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.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. Register, May, 1995, No. 473, eff. 6-1-95.

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) to (4); 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, trichloroethylene; 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 chlorofluorocarbon 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 except that any mixture of a waste from the extraction, beneficiation and processing of ores and minerals excluded under s. NR 605.05 (1) (l) and any other solid waste exhibiting a characteristic of hazardous waste under s. NR 605.08 only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred or if it continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the toxicity characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in table I to s. NR 605.08 (5) that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

4. Except as provided in subds. 5 and 6, 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. a. Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace or electric furnace combinations or industrial furnaces, as defined in s. NR 600.03, that are disposed in units subject to chs. NR 500 to 520, provided that these residues meet the generic exclusion levels identified in the tables in this subdivision for all constituents, and exhibit no characteristics of hazardous waste. Testing requirements shall be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues shall be collected and analyzed quarterly or when the process or operation generating the waste changes.

Constituent	Maximum for any single composite sample-TCLP (mg/l)
Generic exclusion levels for K061 and K062 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70
Generic exclusion levels for F006 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

b. A one-time notification and certification shall be placed in the facility's files and sent to the department for K061, K062 or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to units subject to chs. NR 500 to 520. The notification and certification that is placed in the generator's or treater's files shall be updated if the process or operation generating the waste changes or if the unit receiving the waste changes. However, the generator or treater need only notify the department on an annual basis if such changes occur. Such notification and certification shall be sent to the department by the end of the calendar year, no later than December 31. The notification shall include the following information: The name and address of the unit receiving the waste shipments; the hazardous waste numbers and treatability groups at the initial point of generation; and the treatment standards applicable to the waste at the initial point of generation. The certification shall be signed by an authorized representative and shall state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

7. 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, or unless the solid waste is excluded from regulation under s. NR 605.05 (1) (l) and the resultant mixture no longer exhibits any characteristic of hazardous waste identified in s. NR 605.08 for which the hazardous waste listed in s. NR 605.09 was listed.

Note: Nonwastewater mixtures are still subject to the requirements of ch. NR 675, even if they no longer exhibit a characteristic at the point of land disposal.

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.

8. It is a nonwastewater residue, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces, as defined in s. NR 600.03, that are disposed in a licensed solid waste disposal facility, provided that these residues meet the exclusion levels identified below for all constituents, and exhibit no characteristics of hazardous waste. Testing requirements shall be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan. At a minimum, composite samples of residues shall be collected and analyzed quarterly and/or when the process or operation generating the waste changes. The exclusion levels are:

Constituent	Maximum for any single composite sample (mg/l)
Antimony	0.063
Arsenic	0.055
Barium	6.3
Beryllium	0.0063
Cadmium	0.032
Chromium (total)	0.33
Lead	0.095
Mercury	0.009
Nickel	0.63
Selenium	0.16
Silver	0.30
Thallium	0.013
Vanadium	1.26

8m. For each shipment of K061 HTMR residues sent to a licensed solid waste disposal facility that meets the exclusion levels for all constituents, and does not exhibit any characteristic, a notification and certification shall be sent to the department. The notification shall include the following information:

a. The name and address of the licensed solid waste facility receiving the waste shipment;

b. The EPA hazardous waste number and treatability group at the initial point of generation;

c. The treatment standards applicable to the waste at the initial point of generation. The certification shall be signed by an authorized representative and shall state as follows:

"I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

9. It is used oil containing greater than or equal to 1000 ppm total halogens. Used oil containing greater than or equal to 1000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in s. NR 605.09. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste, for example, by using an analytical method from SW-846, "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods", third edition, September, 1986, as amended by update I in July, 1992, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix IV.

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

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

Note: Publication SW-846 may be obtained from:

Superintendent of Documents
U.S. Government Printing Office
P.O. Box 371954
Pittsburgh, PA 15250-7954
(202) 783-3238

This publication is available for inspection at the offices of the department, the secretary of state and the revisor of statutes.

(2) A solid waste which is not excluded from regulation under s. NR 605.05 (1) to (4) 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.

(4) Notwithstanding subs. (1) to (3) and provided the debris as defined in s. NR 675.03 does not exhibit a characteristic identified at s. NR 605.08, the following materials are not subject to regulation under chs. NR 600 to 685:

(a) Hazardous debris as defined in s. NR 675.03 that has been treated using one of the required extraction or destruction technologies specified in Table 1 of s. NR 675.22; or

(b) Debris as defined in s. NR 675.03 that the department, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91; corrections in (1) (a) and (2) (intro.) made under s. 13.93 (2m) (b) 7, Stats., Register, March, 1993, No. 447; am. (1) (b) 3., 4., renum. (1) (b) 6. to be 7. and am., cr. (1) (b) 6., 8., 9., (4), Register, May, 1995, No. 473, eff. 6-1-95; correction in (1) (a) and (2) (intro.) made under s. 13.93 (2m) (b) 7., Stats., Register, May, 1995, No. 473.

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 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, except as provided by 40 CFR Part 266 Subpart H for facilities that burn or process hazardous 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 arsenical-treated wood or wood products which fail the test for the toxicity characteristic for hazardous waste codes D004 to D017 and which is not a hazardous waste for any other reason, if the waste is generated by persons who utilize the arsenical-treated wood and wood products for the intended end use of these materials.

