

Chapter NR 605

IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

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NR 605.01 Purpose. The purpose of this chapter is to establish criteria for identifying the characteristics of hazardous waste and to establish a list of solid wastes identified as hazardous based upon the use of the criteria, which shall be used by a solid waste generator, transporter or owner or operator of a solid waste treatment, storage or disposal facility to determine if the waste handled is a hazardous waste subject to regulation.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91.

NR 605.02 Applicability. This chapter identifies those solid wastes which are subject to regulation as hazardous waste under chs. NR 600 to 685. This chapter does not apply to metallic mining wastes resulting from a mining operation as defined in s. 144.81 (5), Stats., or polychlorinated biphenyls (PCBs) except where portions of this chapter are referenced in ch. NR 157.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91.

NR 605.03 Definitions. The definitions in s. NR 600.03 apply to this chapter.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91.

NR 605.04 Definition of hazardous waste. (1) A solid waste is a hazardous waste if:

(a) It is not excluded from regulation as a hazardous waste under s. NR 605.05 (1); and

(b) It meets any of the following criteria:

1. It is listed in s. NR 605.09 and has not been excluded from the lists under s. NR 605.10.

2. It is a mixture of solid waste and one or more hazardous wastes listed in s. NR 605.09 and has not been excluded under s. NR 605.10; however, the following mixtures of solid wastes and hazardous wastes listed in s. NR 605.09 are not hazardous wastes, except by application of subd. 1. or 3., if the generator can demonstrate that the mixture consists of wastewater, the discharge of which is subject to regulation under ch. 147, Stats., including wastewater at facilities which have eliminated the discharge of wastewater, and:

a. One or more of the following spent solvents listed in s. NR 605.09 (2) (a), table II: carbon tetrachloride, tetrachloroethylene, trichloroethyl-

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ene; if the maximum total weekly usage of these solvents, other than the amounts that may be demonstrated not to be discharged to wastewater, divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed one part per million; or

b. One or more of the following spent solvents listed in s. NR 605.09 (2) (a), table II: methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluoro-carbon solvents; if the maximum total weekly usage of these solvents, other than the amounts that may be demonstrated not to be discharged to wastewater, divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million; or

c. One of the following wastes listed in s. NR 605.09 (2) (b), table III: heat exchanger bundle cleaning sludge from the petroleum refining industry, hazardous waste no. K050; or

d. A discarded commercial chemical product, or chemical intermediate listed in s. NR 605.09 (3) (b), table IV or (c), table V, arising from minimal losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this paragraph, "minimal" losses include those from normal material handling operations, e.g. spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials; minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment, and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

e. Wastewater resulting from laboratory operations containing hazardous wastes listed in s. NR 605.09, tables I to V with the hazard code (t) if the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system, or provided the wastes combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

3. It exhibits any of the characteristics of hazardous waste identified in s. NR 605.08.

4. Except as provided in subd. 5, it is generated from the treatment, storage or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust or leachate, and it is a waste which is listed under s. NR 605.09, contains a waste listed under s. NR 605.09, or is derived from a waste listed under s. NR 605.09, and it has not been excluded under s. NR 605.10.

5. It is a waste pickle liquor sludge derived from the lime stabilization treatment of spent pickle liquor from the iron and steel industry falling under the standard industrial classification (SIC) codes 331 and 332, and

the sludge exhibits one or more of the characteristics of hazardous waste identified in s. NR 605.08.

Note: If waste pickle liquor sludge derived from the lime stabilization treatment of spent pickle liquor from the iron and steel industry falling under SIC codes 331 and 332 does not display one or more of the characteristics of hazardous waste identified in s. NR 605.08, it is not a hazardous waste.

6. It is a mixture of nonhazardous solid waste and a hazardous waste that is listed in s. NR 605.09 solely because it exhibits one or more of the characteristics of hazardous waste identified in s. NR 605.08, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in s. NR 605.08.

Note: The process of mixing a nonhazardous solid waste and a hazardous waste may require a license under ch. NR 680 for hazardous waste treatment.

(2) A solid waste which is not excluded from regulation under s. NR 605.05 (1) becomes a hazardous waste when any of the following events occur:

(a) In the case of a waste listed in s. NR 605.09, when the waste first meets the listing description in s. NR 605.09.

