Chapter NR 660

HAZARDOUS WASTE MANAGEMENT: GENERAL

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) AVAILABILITY OF INFORMATION. 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) CONFIDENTIALITY OF INFORMATION. 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 application 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.

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

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:
www.epa.gov/epaoswer/hazwaste/data/form8700/form or the department by E−mail: waste.management@dnr.state.wi.us phone (608) 266−2111, or Fax (608) 267−2768.

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".

(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.

(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.

(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 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.

(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.

(21) "Designated facility" means a hazardous waste treatment, storage or disposal facility which 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 or 3) is regulated under s. NR 661.06 (3) (b) or subch. F of ch. NR 666, and 4) that has been designated on the manifest by the generator pursuant to s. NR 662.020. "Designated facility" also means 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). If a waste is destined to a facility in an authorized state which 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" is 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.

(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 661.22, 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" 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" 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) facility" 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 that 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. 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, all contiguous property under the control of the owner or operator seeking a license under ch. 291, Stats., and 42 USC 6928 (h). This definition also applies to facilities implementing corrective action under s. 291.37, Stats., and 42 USC 6928(h).

(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 s. NR 662.034.

(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.

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

(52) "Hazardous waste" means a hazardous waste as defined in s. NR 661.03.

(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 661.24.

(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 machine, roasters and foundry furnaces).

(h) Titanium dioxide chloride process oxidation reactors.

(i) Methane reforming furnaces.

(j) Pulping 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.

(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.

(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.

(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, 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.

(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 which began operation, or for which construction commenced after October 21, 1976.

Note: See also "existing hazardous waste management facility".

(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."

(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.

(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.

(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 less than 1,000 kg (2,205 pounds) of hazardous waste in a calendar month.

(108) "Solid waste" means a solid waste as defined in s. NR 661.02.

(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 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 661.04 (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 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.

(139) "Very small quantity generator" means a generator who generates no more than 100 kilograms (220 pounds) of non−acute hazardous waste or 1 kilogram of acute hazardous waste listed in ss. NR 661.31 to 661.33 in a calendar month.

(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 part 1317(b) or 1342.

(b) Receives and treats or stores an influent wastewater that is a hazardous waste as defined in s. NR 661.03, or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as defined in s. NR 661.03, or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in s. NR 661.03.

(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.

(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.**

NR 660.11 Incorporation by reference. This section is adopted under ss. 227.21 (2) and 285.11, 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, secretary of state and legislative reference bureau, Madison, Wisconsin, the web address listed after the name of the publication or may be obtained for personal use at the corresponding address noted.

(1) CODE OF FEDERAL REGULATIONS APPENDICES.

Note: Copies of these materials may be purchased from:

Superintendent of Documents
PO Box 371954
Pittsburgh, PA 15250−7954
(866) 512−1800
http://www.access.gpo.gov/su_docs/chklst/chklst.html

Table 1
CFR Appendix References

CFR Reference	Title	Incorporated by Reference For
(a) 40 CFR part 51, Appendix M, Method 204	Criteria for and Verification of a Permanent or Temporary Total Enclosure	NR 664, subch. CC NR 665, subch. CC
(b) 40 CFR part 51, Appendix W	Guideline on Air Quality Models (Revised)	NR 666, subch. H
(c) 40 CFR part 60, Appendix A	Test Methods	NR 666, Appendix IX
(d) 40 CFR part 60, Appendix A, Methods 1 to 5	Various Titles	NR 666, subch. H
(e) 40 CFR part 60, Appendix A, Method 1	Sample and Velocity Traverses for Stationary Sources	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)	NR 664, subch. AA NR 665, subch. AA
(g) 40 CFR part 60, Appendix A, Method 2A	Direct Measurement of Gas Volume through Pipes and Small Ducts	NR 664, subch. AA NR 665, subch. AA
(h) 40 CFR part 60, Appendix A, Method 2C	Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	NR 664, subch. AA NR 665, subch. AA
(i) 40 CFR part 60, Appendix A, Method 2D	Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	NR 664, subch. AA NR 665, subch. AA
(j) 40 CFR part 60, Appendix A, Method 3	Gas Analysis for the Determination of Dry Molecular Weight	NR 664, subch. O 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)	NR 666, Appendix IX
(L) 40 CFR part 60, Appendix A, Method 10	Determination of Carbon Monoxide Emissions from Stationary Sources	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	NR 666, Appendix IX
(n) 40 CFR part 60, Appendix A, Method 10B	Determination of Carbon Monoxide Emissions from Stationary Sources	NR 666, Appendix IX
(o) 40 CFR part 60, Appendix A, Method 18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography	NR 664, subch. AA NR 665, subch. AA
(p) 40 CFR part 60, Appendix A, Method 21	Determination of Volatile Organic Compounds Leaks	NR 664, subchs. AA and BB NR 665, subchs. AA, BB and CC

