

## Chapter NR 660

### HAZARDOUS WASTE MANAGEMENT: GENERAL

#### Subchapter A — General

- NR 660.01 Purpose, scope and applicability.
- NR 660.02 Availability of information and confidentiality of information.
- NR 660.04 Manifest copy submission requirements for certain interstate waste shipments.
- NR 660.05 Applicability of electronic manifest system and user fee requirements to facilities receiving state-only regulated waste shipments.
- NR 660.07 Notification of hazardous waste activities.

#### Subchapter B — Definitions

- NR 660.10 Definitions.
- NR 660.11 Incorporation by reference.

#### Subchapter C — Rulemaking Petitions

- NR 660.20 General.
- NR 660.21 Petitions for equivalent testing or analytical methods.
- NR 660.22 Petitions to amend ch. NR 661 to exclude a waste produced at a particular facility.

- NR 660.23 Petitions to amend ch. NR 673 to include additional hazardous wastes.
- NR 660.30 Non-waste determinations and variances from classification as a solid waste.
- NR 660.31 Standards and criteria for variances from classification as a solid waste.
- NR 660.32 Variances to be classified as a boiler.
- NR 660.33 Procedures for variances from classification as a solid waste or to be classified as a boiler, or applications for non-waste determinations.
- NR 660.34 Standards and criteria for non-waste determinations.
- NR 660.40 Additional regulation of certain hazardous waste recycling activities on a case-by-case basis.
- NR 660.41 Procedures for case-by-case regulation of hazardous waste recycling activities.
- NR 660.42 Notification requirement for hazardous secondary material.
- NR 660.43 Legitimate recycling of hazardous secondary material.

#### Subchapter A — General

##### NR 660.01 Purpose, scope and applicability. (1)

This chapter provides definitions of terms, general standards and overview information applicable to chs. NR 660 to 679.

##### (2) In this chapter:

(a) Section NR 660.02 sets forth the rules that the department will use in making information it receives available to the public and sets forth the requirements that generators, transporters, or owners or operators of treatment, storage or disposal facilities shall follow to assert claims of business confidentiality with respect to information that is submitted to the department under chs. NR 660 to 679.

(c) Section NR 660.10 defines terms which are used in chs. NR 660 to 679.

(d) Section NR 660.20 establishes procedures for petitioning the department to amend, modify or revoke any provision of chs. NR 660 to 679 and establishes procedures governing the department's action on the petitions.

(e) Section NR 660.21 establishes procedures for petitioning the department to approve testing methods as equivalent to those prescribed in ch. NR 661, 664 or 665.

(f) Section NR 660.22 references procedures for petitioning EPA to amend subch. D of ch. NR 661 to exclude a waste from a particular facility.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06.

##### NR 660.02 Availability of information and confidentiality of information. (1)

Any information provided to or obtained by the department under chs. NR 660 to 679 in the administration of s. 287.15 or 299.53, Stats., or ch. 291, Stats., will be made available to the public to the extent and in the manner authorized by ss. 19.31 to 19.39, Stats., and s. NR 2.195.

(2) Except as provided under subs. (3) and (4), any person who submits information to the department according to chs. NR 660 to 679 may seek confidential status for part or all of that information, except emission data, by following the procedures set forth in s. 291.15 or 299.55, Stats., and s. NR 2.19. Information granted confidential status will be disclosed by the department only to the extent, and by means of the procedures, set forth in s. 291.15 or 299.55, Stats., and s. NR 2.19. However, if no applica-

tion for confidential status accompanies the information when it is received by the department, it may be made available to the public without further notice to the person submitting it.

(3) (a) *Manifest claim of confidential status.* No claim of confidential status may be asserted by any person with respect to information entered on a hazardous waste manifest, EPA Form 8700-22; a hazardous waste manifest continuation sheet, EPA Form 8700-22A; or an electronic manifest format that may be prepared and used in accordance with s. NR 662.020 (1) (c).

(b) *Availability of manifest.* EPA will make any electronic manifest that is prepared and used in accordance with s. NR 662.020 (1) (c), or any paper manifest that is submitted to the system under s. NR 664.0071 or 665.0071 available to the public under this section when the electronic or paper manifest becomes a complete and final document. Electronic manifests and paper manifests submitted to the system are considered by EPA and the department to be complete and final documents and publicly available information after 90 days have passed since the delivery to the designated facility of the hazardous waste shipment identified in the manifest.

(4) (a) After June 26, 2018, no claim of business confidentiality may be asserted by any person with respect to information contained in cathode ray tube export documents prepared, used, and submitted under ss. NR 661.0039 (1) (e) and 661.0041 (1), and with respect to information contained in hazardous waste export, import, and transit documents prepared, used, and submitted under ss. NR 662.082, 662.083, 662.084, 663.20, 664.0012, 664.0071, 665.0012, 665.0071, and 667.0071, whether submitted electronically into EPA's waste import export tracking system, or its successor or in paper format.

(b) EPA will make any cathode ray tube export documents prepared, used, and submitted under ss. NR 661.0039 (1) (e) and 661.0041 (1), and any hazardous waste export, import, and transit documents prepared, used, and submitted under ss. NR 662.082, 662.083, 662.084, 663.20, 664.0012, 664.0071, 665.0012, 665.0071, and 667.0071 available to the public under this section when these electronic or paper documents are considered by EPA to be complete and final documents. These submitted electronic and paper documents related to hazardous waste exports, imports and transits, and cathode ray tube exports are considered by EPA to be final documents on March 1 of the calendar year after the

related cathode ray tube exports or hazardous waste exports, imports, or transits occur.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 19-082: r. (1) (title), am. (2), cr. (3), (4) Register August 2020 No. 776, eff. 9-1-20.

**NR 660.04 Manifest copy submission requirements for certain interstate waste shipments.** (1) In any case in which the state in which waste is generated, or the state in which waste will be transported to a designated facility, requires that the waste be regulated as a hazardous waste or otherwise be tracked through a hazardous waste manifest, the designated facility that receives the waste shall do all of the following, regardless of the state in which the facility is located:

- (a) Complete the facility portion of the applicable manifest.
- (b) Sign and date the facility certification.
- (c) Submit to the e-manifest system a final copy of the manifest for data processing purposes.
- (d) Pay the appropriate per manifest fee to EPA for each manifest submitted to the e-manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in subpart FF of 40 CFR 264.

**History:** CR 19-082: cr. Register August 2020 No. 776, eff. 9-1-20.

**NR 660.05 Applicability of electronic manifest system and user fee requirements to facilities receiving state-only regulated waste shipments.** (1) In this section, “state-only regulated waste” means any of the following:

- (a) A non-RCRA waste that a state regulates more broadly under its state regulatory program.
- (b) A RCRA hazardous waste that is federally exempt from manifest requirements, but not exempt from manifest requirements under state law.

(2) In any case in which a state requires a RCRA manifest to be used under state law to track the shipment and transportation of a state-only regulated waste to a receiving facility, the facility receiving such a waste shipment for management shall do all of the following:

- (a) Comply with the provisions of ss. NR 664.0071, use of the manifest, and NR 664.0072, manifest discrepancies.
- (b) Pay the appropriate per manifest fee to EPA for each manifest submitted to the e-manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in subpart FF of 40 CFR part 264.

**History:** CR 19-082: cr. Register August 2020 No. 776, eff. 9-1-20; correction in (1) (intro.) made under s. 35.17, Stats., Register August 2020 No. 776.

**NR 660.07 Notification of hazardous waste activities.** (1) **NEW ACTIVITIES.** Any person who generates or transports hazardous waste, or owns or operates a facility for the treatment, storage or disposal of hazardous waste, shall notify the department of the activities using EPA Form 8700-12.

(2) **EXISTING ACTIVITIES.** Any person who, after the effective date of a rule that makes the person subject to regulation under chs. NR 660 to 679, generates or transports hazardous waste, or owns or operates a facility for the treatment, storage or disposal of hazardous waste shall notify the department of the activities using EPA form 8700-12 within 90 days of the effective date of the rule, unless the person has previously notified EPA or the department.

(3) **SEPARATE FORMS.** A separate EPA notification form shall be submitted to the department for each generation site, transportation service and hazardous waste facility.

**Note:** EPA notification form 8700-12 may be obtained from: [https://rcrapublic.epa.gov/rcrainfoweb/documents/rcra\\_subtitleC\\_forms\\_and\\_instructions.pdf](https://rcrapublic.epa.gov/rcrainfoweb/documents/rcra_subtitleC_forms_and_instructions.pdf) or

the department by E-mail: [DNRWasteMaterials@wisconsin.gov](mailto:DNRWasteMaterials@wisconsin.gov) or phone: (608) 266-2111.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06.

