

Chapter NR 500

GENERAL SOLID WASTE MANAGEMENT REQUIREMENTS

NR 500.01	Purpose.	NR 500.065	License issuance.
NR 500.02	Applicability.	NR 500.07	Review times.
NR 500.03	Definitions.	NR 500.08	Exemptions.
NR 500.035	CCR landfill requirements.	NR 500.09	Construction inspection.
NR 500.04	Initial site inspection.	NR 500.10	Exemption for use of municipal solid waste as a fuel.
NR 500.05	General submittal requirements.	NR 500.11	Enforcement.
NR 500.06	License applications.		

Note: Corrections made under s. 13.93 c2md cbd 7., Stats., [Register, August, 1997, No. 500](#), eff. 9-1-97.

NR 500.01 Purpose. The purpose of this chapter is to provide definitions, submittal requirements, exemptions and other general information relating to solid waste facilities. This chapter is adopted pursuant to s. [227.11](#), Stats., and ch. [289](#), Stats.

History: Cr. [Register, January, 1988, No. 385](#), eff. 2-6-88.

NR 500.02 Applicability. c1d cad Except as provided under par. [cbd](#) and except as otherwise provided, this chapter governs all solid waste facilities as defined under s. [289.01 c35d](#), Stats., including all CCR landfills and expansions.

[cbd](#) This chapter does not govern any of the following:

1. Hazardous waste facilities as defined under s. [291.01 c8d](#), Stats., and regulated under chs. [NR 660](#) to [679](#).
2. Metallic mining operations for nonferrous minerals as defined under s. [293.01 c9d](#), Stats., and regulated under ch. [NR 182](#).
3. Metallic mining operations for ferrous minerals as defined under s. [295.41 c26d](#), Stats., including mining wastes and mining waste sites as defined under s. [295.41 c30d](#) and [c31d](#), Stats., and regulated under subch. [III of ch. 295](#), Stats.

c2d This chapter does not apply to the design, construction or operation of industrial wastewater facilities, sewerage systems and waterworks treating liquid wastes approved under s. [281.41](#), Stats., or permitted under ch. [283](#), Stats., nor to facilities used solely for the disposal of liquid municipal or industrial wastes which have been approved under s. [281.41](#), Stats., or permitted under ch. [283](#), Stats., except for facilities used for the disposal of solid waste.

History: Cr. [Register, January, 1988, No. 385](#), eff. 2-6-88; correction in c1d made under s. 13.93 c2md cbd 7., Stats., [Register, May, 1992, No. 437](#); am. c1d, [Register, June, 1996, No. 486](#), eff. 7-1-96; correction in c1d made under s. 13.93 c2md cbd 7., Stats., [Register March 2003 No. 567](#); correction in c1d made under s. 13.93 c2md cbd 7., Stats.; [CR 13-057](#): am. c1d [Register July 2015 No. 715](#), eff. 8-1-15; [CR 21-076](#): renum. c1d to c1d cad and cbd 1. to 3., cr. cbd cintro.d [Register July 2022 No. 799](#), eff. 8-1-22.

NR 500.03 Definitions. The following definitions as well as the definitions in chs. [289](#) and [299](#), Stats., are applicable to the terms used in chs. [NR 500](#) to [538](#) unless the context requires otherwise.

c1d XACLY means alternative concentration limit.

c2d XActive facility lifeY means the period of operation beginning with the initial receipt of solid waste at a facility until the department issues a closure and long term care license in accordance with s. [NR 520.04 c3d](#) or, if a closure and long term care license is not required, until the facility ceases to accept waste and has completed all closure activities in accordance with chs. [NR 500](#) to [538](#) and any applicable plan approvals.

c2md XActive portionY means that part of a CCR landfill

that has received or is receiving CCR or non-CCR waste and that has not completed closure in accordance with ch. [NR 506](#).

c3d XAir curtain destructorY means a solid waste facility that combines a fixed wall, open pit and mechanical air supply which uses an excess of oxygen and turbulence to accomplish the smokeless combustion of clean wood, brush, stumps or trees.

c4d XAirportY means a public-use airport open to the public without prior permission and without restrictions within the physical capacities of available airport facilities.

c5d XAlternative concentration limitY has the meaning specified in s. [NR 140.05 c1md](#).

c6d XAnti-seep collarY means a device which is attached to a leachate transfer pipe to prevent the migration of leachate along the pipe.

c7d XApplicantY means a person applying for a license or approval for a solid waste facility.

c8d XApproved facilityY has the meaning specified in s. [289.01 c3d](#), Stats.

c9d XApproved plan of operationY means a plan of operation approved under s. [289.30 c3d](#), Stats.

c9md XAreas of special natural resource interestY has the meaning in s. [30.01 c1amd](#), Stats., and as identified in s. [NR 1.05](#).

c10d XAreas susceptible to mass movementY means those areas characterized as having an active or substantial possibility of mass movement where the movement of earth material at, beneath, or adjacent to the landfill, because of natural or human-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, solifluction, block sliding, and rock fall.

c11d XAquiferY means a geologic formation, group of formations or part of a formation which are saturated and can transmit economic quantities of groundwater.

c12d XAsbestosY means any material which contains fibrous chrysotile, crocidolite, amosite minerals or the fibrous varieties of anthophyllite, tremolite and actinolite.

Note: Asbestos containing material is further defined in subs. [c25d](#), [c26d](#), and [c91d](#).

c13d XAssessment monitoringY means groundwater monitoring conducted at Subtitle D wells in accordance with s. [NR 508.04](#) when a groundwater standard is attained or exceeded at a Subtitle D well.

c14d XASTM methodY, XASTM standardY or XASTM-Y means a method or standard recognized and published by ASTM International.

c14md XASTM InternationalY means American Society for Testing and Materials International, located at 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, c610d 832-9585, www.astm.org

c15d XBackground groundwater qualityY has the meaning specified in s. NR 140.05 c3d.

c16d XBase gradeY means the elevation of a facility or portion of a facility following placement of the liner but prior to the placement of any granular drainage blanket.

c17d XBaselineY means groundwater quality at a point that is measured after the parameters have stabilized following installation of a monitoring well.

c18d XBedrockY means all rock formations at or beneath the land surface.

c19d XBeneficial useY or Xbeneficial reuseY means the utilization of a solid waste or an industrial by-product in a productive manner.

c19md XBeneficial use of CCR Y means the utilization of a solid waste or an industrial by-product in a Xproductive manner, Y which has the meaning given in s. NR 538.03 c10d.

c20d XBird hazardY means an increase in the likelihood of a bird and aircraft collision that may cause damage to the aircraft or injury to its occupants.

c20md XBorrow sourceY means a location where non-metallic mining, as defined in s. NR 135.03 c13d, is conducted for soils and aggregates used in landfill construction, operation and closure.

c20rd XBotanical residualsY means compostable materials and associated mineral soils derived from commercial and non-commercial horticultural activities such as greenhouse and plant nursery operations.

c21d XBuilding materialsY means non-combustible construction material including brick, concrete and drywall.

c22d XBulk blood and body fluidsY means drippable or pourable quantities or items saturated with whole blood or blood components, blood specimens, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, amniotic fluid, peritoneal fluid, peritoneal dialysate, pericardial fluid, pleural fluid and other body fluids visibly contaminated with blood.

c23d XCapital expendituresY has the meaning specified in s. 289.41 c1d camd, Stats.

c24d XCaptive insurance companyY means a closely-held company owned by one or more organizations, parents, whose original purpose was and may continue to be, to insure some or all of the risks of shareholders or affiliated organizations.

c25d XCategory I nonfriable asbestos containing materialY has the meaning specified in s. NR 447.02 c1d cad.

Note: Section NR 447.02 c1d cad defines category I nonfriable asbestos-containing matter to mean Xasbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than 1% asbestos as determined using the method specified in Appendix E to Subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, incorporated by reference in s. NR 484.04, that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure. Y

c26d XCategory II nonfriable asbestos containing materialY has the meaning specified in s. NR 447.02 c1d cbd.

Note: Section NR 447.02 c1d cbd defines category II nonfriable asbestos-containing matter to mean Xany material, excluding Category I nonfriable ACM, containing more than 1% asbestos as determined using the method specified in Appendix E to Subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure. Y

c26bd XCCRY means coal combustion residuals, including fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers.

c26fd XCCR fugitive dustY means solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than a stack or chimney.

c26kd cad XCCR landfillY means a landfill that receives CCR, including nonmetallic mining sites under s. 295.11 c6d, Stats., that receive CCR, and any area of land or excavation that

receives CCR, including sand and gravel pits and quarries that receive CCR, CCR piles, and any practice that does not meet the definition of a beneficial use of CCR under sub. c19md.

cbd XCCR landfillY does not include a CCR surface impoundment or municipal solid waste landfill that receives CCR.

c26pd cad XCCR pileY means any non-containerized accumulation of solid, nonflowing CCR that is placed on the land.

cbd XCCR pileY does not include CCR that is stored for beneficial use of CCR or beneficially used under ch. NR 538.

c26sd XCCR surface impoundmentY means a natural topographic depression, man-made excavation, or diked area that is designed to hold an accumulation of CCR and liquids, and the unit treats, stores or disposes of CCR.

c26wd cad XCCR unitY means any CCR landfill, CCR surface impoundment, lateral expansion of a CCR landfill, or a combination of more than one of these units.

cbd XCCR unitY includes both new and existing units, unless otherwise specified.

c26yd XCCR wellyY means a designated well installed at a CCR landfill whose location and depth have been approved by the department specifically for monitoring purposes under Subtitle D.

c27d XCertificate of depositY means a certificate issued by a bank or financial institution acknowledging receipt of a specified sum of money in a special kind of time deposit, drawing interest and requiring written notice for withdrawal.

c28d XCFRY means the code of federal regulations.

c29d XClass A compostY means compost derived from source-separated compostable materials that meets the requirements of s. NR 502.12 c16d.

c30d XclayY means all soil particles less than .005 mm.

c30gd XClean chipped woodY means unpainted, untreated and unlaminated wood that has been chipped, ground or shredded into small pieces and is free from contamination by bonding agents, dyes, finishes, chemical preservatives, or physical contaminants such as metal or plastic.

Note: Chapter NR 40 governs the identification, classification and control of invasive species in Wisconsin. Proper screening of compost feedstock materials and achievement of appropriate temperatures and residence times can help prevent the spread of viable seeds or other propagules of invasive species through compost.

c30rd XClean sawdustY means sawdust from processing of unpainted, untreated and unlaminated wood that is free from contamination by bonding agents, dyes, finishes, chemical preservatives, or physical contaminants such as metal or plastic.

c31d XClinicY has the meaning given in s. 287.07 c7d ccd 1. a., Stats.

c32d XClosingY has the meaning specified in s. 289.01 c5d, Stats.

c33d XClosureY means those actions to be taken by the owner or operator of a solid waste facility to prepare the facility for long-term care and to make it suitable for other uses.

c34d XClosure periodY means the 90-day period after the facility ceases to accept waste, unless otherwise specified in the approved plan of operation.

c35d XClosure planY means a written report and engineering plans detailing those actions that will be taken by the owner or operator to effect proper closure of a solid waste facility.

c36d XCoarse-grained soil environmentY means a soil environment in which a majority of the material within 25 feet of the proposed sub-base of the facility has less than 50% by weight passing the y200 sieve and which contains no extensive and continuous deposits of fine-grained or plastic soils.