Table 1 − Continued
CFR Appendix References

CFR Reference	Title	Incorporated by Reference For
(q) 40 CFR part 60, Appendix A, Method 22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares	NR 664, subchs. AA and DD NR 665, subch. AA
(r) 40 CFR part 60, Appendix A, Method 25D	Determination of the Volatile Organic Concentration of Waste Samples	NR 664, subch. CC NR 665, subch. CC
(s) 40 CFR part 60, Appendix A, Method 25E	Determination of Vapor Phase Organic Concentration in Waste Samples	NR 665, subch. CC
(t) 40 CFR part 60, Appendix A, Method 27	Determination of Vapor Tightness of Gasoline Delivery Tank using Pressure−Vacuum Test	NR 664, subch. CC
(u) 40 CFR part 63, Appendix A, Method 301	Field Validation of Pollutant Measurement Methods from Various Waste Media	NR 665, subch. CC
(v) 40 CFR part 63, Appendix C	Determination of the Fraction Biodegraded (Fbio) in a Biological Treatment Unit	NR 665, subch. CC
(w) 40 CFR part 63, Appendix D	Alternative Validation Procedure for EPA Waste and Wastewater Methods	NR 665, subch. CC
(x) 40 CFR part 136, Appendix A, Method 624	Purgeables	NR 665, subch. CC
(y) 40 CFR part 136, Appendix A, Method 625	Base/Neutrals and Acids	NR 665, subch. CC
(z) 40 CFR part 136, Appendix A, Method 1624	Volatile Organic Compounds by Isotope Dilution GC/MS	NR 665, subch. CC
(za) 40 CFR part 136, Appendix A, Method 1625	Semivolatile Organic Compounds by Isotope Dilution GC/MS	NR 665, subch. CC

(2) AMERICAN PETROLEUM INSTITUTE (API).

Note: Copies of this document can be purchased from:
American Petroleum Institute
1220 L Street, Northwest
Washington, DC 20005
(202) 682−8000
www.api.org

Table 2
American Petroleum Institute Document Reference

Document Reference	Title	Incorporated by Reference For
(a) Publication 2517, Third Edition, February 1989	Evaporative Loss from External Floating−Roof Tanks	NR 665, subch. CC

(3) AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).

Note: Copies of these documents are available for inspection in the offices of the department of natural resources, secretary of state and legislative reference bureau, Madison, Wisconsin.