## Subchapter B — Definitions

**NR 660.10 Definitions.** Terms not defined in this section or elsewhere in chs. NR 660 to 679 have the meanings given them in ch. 291, Stats. When used in chs. NR 660 to 679, the following terms have the following meanings:

(1) “Above ground tank” means a device meeting the definition of “tank” in this section and that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.

(2) “Active life” of a facility means the period from the initial receipt of hazardous waste at the facility until the department receives certification of final closure.

(3) “Active portion” means that portion of a facility where treatment, storage or disposal operations are being or have been conducted after August 1, 2006 and which is not a closed portion.

**Note:** See also “closed portion” and “inactive portion.”

(3m) “Acute hazardous waste” means a hazardous waste that meets the listing criteria specified in s. NR 661.0011 (1) (b) and therefore is either listed in s. NR 661.0031 with the assigned hazard code of (H) or is listed in s. NR 661.0033 (5).

(3p) “AES filing compliance date” means the date that EPA announces in the Federal Register, on or after which exporters of hazardous waste and exporters of cathode ray tubes for recycling are required to file EPA information in the Automated Export System or its successor system, under the International Trade Data System, ITDS, platform.

(3t) “Airbag waste” means any hazardous waste airbag module or hazardous waste airbag inflator.

(3w) “Airbag waste collection facility” means any facility that receives airbag waste from an airbag waste handler subject to regulation under s. NR 661.0004 (10), and accumulates the waste for more than 10 days.

(3y) “Airbag waste handler” means any person, by site, who generates airbag waste that is subject to regulation under this chapter.

(4) “Ancillary equipment” means any device including, but not limited to, such devices as piping, fittings, flanges, valves and pumps, that is used to distribute, meter or control the flow of hazardous waste from its point of generation to a storage or treatment tank or tanks, between hazardous waste storage and treatment tanks to a point of disposal onsite, or to a point of shipment for disposal off-site.

(5) “Aquifer” means a geologic formation, group of formations or part of a formation capable of yielding a significant amount of ground water to wells or springs.

(6) “Authorized representative” means the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent or person of equivalent responsibility.

(7) “Battery” means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

**(8)** “Boiler” means an enclosed device using controlled flame combustion and having all of the characteristics in par. (a) or the characteristic in par. (b):

(a) 1. The unit shall have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids or heated gases.

2. The unit’s combustion chamber and primary energy recovery sections shall be of integral design. To be of integral design, the combustion chamber and the primary energy recovery sections (such as waterwalls and superheaters) shall be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery sections are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units.

3. While in operation, the unit shall maintain a thermal energy recovery efficiency of at least 60%, calculated in terms of the recovered energy compared with the thermal value of the fuel.

4. The unit shall export and utilize at least 75% of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps).

(b) The unit is one which the department has determined, on a case-by-case basis, to be a boiler, after considering the standards in s. NR 660.32.

**(9)** “Carbon regeneration unit” means any enclosed thermal treatment device used to regenerate spent activated carbon.

**(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.

**(9t)** “Central accumulation area” means any on-site hazardous waste accumulation area with hazardous waste accumulating in units subject to either s. NR 662.016 for small quantity generators or s. NR 662.017 for large quantity generators. A central accumulation area at an eligible academic entity that chooses to operate is also subject to s. NR 662.211 when accumulating unwanted material or hazardous waste.

**(10)** “Certification” means a statement of professional opinion based upon knowledge and belief.

**(11)** “Closed portion” means that portion of a facility which an owner or operator has closed according to the approved facility closure plan and all applicable closure requirements.

**Note:** See also “active portion” and “inactive portion.”

**(12)** “Component” means either the tank or ancillary equipment of a tank system.

**(13)** “Confined aquifer” means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined ground water.

**(13m)** “Contained” means held in a unit, including a land-based unit as defined in this subchapter, that meets all of the following criteria:

(a) The unit is in good condition, with no leaks or other con-

tinuing or intermittent unpermitted releases of the hazardous secondary material to the environment, and is designed, as appropriate for the hazardous secondary material, to prevent releases of hazardous secondary material into the environment. Unpermitted releases are releases that are not covered by a permit, such as a permit to discharge to water or air, and may include releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures.

(b) The unit is properly labeled or otherwise has a system, such as a log, to immediately identify the hazardous secondary material in the unit.

(c) The unit holds hazardous secondary material that is compatible with other hazardous secondary material placed in the unit and is compatible with the materials used to construct the unit and addresses any potential risks of fires or explosions.

(d) Hazardous secondary material in units that meet the applicable requirements under chs. NR 664 and 665 are presumptively contained for the purposes of this subsection.

**(14)** “Container” means any portable device in which a material is stored, transported, treated, disposed of or otherwise handled.

**(15)** “Containment building” means a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of subch. DD of ch. NR 664 or subch. DD of ch. NR 665.

**(16)** “Contingency plan” means a document setting out an organized, planned and coordinated course of action to be followed in case of a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

**(17)** “Corrosion expert” means a person who, by reason of the person’s knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. The person shall be certified as being qualified by the national association of corrosion engineers (NACE) or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

**(18)** “Construct” means to engage in a program of on-site construction including but not limited to the erection or building of new structures, replacement, expansion, remodeling, alteration or extension of existing structures, the acquisition and installation of initial equipment associated with the new or expanded, remodeled structures, and site clearing, grading, dredging or landfilling.

**(19)** “Critical habitat” means any habitat determined by the department to be critical to the continued existence of any threatened or endangered species listed in ch. NR 27.

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

**(19e)** “CRT exporter” means any person in the United States who initiates a transaction to send used CRTs outside the United States or its territories for recycling or reuse, or any intermediary in the United States arranging for such export.

**(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.

**(19m)** “CWA” or “Clean Water Act” means the Federal Water Pollution Control Act, 33 USC 1251 to 1387, and regulations adopted under that act.

**(20)** “Department” means the Wisconsin department of natural resources.

**(20m)** “Department of transportation” or “DOT” means the U.S. department of transportation.

**(21)** “Designated facility” means any of the following:

(a) A hazardous waste, treatment, storage or disposal facility that meets one of the following conditions:

1. Has received a license, or interim license, according to ch. NR 670.

2. Has received a permit, or interim permit, from a state authorized according to 40 CFR part 271.

3. Is regulated under s. NR 661.0006 (3) (b) or subch. F of ch. NR 666.

4. Has been designated on the manifest by the generator pursuant to s. NR 662.020.

(b) A generator site designated on the manifest to receive its waste as a return shipment from a facility that has rejected the waste according to s. NR 664.0072 (6) or 665.0072 (6).

(c) If a waste is destined to a facility in an authorized state that has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility shall be a facility allowed by the receiving state to accept such waste.

**(22)** “Destination facility” means a facility that treats, disposes of or recycles a particular category of universal waste, except those management activities described in subs. (1) and (3) of ss. NR 673.13 and 673.33. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

**(23)** “Dike” means an embankment or ridge of either natural or human-made materials used to prevent the movement of liquids, sludges, solids or other materials.

**(24)** “Dioxins and furans (D/F)” means tetra, penta, hexa, hepta and octa-chlorinated dibenzo dioxins and furans.

**(25)** “Discharge” or “hazardous waste discharge” means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying or dumping of hazardous waste into or on any land or water.

**(26)** “Disposal” means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

**(27)** “Disposal facility” means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure. The term disposal facility does not include a corrective action management unit into which remediation wastes are placed.

**(28)** “Drip pad” means an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation and surface water run-on to an associated collection system at wood preserving plants.

**(28m)** “Electronic import-export reporting compliance date”

means the date that EPA announces in the Federal Register, on or after which exporters, importers, and receiving facilities are required to submit certain export and import related documents to EPA using EPA’s waste import export tracking system, or its successor system.

**(28p)** “Electronic manifest” or “e-manifest” means the electronic format of the hazardous waste manifest that is obtained from EPA’s national e-manifest system and transmitted electronically to the system, and that is the legal equivalent of EPA Forms 8700-22, Manifest, and 8700-22A, Continuation Sheet.

**(28s)** “Electronic manifest system” or “e-manifest system” means EPA’s national information technology system through which the electronic manifest may be obtained, completed, transmitted, and distributed to users of the electronic manifest and to regulatory agencies.