(b) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in s. NR 605.09 is first added to the solid waste.

(c) In the case of any other solid waste, including a solid waste mixture, when the waste exhibits any of the characteristics identified in s. NR 605.08.

(3) A hazardous waste shall remain a hazardous waste unless and until it:

(a) No longer exhibits any of the characteristics of a hazardous waste identified in s. NR 605.08; or

Note: However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of ch. NR 675 even if the wastes no longer exhibit a characteristic at the point of land disposal.

(b) In the case of a waste which is listed under s. NR 605.09, contains a waste listed under s. NR 605.09, or is derived from a waste listed under s. NR 605.09, the waste is excluded under s. NR 605.10.

(c) Is no longer a solid waste.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91.

NR 605.05 Exemptions. (1) EXEMPTIONS. The following materials are excluded from regulation as hazardous wastes:

(a) Household waste, including all of the following:

1. Waste that has been collected, transported, stored, treated, disposed, recovered or reused, except if the hazardous waste in this stream is separated and accumulated for later treatment, storage or disposal by a person other than a member of the household where the waste is generated.

2. Waste accumulated by a municipality for 5 days or less in a clean sweep program as defined in s. NR 187.03 (1). This exclusion for clean

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sweep programs does not apply to the household waste upon its removal from the accumulation area for further management.

Note: The accumulation, treatment, storage and disposal of household wastes which are not excluded under this paragraph are subject to regulation under chs. NR 600 to 685.

(b) Waste that is treated, stored, disposed or otherwise managed by a resource recovery facility managing municipal solid waste, if such facility:

1. Receives and burns only:

a. Household waste, and

b. Solid waste from commercial or industrial sources that does not contain hazardous waste; and

2. Does not accept hazardous waste and the owner or operator of the facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous waste is not received at or burned in the facility.

(c) Cement kiln dust waste.

(d) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:

1. The growing and harvesting of agricultural crops.

2. The raising of animals, including animal manures.

(e) Solid waste which consists of discarded wood or wood products which fail the test for the toxicity characteristic solely for arsenic and which is not a hazardous waste for any other reason, if the waste is generated by persons who utilize arsenical-treated wood and wood products for the intended end use of these materials.

(f) Polychlorinated biphenyls (PCBs) regulated under ch. NR 157.

(g) Fly ash waste, bottom ash waste, slag waste and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels.

(h) Drilling fluids, produced waters, and other wastes associated with the exploration, development or production of crude oil, natural gas or geothermal energy.

(i) Wastes which fail the test for the toxicity characteristic because chromium is present or are listed in s. NR 605.09 due to the presence of chromium, which do not fail the test for the toxicity characteristic for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or waste generators that:

1. The chromium in the waste is exclusively, or nearly exclusively, trivalent chromium; and

2. The waste is generated from an industrial process which used trivalent chromium exclusively, or nearly exclusively, and the process does not generate hexavalent chromium; and

3. The waste is typically and frequently managed in non-oxidizing environments.

(j) Specific wastes which meet the standard in par. (h), as long as they do not fail the test for the toxicity characteristic, and do not fail the test for any other characteristic are:

1. Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

2. Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

3. Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; and through-the-blue.

4. Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

5. Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

6. Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.

7. Waste scrap leather from the leather tanning industry, the shoe manufacturing industry and other leather product manufacturing industries.

8. Wastewater treatment sludges from the production of titanium dioxide pigment using chromium-bearing ores by the chloride process.

(k) Mining overburden returned to the mine site.

(l) Solid waste from the extraction, beneficiation and processing of ores and minerals, including coal, phosphate rock and the overburden from the mining of uranium ore.

(m) Until September 30, 1990, bottom ash waste, fly ash waste, slag waste and flue gas emission control waste generated from the combustion of municipal solid waste. After September 30, 1990, bottom ash waste, fly ash waste, slag waste and flue gas emission control waste generated from the combustion of municipal solid waste at a facility approved by the department under s. NR 502.14.

(n) By-products exhibiting a characteristic of hazardous waste that are reclaimed and complies with subs. (3) and (4).

Note: This exclusion does not apply to listed by-products included in s. NR 605.09.