Note: The determination as to whether a soil environment meets the definition of a coarse-grained soil environment shall be based on an interpretation of soil stratigraphy after consideration is given to the deposition and origin of the deposits and

their engineering classification under the unified soil classification system specified in ASTM standard D2487-00 c2000d. Copies of the standard may be obtained from ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, c610d 832-9585, www.astm.org. Copies of the standard are available for inspection at the offices of the department of natural resources, the secretary of state and the legislative reference bureau.

c37d XCODY means chemical oxygen demand.

c38d XCollectionY means the physical aggregating of solid waste from its primary source and includes all activities up to such time as the waste is delivered to a facility for transfer, processing, treatment or disposal.

c39d XCollection and transportation serviceY means a solid waste facility which utilizes containers, vehicles or other means for the collection and transportation of solid waste.

c40d XCollection basin lysimeterY means a device which is constructed with a geomembrane for monitoring the unsaturated zone.

c41d XCommercial solid wasteY means all types of solid waste generated by stores, offices, restaurants, warehouses, and other non-manufacturing activities, excluding residential and industrial wastes.

c42d XCompanyY has the meaning specified in s. 289.41 c1d cbd, Stats.

c43d XCompleteness determinationY means a determination by the department that the minimum submittal requirements established by chs. NR 500 to 538 for a plan or report have been met.

c44d XCompostY means a material which has been decomposed by composting to the extent that the material will not significantly reheat due to action of microorganisms when subjected to optimum oxygen, moisture, nutrients, and thermal conditions.

c44md XCompostableY means susceptible to complete decomposition by aerobic biological processes to yield carbon dioxide, water, inorganic compounds, and organic matter, leaving no distinguishable or toxic residue.

c45d XCompostingY means the biological degradation and transformation of organic solid waste under controlled conditions designed to promote aerobic decomposition. XCompostingY includes vermicomposting.

c46d XCondensateY means the liquid which is generated due to a change in the temperature or pressure of landfill gas.

c47d XConductivityY means the measurement of a water[s] ability to transmit an electrical current in micromhos{cm before correcting to 25°C.

c48d XConfining unitY means a geologic formation, group of formations or part of a formation which restricts the movement of groundwater to or from a geologic formation, group of formations or part of a formation with a higher hydraulic conductivity than the confining unit.

c49d XConstructY means to engage in facility construction for a new or expanded solid waste facility 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 equipment associated with the new, expanded or remodeled structures, and clearing, grading or liner construction.

c50d XConstruction and demolition wasteY means solid waste resulting from the construction, demolition or razing of buildings, roads and other structures.

Note: Construction and demolition waste typically consists of concrete, bricks, bituminous concrete, wood, glass, masonry, roofing, siding and plaster, alone or in combinations. It does not include waste paints, solvents, sealers, adhesives or similar materials.

c51d XConstruction documentation reportY means a written report submitted under the seal of a registered professional engineer in the state of Wisconsin documenting that a solid waste fa-

cility has been constructed in substantial compliance with a department approved plan of operation or chs. NR 500 to 538.

c52d XContainerY means a manufactured receptacle or man-made receptacle used to confine or hold solid waste.

c53d XContainerized storage facilityY means a storage facility designed and operated to use containers for the storage and containment of solid waste. A building which is enclosed on 4 sides and has a floor and roof is considered a container for the purposes of this definition.

c54d XCultural featuresY means any structure or landscape alteration intended for use by humans.

c56d XDecontaminationY means a process of removing disease-producing microorganisms and rendering an object safe for handling.

c57d XDepartmentY means the department of natural resources.

c58d XDesign capacityY means the total volume in-place in cubic yards of solid waste disposed of in a land disposal facility together with daily and intermediate cover utilized in the facility, but not including liner material, drainage blanket, final cover or topsoil.

c59d XDesign capacity for a facility which burns municipal solid wasteY means the facility[s] rated capacity or any permit limitation, whichever is less, for burning municipal solid waste. The design capacity for facilities that burn multiple fuel types such as refuse derived fuel, wood and coal will be determined based on the municipal solid waste portion of the fuel.

c60d XDesign management zoneY has the meaning specified in s. NR 140.05 c6d.

c60md X Destruction or adverse modificationY means a direct or indirect alteration of critical habitat that appreciably diminishes the likelihood of the survival and recovery of threatened or endangered species using that habitat.

c61d XDetection monitoringY means routine groundwater monitoring conducted in accordance with s. NR 507.19.

c62d XDetrimental effect on ground or surface waterY means having a significant damaging impact on ground or surface water quality for any present or future consumptive or non-consumptive uses.

c63d XDirectorY means the person in the highest ranking position in a medical facility, including but not limited to the administrator, chief executive officer or chair of the board of directors.

c64d XDiscarded materialY means material that is no longer of use to the generator of the material in the process from which it is generated.

c65d XDischarge areaY means an area in which there are upward components of hydraulic head in the aquifer.

c66d XDisinfectionY means a process that kills or destroys most disease-producing microorganisms, except spores.

c67d XDisplacementY means the relative movement of any 2 sides of a fault measured in any direction.

c68d XDistillate waste productY has the meaning specified in s. 289.44 c1d cad, Stats.

c69d XDMZY means design management zone.

c70d XDNRY means department of natural resources.

c71d XDredge materialY means any solid waste removed from the bed of any surface water.

c71gd XElectronic deviceY has the meaning specified under s. 287.17 c1d cgmd, Stats., but does not include a major appliance, as defined under sub. c136d, or a motor vehicle.

c71md cad XElectronics processingY means processing electronic devices for use in manufacturing processes or for re-

covery of usable materials and includes processing electronic devices or components derived from electronic devices by disassembling, baling, crushing, grinding, and shredding.

cbd XElectronics processingY does not include any of the following:

1. Destruction by incineration or other processes.
2. Land disposal of recyclable materials.
3. Reuse, repair, or any other process through which an electronic device is returned for use in its original form.
4. Removal of an electronic device from another device, such as from a major appliance or motor vehicle.
5. Hand disassembly of an electronic device in an educational setting for educational purposes.
6. Hand disassembly of a waste electronic device generated by a household on the property where it is generated.

c71rd XElectronics processing facilityY means a solid waste processing facility that accepts electronic devices or components derived from electronic devices for the purpose of electronics processing.

c72d XEnforcement standardY has the meaning specified in s. NR 140.05 c7d.

c73d XEnvironmentally sound storage facilityY has the meaning specified in s. 289.44 c1d cbd, Stats.

c74d XEPAY or XUSEPAY means the United States environmental protection agency.

c75d XESY means enforcement standard.

c76d XEstablishY means to bring a new or expanded solid waste facility into existence.

c76md cad XExisting CCR landfillY means a CCR landfill that receives CCR both before and after October 19, 2015.

cbd XExisting CCR landfillY includes a CCR landfill for which construction commenced prior to October 19, 2015, and which receives CCR on or after October 19, 2015, where all of the following occurred:

1. The landfill owner or operator obtained all federal, state, and local approvals or permits to begin physical construction.
2. The landfill had a continuous on-site, physical construction program that began prior to October 19, 2015.

c77d XExpand an existing land disposal facilityY means to construct a solid waste disposal facility or dispose of solid waste on land not previously licensed or to dispose of an additional volume of waste beyond the volume previously approved by the department. The term also includes the disposal of approved volumes of solid waste on existing licensed land if done in a manner not in accordance with a department plan approval or in a manner significantly different from past operations unless the department approves the proposed changes in writing.

c78d XFacilityY means a solid waste facility.

c79d XFalse groundwater standard exceedanceY means a sample result that exceeds a groundwater standard due to a source other than a solid waste disposal facility or due to laboratory or sampling error.

c80d XFaultY means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.

c81d XFeasibility reportY means a report required under s. 289.23, Stats.

Note: A feasibility report for a specific solid waste facility must describe the facility, surrounding area, and proposed operation in terms of land use, topography, soils, geology, groundwater, surface water, proposed waste quantities and characteristics, preliminary facility design concepts, environmental impacts, the need for the facility and waste reduction and recovery alternatives.

c82d XField blankY means a sample of reagent grade water

which is processed in the field in the same manner as the groundwater samples.

c83d XFill areaY means the area proposed to receive or which is receiving direct application of solid waste.

c84d XFilter packY means the sand, gravel or both in direct contact with or directly above the well screen.

c85d XFinal coverY means cover material that is applied upon closure of a landfill.

c86d XFine-grained soil environmentY means a soil environment in which a majority of the material within 25 feet of the proposed sub-base of the facility has at least 50% by weight passing the y200 sieve and which contains no extensive and continuous deposits of coarse-grained or non-plastic soils.

Note: The determination as to whether a soil environment meets the definition of a fine-grained soil environment shall be based on an interpretation of soil stratigraphy after consideration is given to the deposition and origin of the deposits and their engineering classification under the unified soil classification system specified in ASTM standard D2487-00 c2000d. Copies of the standard may be obtained from ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, c610d 832-9585, www.astm.org. Copies of the standard are available for inspection at the offices of the department of natural resources, the secretary of state and the legislative reference bureau.

c86md XFinished compostY means compost that has been processed sufficiently to meet the maturity and stability criteria in Table 2 of s. NR 502.12, and that is ready and suitable for sale, distribution or use.

c87d XFloodplainY means the land which has been or may be hereafter covered by flood water during the regional flood as defined in ch. NR 116, and includes the floodway and the flood fringe as defined in ch. NR 116.

c88d XFood chain cropsY means tobacco and crops grown for human consumption, and pasture, forage and feed grain for animals whose products are consumed by humans.

c88md XFood residualsY means unconsumed raw or cooked compostable material that results from handling, preparation, cooking, sale or consumption of food, and includes whole, ground and pulped food scraps, as well as compostable food packaging, utensils, tableware, kitchenware, and food containers that meet either the ASTM J D-6400 or the D-6868 standard. XFood residualsY includes vegetable and non-vegetable food residuals, but does not include rendering or slaughterhouse wastes or animal carcasses.

Note: Copies of ASTM standards D-6400 and D-6868 may be obtained from ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, c610d 832-9585, www.astm.org. Copies of the standard are available for inspection at the offices of the department of natural resources and legislative reference bureau.

c89d XFracture frequencyY means the average number of natural fractures or bedding planes calculated from a rock core collected from a boring.

Note: Fracture frequency is calculated by dividing the number of natural fractures or bedding planes in a rock core by the total length of the core in feet.

c90d XFree liquidsY means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.