**(29)** “Elementary neutralization unit” means a device which meets all of the following conditions:

(a) Is used for neutralizing wastes that are hazardous only because they exhibit the corrosivity characteristic defined in s. NR 661.0022, or they are listed in subch. D of ch. NR 661 only for this reason.

(b) Meets the definition of tank, tank system, container, transport vehicle or vessel in this section.

**(30)** “Enforceable document” means a special order, variance, license or plan approval issued by the department.

**(31)** “EPA” or “U.S. EPA” means the United States environmental protection agency.

**(32)** “EPA administrator” means the administrator of the EPA or anyone designated to act for the administrator of the EPA.

**(33)** “EPA hazardous waste number” means the number assigned by EPA to each hazardous waste listed in subch. D of ch. NR 661 and to each characteristic identified in subch. C of ch. NR 661.

**(34)** “EPA identification number” or “EPA ID number” means the number assigned by EPA to each generator, transporter, and treatment, storage or disposal facility.

**(35)** “EPA region” means the states and territories found in any one of the following 10 regions:

Region I—Maine, Vermont, New Hampshire, Massachusetts, Connecticut and Rhode Island.

Region II—New York, New Jersey, Commonwealth of Puerto Rico and the U.S. Virgin Islands.

Region III—Pennsylvania, Delaware, Maryland, West Virginia, Virginia and the District of Columbia.

Region IV—Kentucky, Tennessee, North Carolina, Mississippi, Alabama, Georgia, South Carolina and Florida.

Region V—Minnesota, Wisconsin, Illinois, Michigan, Indiana and Ohio.

Region VI—New Mexico, Oklahoma, Arkansas, Louisiana and Texas.

Region VII—Nebraska, Kansas, Missouri and Iowa.

Region VIII—Montana, Wyoming, North Dakota, South Dakota, Utah and Colorado.

Region IX—California, Nevada, Arizona, Hawaii, Guam, American Samoa, Commonwealth of the Northern Mariana Islands.

Region X—Washington, Oregon, Idaho and Alaska.

**(36)** “Equivalent method” means any testing or analytical method approved by the department under ss. NR 660.20 and 660.21.

**(37)** “Existing hazardous waste management (HWM) facili-



ty” or “existing facility” means a facility which was in operation or for which construction commenced on or before November 19, 1980. A facility has commenced construction if par. (a) and either par. (b) 1. or 2. are met:

(a) The owner or operator has obtained the federal, state and local approvals or licenses necessary to begin physical construction.

(b) 1. A continuous on-site, physical construction program has begun.

2. The owner or operator has entered into contractual obligations - which cannot be canceled or modified without substantial loss - for physical construction of the facility to be completed within a reasonable time.

**(38)** “Existing portion” means the land surface area of an existing waste management unit, included in the original Part A of the license application, on which wastes have been placed prior to the issuance of a license.

**(39)** “Existing tank system” or “existing component” means a tank system or component that is used for the storage or treatment of hazardous waste and that is in operation, or for which installation has commenced on or prior to March 1, 1991. Installation will be considered to have commenced if the owner or operator has obtained all federal, state and local approvals or licenses necessary to begin physical construction of the site or installation of the tank system and if either 1) a continuous on-site physical construction or installation program has begun or 2) the owner or operator has entered into contractual obligations—which cannot be canceled or modified without substantial loss—for physical construction of the site or installation of the tank system to be completed within a reasonable time.

**(40)** “Explosives or munitions emergency” means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate or eliminate the threat.

**(41)** “Explosives or munitions emergency response” means all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions or transporting those items to another location to be rendered safe, treated or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at hazardous waste management facilities.

**(42)** “Explosives or munitions emergency response specialist” means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures or destruction techniques. Explosives or munitions emergency response specialists include department of defense (DOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU) and DOD-certified civilian or contractor personnel; and other federal, state or local government, or civilian personnel

similarly trained in explosives or munitions emergency responses.

**(43)** “Facility” means:

(a) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste, or for managing hazardous secondary material prior to reclamation. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).

(b) For the purpose of implementing corrective action under s. 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 Subtitle C of RCRA. This definition also applies to facilities implementing corrective action under s. 291.37, Stats., and 42 USC 6928(h).

(c) Notwithstanding par. (b), a remediation waste management site is not a facility that is subject to s. NR 664.0101, but is subject to corrective action requirements if the site is located within such a facility.

**(44)** “Federal agency” means any department, agency or other instrumentality of the federal government, any independent agency or establishment of the federal government including any government corporation, and the government printing office.

**(45)** “Federal, state and local approvals or licenses necessary to begin physical construction” means licenses and approvals required under federal, state or local hazardous waste control statutes, regulations, rules or ordinances.

**(46)** “Final closure” means the closure of all hazardous waste management units at the facility according to all applicable closure requirements so that hazardous waste management activities under chs. NR 664 and 665 are no longer conducted at the facility unless subject to the provisions in ss. NR 662.015 and 662.017.

**(47)** “Food chain crops” means tobacco, crops grown for human consumption and crops grown for feed for animals whose products are consumed by humans.

**(48)** “Free liquids” means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.

**(49)** “Freeboard” means the vertical distance between the top of a tank or surface impoundment dike, and the surface of the waste contained therein.

**(50)** “Generator” means any person, by site, whose act or process produces hazardous waste identified or listed in ch. NR 661 or whose act first causes a hazardous waste to become subject to regulation.

**(50m)** “Generating facility” as used in s. NR 660.10 (51t) means all contiguous property owned, leased, or otherwise controlled by the hazardous secondary material generator.

**(51)** “Ground water” means water below the land surface in a zone of saturation.

**(51m)** “Hazardous secondary material” means a secondary material, such as spent material, by-product, or sludge, that, when discarded, would be identified as a hazardous waste, as defined in sub. (52).

**(51t)** “Hazardous secondary material generator” means any person whose act or process produces hazardous secondary material at the generating facility. In this subsection, “generating facility” means all contiguous property owned, leased, or otherwise controlled by the hazardous secondary material generator. For the purposes of ss. NR 661.0002 (1) (b) 2. and 661.0004 (1) (w), a facility that collects hazardous secondary material from other persons is not the hazardous secondary material generator.

(52) “Hazardous waste” means a hazardous waste as defined in s. NR 661.0003.

(53) “Hazardous waste constituent” means a constituent that caused the department to list the hazardous waste in subch. D of ch. NR 661, or a constituent listed in table 1 of s. NR 661.0024.

(54) “Hazardous waste management unit” is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

(55) “In operation” refers to a facility which is treating, storing or disposing of hazardous waste.

(56) “Inactive portion” means that portion of a facility which is not operated after August 1, 2006.

**Note:** See also “active portion” and “closed portion.”

(57) “Incinerator” means any enclosed device that is one of the following:

(a) Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer or carbon regeneration unit, nor is listed as an industrial furnace.

(b) Meets the definition of infrared incinerator or plasma arc incinerator.

(58) “Incompatible waste” means a hazardous waste which is unsuitable for one of the following:

(a) Placement in a particular device or facility because it may cause corrosion or decay of containment materials (e.g., container inner liners or tank walls).

(b) Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases.

**Note:** See ch. NR 665 Appendix V for examples.

(59) “Individual generation site” means the contiguous site at or on which one or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.

(60) “Industrial furnace” means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy:

(a) Cement kilns.

(b) Lime kilns.

(c) Aggregate kilns.

(d) Phosphate kilns.

(e) Coke ovens.

(f) Blast furnaces.

(g) Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters and foundry furnaces).

(h) Titanium dioxide chloride process oxidation reactors.

(i) Methane reforming furnaces.

(j) Pulp liquor recovery furnaces.

(k) Combustion devices used in the recovery of sulfur values from spent sulfuric acid.

(L) Halogen acid furnaces (HAFs) for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least 3%, the acid product is used in a manufacturing process, and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of 20% as-generated.

(m) Such other devices as the department may, after notice and comment, add to this list on the basis of one or more of the following factors:

1. The design and use of the device primarily to accomplish recovery of material products.

2. The use of the device to burn or reduce raw materials to make a material product.

3. The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks.

4. The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product.

5. The use of the device in common industrial practice to produce a material product.

6. Other factors, as appropriate.

(61) “Infrared incinerator” means any enclosed device that uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

(62) “Inground tank” means a device meeting the definition of “tank” in this section whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

(63) “Injection well” means a well into which fluids are injected.

**Note:** See also “underground injection.”

(64) “Inner liner” means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the contained waste or reagents used to treat the waste.