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(o) Domestic sewage.

(p) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly owned treatment works for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.

(q) Petroleum contaminated media and debris that fail the test for the toxicity characteristic of s. NR 605.08 (5) for any one or more of the hazardous waste codes D018 to D043 and are subject to the corrective action regulations under 40 CFR 280, July 1, 1990.

Note: The publication containing the CFR references may be obtained from:

The Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

(r) Used oil that exhibits one or more of the characteristics of hazardous waste but is recycled in some other manner than being burned for energy recovery.

(s) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.

(1h) The following hazardous wastes are not subject to the requirements of chs. NR 610 to 685 when they are recycled and if the generator complies with subs. (3) and (4):

a. Scrap metal that is legitimately recovered or reclaimed.

b. Industrial ethyl alcohol that is legitimately recovered or reclaimed, except that:

1. A person initiating a shipment for legitimate recovery or reclamation in a foreign country, and any intermediary arranging for the shipment, shall comply with the requirements applicable to a primary exporter in s. NR 615.12 (1) (intro.), (1t) (a) to (d), (f) and (g) and (1u) to (1z), export the materials only upon consent of the receiving country and conforming with the EPA acknowledgment of consent, and provide a copy of the EPA acknowledgment of consent for the shipment to the transporter transporting the shipment for export;

2. Transporters transporting a shipment for export may not accept a shipment if the transporter knows the shipment does not conform to the EPA acknowledgment of consent, shall ensure that a copy of the EPA acknowledgment of consent accompanies the shipment and shall ensure that it is delivered to the facility designated by the person initiating the shipment.

(1m) Generators of wastes that are excluded under subs. (1) (1) and (1h) shall demonstrate, at the department's request, compliance with the terms of the exclusions by providing the following information:

(a) The name, location and address of the recycling facility;

(b) A description of the waste, hazardous waste number and waste quantity;

(c) A detailed description of the recycling process and how the waste is used as an ingredient in the process;

(d) A demonstration that there is a market or disposition of the waste; and

Note: An example of a demonstration of a market or disposition would be a contract showing the recycling facility uses the recyclable waste material as an ingredient in a production process.

(e) Documentation that the recycling facility has the necessary equipment to conduct the recycling activity.

(1r) The exclusions included in subs. (1) (l) and (1h) do not apply to wastes that are used in a manner constituting disposal or speculatively accumulated. Wastes that are used in a manner constituting disposal or speculatively accumulated are hazardous waste and shall be managed in accordance with all the requirements of chs. NR 600 to 685.

(2) **GENERATION OF WASTE IN PRODUCT OR RAW MATERIAL UNITS.** A hazardous waste which is generated in a product or raw material storage tank, a product or raw material vehicle, railroad freight car, vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment manufacturing unit, is not subject to regulation under chs. NR 600 to 685 until it exits the unit in which it was generated, unless the unit is a surface impoundment or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials. In accordance with s. NR 615.05 (4) (a) 4., the date upon which each period of accumulation begins after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials, shall be clearly marked and visible for inspection on each unit.

(3) **SAMPLES.** (a) Except as provided in par. (b), a sample of solid waste or a sample of water, soil or air which is collected for the sole purpose of testing to determine its characteristics or composition is not subject to regulation under chs. NR 600 to 685 when the sample is being:

1. Transported to a laboratory for the purpose of testing;
2. Transported back to the sample collector after testing;
3. Stored by the sample collector before transport to a laboratory for testing;
4. Stored in a laboratory before testing;
5. Stored in a laboratory after testing but before it is returned to the sample collector; or
6. Stored temporarily in the laboratory after testing for a specific purpose.

Note: An example of a specific purpose would be storage until conclusion of a court case or enforcement action where further testing of the sample may be necessary.

(b) In order to qualify for the exemption in par. (a) 1. and 2., a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector shall:

1. Comply with DOT, U.S. postal service (USPS) or any other applicable shipping requirements; or

2. Comply with the following requirements, if the sample collector determines that DOT, USPS or other shipping requirements do not apply to the shipment of the sample:

a. Assure that the following information accompanies the sample: the sample collector's name, mailing address and telephone number; the laboratory name, address and telephone number; the quantity of the sample; the date of shipment; and a description of the sample; and

b. Package the sample so that it does not leak, spill or vaporize from its packaging.