Note: Free liquids shall be determined using the paint filter liquids test, Method 9095, in XTest Methods for Evaluating Solid Waste, Physical{Chemical Methods,Y EPA Publication SW-846, third edition, November 1986, as amended by Updates I in July 1992, II in September 1994, IIA in August 1993, IIB in January 1995, III in December 1996 and IIIA in April 1998. The test methods are available at no cost at <https://www.epa.gov/hw-sw846/basic-information-about-how-use-sw-846yUse-Which>. Copies of the test methods are available for inspection at the offices of the department of natural resources, the secretary of state and the legislative reference bureau. Copies may be obtained from the superintendent of documents, U.S. government printing office, P.O. Box 371954, Pittsburgh, PA 15250-7954, c866d 512-1800, www.gpo.gov. Copies may also be obtained from the National Technical Information Service, U.S. department of commerce, 5285 Port Royal Road, Springfield, VA 22161, c800d 553-6847, www.ntis.gov.

c91d XFriable asbestos materialY has the meaning specified in s. NR 447.02 c16d.

Note: Section NR 447.02 c16d defines friable asbestos material to mean Xany material containing more than 1% asbestos as determined using the method specified in Appendix E to Subpart E, 40 CFR part 763, section I, Polarized Light Mi-

croscopy, incorporated by reference in s. NR 484.04, that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. If the asbestos content of the friable ACM is less than 10%, as determined by a method other than point counting by polarized light microscopy cPLMd, the asbestos content shall be verified by point counting using PLM.Y

c92d XGarbageY has the meaning specified in s. 289.01 c9d, Stats.

c93d XGas condensateY means the liquid generated as a result of gas recovery process at the landfill.

c93md XGCLY or Xgeosynthetic clay linerY means factory manufactured geosynthetic product consisting of a layer of bentonite contained between geotextiles that are attached by adhesion, stitch bonding or needlepunching or a layer of bentonite attached to a geomembrane by adhesion.

c94d XGeomembraneY means a highly impermeable membrane made from plastic or rubber-based material by polymerization.

c95d XGeotextileY means a porous fabric manufactured from synthetic materials.

c96d XGroundwaterY means any waters of the state, as defined in s. 281.01 c18d, Stats., occurring in a saturated subsurface geological formation of rock or soil.

c97d XGroundwater standardY means a preventive action limit, alternative concentration limit or enforcement standard established in accordance with ch. NR 140 and s. NR 507.27.

c98d XHazardous air contaminantY has the meaning specified in s. NR 445.02 c6d.

c99d XHazardous substanceY has the meaning specified in s. 289.01 c11d, Stats.

c100d XHazardous wasteY has the meaning given in s. NR 660.10 c52d

c100md XHDPEY means high density polyethylene.

c101d XHigh-volume industrial wasteY has the meaning specified in s. 289.01 c17d, Stats.

c102d XHome generator of infectious wasteY means a person who generates infectious waste through self-administration of medication or who receives injected medication at home from other members of the household or from employees of a home care or hospice program.

c103d XHoloceneY means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.

c104d XHospitalY has the meaning given in s. 50.33 c2d, Stats.

c105d XHousehold wasteY means any solid waste including garbage, trash, and sanitary waste in septic tanks which is derived from households, including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas.

c106d XHuman tissueY means tissue removed from human beings. Human tissue does not include hair or nails, but does include teeth.

Note: A tooth containing mercury amalgam may be both an infectious waste and a hazardous waste. See s. NR 526.11 c2d cfd for how to manage teeth containing mercury amalgam.

c106md XHydraulic conductivityY means the rate at which water can move through a permeable medium and is also called the coefficient of permeability.

c107d XHydraulic connectionY means groundwater interflow within the zone of saturation occurring between 2 formations which may or may not be separated by an intermediate layer.

c108d XIncineratorY means a processing facility designed and operated for controlled burning of solid wastes primarily to achieve volume and weight reduction or to change waste charac-

teristics. Incinerator does not include a facility that uses solid waste as a supplemental fuel where less than 30% of the heat input to the facility is derived from such supplemental fuel.

c109d XIndustrial wasteY means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under chs. NR 660 to 679. Industrial waste may include, but is not limited to, waste resulting from the following manufacturing processes; electric power generation; fertilizer and agricultural chemicals; food and related products and by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing and foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

c110d XInfectious wasteY has the meaning given in s. 287.07 c7d ccd 1. c., Stats.

c111d XInfectious waste generatorY means a person or group of persons under the same corporate ownership and located on the same property who produces infectious waste.

c112d XInfectious waste treatmentY means rendering an infectious waste non-infectious. For human tissue, this term means rendering the waste both non-infectious and unrecognizable as human tissue. For sharps, this term means rendering the sharp non-infectious and rendering the sharp broken and not able to be reused, such as by a grinding or shredding process.

c114d XInitial site reportY means a report submitted under ch. NR 509 which describes a proposed solid waste disposal facility in sufficient detail to allow the department to give a written opinion on whether or not a feasibility report should be prepared.

c115d XIn-situ testingY means hydraulic conductivity tests performed on the in-place soils.

c116d XInterest bearing accountsY means escrow accounts, trust accounts or cash deposits with the department.

c117d XIntermediate size construction and demolition waste landfillY means a landfill with a design capacity of at least 50,000 cubic yards but no more than 250,000 cubic yards and used for the disposal of only construction and demolition wastes.

c118d XKarst terranesY means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terranes include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.

c119d XLand disposal facilityY means a solid waste facility where solid waste is placed in a landspreading facility, a landfill, or surface impoundment facility for disposal purposes.

c120d XLandfillY means a land disposal facility, not classified as a landspreading facility or surface impoundment facility, where solid waste is disposed on land by utilizing the principles of engineering to confine the solid waste to the smallest practical area, to reduce it to the smallest practical volume, and to cover it with a layer of earth or other approved material as required.

c120gd XLandfill organic stabilityY means a landfill has reached an organically stable state when landfill gas production has effectively ceased, landfill leachate levels have no significant organic component, the organic fraction of the waste mass will not readily decompose when placed in ideal moisture and temperature conditions, and there is no longer any measurable settlement of the landfill surface.

c120rd XLandfill stabilityY means a landfill has reached a stable state when maintenance and engineering systems are no longer necessary to protect human health and the environment.

c121d XLandspreading facilityY means a land disposal facility where solid waste is discharged, deposited, placed or injected in thin layers onto the land surface of the facility, or is incorporated into the top several feet of the surface soil, for agricultural, silvicultural or waste disposal purposes.

c121md XLateral expansion of a CCR landfillY means a horizontal expansion of the waste boundaries of an existing CCR landfill made after October 19, 2015.

c122d XLeachateY means water or other liquid that has percolated through or contacted solid waste or gases generated by solid waste.

c123d XLeachate collection and removal systemY means a system capable of collecting and removing leachate or other liquids from a solid waste facility.

c123md XLeachate drainage basinY means the areal extent of the liner over which leachate gravity drains to a single extraction point, generally a sump and sideslope riser, as well as all of the waste vertically overlying this area.

c124d XLeachate monitoring systemY means a system used to monitor the elevation, quantity or quality of leachate and other liquids generated within a solid waste facility.

c124ed XLeachate recirculationY means the controlled introduction into the waste mass of a landfill of leachate derived from the same landfill.

c124gd XLicensed professional engineerY means a professional engineer registered or licensed with the Wisconsin department of safety and professional services.

c124hd XLicensed professional geologistY means a professional geologist registered or licensed with the Wisconsin department of safety and professional services.

c124md XLight petroleum productsY means gasoline, diesel fuel, no. 1 or no. 2 fuel oil, kerosene, aviation gasoline, jet fuel, or a mixture of 2 or more of these materials.

c125d XLimit of detectionY has the meaning specified in s. NR 149.03 c41d.

Note: Section NR 149.03 c41d defines Xlimit of detectionY to mean the lowest concentration or amount of analyte that can be identified, measured, and reported with confidence that the concentration is not a false positive value.Y

c126d XLimit of quantitationY has the meaning specified in s. NR 149.03 c42d.

Note: Section NR 149.03 c42d defines Xlimit of quantitationY to mean Xthe lowest concentration or amount of an analyte for which quantitative results can be obtained.Y

c127d XLimits of fillingY means the outermost limit at which waste from a facility has been disposed of, or approved or proposed for disposal.

c128d XLinerY means a constructed, continuous layer of natural or artificial materials placed beneath and on the sides of a surface impoundment, landfill, or landfill cell, which restricts the downward or lateral movement of leachate.

c129d XLiquid wasteY means any waste material that is determined to contain Xfree liquidsY as defined by Method 9095, Paint Filter Liquids Test, in XTest Methods for Evaluating Solid Waste, Physical/Chemical Methods,Y EPA Publication SW-846, third edition, November 1986, as amended by Updates I in July 1992, II in September 1994, IIA in August 1993, IIB in January 1995, III in December 1996 and IIIA in April 1998.

Note: The test methods are available at no cost at <https://www.epa.gov/hw-sw846/basic-information-about-how-use-sw-846yUseWhich>. Copies of the test methods are available for inspection at the offices of the department of natural resources, the secretary of state, and the legislative reference bureau. Copies may be obtained from the superintendent of documents, U.S. government printing office, P.O. Box 371954, Pittsburgh, PA 15250-7954, c866d 512-1800, www.gpo.gov. Copies may also be obtained from the National Technical Information Service, U.S. department of commerce, 5285 Port Royal Road, Springfield, VA 22161, c800d 553-6847, www.ntis.gov.

c130d XLithified earth materialY means all rock, including

all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

c131d XLithostratigraphic unitY means a geologic formation that has a substantial degree of overall uniformity including such characteristics as color, mineralogic composition and grain size.

c132d XLong-term careY has the meaning specified in s. 289.01 c21d, Stats.

c133d XLow-flow sampling techniqueY means the collection of a groundwater sample from a monitoring well using equipment that draws the sample into the equipment and discharges the sample to the sample container at a rate of less than 350 milliliters{minute.

c134d XLower explosive limitY means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25°C and standard atmospheric pressure.

c135d XLysimeterY means a device used for collecting samples of soil moisture from the unsaturated zone.

c136d XMajor applianceY has the meaning specified in s. 287.01 c3d, Stats.

Note: Section 287.01 c3d, Stats., defines Xmajor applianceY to mean Xa residential or commercial air conditioner, clothes dryer, clothes washer, dishwasher, freezer, microwave oven, oven, refrigerator, furnace, boiler, dehumidifier, water heater or stoveY.

c137d XMajor phaseY means a horizontal portion of the landfill which is designed to be constructed at one time.

c138d XMajor soil unitY means any soil layer which is greater than 2 feet thick and is laterally extensive beneath the proposed or existing limits of filling, or which affects the local hydrogeologic flow system.

c139d XManifestY has the meaning given in s. 299.51 c1d camd, Stats.

c140d XMaterials recovery facilityY has the meaning specified in s. 287.27 c1d, Stats.

Note: The definition of a materials recovery facility, as given in s. 287.27 c1d, Stats., provides XIn this section, Zmaterials recovery facility[means a facility where the materials specified in sub. c4d cbd or s. 287.07 c3d or c4d, not mixed with other solid waste, are processed for reuse or recycling by conversion into a consumer product or a product which is used as a raw material in a commercial or industrial process. ZMaterials recovery facility[does not include a facility operated by a pulp or paper mill which utilizes fiber or paper that has been separated from waste for use as a raw material in a commercial product.Y

c141d XMaximum horizontal acceleration in lithified earth materialY means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90% or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

c142d XMedical facilityY means a hospital, clinic or nursing home.

c143d XMedical wasteY has the meaning given in s. 299.51 c1d cbd, Stats.