(65) “Installation inspector” means a person who, by reason of that person’s knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

(65m) “Intermediate facility” means a facility that stores hazardous secondary material for more than 10 days, other than a hazardous secondary material generator or reclaimer of such material.

(66) “International shipment” means the transportation of hazardous waste into or out of the jurisdiction of the United States.

(67) “Lamp”, also referred to as “universal waste lamp,” is defined as the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible and infra-red regions of the electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium and metal halide lamps.

(67m) “Land-based unit” means an area where hazardous secondary material are placed in or on the land before recycling. This definition does not include land-based production units.

**(68)** “Landfill” means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave or a corrective action management unit.

**(69)** “Landfill cell” means a discrete volume of a hazardous waste landfill which uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells are trenches and pits.

**(70)** “Land treatment facility” means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.

**(70m)** “Large quantity generator” means a generator that generates any of the following amounts in a calendar month:

(a) Greater than or equal to 1,000 kilograms of non-acute hazardous waste.

(b) Greater than 1 kilogram of acute hazardous waste listed in s. NR 661.0031 or 661.0033 (5).

(c) Greater than 100 kilograms of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in s. NR 661.0031 or 661.0033 (5).

**(71)** “Leachate” means any liquid, including any suspended components in the liquid, that has percolated through or drained from hazardous waste.

**(72)** “Leak detection system” means a system capable of detecting the failure of either the primary or secondary containment structure or the presence of a release of hazardous waste or accumulated liquid in the secondary containment structure. Such a system shall employ operational controls (e.g., daily visual inspections for releases into the secondary containment system of aboveground tanks) or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure or the presence of a release of hazardous waste into the secondary containment structure.

**(73)** “Liner” means a continuous layer of natural or human-made materials, beneath or on the sides of a waste pile, surface impoundment, landfill or landfill cell, which restricts the downward or lateral escape of hazardous waste, hazardous waste constituents or leachate.

**(74)** “MACT” means maximum achievable control technology, as defined in the clean air act, 42 USC 7412(g).

**(75)** “Management” or “hazardous waste management” means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery and disposal of hazardous waste.

**(76)** “Manifest” has the meaning given in s. 291.01 (11), Stats. “Manifest” also means the shipping document EPA Form 8700-22 and, if necessary, EPA form 8700-22A, or the electronic manifest, originated and signed by the generator or offeror according to the instructions in the appendix to 40 CFR part 262 and the applicable requirements of chs. NR 662 to 665.

**(77)** “Manifest tracking number” means the alphanumeric identification number, a unique 3 letter suffix preceded by 9 numerical digits, which is pre-printed in Item 4 of the manifest by a registered source.

**(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.

**(78)** “Military munitions” means all ammunition products and components produced or used by or for the U.S. department of defense or the U.S. armed services for national defense and security, including military munitions under the control of the department of defense, the U.S. coast guard, the U.S. department of energy (DOE) and national guard personnel. The term military munitions includes: confined gaseous, liquid and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices and nuclear weapons, nuclear devices and nuclear components thereof. However, the term does include non-nuclear components of nuclear devices, managed under DOE’s nuclear weapons program after all required sanitization operations under the atomic energy act of 1954 (42 USC parts 2011 to 2114), as amended, have been completed.

**(79)** “Mining overburden returned to the mine site” means any material overlying an economic mineral deposit which is removed to gain access to that deposit and is then used for reclamation of a surface mine.

**(80)** “Miscellaneous unit” means a hazardous waste management unit where hazardous waste is treated, stored or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well, containment building, corrective action management unit, unit eligible for a research, development and demonstration license under s. NR 670.065, or staging pile.

**(81)** “Movement” means that hazardous waste transported to a facility in an individual vehicle.

**(82)** “New hazardous waste management facility” or “new facility” means a facility that began operation, or for which construction commenced, after November, 19, 1980.

**(83)** “New tank system” or “new tank component” means a tank system or component that will be used for the storage or treatment of hazardous waste and for which installation has commenced after March 1, 1991; except, however, for purposes of ss. NR 664.0193 (7) (b) and 665.0193 (7) (b), a new tank system is one for which construction commences after July 14, 1986.

**Note:** See also “existing tank system.”

**(83m)** “No free liquids,” as used in s. NR 661.0004 (1) (z) and (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.

**(83t)** “Non-acute hazardous waste” means all hazardous wastes that are not acute hazardous waste.

**(84)** “On ground tank” means a device meeting the definition of “tank” in this section and that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.

**(85)** “On-site” means the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to



going along, the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which the owner controls and to which the public does not have access, is also considered on-site property.

**(86)** “Open burning” means the combustion of any material without any of the following characteristics:

(a) Control of combustion air to maintain adequate temperature for efficient combustion.

(b) Containment of the combustion-reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion.

(c) Control of emission of the gaseous combustion products.

**Note:** See also “incineration” and “thermal treatment.”

**(87)** “Operator” means the person responsible for the overall operation of a facility.

**(88)** “Owner” means the person who owns a facility or part of a facility.

**(89)** “Partial closure” means the closure of a hazardous waste management unit according to the applicable closure requirements of chs. NR 664 and 665 at a facility that contains other active hazardous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile or other hazardous waste management unit, while other units of the same facility continue to operate.

**(90)** “Person” means an individual, trust, firm, joint stock company, limited liability company, federal agency, corporation (including a government corporation), partnership, association, state, municipality, commission, political subdivision of a state or any interstate body.

**(91)** “Personnel” or “facility personnel” means all persons who work at or oversee the operations of a hazardous waste facility, and whose actions or failure to act may result in noncompliance with ch. NR 664 or 665.

**(92)** “Pesticide” means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest, or intended for use as a plant regulator, defoliant or desiccant, other than any article that is one of the following:

(a) A new animal drug under the federal food, drug and cosmetic act (FFDCA), 21 USC 321(v).

(b) An animal drug that has been determined by regulation of the federal secretary of health and human services to not be a new animal drug.

(c) An animal feed under the federal food, drug and cosmetic act (FFDCA), 21 USC 321(w) that bears or contains any substances described by par. (a) or (b).

**(93)** “Pile” means any non-containerized accumulation of solid, non-flowing hazardous waste that is used for treatment or storage and that is not a containment building.

**(94)** “Plasma arc incinerator” means any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

**(95)** “Point source” has the meaning given in s. 283.01 (12), Stats.

**(96)** “Publicly owned treatment works” or “POTW” means any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a “state” or “municipality” (as defined by s. 283.01 (7), Stats.). This definition includes sewers, pipes or other conveyances only if they convey wastewater to a POTW providing treatment.

**(97)** “Qualified ground-water scientist” means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and has sufficient training and experience in ground-water hydrology and related fields as may be demonstrated by state registration, professional certifications or completion of accredited university courses that enable that individual to make sound professional judgments regarding ground-water monitoring and contaminant fate and transport.

**(97m)** “Recognized trader” means a person domiciled in the United States, by site of business, who acts to arrange and facilitate transboundary movements of wastes destined for recovery or disposal operations, either by purchasing from and subsequently selling to United States and foreign facilities, or by acting under arrangements with a United States waste facility to arrange for the export or import of the wastes.

**(97t)** “Remanufacturing” means processing a higher-value hazardous secondary material in order to manufacture a product that serves a similar functional purpose as the original commercial-grade material. For the purpose of this definition, a hazardous secondary material is considered higher-value if it was generated from the use of a commercial-grade material in a manufacturing process and can be remanufactured into a similar commercial-grade material.

**(98)** “Remediation waste” means all solid and hazardous wastes, and all media (including ground water, surface water, soils and sediments) and debris, that are managed for implementing cleanup.

**(99)** “Remediation waste management site” means a facility where an owner or operator is or will be treating, storing or disposing of hazardous remediation wastes. A remediation waste management site is not a facility that is subject to corrective action under s. NR 664.0101, but is subject to corrective action requirements if the site is located in such a facility.

**(100)** “Replacement unit” means a landfill, surface impoundment or waste pile unit (1) from which all or substantially all of the waste is removed and (2) that is subsequently reused to treat, store or dispose of hazardous waste. Replacement unit does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, according to an approved closure plan or EPA or state approved corrective action.

**(100m)** “Resource conservation and recovery act” or “RCRA” means the public law that creates the framework for the proper management of hazardous and non-hazardous solid waste. The term RCRA is often used interchangeably to refer to the law and regulations.

**(101)** “Representative sample” means a sample of a universe or whole (e.g., waste pile, lagoon, ground water) which can be expected to exhibit the average properties of the universe or whole.