(c) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory no longer meets any of the conditions stated in par. (a).

(4) **TREATABILITY STUDIES SAMPLES.** Except as provided in sub. (4h), persons who generate or collect samples for the purpose of conducting treatability studies are not subject to any requirement of chs. NR 610 to 699 when:

(a) The sample is being collected and prepared for transportation by the generator or sample collector;

(b) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility;

(c) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study; or

(d) The sample shipment is accompanied by a manifest, according to the requirements of s. NR 615.08.

(4h) The exemption in sub. (4) is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies if:

(a) The generator or sample collector uses in treatability studies no more than 1000 kg of any non-acute hazardous waste, 1 kg of acute hazardous waste, or 250 kg of soils, water or debris contaminated with acute hazardous waste for each process being evaluated for each generated waste stream;

(b) The mass of each sample shipment does not exceed 1000 kg of non-acute hazardous waste, 1 kg of acute hazardous waste or 250 kg of soils, water or debris contaminated with acute hazardous waste;

(c) The sample is packaged so that it does not leak, spill or vaporize from its package during shipment and meet the following requirements:

1. The transportation of each sample shipment complies with ch. NR 620, U.S. Department of Transportation (DOT), U.S. Postal Service (USPS) and any other applicable shipping requirement;

2. If the DOT, USPS or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample:

a. The name, mailing address and telephone number of the originator of the sample;

b. The name, address and telephone number of the facility that will perform the treatability study;

c. The quantity of the sample;

d. The date of shipment; and

e. A description of the sample, including its EPA hazardous waste number.

(d) The sample is shipped to a laboratory or testing facility which:

1. Is exempt under sub. (5);

2. Has an operating license, interim license, variance or waiver from the department;

3. Is shipped to an out-of-state laboratory or facility that has an applicable exemption, operating license, interim license, variance or waiver which has been granted by EPA or an authorized state; and

(e) The generator or sample collector maintains the following records for a period ending 3 years after completion of the treatability study:

1. Copies of the manifest and any other required shipping documents;

2. A copy of the contract with the facility conducting the treatability study; and

3. Documentation showing:

a. The amount of waste shipped under this exemption;

b. The name, address and EPA identification number of the laboratory or testing facility that received the waste;

c. The date that the shipment was made; and

d. Whether or not unused samples and residues were returned to the generator.

(f) The generator reports the information required under par. (e) 3. in its annual report.

(4p) (a) The department may grant requests, on a case-by-case basis, for quantity limits in excess of those specified in sub. (4h) (a), for up to an additional 500 kg of non-acute hazardous waste, 1 kg of acute hazardous waste and 250 kg of soils, water and debris contaminated with acute hazardous waste, to conduct further treatability study evaluation when:

1. There has been an equipment or mechanical failure during the conduct of a treatability study;

2. There is a need to verify the results of a previously conducted treatability study;

3. There is a need to study and analyze alternative techniques within a previously evaluated treatment process; or

4. There is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

(b) The additional quantities allowed are subject to all the provisions in sub. (4) and (4h) (b) to (f).

(c) The generator or sample collector shall apply to the department and provide the following information:

1. The reason why the generator or sample collector requires an additional quantity of sample for the treatability study evaluation and the amount needed;

2. Documentation accounting for all samples of hazardous waste from the waste stream which have been sent for or undergone treatability studies including;

a. The date each previous sample from the waste stream was shipped;

b. The quantity of each previous shipment;

c. The laboratory or testing facility to which it was shipped;

d. What treatability study processes were conducted on each sample shipped, and

e. A summary of the results of each treatability study.

3. A description of the technical modifications or change in specification that shall be evaluated and the expected results;

4. If further study is being required due to equipment or mechanical failure, information concerning the reason for the failure or breakdown and what procedures or equipment improvements have been made to protect against further breakdowns; and

5. Other information that the department considers necessary.

(5) **SAMPLES UNDERGOING TREATABILITY STUDIES AT LABORATORIES AND TESTING FACILITIES.** Samples undergoing treatability studies and the laboratory or testing facility conducting treatability studies, to the extent the facilities are not otherwise subject to the requirements of chs. NR 600 to NR 685, are not subject to any requirement of chs. NR 600 to NR 685 if the conditions of pars. (a) to (k) are met. A mobile treatment unit may qualify as a testing facility subject to pars. (a) to (k). Where a group of mobile treatment units are located at the same site, the limitations specified in pars. (a) to (k) apply to the entire group of mobile treatment units collectively as if the group were one mobile treatment unit.