Note: Medical waste does not mean all of the waste produced in a medical setting. Waste materials from a medical setting which do not meet the definition of Xinfectious wasteY in statutes are considered to be Xmedical wasteY only if the generator mixes them with infectious waste or manages them as though they are infectious waste.

c144d XMedical waste incineratorY has the meaning given in s. 287.07 c7d ccd 1. cr., Stats.

c145d XMedical waste reduction policyY is a policy developed by a medical facility and designed to reduce the amount of medical waste generated within that medical facility, to prevent the mixing of infectious waste with waste which is not infectious

and to promote practical alternatives to disposable items in the medical setting.

c146d XMethod blankY has the meaning specified in s. NR 149.03 c46d.

c147d XMicrobiological laboratory wasteY means cultures derived from clinical specimens or laboratory equipment which has come in contact with these cultures.

c148d XMonitoringY means all procedures used to systematically inspect and collect data on the performance of a facility relating to leachate and gas production or the effect on the quality of the air, groundwater, surface water, unsaturated zone or soils.

c149d XMonofill cell for residue produced by burning municipal solid wasteY means a landfill or a specified area within a landfill for residue disposal which is designed to prevent mixing of residue and wastes which produce acidic leachates and which is designed to prevent leachate from adjacent cells from coming into contact with the residue.

c150d XMunicipal solid wasteY means:

cad Household waste, or

cbd Solid waste from commercial or industrial sources that does not contain hazardous waste and does not contain any process waste which is the direct or indirect result of the manufacturing of a product or the performance of a service such as dry cleaners or paint shops. XMunicipal solid wasteY does not include waste wood, papermill sludge, sewage sludge, tires or industrial process wastes.

c151d XMunicipal solid waste combustorY means any solid waste treatment facility that is used to burn municipal solid waste or products derived from municipal solid waste, alone or in conjunction with other materials.

c152d XMunicipal solid waste landfillY means a landfill which receives, or has received in the past, municipal solid waste. A municipal solid waste landfill may also receive other types of nonhazardous waste such as industrial solid waste and demolition waste. A municipal solid waste landfill may be publicly or privately owned.

c152md cad XNew CCR landfillY means a CCR landfill or lateral expansion of a CCR landfill that first receives CCR after October 19, 2015.

cbd XNew CCR landfillY includes a CCR landfill or lateral expansion of a CCR landfill that commences construction after October 19, 2015, where all of the following occurred:

1. The landfill owner or operator obtained all federal, state, and local approvals or permits to begin physical construction.
2. The landfill had a continuous on-site, physical construction program that began after October 19, 2015.

c153d XNoncombustible materialsY means solid waste which will not support combustion in the ambient atmosphere.

c154d XNoncontainerized storage facilityY means a storage facility which is not a containerized storage facility.

c155d XNoninterest bearing accountsY means letters of credit, performance bonds or forfeiture bonds.

c155md XNonrecyclable compostable paperY means compostable paper that is unrecyclable because it has been soiled or is not of a grade that is acceptable to the local recycling program serving the place of generation.

c156d XNRCSY means natural resources conservation service.

c157d XNursing homeY has the meaning given in s. 50.01 c3d, Stats.

c158d XOne-time disposalY means the disposal of no more than 10,000 cubic yards of approved types of agricultural or demolition solid waste on a one-time basis over a project life of not

more than 6 months. Examples are the disposal of concrete, brick, stone, asphalt, wood, trees, logs, brush and material from demolished buildings.

c159d XOpen burningY has the meaning specified in s. 289.51 c1d cbd, Stats.

c160d XOperating recordY means the record maintained by the owner or operator of a municipal solid waste facility in accordance with Subtitle D, 40 CFR 258.29.

c161d XOperatorY means the person who is responsible for the overall operation of a solid waste facility, or for part of a solid waste facility.

c162d XOSHAY means the occupational safety and health administration.

c163d XOwnerY means the person who owns a solid waste facility, or part of a solid waste facility.

c164d XPaint filter liquids testY means the test used for determining whether a waste contains free liquids as defined by Method 9095, Paint Filter Liquids Test, in XTest Methods for Evaluating Solid Waste, Physical{Chemical Methods,Y EPA Publication SW-846, third edition, November 1986, as amended by Updates I in July 1992, II in September 1994, IIA in August 1993, IIB in January 1995, III in December 1996 and IIIA in April 1998.

Note: The test methods are available at no cost at <https://www.epa.gov/hw-sw846/basic-information-about-how-use-sw-846yUseWhich>. Copies of the test methods are available for inspection at the offices of the department of natural resources, the secretary of state and the legislative reference bureau. Copies may be obtained from the superintendent of documents, U.S. government printing office, P.O. Box 371954, Pittsburgh, PA 15250-7954, c866d 512-1800, www.gpo.gov. Copies may also be obtained from the National Technical Information Service, U.S. department of commerce, 5285 Port Royal Road, Springfield, VA 22161, c800d 553-6847, www.ntis.gov.

c165d XPALY means preventive action limit.

c166d XParent materialY means the slightly altered or unweathered material from which the soil was formed.

c167d XPatient dayY means a period of service between the census-taking hours on 2 successive calendar days, including inpatient census and out-patient surgical days.

c168d XPercent recoveryY means the volume of soil or rock remaining in a sampling device relative to the total volume of soil or rock penetrated by the sampler.

c169d XPerched groundwaterY means any waters of the state, as defined in s. 281.01 c18d, Stats., occurring in an isolated, saturated zone located in the unsaturated zone.

c170d XPiezometerY means a well which is used to measure groundwater elevations and water quality beneath the water table. A piezometer is sealed within the aquifer and typically has a well screen of 2 to 5 feet.

c171d XPiezometer nestY means 2 or more piezometers within 10 feet of each other at the ground surface which are screened at different depths.

c172d XPiezometric surfaceY means a surface that represents the level to which water will rise in a piezometer.

c173d XPlace of public gatheringY means a structure which is open to the public.

c174d XPlan of operationY means a report submitted for a solid waste facility that describes its location, design, construction, documentation, monitoring, sanitation, operation, maintenance, closing and long-term care.

c175d XPoint of standards applicationY has the meaning specified in s. NR 140.05 c15d.

c176d XPoor foundation conditionsY means those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of a landfill.

c177d XPopulation equivalentY has the meaning specified in s. 289.51 c1d ccd, Stats.

c178d XPreventive action limitY has the meaning specified in s. NR 140.05 c17d.

c179d XPrivate alcohol fuel production systemY has the meaning specified in s. 289.44 c1d ccd, Stats.

c180d XPrivate water supply wellY is part of a private water supply system as defined in s. NR 812.07 c78d.

c181d XProcessing facilityY means a solid waste facility at which solid waste is baled, shredded, pulverized, composted, classified, separated, combusted or otherwise treated or altered by some means to facilitate further transfer, processing, utilization or disposal. Processing facilities do not include operations conducted by scrap metal, paper, fiber or plastic processors which are excluded from the definition of Xsolid waste facilitiesY in this section.

c182d XProof of financial responsibilityY means a bond, letter of credit, deposit, escrow account, trust account, net worth method, or other financial commitment made payable to or for the benefit of the department and approved by the department, ensuring that sufficient funds will be available to comply with the closure and long-term care requirements of chs. NR 500 to 538 and the approved plan of operation.

c183d XPublic water supply wellY is part of a public water supply system as defined in s. NR 811.02 c56d.

c184d XPublic use airportY has the meaning in s. 114.002 c18md, Stats.

c185d XPutrescible wasteY means solid waste which contains organic matter capable of being decomposed by microorganisms and of such a character and proportion as to be capable of supporting a disease vector population or attracting or providing food for birds. It does not include high-volume industrial waste.

c185md XPVCY means polyvinyl chloride.

c186d XQuality control flagY means a letter or symbol attached to a reported result indicating failure to meet quality control criteria.

c187d XRadioactive materialY has the meaning given in s. DHS 157.03 c299d.

c188d XRadioactive wasteY means those wastes defined in federal code 10 CFR 60.2 and 61.3.

c189d XRecharge zoneY means an area in which there are downward components of hydraulic head in the aquifer.

c189md XRecognized and generally accepted good engineering practicesY means engineering maintenance or operation activities based on established codes, widely accepted standards, published technical reports, or a practice widely recommended throughout the industry. Such practices generally detail approved ways to perform specific engineering, inspection, or mechanical integrity activities.

c190d XRecyclable materialsY means the items listed in s. 287.07 c1md to c4d, Stats.

c191d XRecyclingY has the meaning specified in s. 289.43 c1d, Stats.

c192d XRecycling facilityY means a facility where waste is recycled and may include a facility where waste has been generated.

c193d XRefuseY has the meaning specified in s. 289.01 c28d, Stats.

c194d XRegistered professional engineerY means a professional engineer registered or licensed with the Wisconsin department of safety and professional services.

c195d XRegistered professional geologistY means a profes-

sional geologist registered or licensed with the Wisconsin department of safety and professional services.

c196d XRemedial action options reportY has the meaning specified in s. NR 700.03 c49d.

Note: Section NR 700.03 c49d defines Xremedial action options reportY to mean Xa report which identifies and evaluates various remedial options with the goal of selecting an option in compliance with the requirements of s. NR 722.11.Y

c197d XRepresentative sampleY means any sample of a universe or whole, such as groundwater or soils, which reliably exhibits the average properties of the universe or whole.

Note: See EPA Publication SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Chapter 9 <https://www.epa.gov/hw-sw846> dated September 1986 for a discussion and examples of representative samples.

c198d XResidue produced by burning municipal solid wasteY means the residue produced in a municipal solid waste combustor designed and operated for controlled burning of solid wastes primarily to achieve volume and weight reduction or to change waste characteristics. This includes facilities such as boilers which also capture energy in the form of steam, electricity, heat, gas, oil or char from the burning of waste. Residue produced by burning municipal solid waste includes, but is not limited to, slag, ash, fly ash, reacted and unreacted scrubber lime, and soot. Residue produced by burning municipal solid waste does not include bypass waste which is rejected prior to burning.

c199d XRockY means lithified earth material as defined in sub. c130d.

c200d XRQDY means the rock quality designation calculated from a rock core collected from a boring.