Table 3
American Society for Testing and Materials Document References

Document Reference	Title	Incorporated by Reference For
(a) ASTM D93−79	Standard Test Methods for Flash Point by Pensky−Martens Closed Tester	NR 661, subch. C
(b) ASTM D93−80	Standard Test Methods for Flash Point by Pensky−Martens Closed Tester	NR 661, subch. C
(c) ASTM D140−70	Standard Practice for Sampling Bituminous Materials	NR 661, Appendix I
(d) ASTM D346−75	Standard Practice for Collection and Preparation of Coke Samples for Laboratory Analysis	NR 661, Appendix I
(e) ASTM D420−69	Guide to Site Characterization for Engineering, Design, and Construction Purposes	NR 661, Appendix I
(f) ASTM D1452−65	Standard Practice for Soil Investigation and Sampling by Auger Borings	NR 661, Appendix I
(g) ASTM D1946−82	Standard Method for Analysis of Reformed Gas by Gas Chromatography	NR 664, subch. AA NR 665, subch. AA
(h) ASTM D2234−76	Standard Practice for Collection of a Gross Sample of Coal	NR 661, Appendix I
(i) ASTM D2267−88	Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography	NR 664, subch. BB NR 665, subch. BB
(j) ASTM D2382−83	Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High−Precision Method)	NR 664, subch. AA NR 665, subch. AA
(k) ASTM D2879−86	Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope	NR 664, subch. BB NR 665, subch. BB
(L) ASTM D2879−92	Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope	NR 665, subch. CC
(m) ASTM D3278−78	Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester	NR 661, subch. C
(n) ASTM E168−88	Standard Practices for General Techniques of Infrared Quantitative Analysis	NR 664, subch. BB NR 665, subch. BB
(o) ASTM E169−87	Standard Practices for General Techniques of Ultraviolet−Visible Quantitative Analysis	NR 664, subch. BB NR 665, subch. BB
(p) ASTM E260−85	Standard Practice for Packed Column Gas Chromatography	NR 664, subch. BB NR 665, subch. BB
(q) ASTM G21−70 (1984a)	Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi	NR 664, subch. N NR 665, subch. N
(r) ASTM G22−76 (1984b) [1]	Standard Practice for Determining Resistance of Plastics to Bacteria	NR 664, subch. N NR 665, subch. N

[1] Copies of this document can be purchased from: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428−2959, (610) 832−9585, www.astm.org

(4) DEPARTMENT OF DEFENSE EXPLOSIVES SAFETY BOARD.

Note: Copies of this document can be obtained free of charge from: http://www.ddesb.pentagon.mil/

Table 4
Department of Defense Explosives Safety Board Document References

Document Reference	Title	Incorporated by Reference For
(a) DOD 6055.9−STD	DOD Ammunition and Explosives Safety Standards	NR 666, subch. M

(5) U.S. EPA OFFICE OF SOLID WASTE:

Table 5

EPA Office of Solid Waste Document References

Document Reference	Title	Incorporated by Reference For
(a) EPA 450/2−78−027R, July 1986 [2]	Guidance on Air Quality Models (Revised)	NR 666, Appendix IX
(b) EPA 450/2−78−041, January 1978 [1]	Measurement of Volatile Organic Compounds Guideline Series	NR 666, Appendix IX
(c) EPA−450/2−81−005, December 1981 [1]	APTI Course 415: Control of Gaseous Emissions	NR 664, subch. AA NR 665, subch. AA NR 670, subch. B
(d) EPA 450/3−82−026, October 1982 [1, 2]	Gaseous Continuous Emissions Monitoring Systems−Performance Specification Guidelines for SO_2, NO_x, CO_2, O_2 and TRS.	NR 666, Appendix IX
(e) EPA−450/4−88−010, August 1988 [1]	Screening Procedures for Estimating the Air Quality Impact of Stationary Sources	NR 666, Appendix IX
(f) EPA−450/R−92−019, October 1992 [1, 2]	Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised	NR 666, subch. H
(g) EPA 600/2−80−018, January 1980 [4]	Samplers and Sampling Procedures for Hazardous Waste Streams	NR 661, Appendix I
(h) EPA 600/4−82−054, August 1982 [1, 2]	Field Evaluation of Carbon Monoxide and Hydrogen Sulfide Continuous Emission Monitors at an Oil Refinery	NR 666, Appendix IX
(i) EPA 600/9−76−006, December 1984 [1, 2]	Quality Assurance Handbook for Air Pollution Measurement Systems: Volume I. Principles	NR 666, Appendix IX
(j) EPA 600/S4−83−013, September 1982 [2]	Performance Test Results and Comparative Data for Designated Reference Methods for Carbon Monoxide	NR 666, Appendix IX
(k) EPA 625/3−89−016, March 1989 [6]	Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo−p−Dioxins and Dibenzofurans (CDDs and CDFs) and 1989 Update	NR 666, Appendix IX
(L) EPA 625/6−79−005, June 1979 [1]	Handbook: Continuous Air Pollution Source Monitoring Systems	NR 666, Appendix IX
(m) EMB Report No. 76−GAS−6, August 1975 [2]	Gasoline Vapor Emission Laboratory Evaluation−Part 2	NR 666, Appendix IX
(n) EPA Protocol 1, June 1978 [2]	Traceability Protocol for Establishing True Concentrations of Gases Used for Calibration and Audits of Continuous Source Emission Monitors	NR 666, Appendix IX
(o) EPA SW−846 [Third Edition (November 1986), as amended by Updates I (dated July 1992), II (dated September 1994), IIA (dated August 1993), IIB (dated January 1995), III (dated December 1996) and IIIA (dated April 1998)] [1, 3] (except for IIIA) and [5] (only IIIA)	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods	NR 660, subch. C NR 661, subch. C NR 664, subchs. J, N, S, AA, BB and Appendix IX NR 665, subchs. J, N, AA, BB and CC NR 666, subch. H and Appendix IX NR 668, subchs. A and D NR 670, subchs. B and F