**(102)** “Run-off” means any rainwater, leachate or other liquid that drains over land from any part of a facility.

**(103)** “Run-on” means any rainwater, leachate or other liquid that drains over land onto any part of a facility.

**(104)** “Saturated zone” or “zone of saturation” means that part of the earth’s crust in which all voids are filled with water.

**(105)** “Sludge” means any solid, semi-solid or liquid waste generated from a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

**(106)** “Sludge dryer” means any enclosed thermal treatment



device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb of sludge treated on a wet-weight basis.

**(107)** “Small quantity generator” means a generator who generates any of the following amounts in a calendar month:

(a) Greater than 100 kilograms but less than 1,000 kilograms of non-acute hazardous waste.

(b) Less than or equal to 1 kilogram of acute hazardous waste listed in s. NR 661.0031 or 661.0033 (5).

(c) Less than or equal to 100 kilograms of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in s. NR 661.0031 or 661.0033 (5).

**(108)** “Solid waste” means a solid waste as defined in s. NR 661.0002.

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

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

1. Contains one or more of the F001 to F005 solvents listed in s. NR 661.0031 or the corresponding P- or U-listed solvents listed in s. NR 661.0033.

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

3. Exhibits only the hazardous waste characteristic of ignitability found in s. NR 661.0021 due to the presence of one or more solvents that are not listed in ch. NR 661.

(b) 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 s. NR 661.0004 (1) (z) and (2) (r).

**(109)** “Sorbent” means a material that is used to soak up free liquids by either adsorption or absorption, or both. “Sorb” means to either adsorb or absorb, or both.

**(110)** “Staging pile” means an accumulation of solid, non-flowing remediation waste (as defined in this section) that is not a containment building and that is used only during remedial operations for temporary storage at a facility. Staging piles shall be designated by the department according to s. NR 664.0554.

**(111)** “State” means any of the several states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands.

**(112)** “Storage” means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of or stored elsewhere.

**(113)** “Subsurface fluid distribution system” means an assemblage of perforated pipes or drain tiles, or any similar conveyance, intended to place or distribute a fluid underground.

**(114)** “Sump” means any pit or reservoir that meets the definition of tank and those troughs or trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment or disposal facilities; except that as used in the landfill, surface impoundment and waste pile rules, sump means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.

**(115)** “Surface impoundment” or “impoundment” means a facility or part of a facility which is a natural topographic depression, human-made excavation or diked area formed primarily of earthen materials (although it may be lined with human-made

materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling and aeration pits, ponds and lagoons.

**(116)** “Tank” means a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

**(117)** “Tank system” means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

**(118)** “TEQ” means toxicity equivalence, the international method of relating the toxicity of various dioxin/furan congeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin.

**(119)** “Thermal treatment” means the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation and microwave discharge.

**Note:** See also “incinerator” and “open burning.”

**(120)** “Thermostat” means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with s. NR 673.13 (3) (b) or 673.33 (3) (b).

**(121)** “Totally enclosed treatment facility” means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized.

**(122)** “Transfer facility” means any transportation-related facility, including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste or hazardous secondary material are held during the normal course of transportation.

**(123)** “Transport vehicle” means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle.

**(124)** “Transportation” means the movement of hazardous waste by air, rail, highway or water.

**(125)** “Transporter” means a person engaged in the off-site transportation of hazardous waste by air, rail, highway or water.

**(126)** “Treatability study” means all of the following:

(a) A study in which a hazardous waste is subjected to a treatment process to determine any of the following:

1. Whether the waste is amenable to the treatment process.
2. What pretreatment (if any) is required.
3. The optimal process conditions needed to achieve the desired treatment.
4. The efficiency of a treatment process for a specific waste or wastes.
5. The characteristics and volumes of residuals from a particular treatment process.

(b) Also included in this definition for the purpose of the s. NR 661.0004 (5) and (6) exemptions are liner compatibility, corrosion and other material compatibility studies and toxicological and health effects studies. A treatability study is not a means to commercially treat or dispose of hazardous waste.

(127) “Treatment” has the meaning given in s. 291.01 (21), Stats. Treatment also includes recovering energy or material resources from the waste.

(128) “Treatment zone” means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed or immobilized.

(129) “Underground injection” or “well injection” means the placement of a fluid or any substance underground through a well.

**Note:** See also “injection well.”

(130) “Underground tank” means a device meeting the definition of “tank” in this section whose entire surface area is totally below the surface of and covered by the ground.

(131) “Unfit for use tank system” means a tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or treating hazardous waste without posing a threat of release of hazardous waste to the environment.

(132) “United States” means the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands.

(133) “Universal waste” means any of the following hazardous wastes that are managed under the universal waste requirements of ch. NR 673:

- (a) Batteries as described in s. NR 673.02.
- (b) Pesticides as described in s. NR 673.03.
- (c) Thermostats and mercury-containing equipment as described in s. NR 673.04.
- (d) Lamps as described in s. NR 673.05.

(134) “Universal waste handler”:

- (a) Means any of the following:
  - 1. A generator (as defined in this section) of universal waste.
  - 2. The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste and sends universal waste to another universal waste handler, to a destination facility or to a foreign destination.

(b) Does not mean any of the following:

- 1. A person who treats (except under the provisions of s. NR 673.13 (1) or (3) or 673.33 (1) or (3)), disposes of or recycles universal waste.
- 2. A person engaged in the off-site transportation of universal waste by air, rail, highway or water, including a universal waste transfer facility.

(135) “Universal waste transporter” means a person engaged in the off-site transportation of universal waste by air, rail, highway or water.

(136) “Unsaturated zone” or “zone of aeration” means the zone between the land surface and the water table.

(137) “Uppermost aquifer” means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility’s property boundary.

(138) “Used oil” means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of the use is contaminated by physical or chemical impurities.

(138m) “User of the electronic manifest system” means a hazardous waste generator, a hazardous waste transporter, an owner or operator of a hazardous waste treatment, storage, recycling, or disposal facility, or any other person that does any of the following:

(a) Required to use a manifest to comply with one of the following:

- 1. Any federal or state requirement to track the shipment, transportation, and receipt of hazardous waste or other waste material that is shipped from the site of generation to an off-site designated facility for treatment, storage, recycling, or disposal.
- 2. Any federal or state requirement to track the shipment, transportation, and receipt of rejected wastes or regulated container residues that are shipped from a designated facility to an alternative facility or returned to the generator.

(b) Elects to use the system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system.

(c) Elects to use the paper manifest form and submits to the system for data processing purposes a paper copy of the manifest, or data from the paper copy, in accordance with s. NR 664.0071 (1) (b) 5. or 665.0071 (1) (b) 5. These paper copies are submitted for data exchange purposes only and are not the official copies of record for legal purposes.

(139) “Very small quantity generator” means a generator that generates less than or equal to any of the following amounts in a calendar month:

- (a) 100 kilograms of non-acute hazardous waste.
- (b) 1 kilogram of acute hazardous waste listed in s. NR 661.0031 or 661.0033 (5).
- (c) 100 kilograms of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in s. NR 661.0031 or 661.0033 (5).

(140) “Vessel” includes every description of watercraft, used or capable of being used as a means of transportation on the water.

(141) “Wastewater treatment unit” means a device which is all of the following:

- (a) Part of a wastewater treatment facility that is subject to regulation under either 33 USC 1317(b) or 1342.
- (b) Receives and treats or stores an influent wastewater that is a hazardous waste as defined in s. NR 661.0003, or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as defined in s. NR 661.0003, or treats or stores a wastewater treatment sludge that is a hazardous waste as defined in s. NR 661.0003.
- (c) Meets the definition of tank or tank system in this section.

(142) “Water (bulk shipment)” means the bulk transportation of hazardous waste which is loaded or carried on board a vessel without containers or labels.

(143) “Well” means any of the following: a bored, drilled or driven shaft, a dug hole whose depth is greater than its largest surface dimension, an improved sinkhole or a subsurface fluid distribution system.

(144) “Well injection”: (See “underground injection”).

(145) “Wetlands” has the meaning given in s. 23.32 (1), Stats.

(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.

(146) “Zone of engineering control” means an area under the control of the owner or operator that, upon detection of a hazardous waste release, can be readily cleaned up prior to the release of hazardous waste or hazardous constituents to ground water or surface water.