Note: RQD is the ratio of the length of a rock core, adding only the intact pieces of core recovered greater than 10 centimeters long, to the total length cored. RQD ranges from 0 to 100 percent and should only be applied to cores greater than 5.4 centimeters in diameter.

c201d XRun-offY means any rainwater, leachate or other liquid that drains over land, from any part of a solid waste facility.

c202d XRun-onY means any rainwater, leachate, or other liquid that drains over land onto any part of a solid waste facility.

c203d cad XSalvageable materialY means junk cars, machinery or equipment, scrap metal, or other junk or scrap materials that are of further usefulness mainly as a raw material for reprocessing, or as imperfect stock from which replacement or spare parts can be extracted.

cbd XSalvageable materialY does not include electronic devices as defined under sub. c71gd.

c204d XSampling periodY means the month in which a sample is collected.

c205d XSaturated zoneY means that part of the earth[s crust in which all voids are filled with water excluding the capillary zone.

c206d XSeasonal high groundwaterY means the set of groundwater level readings taken during which the highest water level occur in the majority of the groundwater wells within 300 feet of the proposed limits of filling.

c207d XSeasonal populationY means the seasonal transient population in addition to the year round population.

c208d XSeismic impact zoneY means an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth[s gravitational pull, will exceed 0.10g in 250 years.

c209d XSharpsY means medical equipment or clinical laboratory articles that may cause punctures or cuts. Sharps include, but are not limited to, contaminated, unused and disinfected items listed in s. NR 526.05 c1d cad.

c209md XSingle-application landspreadingY means landspreading where contaminated soil from only one remedial action site is all the contaminated soil that is ever applied onto an area of a property.

c210d XSite investigation reportY means a report prepared in accordance with s. NR 716.15.

c211d XSite investigation work planY means a work plan prepared in accordance with s. NR 716.09.

c212d XSludgeY 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.

c213d XSmall size construction and demolition waste landfillY means a landfill with a design capacity of 50,000 cubic yards or less and used for the disposal of only construction and demolition wastes.

c214d XSoilY means material that has been physically and chemically derived from the bedrock by nature.

c214md XSoil barrier layerY means a soil layer or set of layers that is constructed as a subgrade for a GCL and which provides a smooth surface and hydration water source for the GCL, reduces flow through the barrier system, reduces settlement stresses on a GCL and geomembrane and minimizes geochemical effects on a GCL.

c215d XSolid wasteY has the meaning specified in s. 289.01 c33d, Stats.

c216d XSolid waste disposalY has the meaning specified in s. 289.01 c34d, Stats.

c217d XSolid waste facilityY has the meaning specified in s. 289.01 c35d, Stats.

c218d XSolid waste storageY has the meaning specified in s. 289.01 c38d, Stats.

c219d XSolid waste treatmentY has the meaning specified in s. 289.01 c39d, Stats.

c219md XSource-separated compostable materialY means compostable materials that are separated from non-compostable material at the point of generation for use in composting and are kept separate from municipal solid waste. Source-separated compostable material includes food residuals; farm and non-farm crop residues; botanical residuals; aquatic plants; vegetative food processing residues such as those from cannery and brewing activities; fish harvesting and processing residuals; yard residuals; farm and herbivorous animal manure, excluding deer and elk manure, and associated animal bedding; clean chipped wood; clean sawdust; non-recyclable compostable paper; and other similar materials approved in writing by the department. This term does not include biosolids, domestic wastewater, sewage sludge or septage, high-volume industrial waste, rendering or slaughterhouse wastes, animal carcasses, other solid waste, or hazardous waste.

c220d XSpecific conductanceY means the measurement of a water's ability to transmit an electrical current in micromhos{cm corrected to 25°C.

c221d XStabilization of wasteY means any chemical, physical or thermal treatment of a waste, either alone or in combination with biological processes, which results in a significant reduction of pathogenic organisms including viruses.

c222d XStabilization of a land disposal facilityY means the process of waste settlement and associated land surface maintenance to insure that the majority of settlement has occurred, that pockets or depressions caused by settlement have been refilled or regraded, and that the final land surface contours represent a stable condition for closure and facility maintenance purposes.

c223d XSterilizationY means a process by which all forms of microbial life, including spores, viruses and fungi are destroyed.

c224d XStorage facilityY means a solid waste facility for the

storage of solid waste, on a temporary basis in such a manner as not to constitute ultimate disposal of solid waste.

c225d XStructural componentsY means liners, leachate collection systems, final covers, run-on{run-off systems, and any other component used in the construction and operation of the landfill that is necessary for protection of human health, welfare and the environment.

c226d XSub-base gradeY means the elevation of the facility or portion of the facility which has been excavated to its lowest level prior to the placement of any liner system.

c227d XSub-soil horizonY means the soil horizon adjacent to and usually directly below the topsoil.

c228d XSubtitle DY means the United States Resource Conservation and Recovery Act cRCRA Subtitle D solid waste disposal facility criteria as set forth in 40 CFR parts 257 and 258.

c229d XSubtitle D wellY means a designated well installed at a landfill that accepts municipal solid waste and whose location and depth have been approved by the department specifically for monitoring purposes under Subtitle D of RCRA, 40 CFR parts 257 and 258.

c230d XSurface impoundment facilityY means a storage or land disposal facility with a natural topographic depression, artificial excavation or dike arrangement which is used for storage or disposal of waste fluids, semi-solids or wastes containing free liquids.

c231d XSW-846Y means the document XTest Methods for Evaluating Solid Waste, Physical{Chemical Methods,Y EPA Publication SW-846, third edition, November 1986, as amended by Updates I in July 1992, II in September 1994, IIA in August 1993, IIB in January 1995, III in December 1996 and IIIA in April 1998.

Note: The test methods are available at no cost at <https://www.epa.gov/hw-sw846/basic-information-about-how-use-sw-846yUseWhich>. Copies of the test methods are available for inspection at the offices of the department of natural resources, the secretary of state and the legislative reference bureau. Copies may be obtained from the superintendent of documents, U.S. government printing office, P.O. Box 371954, Pittsburgh, PA 15250-7954, c866d 512-1800, www.gpo.gov. Copies may also be obtained from the national technical information service, U.S. department of commerce, 5285 Port Royal Road, Springfield, VA 22161, c800d 553-6847, www.ntis.gov.

c231md XTake of an endangered or threatened speciesY has the meaning defined in s. NR 27.01 c8d.

c232d XTankY means a stationary device not including manholes, designed to contain an accumulation of leachate or other waste which is constructed primarily of nonearthen materials, such as wood, concrete, steel or plastic, which provide structural support.

c233d X25-year, 24-hour stormY means a storm of 24-hour duration with a probable recurrence interval of once in 25 years as determined under s. NR 205.05.

c234d XTerminationY has the meaning specified in s. 289.01 c40d, Stats.

c235d XTop of the bedrock surfaceY means the top of the uppermost rock formation.

Note: The presence of bedrock shall be indicated when a majority of the drill cuttings or excavated material consist of either angular rock fragments, as in the case of crystalline bedrock, or rock fragments composed of individual grains or rock particles that are cemented together to form an aggregate, as opposed to single sediment particles, such as sand.

c236d XTopsoilY means natural loam, sandy loam, silt loam, silty clay loam or clay loam humus-bearing soils or other material that will easily produce and sustain dense growths of vegetation capable of preventing wind and water erosion of the material itself and of other materials beneath.

c237d XTotal suspended particulatesY means particulate matter as measured by the method described in Appendix B of 40 CFR part 50.

c237md XTrace chemotherapy wasteY means items contaminated with antineoplastic chemotherapy drugs, including drug dispensing devices, gloves and other items that have come into contact with chemotherapy drugs.

c238d XTransfer facilityY means a solid waste facility at which transferring of solid waste from one vehicle or container to another, generally of larger capacity, occurs prior to transporting to the point of processing or disposal.

c239d XTransportation serviceY means an operation which transports vehicles or containers or both vehicles or other means of conveying solid waste from the primary source of collection and includes all activities up to such time as the waste is delivered to a facility for transfer, processing, treatment or disposal.

c240d XTreatment areaY has the meaning given in s. 287.07 c7d ccd 1. e., Stats.

c241d XTrip blankY has the meaning specified in s. NR 149.03 c32d.

Note: The term Xtrip blankY has been eliminated from ch. NR 149. The concept is no longer defined or discussed in ch. NR 149. However, Xtrip blankY is understood to mean a sample of reagent grade water or methanol, which is used to determine possible contamination of sample bottles from volatile organic chemicals while in transit to and from the laboratory.

c242d XUltra low-level radioactive wasteY means a waste generated at a wastewater or water treatment facility treating groundwater containing radium.

c243d XUniformity coefficientY means the number resulting from dividing the grain size diameter in millimeters at the point where 60% of the material is finer by weight by the grain size diameter in millimeters at the point where 10% of the material is finer by weight.

c244d XUnsaturated zoneY means the zone between the land surface and the water table in which the pore spaces contain water at less than atmospheric pressure, as well as air and other gases.

c245d XUnsaturated zone monitoring systemY means a system used to measure soil moisture quantity or quality in the unsaturated zone beneath a regulated facility.

c246d XUnstable areaY means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terranes.

c246md XUppermost aquiferY means the geologic formation nearest the natural ground surface of a CCR landfill capable of yielding usable quantities of groundwater to wells or springs, as well as lower aquifers that are hydraulically interconnected with the uppermost aquifer within a CCR landfill[s] property boundary, as measured at a point nearest to the natural ground surface to which the aquifer rises during the wet season.

c247d XUSCSY means the unified soil classification system.

c248d XUSDAY means the United States department of agriculture.

c248md XUSDOTY means the United States department of transportation.

c249d XU.S. government securitiesY means treasury bills, treasury bonds, treasury certificates, treasury notes and treasury stocks guaranteed by the federal government.

c250d XUSGSY means the United States geological survey.

c251d XUWY means the university of Wisconsin.

c252d XU.W.-ExtensionY means the university of Wisconsin extension.

c253d XVegetable food residualsY means food residuals consisting of raw or cooked waste fruit and vegetable material

from residences, food establishments such as cafeterias, restaurants, food wholesalers, food retailers and food processors, and includes compostable packaging, utensils, tableware, kitchenware, and containers that meet either the ASTM - D-6400 or the D-6868 standard.

Note: Copies of ASTM standards D-6400 and D-6868 may be obtained from ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, c610d 832-9585, www.astm.org. Copies of the standard are available for inspection at the offices of the department of natural resources and legislative reference bureau.

c253md XVermicompostingY means the controlled and managed process by which live worms convert organic matter into dark, fertile granular excrement.

c254d XVOCY means volatile organic compounds.

c254gd XWashoutY means the carrying away of solid waste by waters of a regional flood.

c254rd XWaste boundaryY means a vertical surface located at the hydraulically downgradient limit of a CCR unit and extends down into the uppermost aquifer.

c255d XWater tableY means the upper surface of the saturated zone where the hydrostatic pressure is equal to atmospheric pressure.

c256d XWelly means any drillhole or other excavation or opening constructed for the purpose of obtaining or monitoring groundwater.

c257d XWell nestY means 2 or more wells installed within 10 feet of each other at the ground surface and constructed to varying depths.

c258d XWetlandsY means those areas where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation, and which have soils indicative of wet conditions.

c259d XWGNHSY means the Wisconsin geological and natural history survey.

c260d XWoodburning facilityY means a solid waste facility at which open burning of dry unpainted untreated wood, stumps, trees or other woody materials is performed. This term does not include air curtain destructors, incinerators, or municipal solid waste combustors.

c261d XWPDES permitY means a Wisconsin pollution discharge elimination system permit issued by the department under ch. 283, Stats., for the discharge of pollutants.

c262d XYard residualsY means yard waste as defined in s. 287.01 c17d, Stats., as well as incidental spoiled fruit and vegetables from noncommercial sources.

Note: Section 287.01 c17d, Stats., defines Xyard wasteY to mean Xleaves, grass clippings, yard and garden debris and brush, including clean woody vegetative material no greater than 6 inches in diameter. This term does not include stumps, roots or shrubs with intact root ballsY.