(f) 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, except as provided by 40 CFR Part 266 Subpart H for facilities that burn or process hazardous waste.

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

(h) 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.

(i) Specific wastes which meet the standard in par. (h) 1. to 3., as long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit 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.

(j) Mining overburden returned to the mine site.

(k) Solid waste from the extraction, beneficiation and processing of ores and minerals, including coal, phosphate rock and overburden from the mining of uranium ore, except as provided by 40 CFR 266 Subpart H for facilities that burn or process hazardous waste. For purposes of this paragraph, beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water or carbon dioxide; roasting, autoclaving, or chlorination in preparation for leaching, except where the roasting, autoclaving or chlorination or leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing; gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching. For the purposes of this paragraph, solid waste from the processing of ores and minerals includes only the following wastes:

1. Slag from primary copper processing;

2. Slag from primary lead processing;

3. Red and brown muds from bauxite refining;

4. Phosphogypsum from phosphoric acid production;

5. Slag from elemental phosphorus production;

6. Gasifier ash from coal gasification;

7. Process wastewater from coal gasification;

8. Calcium sulfate wastewater treatment plant sludge from primary copper processing;

9. Slag tailings from primary copper processing;

10. Fluorogypsum from hydrofluoric acid production;

11. Process wastewater from hydrofluoric acid production;

12. Air pollution control dust or sludge from iron blast furnaces;

13. Iron blast furnace slag;

14. Treated residue from roasting or leaching of chrome ore;

15. Process wastewater from primary magnesium processing by the anhydrous process;

16. Process wastewater from phosphoric acid production;

17. Basic oxygen furnace and open hearth furnace air pollution control dust or sludge from carbon steel production;

18. Basic oxygen furnace and open hearth furnace slag from carbon steel production;

19. Chloride process waste solids from titanium tetrachloride production;

20. Slag from primary zinc processing.

(l) 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.

(m) 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.

(n) Domestic sewage.

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

Note: A hazardous waste discharge report may be required under s. NR 211.17 for discharging waste that would otherwise be regulated as hazardous waste if it was not subject to this exemption.

(q) Petroleum contaminated media and debris that fail the test for the toxicity characteristic of s. NR 605.08 (5) for any of the hazardous waste codes D018 to D043, are not a hazardous waste for any other reason, and are subject to the corrective action regulations under 40 CFR 280, July 1, 1992.

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

Superintendent of Documents
U.S. Government Printing Office
PO Box 371954
Pittsburgh, PA 15250-7954
(202) 783-3238

(q) Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic or meets the F500 hazardous waste listing is not subject to the requirements of chs. NR 600 to 685, but is regulated under ch. NR 590. Used oil that is recycled includes any used oil which is reused, following its original use, for any purpose, including the purpose for which the oil was origi-

nally used. Such term includes, but is not limited to, oil which is re-refined, reclaimed, burned for energy recovery, or reprocessed.

(r) 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.

(s) 1. Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose; and

2. Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.

(t) Hazardous Waste Nos. K060, K087, K141, K142, K143, K144, K145, K147 and K148, and any wastes from the coke by-products processes that are hazardous only because they exhibit the toxicity characteristic specified in s. NR 605.08 (5) when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. This exemption is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.

(u) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums, if shipped, and not land disposed before recovery.

(v) Non-terne plated used oil filters that are not mixed with wastes listed in s. NR 605.09 if these oil filters have been gravity hot-drained using any one of the following methods:

1. Puncturing the filter anti-drain back valve or the filter dome end and hot-draining.

2. Hot-draining and crushing.

3. Dismantling and hot-draining.

4. Any other equivalent hot-draining method that will remove used oil.

(w) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.

(x) Used batteries or used battery cells returned to a battery manufacturer for regeneration.

(2) 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.

(3) Generators of wastes that are excluded under subs. (1) (m) and (2) 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.

(4) The exclusions included in subs. (1) (m) and (2) 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.

(5) 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.

(6) DELETION OF CERTAIN HAZARDOUS WASTES CODES FOLLOWING EQUIPMENT CLEANING AND REPLACEMENT. Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the gener-

ator has met all of the requirements of pars. (a) and (b). These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.

(a) *General requirements.* Generators shall either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts and trams, in a manner which minimizes or eliminates the escape of hazardous waste or waste constituents, leachate, contaminated drippage or hazardous waste decomposition products to the ground water, surface water or atmosphere.

(b) *Cleaning requirements.* 1. Generators shall prepare, sign and follow a written equipment cleaning plan that describes all of the following:

a. The equipment to be cleaned.

b. How the equipment will be cleaned.

c. The solvent to be used in the cleaning.

d. How solvent rinses will be tested.

e. How cleaning residues will be disposed.

2. Equipment shall be cleaned as follows:

a. Remove all visible residues from process equipment.

b. Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

3. Generators shall comply with the following analytical requirements:

a. Rinses shall be tested in accordance with SW-846, Method 8920.

b. "Not detected" means at or below the lower method calibration limit (MCL) in Method 8920, Table 1.

4. The generator shall manage all residues from the cleaning process as F032 waste.

(c) *Replacement requirements.* 1. Generators shall prepare, sign and follow an equipment replacement plan that describes all of the following:

a. The equipment to be replaced.

b. How the equipment will be replaced.

c. How the equipment will be disposed.