(a) No less than 45 days before conducting treatability studies, the facility shall notify the department, in writing, that it intends to conduct treatability studies under this subsection.

(b) The laboratory or testing facility conducting the treatability study shall have an EPA identification number.

(c) No more than a total of 250 kg of "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single Register, August, 1992, No. 440

day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.

(d) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 1000 kg, the total of which may include 500 kg of soils, water or debris contaminated with acute hazardous waste or 1 kg of acute hazardous waste. This quantity limitation does not include:

1. Treatability study residues; and
2. Treatment materials, including nonhazardous solid waste, added to "as received" hazardous waste.

(e) No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs.

(f) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.

(g) The facility maintains records for 3 years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information shall be included for each treatability study conducted:

1. The name, address and EPA identification number of the generator or sample collector of each waste sample;
2. The date the shipment was received;
3. The quantity of waste accepted;
4. The quantity of "as received" waste in storage each day;
5. The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;
6. The date the treatability study was conducted;
7. The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the EPA identification number.

(h) The facility keeps, on-site, a copy of the treatability study contract and shipping papers associated with the transport of treatability study samples to and from the facility for a period ending 3 years from the completion date for each treatability study.

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

1. The name, address and EPA identification number of the facility conducting the treatability studies;
2. The types, by process, of treatability studies conducted;

3. The names and addresses of persons for whom studies have been conducted, including their EPA identification numbers;
4. The total quantity of waste in storage each day;
5. The quantity and types of waste subjected to treatability studies;
6. When each treatability study was conducted;
7. The final disposition of residues and unused sample from each treatability study.

(j) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under s. NR 605.07 and, if so, are subject to chs. NR 600 to 685, unless the residues and unused samples are returned to the sample originator under the sub. (4), (4h) or (4p) exemption.

(k) The facility notifies the department, by letter, when the facility is no longer planning to conduct any treatability studies at the site.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91; cr. (1) (a) 13., Register, May, 1992, No. 437, eff. 6-1-92; correction made under s. 13.93 (2m) (b) 1, Stats., Register, August, 1992, No. 440; am. (1) (e), (i) (intro.), (j) (intro.) and (p), (4) (c), cr. (1) (q), (r) and (s), Register, August, 1992, No. 440, eff. 9-1-92.

NR 605.06 Residues of hazardous waste in empty containers. (1) Any hazardous waste that is remaining in either an empty container or an inner liner removed from an empty container, that meet the criteria in sub. (3), (4) or (5), is not subject to regulation under chs. NR 600 to 685.

(2) Any hazardous waste in either a container that is not empty or an inner liner removed from a container that is not empty, as specified in sub. (3) to (5), is subject to regulation under chs. NR 600 to 685.

(3) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is listed as an acute hazardous waste in s. NR 605.09 (2) (a), table II or (b), table III, or identified in table IV of s. NR 605.09 (3) (b), is empty if all wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container; and

Note: Examples of commonly employed practices would be pouring, pumping and aspirating

(a) No more than 2.5 centimeters (one inch) of residue remains on the bottom of the container or inner liner, or

(b) No more than 3% by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size, or

(c) No more than 0.3% by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons in size.

(4) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric pressure.