Note: Chapter NR 40 governs the identification, classification and control of invasive species in Wisconsin. Proper screening of compost feedstock materials and achievement of appropriate temperatures and residence times can help prevent the spread of viable seeds or other propagules of invasive species through compost.

c263d XZone-of-saturation landfillY means a landfill where the base grade is located below the water table in a fine-grained soil environment and is designed and operated to maintain inward groundwater gradients to the extent possible.

c264d XZoonotic infectious agentY means an infectious agent which can be transmitted from an animal to a human. Zoonotic infectious agents include *Bacillus anthracis* canthraxd, *Brucella abortus* cbrucellosisd, *Chlamydia psittaci* cpsittacosisd, *Coxiella burnetii* cQ feverd, *Lyssa virus* crabiesd, *Mycobacterium bovis* and *Mycobacterium tuberculosis*.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; am. c86d, cr. c12md, c33md, c41md, c85md, c86md, c114md, c149md and c155md, Register, May, 1992, No. 437, eff. 6-1-92; cr. c116md, Register, September, 1993, No. 453, eff. 10-1-93; am. cintro.d, c61d, c67d, cr. c12rd, c14gd, c14md, c15md, c30md, c35md, c37md, c62ed, c62id, c62rd, c67gd, c67md, c67td, c84dd, c84hd, c84ld, c84od, c84sd, c84wd, c89md, c96md, c107id, c107rd, c109md, c119md, c130md, c139md,

c159d, Register, October, 1994, No. 466, eff. 11-1-94; r. and recr., Register, June, 1996, No. 486, eff. 7-1-96; am. cintro.d, c2d, c43d, c51d and c182d, Register, December, 1997, No. 504, eff. 1-1-98; cr. c124md and c209md, Register, September, 1998, No. 513, eff. 10-1-98; corrections in c23d, c187d and c188d made under s. 13.93 c2md cbd 7., Stats., Register March 2003 No. 567; CR 04-113: am. c19d and c140d Register June 2005 No. 594, eff. 7-1-05; CR 04-077: cr. c100md, c120gd, c120rd, c123md, c124ed and c185md Register November 2005 No. 599, eff. 12-1-05; CR 05-020: am. cintro.d, c129d, c164d, c194d, c195d, c231d and c259d, cr. c9md, c14md, c20md, c93md, c124gd, c124hd, c214md, c231md, c237md and c248md, r. and recr. c14d, r. c29d and c55d Register January 2006 No. 601, eff. 2-1-06; corrections in c100d, c109d, c125d, c126d, c146d and c187d made under s. 13.92 c4d cbd 7., Stats.; correction in c124gd, c124hd, c194d, c195d made under s. 13.92 c4d cbd 6., Stats., Register February 2012 No. 674; CR 10-128: cr. c20rd, c29d, c30gd, c30rd, c44md, am. c45d, cr. c86md, c88md, c155md, am. c185d, cr. c219md, am. c253d, cr. c253md, am. c262d Register May 2012 No. 677, eff. 6-1-12; correction in c183d made under s. 13.92 c4d cbd 7., Stats., Register December 2020 No. 780; CR 17-046: am. c146d Register February 2021 No. 782, eff. 6-29-21; CR 21-076: cr. c2md, c19md, c26bd, c26fd, c26kd, c26pd, c26sd, c26wd, c26yd, c60md, c76md, am. c96d, cr. c106md, c121md, c152md, c189md, c246md, c254gd, c254rd Register July 2022 No. 799, eff. 8-1-22; correction in c26kd cad made under s. 35.17, Stats., Register July 2022 No. 799; CR 21-041: cr. c71gd, c71md, c71rd, renum. c203d to c203d cad and am., cr. c203d cbd Register June 2023 No. 810, eff. 7-1-23.

NR 500.035 CCR landfill requirements. c1d The CCR landfill requirements included in chs. NR 500 to 538 apply to an owner or operator of a new or existing CCR landfill, including any lateral expansion of a new or existing CCR landfill that disposes or otherwise engages in solid waste management of CCR generated from the combustion of coal at electric utilities and independent power producers. An electric utility or independent power producer is in operation if it is generating electricity that is provided to electric power transmission systems or to electric power distribution systems on or after October 19, 2015. Unless otherwise provided in chs. NR 500 to 538, these requirements also apply to any disposal unit that is not a CCR surface impoundment located off-site of the electric utility or independent power producer. An off-site disposal facility is in operation if it is accepting or managing CCR on or after October 19, 2015. The CCR landfill requirements in chs. NR 500 to 538 also apply to any CCR disposal practice that does not meet the definition of a beneficial use of CCR.

c2d The CCR landfill requirements included in chs. NR 500 to 538 do not apply to any of the following:

cad A CCR landfill that ceased receiving CCR prior to October 19, 2015.

cbd An electric utility or independent power producer that has ceased producing electricity prior to October 19, 2015.

ccd Any waste, including fly ash, bottom ash, boiler slag, and flue gas desulfurization materials, generated at a facility that is not part of an electric utility or independent power producer, such as a manufacturing facility, university, or hospital.

cdd Fly ash, bottom ash, boiler slag, and flue gas desulfurization materials, generated primarily from the combustion of fuels and fossil fuels other than coal, for the purpose of generating electricity unless the fuel burned consists of more than 50 percent coal on a total heat input or mass input basis, whichever results in the greater mass feed rate of coal.

ced A practice that meets the definition of a beneficial use of CCR.

cfid CCR placement at an active or abandoned underground or surface coal mine.

cgd A municipal solid waste landfill that receives CCR.

chd A CCR surface impoundment.

c3d Compliance with the CCR landfill requirements in chs. NR 500 to 538 does not affect the need for the owner or operator of a CCR landfill or lateral expansion of a CCR landfill to comply with all other applicable federal, state, tribal, or local laws or other requirements.

History: CR 21-076: cr. Register July 2022 No. 799, eff. 8-1-22; correction in c2d cfd made under s. 35.17, Stats., Register July 2022 No. 799.

NR 500.04 Initial site inspection. Any person intending to establish a new solid waste facility or expand an existing solid waste facility shall contact the department[s district or area office as appropriate to arrange for an initial site inspection in accordance with ch. NR 509 for the purpose of evaluating compliance with the applicable locational criteria and performance standards of ch. NR 502 and s. NR 504.04. This inspection shall be completed prior to submittal of an initial site report or a plan of operation report.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; am., Register, June, 1996, No. 486, eff. 7-1-96.

NR 500.05 General submittal requirements. Unless otherwise specified, all submittals for review and approval of any initial site report, feasibility report, plan of operation site investigation report, remedial action options report, construction documentation report, or closure plan, or any modifications to those plans, shall include all of the following:

c1d REVIEW FEE. The appropriate review fee specified in s. NR 520.04 shall be identified. The department will send an invoice for the plan review fee to the contact for the facility upon receipt of the submittal. Payment in check or money order shall be sent to the department[s bureau of finance within 30 days after receipt of the invoice.

c2d COVER LETTER. A letter detailing the desired department action or response.

c3d PAPER AND ELECTRONIC COPIES. Unless otherwise specified, 4 paper copies and one electronic copy of the plan or report prepared pursuant to the appropriate section of chs. NR 500 to 538, and an additional electronic copy of any plan sheets or drawings submitted as a part of the plan or report. Three paper copies shall be submitted to the department[s field office responsible for the area in which the facility is located and one paper copy, one electronic copy, and the additional electronic copy of associated plans or drawings shall be submitted to the bureau of waste management in Madison unless otherwise specified by the department. The complete electronic copy of the report and the separate electronic copy of any plan sheets or drawings shall be provided in formats and on media acceptable to the department.

c4d CERTIFICATION. cad The reports and plan sheets shall be under the seal of a licensed professional engineer. In addition, the following certification shall be included:

XI, _____, hereby certify that I am a licensed professional engineer in the State of Wisconsin in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 500 to 538, Wis. Adm. Code.Y

cbd Initial site reports, feasibility reports, plans of operation, site investigation, remedial action options reports and any other reports where interpretation of geology or hydrogeology is necessary shall be under the seal of a licensed professional geologist. In addition, the following certification shall be included:

XI, _____, hereby certify that I am a licensed professional geologist in the State of Wisconsin in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code; that the preparation of this document has not involved any unprofessional conduct as detailed in ch. GHSS 5, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 500 to 538, Wis. Adm. Code.Y

c5d TECHNICAL PROCEDURES. All technical procedures used to investigate a solid waste facility shall be the current standard procedures as specified by ASTM International, United States geological survey, USEPA[s standard methods for the examination of water and wastewater, or other equivalent or appropriate methods approved by the department. Test procedures used shall be specified. Any deviation from a standard method shall be explained in detail with reasons provided.

c6d VISUALS. Maps, figures, photographs and tables to clarify information or conclusions. The visuals shall be legible. All paper copies of maps, plan sheets, drawings, isometrics, cross-sections and aerial photographs shall meet the following requirements:

cad No larger than 32 inches by 44 inches and no smaller than 8 $\frac{1}{2}$ inches by 11 inches.

cbd Be of appropriate scale to show all required details in sufficient clarity.

ccd Be numbered, referenced in the narrative, titled, have a legend of all symbols used, contain horizontal and vertical scales, where applicable, and specify drafting or origination dates.

cdd Use uniform scales.

ced Contain a north arrow.

cfđ Use mean sea level as the basis for all elevations.

cgđ Contain a survey grid based on monuments established in the field which utilizes a coordinate system and datum acceptable to the department. Examples of acceptable coordinate systems include state plane, Universal Transverse Mercator, and Wisconsin Transverse Mercator.

chđ Show original topography and the grid system on plan sheets showing construction, operation or closure topography. For complex plans, existing conditions within the landfill area may be shown by lighter lines or may be eliminated.

cid Show survey grid location and reference major plan sheets on all cross-sections. A reduced diagram of a cross-section location plan view map shall be included on the sheets with the cross-sections.

c7d TABLE OF CONTENTS. A table of contents listing all sections of the submittal.

c8d APPENDIX. An appendix listing names of all references, all raw data, testing and sampling procedures and calculations.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; am. cintro.d, c1d, c3d, c4d and c6d chđ, Register, June, 1996, No. 486, eff. 7-1-96; am. c3d and c4d, Register, December, 1997, No. 504, eff. 1-1-98; CR 05-020: am. c3d, c4d, c5d, c6d cintro.d, cad, cfd and cgđ Register January 2006 No. 601, eff. 2-1-06; CR 21-076: am. cintro.d Register July 2022 No. 799, eff. 8-1-22.

NR 500.06 License applications. Unless otherwise specified, no person may operate or maintain a solid waste facility without a license from the department. A submittal for initial licensing or relicensing of any solid waste facility shall include:

c1d LICENSE FEE. The appropriate fee as specified in s. NR 520.04 in check or money order payable to the department. Except as provided in s. NR 500.065, license fees are not transferable, prorable or refundable.

c2d APPLICATION FORM. A completed copy of the appropriate application form.

c3d FINANCIAL RESPONSIBILITY. For all land disposal facilities with plans of operation approved under s. 289.30, Stats., proof of financial responsibility as specified in s. NR 520.05.

c4d AFFIDAVIT OF FACILITY REGISTRY. Submittal on form 4400-067 that proof that a notation of the existence of the facility has been recorded in the office of the register of deeds in each county in which a portion of the facility is located. Owners of landfills applying for relicensure need only submit this form if

the legal description of the landfill has changed from that identified on a previously submitted form 4400-067.