**Note:** See chs. 289 and 291, Stats., for additional definitions.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 06-102: am. (21), (76) and (77) Register March 2007 No. 615, eff. 4-1-07; EmR1007: emerg. cr. (70m), am. (107), eff. 3-17-10; CR 10-036: cr. (70m), am. (107) Register October 2010 No. 658, eff. 11-1-10; corrections in (15), (141) made under s. 13.92 (4) (b) 7., Stats., Register March 2013 No. 687; CR 16-007: cr. (9m), (19d), (19g), (19j), am. (43) (b), (70m) (a) to (c), cr. (77m), (83m), am. (107) (a), (b), cr. (108m), am. (133) (c), renum. (139) to (139) (intro.) and (a), cr. (139) (b), (c), (145m) Register July 2017 No. 739, eff. 8-1-17; correction in (9m), (43) (b), (83m), (108m) (b) made under s. 35.17, Stats., and correction in numbering of (108m) made under s. 13.92 (4) (b) 1., Stats., Register July 2017 No. 739; CR 19-082: cr. (3m), (3p), (3t), (3w), (3y), (9t), (13m), (19e), (20m), r. and recr. (21), cr. (28m), (28p), (28s), am. (29) (a), (31), (34), (43) (a), (b), (46), cr. (50m), (51m), (51t), am. (52), (53), cr. (65m), (67m), r. and recr. (70m), am. (76), (82), (83m), cr. (83t), (97m), (97t), (100m), r. and recr. (107), am. (108), (108m) (a) 1., 3., (b), (122), (126) (b), cr. (138m), r. and recr. (139), am. (141) (b) Register August 2020 No. 776, eff. 9-1-20; correction in (13m) (c), (d), (28), (38), (51m), (60) (g), (82), (83m), (108m) (b), (126) (b) made under s. 35.17, Stats., Register August 2020 No. 776; correction in (50m) made under s. 13.92 (4) (b) 7., Stats., Register April 2021 No. 784.

**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, the Legislative Reference Bureau, 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 661.0021.

(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.

**Note:** Withdrawn standard, 1992.

(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 661.0021 (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 Isoteniscope, incorporated by reference for ch. NR 664 and subch. BB of ch. NR 665.

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

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

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

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

(b) 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 661.0024, 668.07, and 668.40.

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 661.0022.

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 661.0022.

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 (NFPA 30), (1977 or 1981), incorporated by reference for ss. NR 662.016 (2), 664.0198, and 665.0198, subch. H of ch. NR 666, and s. NR 667.0202 (2).

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

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

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

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

(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 André Pascal, F-75775 Paris Cedex 16, France:

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

(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 subch. CC of ch. NR 664 and subch. CC of ch. NR 665.

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

(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 Tiltles, incorporated by reference for subch. H of ch. NR 666.

(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 subch. AA of ch. NR 664 and subch. AA of ch. NR 665.

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

(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 subch. AA of ch. NR 664 and subch. AA of ch. NR 665.

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

(j) 40 CFR part 60, Appendix A, Method 3 Gas Analysis for the Determination of Dry Molecular Weight, incorporated by reference for subch. O of ch. NR 664 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 subch. AA of ch. NR 664 and subch. AA of ch. NR 665.

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

(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 subchs. AA and DD of ch. NR 664 and subchs. AA and DD of ch. NR 665.

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

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

(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 subch. CC of ch. NR 664.

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

(v) 40 CFR part 63, Appendix C Determination of the Frac-



tion Biodegraded (Fbio) in a Biological Treatment Unit, incorporated by reference for subch. CC of ch. NR 665.

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

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

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

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

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

(zb) 40 CFR 52.741, Appendix B, Method 204 Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure, incorporated by reference for ss. NR 661.1084 (9), 661.1086 (5), 661.1089 (2), 661.1089 (4), 670.027 (1), and 670.315 (3).

(9) The 1987 Standard Industrial Classification (SIC) is available from the Occupational Safety and Health Administration, 200 Constitution Ave NW, Washington, DC 20210, (800) 321-6742, [www.osha.gov](http://www.osha.gov), incorporated by reference for ss. NR 661.0003 (3), 661.0004 (1), 661.0032, 668.40, 670.013 (3), and 679.01 (8).

(10) The 2017 North American Industry Classification System (NAICS code) is available from the United States Census Bureau, 4600 Silver Hill Road, Washington, DC 20233, (800) 923-8282, [www.census.gov](http://www.census.gov), incorporated by reference for ss. NR 661.0004 (1), 662.203 (2), and 662.204 (2).

(11) 40 CFR parts 704, 710, and 711, Chemical Data Reporting Rule of the Toxic Substances Control Act, incorporated by reference for s. NR 661.0004 (1).

(12) References to citations of federal statutes and regulations shall also include any applicable Wisconsin requirements.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; correction in (5) (o) made under s. 13.92 (4) (b) 7., Stats., Register March 2013 No. 687; CR 16-007: r. and recr. Register July 2017 No. 739, eff. 8-1-17; correction in (2) (intro.), (p) to (r), (3) (intro.), (b) (intro.), (4) (intro.), (a), (5) (intro.), (6) (intro.), (7) (intro.), (8) (intro.), (a), (b), (d), (f) to (h), (j), (p) to (za) made under s. 35.17, Stats., and correction in (3) (b) 1., (4) (a) made under s. 13.92 (4) (b) 7., Stats., Register July 2017 No. 739; CR 19-082: am. (2) (a), (f), (3) (b) 1., 8., 11., (4) (a), cr. (5) (b), (c), am. (7) (intro.), r. and recr. (7) (a), cr. (8) (zb), (9) to (12) Register August 2020 No. 776, eff. 9-1-20; correction in (4) (a), (8) (zb) made under s. 35.17, Stats., Register August 2020 No. 776; correction in (4) (a), (7) (a) made under s. 13.92 (4) (b) 7., Stats., Register April 2021 No. 784.

## Subchapter C — Rulemaking Petitions

**NR 660.20 General.** As provided under s. 227.12, Stats., and ch. NR 2, a person may petition the department to modify or revoke any provision in chs. NR 660 to 673. Section NR 660.21 sets forth additional requirements for petitions to add a testing or analytical method to ch. NR 661, 664 or 665. Section NR 660.22 references petitions to EPA to exclude a waste or waste-derived material at a particular facility from s. NR 661.0003 or the lists of hazardous wastes in subch. D of ch. NR 661. Section NR 660.23 sets forth additional requirements for petitions to amend ch. NR 673 to include additional hazardous wastes or categories of hazardous waste as universal waste.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 19-082: am. Register August 2020 No. 776, eff. 9-1-20; renum. from (1) under s. 13.92 (4) (b) 1., Stats., Register August 2020 No. 776.

### NR 660.21 Petitions for equivalent testing or ana-

**lytical methods.** (1) Any person seeking to add a testing or analytical method to ch. NR 661, 664 or 665 may petition for a rule amendment under this section and s. NR 660.20. To be successful, the person shall demonstrate to the satisfaction of the department that the proposed method is equal to or superior to the corresponding method prescribed in ch. NR 661, 664 or 665, in terms of its sensitivity, accuracy and precision (i.e., reproducibility).

(2) Each petition shall include all of the following, in addition to the information required by s. NR 660.20:

(a) A full description of the proposed method, including all procedural steps and equipment used in the method.

(b) A description of the types of wastes or waste matrices for which the proposed method may be used.

(c) Comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods prescribed in ch. NR 661, 664 or 665.

(d) An assessment of any factors which may interfere with, or limit the use of, the proposed method.

(e) A description of the quality control procedures necessary to ensure the sensitivity, accuracy and precision of the proposed method.

(3) After receiving a petition for an equivalent method, the department may request any additional information on the proposed method which the department may reasonably require to evaluate the method.

(4) If the department amends the rules to permit use of a new testing method, the method will be incorporated in “Test Methods for the Evaluation of Solid Waste: Physical/Chemical Methods,” SW-846, incorporated by reference in s. NR 660.11.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06.

**NR 660.22 Petitions to amend ch. NR 661 to exclude a waste produced at a particular facility.** Any person seeking to exclude a waste at a particular generating facility from the lists in subch. D of ch. NR 661 may petition the EPA region 5 administrator for a regulatory amendment under 40 CFR 260.20 and 260.22. The department shall recognize an EPA granted delisting unless the department clearly establishes that a delisting would threaten human health or the environment.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06.

**NR 660.23 Petitions to amend ch. NR 673 to include additional hazardous wastes.** (1) Any person seeking to add a hazardous waste or a category of hazardous waste to the universal waste rules in ch. NR 673 may petition for a rule amendment under this section, s. NR 660.20, and subch. G of ch. NR 673.