2. The generator shall manage the discarded equipment as F032 waste.

(d) *Documentation requirements.* Generators shall document that equipment cleaning or replacement, or both, was performed in accordance with this subsection, and carried out after termination of use of chlorophenolic preservations. The generator shall maintain all of the following records documenting the cleaning and replacement as part of the facility's operating record:

1. The name and address of the facility.

2. Formulations previously used and the date on which their use ceased in each process at the plant.

3. Formulations currently used in each process at the plant.

4. The equipment cleaning or replacement plan.

5. The name and address of any persons who conducted the cleaning and replacement.

6. The dates on which cleaning and replacement were accomplished.

7. The dates of sampling and testing.

8. A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation and chain-of-custody of the samples.

9. A description of the tests performed, the date the tests were performed and the results of the tests.

10. The name and model numbers of the instruments used in performing the tests.

11. QA/QC documentation.

12. The following statement signed by the generator or his or her authorized representative:

I certify under penalty of law that all process equipment required to be cleaned or replaced under NR 656.05 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

(7) 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).

(8) TREATABILITY STUDIES SAMPLES. Except as provided in sub. (9), 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.

(9) The exemption in sub. (8) 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. (11);

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.

(10) (a) The department may grant requests, on a case-by-case basis, for quantity limits in excess of those specified in sub. (9) (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 subs. (8) and (9) (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.

(11) 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 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. (8), (9) or (10) 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; corrections in (1) (j), (n), (1h) (intro.), (a), (b) (intro.), made under s. 13.93 (2m) (b) 7, Stats., Register, March, 1993, No. 447; am. (1) (c), (e), r. (1) (f), renum. (1) (g) to (s) to be (1) (f) to (r) and am. (1) (f), (i) (intro.), (k), (m), (o), (p), (q), (1h) (intro.) to be (2) (intro.) and am., (1m) (intro.) to be (3) (intro.) and am., (1r) to be (4) and am., (2) to be (5), (3) and (4) to be (7) and (8) and am. (8) (intro.), (4h) to be (9) and am. (9) (intro.), (d) 1., (4p) to be (10) and am. (10) (a) (intro.), (b), (5) to be (11) and am. (11) (j), cr. (1) (s), (t), (u), (v), (w),(x), (6), Register, May, 1995, No. 473, eff. 6-1-95.

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 subs. (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.

(5) A container or an inner liner removed from a container that has held an acute hazardous waste listed in s. NR 605.09 (2) (a), table II or (b), table III, or identified in s. NR 605.09 (3) (b), table IV is empty if:

(a) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

(b) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(c) In the case of a container, the inner liner, that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

Note: Empty containers and rinsate from the cleaning or reconditioning of empty containers are regulated as solid waste under chs. NR 500 to 522. In addition, any rinsate from the cleaning or reconditioning of empty containers as specified in this section is subject to regulation as a hazardous waste under chs. NR 600 to 685 if it exhibits any of the characteristics in s. NR 605.08.

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

NR 605.07 Criteria for identifying the characteristics of hazardous waste and for listing hazardous waste. (1) CRITERIA FOR IDENTIFYING THE CHARACTERISTICS OF HAZARDOUS WASTE. The department shall identify and define a characteristic of hazardous waste only upon determining that:

(a) A solid waste that exhibits the characteristic may:

1. Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

2. Pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed; and

(b) The characteristic may be:

1. Measured by an available standardized test method which is reasonably within the capability of generators of solid waste or private sector laboratories that are available to serve generators of solid waste; or

2. Reasonably detected by generators of solid waste through their knowledge of their waste.

(2) CRITERIA FOR LISTING HAZARDOUS WASTE. (a) The department shall list a solid waste as a hazardous waste under s. NR 605.09 only upon determining that the solid waste meets one of the following criteria:

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

2. It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown to have an oral LD50 toxicity measured in rats of less than 50 milligrams per kilogram, an inhalation LC50 toxicity measured in rats of less than 2 milligrams per liter, or a dermal LD50 toxicity measured in rabbits of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness.

3. It contains any of the toxic constituents listed in Appendix IV and, after considering the following factors, the department concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed:

a. The nature of the toxicity presented by the constituent.

b. The concentrations of the constituent in the waste.

c. The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in subpar. g.

d. The persistence of the constituent or any toxic degradation product of the constituent.

e. The potential for the constituent or any toxic degradation product of the constituent to degrade into nonharmful constituents and the rate of degradation.

f. The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems.

g. The plausible types of improper management to which the waste could be subjected.

h. The quantities of the waste generated at individual generation sites or on a regional or statewide basis.

i. The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent.

j. Actions taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent.

k. Other factors as may be relevant in a specific case.

(b) The department may list classes or types of solid waste if there is reason to believe that individual wastes, within the class or type of waste, typically or frequently because their quantity, concentration, or physical, chemical or infectious characteristics, may:

1. Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

2. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed.

(c) Hazardous wastes which have been listed in accordance with the criteria in par. (a) 2. are designated as acute hazardous wastes and wastes which have been listed in accordance with the criterion in par. (a) 3. are designated as toxic wastes.

Note: Section 144.62, Stats., requires the department to add any waste listed by U. S. EPA to the lists in s. NR 605.09. The criteria of sub. (2) apply only to wastes listed by Wisconsin.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (2) (a) 3. (intro.), Register, May, 1995, No. 473, eff. 6-1-95.