Note: Copies of these materials may be purchased from:

[1]National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161
(800) 553−NTIS (6847)
www.ntis.gov

[2]Environmental Protection Agency
Research Triangle Park, NC 27711

[3]Superintendent of Documents
PO Box 371954
Pittsburgh, PA 15250−7954
(866) 512−1800
http://www.access.gpo.gov/su_docs/chklst/chklst.html

[4]U.S. EPA Office of Solid Waste (5307W)
OSW Methods Team
1200 Pennsylvania Ave., NW
Washington, DC 20460

[5]EPA Methods Information Communication Exchange (MICE) Service
(703) 821−4690

6ORD Publications Office
Cincinnati, OH
(513) 569−7562

(6) NATIONAL FIRE PROTECTION ASSOCIATION (NFPA).
Note: Copies of this document can be purchased from:
National Fire Protection Association
11 Tracy Drive
Avon, MA 02322
(800) 344−3555
www.nfpa.org

Table 6
National Fire Protection Association Document Reference

Title	Incorporated by Reference For
(a) Flammable and Combustible Liquids Code (1977 or 1981)	NR 662, subch. S NR 664, subch. J NR 665, subch. J NR 666, subch. H

(7) ORGANIZATION FOR ECONOMIC CO−OPERATION AND DEVELOPMENT.
Note: Copies of this document can be purchased and downloaded from:
http://oecdpublications.gfi−nb.com/cgi−bin/oecdbookshop.storefront (no print copies are available):

Table 7
Organization for Economic Co−operation and Development Document References

Document Reference	Title	Incorporated by Reference For
(a) OECD test 301B	CO_2 Evolution (Modified Sturm Test)	NR 664, subch. N NR 665, subch. N

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

Subchapter C — Rulemaking Petitions

NR 660.20 General. (1) 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 661.03 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.

NR 660.21 Petitions for equivalent testing or analytical 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 Variances from classification as a solid waste. According to the standards and criteria in s. NR 660.31 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 661.01 (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.

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

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 prevalence of the practice on an industry−wide basis.

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

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

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

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

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

(h) Other relevant factors.

(3) The department may grant requests for a variance from classifying as a solid waste those materials that have been reclaimed but shall be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity−like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on all of the following factors:

(a) The degree of processing the material has undergone and the degree of further processing that is required.

(b) The value of the material after it has been reclaimed.

(c) The degree to which the reclaimed material is like an analogous raw material.

(d) The extent to which an end market for the reclaimed material is guaranteed.

(e) The extent to which the 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.

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. The department will use all of the following procedures in evaluating applications for variances from classification as a solid waste or applications to classify particular enclosed controlled flame combustion devices as boilers:

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

(2) The department will evaluate the application and issue a draft notice tentatively granting or denying the application. Noti-

fication 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).

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

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 661.06 (1) (b) 4. should be regulated under s. NR 661.06 (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 together 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.

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 661.06 (1) (b) 4. under the provisions of s. NR 661.06 (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 subchs. A, C, D and E 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.