Hazardous Waste Number	Hazardous Waste	Hazard Code
F027	Discarded, used or unused formulations containing tri-, tetra- or pentachlorophenol or discarded used or unused formulations containing compounds derived from these chlorophenols. This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with hazardous wastes F020, F021, F022, F023, F026 or F027.	(T)
F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified by more than one waste code under s. NR 605.09, or from a mixture of wastes classified as hazardous under s. NR 605.09. Leachate resulting from the disposal of one or more of the following hazardous wastes and no other hazardous wastes retains it hazardous wastes code(s): F020, F021, F022, F026, F027 or F028.	(T)
F500	Waste contaminated with the halogenated compounds tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1,2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichloroethylene at greater than 1% (10,000 ppm) solvent concentration, except used chlorofluorocarbon refrigerants that are recycled and that are handled according to s. NR 605.05 (1) (c) and (d). This listing includes any combination of the above named halogenated compounds where the total concentration of the sum of the concentrations of the individual compounds exceeds 1% or 10,000 ppm on a weight to weight basis. Halogenated solvent concentration shall be determined using EPA methods 8010 or 8240 for halogenated volatile organics as specified in SW-846, "Test Methods for Evaluating Solid Waste" or total chloride analysis of bomb washings from ASTM D 240-76, "Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter".	(T)

Note: The publication SW-846, "Test Methods for Evaluating Solid Waste", may be obtained from:

National Technical Information Services
U.S. Department of Commerce
Springfield, Virginia 22161

The publication containing the ASTM method may be obtained from:

American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103

The publications are available for inspection at the offices of the department, the secretary of state and the revisor of statutes.

(b) Solid waste from specific sources is a hazardous waste if it is listed in table III.

Table III
Hazardous Waste from Specific Sources

Hazardous Waste Number	Hazardous Waste	Hazardous Code
Wood Preservation		
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.	(T)
Inorganic Pigments		

Hazardous Waste Number	Hazardous Waste	Hazardous Code
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments.	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments, anhydrous and hydrated.	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments.	(T)
K008	Oven residue from the production of chrome oxide green pigments.	(T)
Organic Chemicals		
K009	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R, T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(R, T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
K017	Heavy ends or still bottoms from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production.	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)
K022	Distillation bottom tars from the production of phenol or acetone from cumene.	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026	Stripping still tails from the production of methyl ethyl pyridines.	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production.	(R, T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product stream stripper in the production of 1,1,1-trichloroethane.	(T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	(T)

Hazardous Waste Number	Substance
See F027	2,4,5-Trichlorophenol
See F027	2,4,6-Trichlorophenol
See F027	2,4,5-Trichlorophenoxyacetic acid
U234	sym-Trinitrobenzene (R, T)
U182	1,3,5-Trioxane,2,4,6-trimethyl
U235	Tris (2,3-dibromopropyl)phosphate
U236	Trypan blue
U237	Uracil, 5[bis(2-chloromethyl)amino]
U237	Uracil mustard
U043	Vinyl chloride
U248	Warfarin and salts, when present at concentrations of 0.3% or less
U239	Xylene (I)
U200	Yohimban-16-carboxylic acid, 11, 17-dimethoxy-18-[(3,4,5-trimethoxy-benzoyl)oxy]-, methyl ester
U249	Zinc phosphide, when present at concentrations of 10% or less
U237	2,4(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (1) (b) 4., (2) (a) Table II and (3) (a) 3., Register, August, 1992, No. 440, eff. 9-1-92.

NR 605.10 Procedures for modifying the hazardous waste lists. (1) (a) Any person seeking to delist either a waste listed in s. NR 605.09 or a waste produced at a particular generation site from the hazardous waste lists in s. NR 605.09 which is also listed as a hazardous waste in the federal regulations promulgated by the EPA under 42 USC 6921 (b) shall petition the EPA to delist that waste.

Note: The publication containing Title 42 of the United States Code may be obtained from:

The Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

(b) If EPA denies a petition for delisting, the department shall recognize that denial.

(c) Persons who have had their petition for delisting approved by EPA shall continue to manage their wastes in compliance with any applicable restrictions established under chs. NR 600 to 685 unless and until the department recognizes EPA's delisting approval. A person may petition the department to recognize an EPA delisting by submitting the following to the department:

1. Copies of all materials and information submitted to EPA concerning the delisting petition.

2. Copies of all materials and information received from EPA, including the EPA notice of delisting.

3. All other information that the department determines is necessary to evaluate the delisting petition.

(d) When determining whether or not to recognize an EPA granted delisting, the department shall:

1. Consider all available information including, but not limited to, the information submitted by the applicant to EPA; and

2. Apply the same criteria as applied by EPA under 40 CFR 260.22 as of July 1, 1990.

Note: The publication containing the CFR references may be obtained from:

The Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

(e) The department shall recognize an EPA granted delisting unless the department clearly establishes that a delisting would threaten human health or the environment.