NR 605.08 Characteristics of hazardous waste. (1) GENERAL. (a) A solid waste which is not excluded from regulation under s. NR 605.05 (1) to (2) is a hazardous waste if it exhibits any of the characteristics identified in this section.

(b) A hazardous waste which is identified by a characteristic in this section is assigned every hazardous waste number that is applicable as set forth in this section. This number shall be used in complying with the notification requirements in s. NR 600.05 and all applicable recordkeeping and reporting requirements under chs. NR 600 to 680.

(c) For purposes of this section, the department shall consider a sample obtained using any of the applicable sampling methods specified in appendix I to be a representative sample.

(2) CHARACTERISTIC OF IGNITABILITY. (a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

1. It is a liquid, other than an aqueous solution containing less than 24% alcohol by volume, and has a flash point less than 60° C (140° F), as determined by a Pensky-Martens closed cup tester, using the test method specified in ASTM standard D-93-85, or a Setaflash closed cup tester, using the test method specified in ASTM standard D-3278-82, or as determined by an equivalent test method approved by EPA.

Note: The publications containing these standards may be obtained from:

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

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

2. It is not a liquid and is capable, at a temperature of 25° C and a pressure of one atmosphere, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

3. It is an ignitable compressed gas as defined in 49 CFR 173.300 October 1, 1990, and as determined by the test methods described in that regulation, ASTM standard D-323-82, or equivalent test methods approved by EPA.

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

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

The ASTM publication may be obtained from:

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

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

4. It is an oxidizer, such as a chlorate, permanganate, inorganic peroxide, nitro carbo nitrate or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter.

(b) A solid waste that exhibits the characteristic of ignitability has the hazardous waste number of D001.

(3) CHARACTERISTIC OF CORROSIVITY. (a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:

1. It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter either EPA method 9040 in SW-846, "Test Methods

for Evaluating Solid Waste, Physical/Chemical Methods", third edition, September, 1986, as amended by update I in July 1992.

2. It is a liquid and corrodes plain carbon steel with a carbon content of 0.20% at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55° C (130° F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) standard TM-01-69 as standardized in SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", third edition, September, 1986, as amended by update I in July, 1992.

Note: Publication SW-846 may be obtained from:

Superintendent of Documents
U.S. Government Printing Office
P.O. Box 371954
Pittsburgh, PA 15250-7954
(202) 783-3238

This publication is available for inspection at the offices of the department, the secretary of state and the revisor of statutes.

(b) A solid waste that exhibits the characteristic of corrosivity has the hazardous waste number of D002.

(4) CHARACTERISTIC OF REACTIVITY. (a) A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

1. It is normally unstable and readily undergoes violent change without detonating.

2. It reacts violently with water.

3. It forms potentially explosive mixtures with water.

4. When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

5. It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

6. It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

7. It is readily capable of detonation or explosive decomposition or reaction at a temperature of 25° C and a pressure of one atmosphere.

8. It is a forbidden explosive as defined in 49 CFR 173.51 [October 1, 1990], or a Class A explosive as defined in 49 CFR 173.53 [October 1, 1990], or a Class B explosive as defined in 49 CFR 173.88 [October 1, 1990].

Note: The publications containing these regulations may be obtained from:

Superintendent of Documents
U.S. Government Printing Office
P.O. Box 371954
Pittsburgh, PA 15250-7954
(202) 783-3238

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

(b) A solid waste that exhibits the characteristic of reactivity has the hazardous waste number of D003.

(5) TOXICITY CHARACTERISTIC. (a) A solid waste exhibits the characteristic of toxicity if, using the toxicity characteristic leaching procedure, EPA method 1311 in SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", third edition, September, 1986, as amended by update I in July, 1992, the extract from a representative sample of the waste contains any of the contaminants listed in table I at a concentration equal to or greater than the respective value given in that table. Where the waste contains less than 0.5% filterable solids, the waste itself, after filtering using the methodology in method 1311, is considered to be the extract for the purpose of this subsection.

Note: Publication SW-846 may be obtained from:

Superintendent of Documents
U.S. Government Printing Office
P.O. Box 371954
Pittsburgh, PA 15250-7954
(202) 783-3238

This publication is available for inspection at the offices of the department, the secretary of state and the revisor of statutes.

(b) A solid waste that exhibits the characteristic of toxicity has the hazardous waste number specified in table I which corresponds to the toxic contaminant causing it to be hazardous.

Table I
Maximum Concentration of Contaminants for the Toxicity Characteristic

EPA HW No.[1]	Contaminant	CAS No.[2]	Regulatory Level (mg/L)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	0071-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	0056-23-5	0.5
D020	Chlordane	0057-74-9	0.03
D021	Chlorobenzene	0108-90-7	100.0
D022	Chloroform	0067-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	0095-48-7	[4] 200.0
D024	m-Cresol	0108-39-4	[4] 200.0
D025	p-Cresol	0106-44-5	[4] 200.0
D026	Cresol	.....	[4] 200.0
D016	2,4-D	0094-75-7	10.0
D027	1,4-Dichlorobenzene	0106-46-7	7.5
D028	1,2-Dichloroethane	0107-06-2	0.5
D029	1,1-Dichloroethylene	0075-35-4	0.7
D030	2,4-Dinitrotoluene	0121-14-2	[3] 0.13
D012	Endrin	0072-20-8	0.02
D031	Heptachlor (and its epoxide)	0076-44-8	0.008
D032	Hexachlorobenzene	0118-74-1	[3] 0.13
D033	Hexachlorobutadiene	0087-68-3	0.5
D034	Hexachloroethane	0067-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	0058-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	0072-43-5	10.0
D035	Methyl ethyl ketone	0078-93-3	200.0
D036	Nitrobenzene	0098-95-3	2.0
D037	Pentachlorophenol	0087-86-5	100.0
D038	Pyridine	0110-86-1	[3] 5.0