(2) To be successful, the petitioner shall demonstrate to the satisfaction of the department that regulation under the universal waste rules in ch. NR 673 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste and will improve implementation of the hazardous waste program. The petition shall include the information required by this section. The petition should also address as many of the factors listed in s. NR 673.81 as are appropriate for the waste or category of waste addressed in the petition.

(3) The department shall grant or deny a petition using the factors listed in s. NR 673.81. The decision will be based on the weight of evidence showing that regulation under ch. NR 673 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.

(4) The department may request additional information needed to evaluate the merits of the petition.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06.

**NR 660.30 Non-waste determinations and variances from classification as a solid waste.** According to the standards and criteria in ss. NR 660.31 and NR 660.34 and the procedures in s. NR 660.33, the department may determine on a case-by-case basis that all of the following recycled materials are not solid wastes:

(1) Materials that are accumulated speculatively without sufficient amounts being recycled (as defined in s. NR 661.0001 (3) (h)).

(2) Materials that are reclaimed and then reused within the original production process in which they were generated.

(3) Materials that have been reclaimed but shall be reclaimed further before the materials are completely recovered.

(4) Hazardous secondary materials that are reclaimed in a continuous industrial process.

(5) Hazardous secondary materials that are indistinguishable in all relevant aspects from a product or intermediate.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 19-082: am. (intro.), (1), cr. (4), (5) Register August 2020 No. 776, eff. 9-1-20; correction in (4), (5) made under s. 35.17, Stats., Register August 2020 No. 776.

**NR 660.31 Standards and criteria for variances from classification as a solid waste.** (1) The department may grant requests for a variance from classifying as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. The department's decision will be based on all of the following criteria:

(a) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material or contractual arrangements for recycling).

(b) The reason that the applicant has accumulated the material for one or more years without recycling 75% of the volume accumulated at the beginning of the year.

(c) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled.

(d) The extent to which the material is handled to minimize loss.

(e) Other relevant factors.

(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 extent to which the material is handled before reclamation to minimize loss.

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

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

(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.

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

(g) Other relevant factors.

(3) The department may grant a request for a variance from classifying as a solid waste those hazardous secondary materials that have been partially reclaimed, but must be reclaimed further before recovery is completed, if the partial reclamation has produced a commodity-like material. A determination that a partially reclaimed material for which the variance is sought is commodity-like will be based on whether the hazardous secondary material is legitimately recycled as specified in s. NR 660.43 and on whether all of the following decision criteria are satisfied:

(a) The degree of partial reclamation the material has undergone is substantial as demonstrated by using a partial reclamation process other than the process that generated the hazardous waste.

(b) The partially reclaimed material has sufficient economic value that it will be purchased for further reclamation.

(c) The partially reclaimed material is a viable substitute for a product or intermediate produced from virgin or raw materials that is used in subsequent production steps.

(d) There is a market for the partially reclaimed material as demonstrated by known customers who are further reclaiming the material, such as records of sales or contracts and evidence of subsequent use, such as bills of lading.

(e) The partially reclaimed material is handled to minimize loss

(f) Other relevant factors.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: r. (2) (b), renum. (2) (c) to (h) to (2) (b) to (g) Register July 2017 No. 739, eff. 8-1-17; CR 19-082: am. (3) (intro.), (a), (b), r. and recr. (3) (c), (d), am. (3) (e) Register August 2020 No. 776, eff. 9-1-20; correction in (3) made under s. 35.17, Stats., Register August 2020 No. 776.

**NR 660.32 Variances to be classified as a boiler.** According to the standards and criteria in s. NR 660.10 (definition of "boiler"), and the procedures in s. NR 660.33, the department may determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in s. NR 660.10, after considering all of the following criteria:

(1) The extent to which the unit has provisions for recovering and exporting thermal energy in the form of steam, heated fluids or heated gases.

(2) The extent to which the combustion chamber and energy recovery equipment are of integral design.

(3) The efficiency of energy recovery, calculated in terms of the recovered energy compared with the thermal value of the fuel.

(4) The extent to which exported energy is utilized.

(5) The extent to which the device is in common and customary use as a "boiler" functioning primarily to produce steam, heated fluids or heated gases.

(6) Other factors, as appropriate.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06.

**NR 660.33 Procedures for variances from classification as a solid waste or to be classified as a boiler, or applications for non-waste determinations.** The department will use all of the following procedures in evaluating applications for variances from classification as a solid waste or appli-

cations to classify particular enclosed controlled flame combustion devices as boilers, or applications for non-waste determinations:

(1) The applicant shall apply to the department for the variance. The application shall address the relevant criteria contained in s. NR 660.31, 660.32, or 660.34, as applicable.

(2) The department will evaluate the application and issue a draft notice tentatively granting or denying the application. Notification of this tentative decision will be provided by newspaper advertisement or radio broadcast in the locality where the recycler is located. The department will accept comment on the tentative decision for 30 days, and may also hold a public hearing upon request or at the department's discretion. The department will issue a final decision after receipt of comments and after the hearing (if any).

(3) In the event of a change in circumstances that affects how a hazardous secondary material meets the relevant criteria contained in s. NR 660.31, 660.32, or 660.34 upon which a variance or non-waste determination has been based, the applicant shall send a description of the change in circumstances to the department. The department may issue a determination that the hazardous secondary material continues to meet the relevant criteria of the variance or non-waste determination or may require the facility to re-apply for the variance or non-waste determination.

(4) A variance or non-waste determination shall be effective for a fixed term not to exceed 10 years. No later than 6 months prior to the end of that term, a facility shall re-apply for a variance or non-waste determination. If a facility re-applies for a variance or non-waste determination within 6 months prior to the end of the term, the facility may continue to operate under an expired variance or non-waste determination until receiving a decision on its re-application from the department.

(5) A facility receiving a variance or non-waste determination shall provide notification as required under s. NR 660.42.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 19-082: am. (intro.), (1), cr. (3) to (5) Register August 2020 No. 776, eff. 9-1-20; correction in (4) made under s. 35.17, Stats., Register August 2020 No. 776.

**NR 660.34 Standards and criteria for non-waste determinations.** (1) An applicant may apply to the department for a formal determination that a hazardous secondary material is not discarded and therefore not a solid waste. The determinations will be based on the criteria contained in sub. (2) or (3), as applicable. If an application is denied, the hazardous secondary material may still be eligible for a solid waste variance or exclusion through one of the solid waste variances under s. NR 660.31. Determinations may also be granted by the department if the department is authorized by the EPA for this provision or if all the following conditions are met:

(a) The department determines the hazardous secondary material meets the criteria in sub. (2) or (3), as applicable.

(b) The department requests that EPA review its determination.

(c) The EPA approves the department determination.

(2) The department may grant a non-waste determination for hazardous secondary material that is reclaimed in a continuous industrial process if the applicant demonstrates that the hazardous secondary material is a part of the production process and is not discarded. The determination shall be based on whether the hazardous secondary material is legitimately recycled as specified in s. NR 660.43 and on all of the following criteria:

(a) The management of the hazardous secondary material is part of the continuous primary production process and is not waste treatment.

(b) The capacity of the production process will use the hazardous secondary material in a reasonable time frame and will ensure that the hazardous secondary material will not be abandoned. Examples of factors the department will use to determine capacity of the production process to use the hazardous secondary material include past production practices, market factors, the nature of the hazardous secondary material, and any contractual arrangements.

(c) The hazardous constituents in the hazardous secondary material are reclaimed rather than released into the air, water, or land at significantly higher levels from either a statistical or health and environmental risk perspective than would otherwise be released by the production process.

(d) Other relevant factors that demonstrate that the hazardous secondary material is not discarded, including why the hazardous secondary material cannot meet, or should not have to meet, the conditions of an exclusion under s. NR 661.0002 or 661.0004.

(3) The department may grant a non-waste determination for hazardous secondary material that is indistinguishable in all relevant aspects from a product or intermediate if the applicant demonstrates that the hazardous secondary material is comparable to a product or intermediate and is not discarded. The determination will be based on whether the hazardous secondary material is legitimately recycled as specified in s. NR 660.43 and on all of the following criteria:

(a) Market participants treat the hazardous secondary material as a product or intermediate rather than a waste. Examples of factors that may be used to determine that the hazardous secondary material is a product or intermediate rather than a waste include the current positive value of the hazardous secondary material, stability of demand, or any contractual arrangements.

(b) The chemical and physical identity of the hazardous secondary material is comparable to commercial products or intermediates.