Note: This form may be obtained from the Department of Natural Resources, Bureau of Waste Management, 101 S. Webster Street, P.O. Box 7921, Madison, WI 53707-7921, c608d 266-2111, waste.management@dnr.state.wi.us.

c5d NONCOMPLIANCE WITH PLANS OR ORDERS. A submittal for initial licensing of a new or expanded solid waste disposal facility shall contain the following information:

cad Identification of all persons owning a 10% or greater legal or equitable interest in the applicant or in the assets of the applicant, including shareholders of a corporation which is an applicant and partners of a partnership which is an applicant.

cbd Identification of all other Wisconsin solid or hazardous waste facilities for which the applicant or any person identified in par. cad, is named in, or subject to an order or plan approval issued by the department.

ccd Identification of all other Wisconsin solid or hazardous waste facilities which are owned by persons, including corporations and partnerships, in which the applicant or person identified in par. cad owns or previously owned a 10% or greater legal or equitable interest or a 10% or greater interest in the assets.

cdd A statement indicating whether or not all plan approvals and orders relating to all facilities identified in pars. cbd and ccd are being complied with.

Note: If noncompliance with an order or plan approval occurs while the applicant has or had a 10% or greater legal or equitable interest in the facility and is continuing, the department is prohibited from licensing the new or expanded solid waste disposal facility, unless the applicant provides proof of financial responsibility under s. 289.34 c3d, Stats., to assure that compliance is achieved.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; am. c1d cintro.d, Register, June, 1996, No. 486, eff. 7-1-96; am. c1d and cr. c5d, Register, September, 1998, No. 513, eff. 10-1-98; CR 05-020: am. c4d Register January 2006 No. 601, eff. 2-1-06.

NR 500.065 License issuance. c1d INITIAL APPLICATIONS. The department shall make a determination on an initial application for a solid waste facility license within 65 business days of receipt of all of the information specified in s. NR 500.06. If a determination is not made on the application within 65 business days, the department shall refund the license application fee paid by the applicant.

c2d RENEWALS. The department shall make a determination on a license renewal application for a solid waste facility license within 65 business days of receipt of all of the information specified in s. NR 500.06, or by the end of the current license period, whichever occurs later. If a determination is not made within these time constraints, the department shall refund the license renewal application fee paid by the applicant.

History: Cr. Register, September, 1998, No. 513, eff. 10-1-98.

NR 500.07 Review times. Except as otherwise provided in chs. NR 500 to 538, the department shall review and approve, deny or deem incomplete requests for plan approvals or exemptions within 65 business days after receiving the request. For the purposes of determining department compliance with review times specified in chs. NR 500 to 538 and ch. 289, Stats., the review time starts when the appropriate copies and review fee are received.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; am., Register, June, 1996, No. 486, eff. 7-1-96; am., Register, December, 1997, No. 504, eff. 1-1-98.

NR 500.08 Exemptions. c1d GENERAL. The following facilities are exempt from all requirements of chs. NR 500 to 538:

cad Facilities used for the disposal of solid waste from a single family or household on the property where it is generated.

cbd Riprapping projects using inert solid waste materials approved by the department under s. 30.12, Stats., or in submerged

shorelands in Lake Michigan, the title to which has been granted by the state to a municipality.

c2d OTHER FACILITIES. The following facilities shall be established in conformance with the locational requirements of s. NR 504.04 c3d ccd and c4d cad to cfd and shall be operated and maintained in a nuisance-free and aesthetic manner but are exempt from licensing and the requirements of chs. NR 500 to 538:

cad Facilities where only clean soil, brick, building stone, concrete or reinforced concrete not painted with lead-based paint, broken pavement, and wood not treated or painted with preservatives or lead-based paint are disposed.

cbd Facilities for the exclusive disposal of spoils from sand, gravel or stone and crushed stone quarry operations and similar nonmetallic earth materials.

ccd Facilities for the disposal of wood residue from a saw mill, debarker or equivalent industry which produces less than 5,000 board feet of lumber per year or equivalent and the total disposal facility volume is less than 500 cubic yards of wood residue.

cdd Facilities where railroad ties or utility poles are used as structural timbers for landscaping purposes in accordance with generally accepted practices.

ced Facilities where untreated, unpainted wood wastes including wood chips, bark, and sawdust are handled and stored properly and used for landscaping or trail surface course purposes in accordance with generally accepted practices.

cfđ Facilities where glass is processed or used as an aggregate replacement in asphalt pavement and subbase material under roadways subject to the following:

1. Glass may not be used in areas where the glass will be exposed and may pose a safety threat or in areas that will be frequently disturbed.

2. The amount of contaminants present with the glass such as labels, caps and metal rings shall be minimized to the extent necessary to prevent interference with the performance of the asphalt or roadbed aggregate. Asphalt and roadbed aggregate containing glass shall be designed and used in accordance with generally accepted engineering practice. The glass shall have sufficient properties to perform the function of the aggregates it replaces. The use of glass particles greater than 1/2 inch in size requires written department approval.

3. Glass shall be collected and stored in a nuisance free manner. Glass stockpiles shall have controlled access to prevent the general public from coming in contact with the glass piles. The number of stockpiles shall be kept to a minimum and may not be spread over a large area. Stockpiles shall be placed on a hard, all weather surface such as asphalt or concrete.

c3d DREDGED MATERIAL EXEMPTIONS. The following facilities are exempt from the licensing and plan review requirements of chs. NR 500 to 538 but shall be developed in accordance with the following requirements:

cad Except as provided under s. NR 500.08 c3md, facilities for the disposal of nonhazardous dredged material consisting of less than 3000 cubic yards from Lake Michigan, Lake Superior, the Wisconsin river, the Sheboygan river, the Milwaukee river, the Brule and Menominee rivers, the Fox river, the Mississippi river, or from any inland lakes or ponds treated with arsenicals provided the facility complies with the performance standards specified in s. NR 504.04 c4d.

cbd Facilities for the disposal of non-hazardous dredged material from rivers not listed in par. cad provided the facility complies with the performance standards specified in s. NR 504.04 c4d.

ccd Facilities for the disposal of nonhazardous dredged material from inland lakes or ponds that have not been treated with arsenicals provided the facility complies with the performance standards specified in s. NR 504.04 c4d.

c3md EXEMPTION FOR MATERIAL DREDGED FROM THE GREAT LAKES. A facility for the exclusive disposal of material dredged by a municipality or county or a contractor for a municipality or county from Lake Michigan, Lake Superior, or bays or harbors adjacent to Lake Michigan or Lake Superior is exempt from the licensing and plan review requirements under chs. NR 500 to 538, except for appropriate fees under ch. NR 520, Table 3, if established and operated in accordance with all of the following requirements:

cad The department determines that the dredging and disposal will have a demonstrable economic public benefit, as defined under s. 281.36 c1d camd, Stats.

cbd The department determines that the cumulative adverse environmental impact of the dredging and disposal is insignificant and will not injure public rights or interests, cause environmental pollution, as defined under s. 299.01 c4d, Stats., or result in material injury to the rights of any riparian owner. To make this determination, the disposal facility shall comply with the performance standards under s. NR 504.04 c4d and may not accept hazardous waste, contaminated sediment from a site regulated under chs. NR 700 to 758, or sediment with polychlorinated biphenyls regulated under 40 CFR 761.

ccd Except for a disposal facility created for the purpose of beach nourishment to add, replenish, or prevent erosion of beach material, the disposal facility is located at least 100 feet from any wetland or critical habitat area and is outside a floodplain. Beach nourishment may only be conducted above the ordinary high water mark on a public beach that has already been noticeably disturbed by human activities such as the construction of a parking lot, public swimming area, or other improvement and that has no unique ecological value.

cdd The disposal facility is located at least 100 feet from any water supply well.

ced The owner of the disposal facility accepts dredged material for not more than 10 years or in an amount not to exceed 35,000 cubic yards, whichever occurs first, in accordance with all of the following:

1. The start of the 10-year maximum active period of the disposal facility begins upon initial disposal of dredged material onsite.

2. The owner of the disposal facility shall submit the dates of initial and all subsequent disposal of dredged material in the disposal facility, sample analytical data collected for each source location under par. cnd, and the volume of dredged material during each disposal event to the department within 30 days of each disposal event.

3. The owner of the disposal facility shall submit a new application prior to any changes in facility location, boundaries, or design, or changes in the intended use of the dredged material.

4. There is not a material adverse change in the contamination of the dredged material that would be disposed of at the facility and there is not a material change in the intended use of the dredged material.

cfđ The owner of the disposal facility shall confine the disposal area to as limited a geographic area as is practicable and maintain a minimum separation distance of 1,300 feet from any other disposal facility approved under this subsection.

cgd The owner of the disposal facility shall maintain records of the description and volume of all material disposed of at the facility and dates of all disposal events. These records shall be

maintained and made accessible to department staff upon request for 15 years after the initial disposal of dredged material in the facility.

chd The owner of the disposal facility shall determine the contaminant characteristics of the dredged material prior to disposal by conducting sampling and analysis as required under par. [cnd](#).

cid Except for a disposal facility created for the purpose of beach nourishment to add, replenish, or prevent erosion of beach material, the owner of the disposal facility shall maintain a minimum separation distance of 3 feet between the dredged material and the seasonal high groundwater table at the time of placement.

cjd Except for a disposal facility created for the purpose of beach nourishment to add, replenish, or prevent erosion of beach material or unless the dredged material is used as fill underneath an impermeable structure or surface, the owner of the disposal facility shall place final cover over the waste within 90 days after the 10-year period under par. [ced](#) or attainment of 35,000 cubic yards in volume, whichever is first, in accordance with all of the following:

1. The cover shall consist of a minimum of one foot of native soil that includes a minimum of 6 inches of topsoil to support vegetation. The proposed vegetation shall be appropriate for the type and quality of topsoil, be compatible with both native vegetation and the final use, and be capable of providing stability and preventing erosion of the cover soils and dredged material.

2. Final vegetated slopes may not be steeper than a 3:1 horizontal to vertical incline.

ckd Except for a disposal facility created for the purpose of beach nourishment to add, replenish, or prevent erosion of beach material, the disposal facility shall be operated and maintained to minimize dust, minimize off-site tracking of soil or dredged material, and manage storm water runoff as required under chs. [NR 151](#) and [216](#). An interim cover capable of preventing erosion, windblown dust, and direct contact with the dredged material shall be placed over the dredged material in any areas that do not have final cover and are anticipated to be inactive for more than 90 days.

cLd At least 60 days prior to beginning disposal under this exemption the municipality or county or the contractor for the municipality or county shall submit an application on a form provided by the department requesting an exemption under this section. At a minimum, the form shall include all of the following information:

1. Address or location by quarter] quarter section of the disposal site or sites.

2. Name, address, and contact information of the primary contacts including the proposed disposal facility owner and any consultants.