EPA HW No.[1]	Contaminant	CAS No.[2]	Regulatory Level (mg/L)
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	0127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	0079-01-6	0.5
D041	2,4,5-Trichlorophenol	0095-95-4	400.0
D042	2,4,6-Trichlorophenol	0088-06-2	2.0
D017	2,4,5-TP (Silvex)	0093-72-1	1.0
D043	Vinyl chloride	0075-01-4	0.2

[1] Hazardous waste number.

[2] Chemical abstracts service number.

[3] Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

[4] If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (1) (b), (2) (a) 1., (b), (3) (b), (4) (a) 8., (b), (5) (a) and (b), r. and recr. (5) table 1, Register, August, 1992, No. 440, eff. 9-1-92; am. (5) (a), Register, April, 1994, No. 460, eff. 5-1-94; **am. (3) (a) 1., 2., r. and recr. (5) (b) Table I, Register, May, 1995, No. 473, eff. 6-1-95; correction in (1) (a) made under s. 13.93 (2m) (b) 7., Stats., Register, May, 1995, No. 473.**

NR 605.09 Lists of hazardous wastes. (1) GENERAL. (a) A solid waste is a hazardous waste if it is listed in this section, unless it has been excluded from the lists under s. NR 605.10.

(b) The department has indicated the basis for listing the classes or types of wastes listed in this section by employing one or more of the following hazard codes:

1. Ignitable waste (I)

2. Corrosive waste (C)

3. Reactive waste (R)

4. Toxicity characteristic waste (E)

5. Acute hazardous waste (H)

6. Toxic waste (T)

Note: Appendix III identifies the constituent which caused the department to list the waste as a toxicity characteristic waste (E) or toxic waste (T) in sub. (2) (a) and (b).

(c) Each hazardous waste listed in subs. (2) and (3) is assigned a hazardous waste number which precedes the name of the waste. This number shall be used in complying with the notification requirements of s. NR 600.05 and recordkeeping requirements under chs. NR 610, 615, 620 and 630.

(d) The following hazardous wastes listed in table II of sub. (2) are acute hazardous wastes subject to the exclusion limits established in s. NR 610.09:

1. Hazardous waste numbers F020, F021, F022 and F023; and

2. Hazardous waste numbers F026 and F027.

(2) HAZARDOUS WASTE SOURCES. (a) Solid waste from nonspecific sources is a hazardous waste if it is listed in table II.

Table II
Hazardous Waste from Nonspecific Sources

Hazardous Waste Number	Hazardous Waste	Hazard Code
Generic:		
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all mixtures and blends of spent solvents used in degreasing containing, before use, a total of 10% or more, by volume, of one or more of the above halogenated solvents or those solvents listed in F002, F004 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane; all mixtures and blends of spent solvents containing, before use, a total of 10% or more, by volume, of one or more of the above halogenated solvents or those listed in F001, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F003	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone and methanol; all mixtures and blends of spent solvents containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents and a total of 10% or more, by volume, of one or more of those solvents listed in F001, F002, F004 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I)*
F004	The following spent non-halogenated solvents: cresols, cresylic acid, and nitrobenzene; all mixtures and blends of spent solvents containing, before use, a total of 10% or more, by volume, of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F005	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol and 2-nitropropane; all mixtures and blends of spent solvents containing, before use, a total of 10% or more, by volume, of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I, T)
F006	Wastewater treatment sludges from electroplating operations, except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating, segregated basis, on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning or stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. **Note:** Electroplating operations are considered to include common and precious metals electroplating, anodizing, chemical etching and milling, and cleaning and stripping when associated with these processes. For more information, refer to 51 FR 43350 to 43351, Tuesday, December 2, 1986.	(T)
F007	Spent cyanide plating bath solutions from electroplating operations.	(R, T)