(c) The capacity of the market would use the hazardous secondary material in a reasonable time frame and ensure that the hazardous secondary material will not be abandoned. Examples of factors used to determine that a hazardous secondary material will not be abandoned include past practices, market factors, the nature of the hazardous secondary material, and any contractual arrangements.

(d) The hazardous constituents in the hazardous secondary material are reclaimed rather than released into the air, water or land at significantly higher levels from either a statistical or health and environmental risk perspective than would otherwise be released by the production process.

(e) Other relevant factors that demonstrate that the hazardous secondary material is not discarded, including why the hazardous secondary material cannot meet, or should not have to meet, the conditions of an exclusion under s. NR 661.0002 or 661.0004.

**History:** CR 19-082: cr. Register August 2020 No. 776, eff. 9-1-20; correction in (1) (a), (c), (2) (c), (3) (d) made under s. 35.17, Stats., Register August 2020 No. 776.

**NR 660.40 Additional regulation of certain hazardous waste recycling activities on a case-by-case basis.** (1) The department may decide on a case-by-case basis that persons accumulating or storing the recyclable materials described in s. NR 661.0006 (1) (b) 4. should be regulated under s. NR 661.0006 (2) and (3). The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents have not been adequately contained, or because the materials being accumulated or stored to-



gether are incompatible. In making this decision, the department will consider all of the following factors:

- (a) The types of materials accumulated or stored and the amounts accumulated or stored.
- (b) The method of accumulation or storage.
- (c) The length of time the materials have been accumulated or stored before being reclaimed.
- (d) Whether any contaminants are being released into the environment, or are likely to be so released.
- (e) Other relevant factors.

(2) The procedures for this decision are set forth in s. NR 660.41.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 19-082: am. (1) Register August 2020 No. 776, eff. 9-1-20.

**NR 660.41 Procedures for case-by-case regulation of hazardous waste recycling activities.** The department shall use the following procedures when determining whether to regulate hazardous waste recycling activities described in s. NR 661.0006 (1) (b) 4. under the provisions of s. NR 661.0006 (2) and (3), rather than under the provisions of subch. F of ch. NR 666.

(1) If a generator is accumulating the waste, the department shall issue a special order setting forth the factual basis for the decision and stating that the person shall comply with subch. A of ch. NR 662, subch. C of ch. NR 662, subch. D of ch. NR 662 and subch. H of ch. NR 662. The special order shall become final within 30 days, unless the person served requests a public hearing to challenge the decision. Upon receiving such a request, the department shall hold a public hearing. The department shall provide notice of the hearing to the public and allow public participation at the hearing. The department shall issue a final order after the hearing stating whether or not compliance with ch. NR 662 is required. The order becomes effective 30 days after service of the decision unless the department specifies a later date.

(2) If the person is accumulating the recyclable material as a storage facility, the special order will state that the person shall obtain a license according to all applicable provisions of ch. NR 670. The owner or operator of the facility shall apply for a license within no less than 60 days and no more than 6 months of the effective date of the order, as specified in the order. If the owner or operator of the facility wishes to object to the department's decision, the owner or operator may do so in the owner or operator's license application, in a public hearing held on the draft license or in comments filed on the draft license or on the notice of intent to deny the license. The fact sheet accompanying the license will specify the reasons for the department's determination. The question of whether the department's decision was proper will remain open for consideration during the public comment period discussed under ch. NR 670 and in any subsequent hearing.

**History:** CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register March 2013 No. 687; CR 19-082: am. (1) Register August 2020 No. 776, eff. 9-1-20; correction in (intro.) made under s. 13.92 (4) (b) 7., Stats., Register April 2021 No. 784.

**NR 660.42 Notification requirement for hazardous secondary material.** (1) A facility managing hazardous secondary material under s. NR 660.30, 661.0004 (1) (w), (x), (y), or (za) shall send a notification to the department prior to operating under the regulatory provision and by March 1 of each even-numbered year thereafter using EPA Form 8700-12. The notification shall include all of the following information:

- (a) The name, address, and EPA ID number, if applicable, of the facility.
- (b) The name and telephone number of a contact person.

(c) The NAICS code of the facility.

(d) The regulation under which the hazardous secondary material will be managed.

(e) For reclaimers and intermediate facilities managing hazardous secondary material in accordance with s. NR 661.0004 (1) (x) or (y), whether the reclaimer or intermediate facility has financial assurance. Financial assurance is not applicable for persons managing hazardous secondary material generated and reclaimed under the control of the generator.

(f) The date the facility began or expects to begin managing the hazardous secondary material in accordance with the regulation.

(g) A list of hazardous secondary material that will be managed according to the regulation, reported as the EPA hazardous waste numbers that would apply if the hazardous secondary materials were managed as hazardous wastes.

(h) For each hazardous secondary material, whether the hazardous secondary material, or any portion thereof, will be managed in a land-based unit.

(i) The quantity of each hazardous secondary material to be managed annually.

(j) The certification, included in EPA Form 8700-12, signed and dated by an authorized representative of the facility.

(2) If a facility managing hazardous secondary material has submitted a notification, but then subsequently stops managing hazardous secondary material in accordance with the regulations in sub. (1), the facility shall notify the department within 30 days using EPA Form 8700-12. For the purposes of this section, a facility has stopped managing hazardous secondary material if the facility no longer generates, manages or reclaims hazardous secondary material under the regulations in sub. (1) and does not expect to manage any amount of hazardous secondary material for at least one year.

**History:** CR 19-082: cr. Register August 2020 No. 776, eff. 9-1-20; correction in (1) (g), (2) made under s. 35.17, Stats., Register August 2020 No. 776.

**NR 660.43 Legitimate recycling of hazardous secondary material.** (1) **FACTORS THAT ARE REQUIRED.** Recycling of hazardous secondary material for the purpose of the exclusions or exemptions from the hazardous waste rules shall be legitimate. Hazardous secondary material that is not legitimately recycled is discarded material and is a solid waste. In determining if recycling is legitimate, a person shall address all of the requirements under this subsection and consider the requirements in sub. (2). Legitimate recycling under this subsection includes all of the following:

(a) **Factor 1.** Legitimate recycling shall involve a hazardous secondary material that provides a useful contribution to the recycling process or to a product or intermediate of the recycling process. The hazardous secondary material provides a useful contribution if it meets any of the following conditions:

- 1. It contributes valuable ingredients to a product or intermediate.
- 2. It replaces a catalyst or carrier in the recycling process.
- 3. It is the source of a valuable constituent recovered in the recycling process.
- 4. It is recovered or regenerated by the recycling process.
- 5. It is used as an effective substitute for a commercial product.

(b) **Factor 2.** The recycling process shall produce a valuable product or intermediate. The product or intermediate is valuable if it is one of the following:

- 1. Sold to a third party.



2. Used by the recycler or the generator as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process.

(c) *Factor 3.* The generator and the recycler shall manage the hazardous secondary material as a valuable commodity when it is under their control. Where there is an analogous raw material, the hazardous secondary material shall be managed, at a minimum, in a manner consistent with the management of the raw material or in an equally protective manner. Where there is no analogous raw material, the hazardous secondary materials shall be contained. Hazardous secondary material that are released into the environment and are not recovered immediately are discarded.

**(2) FACTOR THAT SHALL BE CONSIDERED.** In making a determination that a hazardous secondary material is legitimately recycled, a person shall evaluate all factors in par. (a) and consider legitimacy as a whole. If, after careful evaluation of these considerations, the factor in this subsection is not met, then this fact may be an indication that the material is not legitimately recycled. However, the factor in this subsection does not have to be

met for the recycling to be considered legitimate. In evaluating the extent to which this factor is met and in determining whether a process that does not meet this factor is still legitimate, a person can consider exposure from toxics in the product, the bioavailability of the toxics in the product and other relevant considerations. In making a determination as to the overall legitimacy of a specific recycling activity, all of the following factors shall be considered:

(a) *Factor 4.* Whether any of the following applies to the product of the recycling process does not:

1. Contains significant concentrations of any hazardous constituents found in ch. NR 661 Appendix VIII that are not found in analogous products.

2. Contains concentrations of hazardous constituents found in ch. NR 661 Appendix VIII at levels that are significantly elevated from those found in analogous products.

3. Exhibits a hazardous characteristic, as defined in subch. C of ch. NR 661, that analogous products do not exhibit.

**History:** CR 19-082: cr. Register August 2020 No. 776, eff. 9-1-20; correction in (1) (c), (2) (intro.), (a) 1., 2. made under s. 35.17, Stats., Register August 2020 No. 776.