3. Name of the person accepting the dredged material.

4. Map or aerial image showing the disposal location or locations.

5. Coordinates for the center of the disposal location or locations.

6. Dates when dredged material is first to be received at the disposal location or locations.

7. Approximate total volume of material to be disposed, description of the dredged material, and description of source location.

8. Intended uses of the dredged material.

9. Documentation of all other local, state, or federal approvals received for the dredging and disposal.

10. The available laboratory analytical data for samples collected from the dredged material to determine environmental impact in accordance with par. [cnd](#).

11. An explanation of how each of the requirements in pars. [cad](#) to [ckd](#) and [cod](#) will be met.

12. Submittal of the appropriate fees under ch. [NR 520](#), Table 3.

Note: An application form for requesting an exemption under this section may be obtained from the Department of Natural Resources, Waste and Materials Management Program, 101 S. Webster Street, P.O. Box 7921, Madison, WI 53707-7921, DNRWasteManagement@wisconsin.gov.

cmd If the application under par. [cLd](#) is not complete or any of the requirements are not met, the department shall issue a written objection to the application with an explanation. If the department does not provide a written objection to the application within 30 days of receipt of application and fees by the department, the applicant may proceed under this exemption. After an objection, an applicant may resubmit a revised application that addresses the explanation for objection by the department.

cnd The applicant shall take samples and analyze the dredged material prior to disposal in accordance with all of the following:

1. Sampling, sample handling, and sample analysis to demonstrate compliance with this section shall be performed in accordance with methods from applicable sources enumerated under ch. [NR 149](#).

2. Sampling shall be performed as specified under s. [NR 347.06 c4d](#) and [c5d](#).

3. If previous sampling data or other available information indicate the possibility of contamination by chemicals not listed in Table 3, the department may require analysis for those chemicals.

4. The laboratory analytical data for samples collected from the dredged material shall include tables summarizing the analytical data and copies of the laboratory analytical data sheets for all analyses, a map of the project area showing the specific locations of sediment sampling sites, and the name and address of the laboratory that performed the tests. All testing and quality control procedures shall be described and analytical methods, detection limits, and quantification limits shall be identified.

5. The applicant shall collect the appropriate number of samples from the dredged material capable of yielding data that accurately represent the contaminant characteristics of the material in accordance with all of the following:

- a. Laboratory analytical data from the dredged material source location may not be more than 5 years old from the date of application submittal.

- b. At a minimum, the applicant shall follow Table 1 sampling requirements if sampling is conducted prior to removal of the dredged material from its source.

- c. At a minimum, the applicant shall follow Table 2 sampling requirements if sampling is conducted after removal of the dredged material from its source.

- d. At a minimum, all samples shall be analyzed and reported as total concentration in milligrams{kilogram dry weight for the parameters listed in Table 3. Sample collection and evaluation shall be performed by or under the supervision of an environmental professional.

Note: As defined under s. [NR 528.03 c7d](#), Xenvironmental professionalY means a professional engineer registered pursuant to s. [443.04](#), Stats., or a professional soil scientist, geologist or hydrologist licensed under ch. [470](#), Stats.

Table 1

SAMPLING REQUIREMENTS WHEN CONDUCTED PRIOR TO REMOVAL OF THE DREDGED MATERIAL FROM ITS SOURCE

TOTAL VOLUME PLANNED FOR DISPOSAL IN CUBIC YARDS	MINIMUM NUMBER OF CORE SAMPLES¹
Less than 3,000	1
3,000 9,999	3
10,000 19,999	4
20,000 35,000	6

¹At least one sample from each distinct layer or strata observed in each core of the material to be dredged, or if no strata formation exists, then at least 2 samples from each core shall be analyzed for the required chemicals and characteristics. Distinct layers or strata may be identified by differences in grain size, color, texture, and content such as organic matter, sands, and silts along the length of the core.

Table 2
SAMPLING REQUIREMENTS WHEN CONDUCTED AFTER REMOVAL OF THE DREDGED MATERIAL FROM ITS SOURCE

TOTAL VOLUME PLANNED FOR DISPOSAL IN CUBIC YARDS	MINIMUM NUMBER OF SAMPLES
Less than 600	1 sample { 200 cubic yards, minimum of 2 samples
600] 2,999	6
3,000] 14,999	10
15,000] 35,000	15

Table 3
ANALYSES TO BE PERFORMED ON SAMPLES

ORGANICS	INORGANIC - METALS	OTHER INORGANICS
Oil & Grease	Arsenic	Particle Size Analysis] Sieve and Hydrometer Analysis
Dioxin for Lake Superior Projects	Barium	Ammonia-Nitrogen
Chlordane	Cadmium	Nitrate + Nitrite
Dichloro-diphenyl-trichloroethane cDDTd	Chromium ctotald	Total Kjeldahl Nitrogen
Dichlorodiphenyldichloroethan cDDDD	Copper	Total Phosphorus
Dichlorodiphenyl-dichloroethylene cDDEd	Lead	
Polychlorinated Biphenyls cPCBs d cTotald	Manganese	
Total Organic Carbon	Mercury	
Polycyclic Aromatic Hydrocarbons cPAHsd:	Nickel	
	Selenium	
Acenaphthylene Acenaphthene Anthracene Benzo cad anthracene Benzo cad pyrene Benzo ced pyrene Benzo cbd fluoranthene Benzo cg,h,id perylene Benzo ckd fluoranthene Chrysene Dibenzo ca,hd anthracene Fluoranthene Fluorene Indeno c1,2,3-cdd pyrene Naphthalene Phenanthrene Pyrene 2-Methylnaphthalene		

cod The owner of a disposal facility created for the purpose of beach nourishment to add, replenish, or prevent erosion of beach material shall also comply with all of the following:

1. Sampling and analysis requirements under s. [NR 347.06 c3d cdd](#).
2. Dredged material grain-size analysis under s. [NR 347.07 c4d](#).

c4d EXEMPTIONS FROM SOLID WASTE RULES. Exemptions from the requirements of chs. [NR 500](#) to [538](#) may be granted in writing by the department in special cases except as otherwise provided. A person may apply for an exemption by providing the department with a written request along with the appropriate documentation that demonstrates that the proposal will not cause environmental pollution as defined under s. [299.01 c4d](#), Stats. The department shall take into account such factors as the population of the area being served, the amount of waste being generated, the geologic and hydrogeologic conditions at the facility, the design of the facility, the operational history of the facility, the physical and chemical characteristics of the waste, and any other information that may be appropriate. The department shall review and make a written determination on the exemption request within 65 business days after receipt of a complete request and the appropriate review fee under ch. [NR 520](#) unless a different time period is provided by law. An exemption may not be granted if it will result in noncompliance with the minimum federal requirements under Subtitle D.

c5d BENEFICIAL REUSE. cad The department may grant exemptions from the requirements of ch. [289](#), Stats., for the purpose of allowing or encouraging the recycling of solid wastes. Any exemptions granted under this section shall be issued in writing in accordance with the requirements of s. [289.43](#), Stats.

cbd Facilities where wood ash is stored, handled, transported or landspread provided either of the following is met:

1. Wood ash is derived from the combustion of untreated wood with no additives, preservatives or other alterations other than kiln drying from generators who produce 10 dry tons or less of ash per year and is managed in a nuisance free manner.

2. Wood ash is managed in accordance with s. [NR 518.04 c6d](#).

c6d REMEDIATION ACTION EXEMPTION. The following facilities are exempt from solid waste program regulatory requirements under ch. [289](#), Stats., and chs. [NR 500](#) to [538](#):

cad Facilities for the treatment, storage or disposal of solid waste which is excavated for the primary purpose of conducting a site investigation or implementing an interim or remedial action in compliance with the requirements of chs. [NR 700](#) to [726](#) and which is returned to the same property from which it was excavated in compliance with the requirements of ch. [NR 718](#); and

cbd Facilities for the treatment, storage or disposal of excavated contaminated soil which are operated in compliance with the requirements of ch. [NR 718](#).

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; cr. c6d, Register, April, 1994, No. 460, eff. 5-1-94; am. c1d cintro.d, c2d, c3d cintro.d, c4d and c5d, cr. c2d cdd, ced, cfd and c3d and c5d ccd, r. c3d cad, renum. c3d cbd to be c3d cad, Register, June, 1996, No. 486, eff. 7-1-96; am. c1d cintro.d, c2d cintro.d, c3d cintro.d, c4d, c6d cintro.d, r. c5d cbd and renum. c5d ccd to be c5d cbd, Register, December, 1997, No. 504, eff. 1-1-98; am. c3d cad, Register, September, 1998, No. 513, eff. 10-1-98; CR 05-020: am. c2d cad Register January 2006 No. 601, eff. 2-1-06; CR 21-076: am. c4d Register July 2022 No. 799, eff. 8-1-22; EmR2302: emerg. am. c3d cad, cr. c3md, eff. 1-12-23; CR 23-002: am. c3d cad, cr. c3md Register January 2024 No. 817, eff. 2-1-24; correction in c3md cbd made under s. [13.92 c4d cbd](#) 7., Stats., Register January 2024 No. 817.

NR 500.09 Construction inspection. The department may require as a condition of a grant of exemption, the approval of a feasibility report, plan of operation, groundwater monitoring plan, closure plan, site investigation report and remedial action options report or a modification to any approval that critical construction steps of a facility, as specified in the approval, be inspected by the department. The applicant shall pay an inspection fee as specified in s. [NR 520.04 c5d](#).

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; am., Register, June, 1996, No. 486, eff. 7-1-96.

NR 500.10 Exemption for use of municipal solid

waste as a fuel. The department may grant exemptions in writing from any of the requirements of chs. NR 500 to 538 for municipal solid waste combustors and any other solid waste facilities which manage the residue from municipal solid waste combustors. The department also may issue an approval for solid waste which has been processed into a fuel for a municipal solid waste combustor which exempts the combustor and any facility which manages the combustor residue from regulation under chs. NR 500 to 538. Such exemptions may be granted under this section. The department shall consider the following criteria in determining whether an exemption shall be granted under this section:

- c1d** The source of the waste to be used as fuel.
- c2d** The variability of the waste to be used as fuel.
- c3d** The physical and chemical properties of the waste to be used as fuel.

c4d The quantity of the waste to be used as fuel.

c5d The percentage of the total fuel mix contributed by the municipal solid waste.

c6d The physical and chemical properties of the residue.

History: Cr. Register, May, 1992, No. 437, eff. 6-1-92; correction made under s. 13.93 c2md cbd 1., Stats., Register, May, 1995, No. 473; am. intro.d, Register, June, 1996, No. 486, eff. 7-1-96; am. intro.d, Register, December, 1997, No. 504, eff. 1-1-98.

NR 500.11 Enforcement. If the department has reason to believe that a violation of the requirements of ch. 289, Stats., or chs. NR 500 to 538 has occurred, it may take enforcement action as authorized under subch. VIII of ch. 289, Stats., or as authorized in applicable enforcement provisions for landfill and solid waste disposal program requirements in chs. NR 500 to 538.

History: CR 05-020: cr. Register January 2006 No. 601, eff. 2-1-06.