Hazardous Waste Number	Hazardous Waste	Hazard Code
F006	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R, T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	(R, T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R, T)
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.	(T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.	(T)
F020	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production or manufacturing use, as a reactant, chemical intermediate or component in a formulating process, of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.	(H)
F021	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production or manufacturing use, as a reactant, chemical intermediate or component in a formulating process, of pentachlorophenol, or of intermediates used to produce its derivatives.	(H)
F022	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the manufacturing use, as a reactant, chemical intermediate or component in a formulating process, of tetra-, penta-, or hexa-chlorobenzenes under alkaline conditions.	(H)
F023	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production of materials on equipment previously used for the production or manufacturing use, as a reactant, chemical intermediate or component in a formulating process, of tri- and tetrachlorophenols. This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.	(H)
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to 5, with varying amounts and positions of chlorine substitution. This listing does not include wastewaters, wastewater treatment sludges, spent catalysts and wastes listed in sub. (2) (a) or (b).	(T)
F025	Condensed light ends, spent filters and filter aids and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	(T)
F026	Wastes, except wastewater and spent carbon from hydrogen chloride purification, from the production of materials on equipment previously used for the manufacturing use, as a reactant, chemical intermediate or component in a formulating process, of tetra-, penta- or hexachlorobenzene under alkaline conditions.	(T)
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)
F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with s. NR 605.14 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.	(T)
F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.	(T)
F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.	(T)
F037	Petroleum refinery primary oil or water or solids separation sludge-Any sludge generated from the gravitational separation of oil or water or solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil or water or solids separators; tanks and impoundments; ditches and other conveyances; sumps and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in s. NR 605.15 (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.	(T)
F038	Petroleum refinery secondary (emulsified) oil or water or solids separation sludge-Any sludge or float generated from the physical or chemical separation of oil or water or solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in s. NR 605.15 (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048 and K051 wastes are not included in this listing.	(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 its hazardous wastes code(s): F020, F021, F022, F026, F027 or F028.	(T)

Hazardous Waste Number	Hazardous Waste	Hazard Code
F500	Waste containing 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). This listing includes any combination of the above named halogenated compounds where the total chloride concentration or the sum of the concentrations of the individual compounds exceeds 1% or 10,000 ppm on a weight to weight basis. Halogenated compounds concentration shall be determined using EPA methods 8010A, 8021, 8240A or 8260 for volatile organics in SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", third edition, September, 1986, as amended by update I in July, 1992, or total chloride analysis of bomb washings from ASTM D 240-92, "Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter".	(T)

Note: * (I,T) should be used to specify mixtures containing ignitible and toxic constituents.

Note: Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic or meets this hazardous waste listing is exempt from hazardous waste regulation under s. NR 605.05 (1) (q). Such used oil is instead regulated under ch. NR 590.

Note: Used chlorofluorocarbon refrigerants that are reclaimed for further use are exempt from hazardous waste regulation under s. NR 605.05 (1) (r).

Note: Publication SW-846 may be obtained from:

Superintendent of Documents
U.S. Government Printing Office
P.O. Box 371954
Pittsburgh, PA 15250-7954
(202) 783-3238

The publication containing the ASTM method may be obtained from:

American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103-1187
(215) 299-5400

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

Hazardous Waste Number	Hazardous Waste	Hazard Code
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)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083	Distillation bottoms from aniline production.	(T)
K103	Process residues from aniline extraction from the production of aniline.	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production.	(T)
K085	Distillation or fractionating column bottoms from the production of chlorobenzenes.	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	(T)
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazines.	(C,T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(I,T)
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene.	(C, T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	(T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides and compounds with mixtures of these functional groups. This waste does not include still bottoms from the distillation of benzyl chloride.	(T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides and compounds with mixtures of these functional groups.	(T)
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides and compounds with mixtures of these functional groups.	(T)
Pesticides		
K031	By-product salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K035	Wastewater treatment sludges generated in the production of creosote.	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037	Wastewater treatment sludges from the production of disulfoton.	(T)
K038	Wastewater from the washing and stripping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate.	(T)
K041	Wastewater treatment sludge from the production of toxaphene.	(T)
K098	Untreated process wastewater from the production of toxaphene.	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	(T)
K099	Untreated wastewater from the production of 2,4-D.	(T)
K123	Process wastewater, including supernates, filtrates and washwaters, from the production of ethylenebisdithiocarbamic acid and its salt.	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	(C, T)
K125	Filtration, evaporation and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	(T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	(C,T)

Hazardous Waste Number	Hazardous Waste	Hazard Code
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	(T)
Explosives		
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	(R)
K045	Spent carbon from the treatment of wastewater containing explosives.	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047	Pink or red water from TNT operations.	(R)
Petroleum Refining		
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049	Slop oil emulsion solids from the petroleum refining industry.	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
K051	American Petroleum Institute (API) separator sludge from the petroleum refining industry.	(T)
K052	Tank bottoms, leaded, from the petroleum refining industry.	(T)
Iron and Steel		
K061	Emission control dust or sludge from the electric furnace primary production of steel.	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry identified by the SIC codes 331 and 332.	(C,T)
Primary Copper		
K064	Acid plant blowdown slurry or sludge resulting from the thickening of blowdown slurry from primary copper production.	(T)
Primary Lead		
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.	(T)
Primary Zinc		
K066	Sludge from treatment of process wastewater or acid plant blowdown from primary zinc production.	(T)
Primary Aluminum		
K088	Spent potliners from primary aluminum reduction.	(T)
Ferroalloys		
K090	Emission control dust or sludge from ferrochromiumsilicon production.	(T)
K091	Emission control dust or sludge from ferrochromium production.	(T)
Secondary Lead		
K069	Emission control dust or sludge from secondary lead smelting. This listing does not include sludge generated from secondary acid scrubber systems.	(T)
K100	Waste leaching solution from acid leaching of emission control dust or sludge from secondary lead smelting.	(T)
Inorganic Chemicals		
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon wastes from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	(T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	(T)
Ink Formulation		
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps and stabilizers containing chromium and lead.	(T)
Veterinary Pharmaceuticals		
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
Coking		
K060	Ammonia still lime sludge from coking operations.	(T)
K087	Decanter tank tar sludge from coking operations.	(T)
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludge from coking operations).	(T)
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.	(T)
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters and wash oil recovery units from the recovery of coke by-products produced from coal.	(T)
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	(T)
K147	Tar storage tank residues from coal tar refining.	(T)
K148	Residues from coal tar distillation, including but not limited to, still bottoms.	(T)

Note: The Standard Industrial Classification Manual may be obtained from:

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

This publication is available for inspection at the offices of the department, the secretary of state and the revisor of statutes.