(2) Any person seeking to exclude a waste from the hazardous waste lists in s. NR 605.09 or a waste produced at a particular generation site which is not listed as a hazardous waste in the federal regulations promulgated by the EPA under 42 USC 6921 (b) shall petition the department to delist that waste. The department shall either deny the petition in writing or proceed with rulemaking to delist the waste from the hazardous waste lists in s. NR 605.09.

(3) If the EPA deletes a hazardous waste from the hazardous waste lists in the federal regulations promulgated by the EPA under 42 USC 6921 (b), the department shall proceed with rulemaking to either delete the waste from the hazardous waste lists in s. NR 605.09 or retain it. The department may retain the waste on the hazardous waste lists in s. NR 605.09 if the department determines that the waste has characteristics which identify it as a hazardous waste based on the criteria in ss. NR 605.07 and 605.08 and if the department determines that the retention is necessary to protect public health, safety or welfare. The department shall issue specific findings and conclusions on which its determination is based.

(4) If EPA deletes a hazardous waste from a particular generation site from the hazardous waste lists in the federal regulations promulgated by EPA under 42 USC 6921 (b), the department may not regulate under chs. NR 600 to 685 those wastes that have been deleted.

(5) If the EPA adds an additional solid waste to the hazardous waste lists in the federal regulations promulgated by the EPA under 42 USC 6921 (b), the department shall regulate the additional waste as a hazardous waste under chs. NR 600 to 685 as soon as EPA's action becomes final and shall proceed with rulemaking to adopt identical changes in s. NR 605.09.

(6) The department may include, or a person may petition the department to include, on the hazardous waste lists in s. NR 605.09 any additional solid waste which is not included on the hazardous waste lists in the federal regulations promulgated by the EPA under 42 USC 6921 (b) if the department determines that the solid waste has characteristics which identify it as a hazardous waste based on the criteria in ss. NR 605.07 and 605.08 and if the department determines that the inclusion is necessary to protect public health, safety or welfare. The department shall issue specific findings and conclusions on which its determination is based and shall include the additional solid waste on the lists of hazardous waste in s. NR 605.09 by rule.

Note: For the purpose of this section, petitions under subs. (2) and (6) are petitions for rules under s. 227.12, Stats. The publication containing Title 42 of the United States Code may be obtained from:

Register, August, 1992, No. 440

The Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91; renun. (1) to be (1) (a), cr. (1) (b) to (e), Register, August, 1992, No. 440, eff. 9-1-92.

NR 605.11 EP toxicity test procedure. History: Cr. Register, February, 1991, No. 422, eff. 3-1-91; r. Register, August, 1992, No. 440, eff. 9-1-92.

NR 605.12 Analytical methods. (1) Chemical and physical samples shall be analyzed by a laboratory certified or registered under ch. NR 149. The following tests are excluded from this requirement:

- (a) Physical tests of soil,
- (b) Air quality tests,
- (c) Gas tests,
- (d) Field pH tests,
- (e) Field conductivity,
- (f) Turbidity tests,
- (g) Water elevation,
- (h) Temperature,
- (i) Leachate-liner compatibility testing.

(2) Bacteriological and radiological samples shall be analyzed by the state laboratory of hygiene or at a laboratory approved or certified by the department of health and social services.

(3) Other chemical and physical samples shall be analyzed by a laboratory certified or registered under ch. NR 149. The department may allow, on a case-by-case basis, facilities to submit analytical test results from a laboratory that has not been certified, registered or approved by the department or the department of health and social services.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91.

NR 605.13 PCB wastes regulated under toxic substances control act. The disposal of PCB containing dielectric fluid and electric equipment containing such fluid authorized for use and regulated under 40 CFR 761, July 1, 1990, and that are hazardous only because they fail the test for the toxicity characteristic, hazardous codes D018 to D043 only, are exempt from regulation under chs. NR 600 to 685 and the notification requirements of section 3010 of RCRA.

Note: The publication containing the CFR references may be obtained from:

The Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

History: Cr. Register, August, 1992, No. 440, eff. 9-1-92.