(3) DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINER RESIDUES AND SPILL RESIDUES THEREOF. (a) The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded, when they are mixed with used oil or other solid waste and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original intended use, they are produced for use as, or as a component of, a fuel, distributed for use as a fuel or burned as a fuel:

1. Any commercial chemical product or manufacturing chemical intermediate having a generic name listed in table IV or V.

2. Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have a generic name listed in table IV or V.

3. Any container or inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having a generic name listed in par. (b) or (c), or off-specification chemical product or manufacturing chemical intermediate which, if it met specifications, would have a generic name listed in table IV or V, unless the container is empty under the criteria in s. NR 605.06 (3) to (5).

4. Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any commercial chemical product or manufacturing chemical intermediate having a generic name listed in table IV or V, or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product or manufacturing chemical intermediate which, if it met specifications, would have a generic name listed in table IV or V.

(b) The commercial chemical products, manufacturing chemical intermediates, off-specification commercial chemical products or manufacturing chemical intermediates described in par. (a) 1. or 2. or materials or items described in par. (a) 3. or 4. listed in table IV are identified as acute hazardous wastes (H) and are subject to the small quantity exclusion in s. NR 610.07. These wastes and their corresponding hazardous waste numbers are:

Table IV
Acute Hazardous Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
P023	00107-20-0	Acetaldehyde, chloro-
P002	00591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	00640-19-7	Acetamide, 2-fluoro-
P058	00062-74-8	Acetic acid, fluoro-, sodium salt
P002	00591-08-2	1-Acetyl-2-thiourea
P003	00107-02-8	Acrolein
P070	00116-06-3	Aldicarb
P004	00309-00-2	Aldrin
P005	00107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	02763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	00504-24-5	4-Aminopyridine
P009	00131-74-8	Ammonium picrate (R)
P119	07803-55-6	Ammonium vanadate
P099	00506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	07778-39-4	Arsenic acid H3AsO4
P012	01327-53-3	Arsenic oxide As2O3
P011	01303-28-2	Arsenic oxide As2O5
P011	01303-28-2	Arsenic pentoxide
P012	01327-53-3	Arsenic trioxide
P038	00692-42-2	Arsine, diethyl-
P036	00696-28-6	Arsonous dichloride, phenyl-
P054	00151-56-4	Aziridine
P067	00075-55-8	Aziridine, 2-methyl-
P013	00542-62-1	Barium cyanide
P024	00106-47-8	Benzenamine, 4-chloro-
P077	00100-01-6	Benzenamine, 4-nitro-
P028	00100-44-7	Benzene, (chloromethyl)-
P042	00051-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	00122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-

Hazardous Waste Number	Chemical Abstracts No.	Substance
P014	00108-98-5	Benzenethiol
P001	[1] 00081-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	00100-44-7	Benzyl chloride
P015	07440-41-7	Beryllium
P017	00598-31-2	Bromoacetone
P018	00357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[methylamino)carbonyl] oxime
P021	00592-01-8	Calcium cyanide
P021	00592-01-8	Calcium cyanide Ca(CN)2
P022	00075-15-0	Carbon disulfide
P095	00075-44-5	Carbonic dichloride
P023	00107-20-0	Chloroacetaldehyde
P024	00106-47-8	p-Chloroaniline
P026	05344-82-1	1-(o-Chlorophenyl)thiourea
P027	00542-76-7	3-Chloropropionitrile
P029	00544-92-3	Copper cyanide
P029	00544-92-3	Copper cyanide Cu(CN)
P030	.....	Cyanides (soluble cyanide salts), not otherwise specified
P031	00460-19-5	Cyanogen
P033	00506-77-4	Cyanogen chloride
P033	00506-77-4	Cyanogen chloride (CN)Cl
P034	00131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	00542-88-1	Dichloromethyl ether
P036	00696-28-6	Dichlorophenylarsine
P037	00060-57-1	Dieldrin
P038	00692-42-2	Diethylarsine
P041	00311-45-5	Diethyl-p-nitrophenyl phosphate
P040	00297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	00055-91-4	Diisopropylfluorophosphate (DFP)
P004	00309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha, 4abeta,5alpha,8alpha,8abeta)-
P060	00465-73-6	1,4;5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha, 4abeta,5beta,8beta,8abeta)-
P037	00060-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene 3,4,5,6,9,9-hexachloro-1a, 2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta, 2aalpha,3beta,6beta,6aalpha,7beta, 7aalpha)-
P051	[1] 00072-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene 3,4,5,6,9,9-hexachloro-1a, 2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta, 3alpha,6alpha,6abeta,7beta, 7aalpha)-, & metabolites
P044	00060-51-5	Dimethoate
P046	00122-09-8	alpha,alpha-Dimethylphenethylamine
P047	[1] 00534-52-1	4,6-Dinitro-o-cresol, & salts
P048	00051-28-5	2,4-Dinitrophenol
P020	00088-85-7	Dinoseb
P085	00152-16-9	Diphosphoramide, octamethyl-
P111	00107-49-3	Diphosphoric acid, tetraethyl ester
P039	00298-04-4	Disulfoton
P049	00541-53-7	Dithiobiuret
P050	00115-29-7	Endosulfan
P088	00145-73-3	Endothall
P051	00072-20-8	Endrin
P051	00072-20-8	Endrin, & metabolites
P042	00051-43-4	Epinephrine
P031	00460-19-5	Ethanedinitrile
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P101	00107-12-0	Ethyl cyanide
P054	00151-56-4	Ethyleneimine
P097	00052-85-7	Famphur
P056	07782-41-4	Fluorine
P057	00640-19-7	Fluoroacetamide
P058	00062-74-8	Fluoroacetic acid, sodium salt
P065	00628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P059	00076-44-8	Heptachlor

Hazardous Waste Number	Chemical Abstracts No.	Substance
P062	00757-58-4	Hexaethyl tetraphosphate
P116	00079-19-6	Hydrazinecarbothioamide
P068	00060-34-4	Hydrazine, methyl-
P063	00074-90-8	Hydrocyanic acid
P063	00074-90-8	Hydrogen cyanide
P096	07803-51-2	Hydrogen phosphide
P060	00465-73-6	Isodrin
P007	02763-96-4	3 (2H)-Isoxazolone, 5-(aminomethyl)-
P092	00062-38-4	Mercury, (acetato-O)phenyl-
P065	00628-86-4	Mercury fulminate (R,T)
P082	00062-75-9	Methanamine, N-methyl-N-nitroso-
P064	00624-83-9	Methane, isocyanato-
P016	00542-88-1	Methane, oxybis[chloro-
P112	00509-14-8	Methane, tetranitro- (R)
P118	00075-70-7	Methanethiol, trichloro-
P050	00115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10 hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059	00076-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro-
P066	16752-77-5	Methomyl
P068	00060-34-4	Methyl hydrazine
P064	00624-83-9	Methyl isocyanate
P069	00075-86-5	2-Methyllactonitrile
P071	00298-00-0	Methyl parathion
P072	00086-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO)4, (T-4)-
P074	00557-19-7	Nickel cyanide
P074	00557-19-7	Nickel cynaide Ni(CN)2
P075	[1] 00054-11-5	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	00100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO2
P081	00055-63-0	Nitroglycerine (R)
P082	00062-75-9	N-Nitrosodimethylamine
P084	04549-40-0	N-Nitrosomethylvinylamine
P085	00152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO4, (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	00145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	00056-38-2	Parathion
P034	00131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	00051-28-5	Phenol, 2,4-dinitro-
P047	[1] 00534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P020	00088-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	00131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	00062-38-4	Phenylmercury acetate
P093	00103-85-5	Phenylthiourea
P094	00298-02-2	Phorate
P095	00075-44-5	Phosgene
P096	07803-51-2	Phosphine
P041	00311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	00298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	00298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	00060-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
P043	00055-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	00056-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	00297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	00052-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P071	00298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester
P110	00078-00-2	Plumbane, tetraethyl-
P098	00151-50-8	Potassium cyanide
P098	00151-50-8	Potassium cyanide K(CN)

Hazardous Waste Number	Chemical Abstracts No.	Substance
P099	00506-61-6	Potassium silver cyanide
P070	00116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P101	00107-12-0	Propanenitrile
P027	00542-76-7	Propanenitrile, 3-chloro-
P069	00075-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	00055-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	00598-31-2	2-Propanone, 1-bromo-
P102	00107-19-7	Propargyl alcohol
P003	00107-02-8	2-Propenal
P005	00107-18-6	2-Propen-1-ol
P067	00075-55-8	1,2-Propylenimine
P102	00107-19-7	2-Propyn-1-ol
P008	00504-24-5	4-Pyridinamine
P075	[1] 00054-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	00630-10-4	Selenourea
P104	00506-64-9	Silver cyanide
P104	00506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	00143-33-9	Sodium cyanide
P106	00143-33-9	Sodium cyanide Na(CN)
P108	[1] 00057-24-9	Strychnidin-10-one, & salts
P018	00357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	[1] 00057-24-9	Strychnine, & salts
P115	07446-18-6	Sulfuric acid, dithallium(1+) salt
P109	03689-24-5	Tetraethyldithiopyrophosphate
P110	00078-00-2	Tetraethyl lead
P111	00107-49-3	Tetraethyl pyrophosphate
P112	00509-14-8	Tetranitromethane (R)
P062	00757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	01314-32-5	Thallic oxide
P113	01314-32-5	Thallium oxide Tl2O3
P114	12039-52-0	Thallium(I) selenite
P115	07446-18-6	Thallium(I) sulfate
P109	03689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	00541-53-7	Thioimidodicarbonic diamide [(H2N)C(S)]2NH
P014	00108-98-5	Thiophenol
P116	00079-19-6	Thiosemicarbazide
P026	05344-82-1	Thiourea, (2-chlorophenyl)-
P072	00086-88-4	Thiourea, 1-naphthalenyl-
P093	00103-85-5	Thiourea, phenyl-
P123	08001-35-2	Toxaphene
P118	00075-70-7	Trichloromethanethiol
P119	07803-55-6	Vanadic acid, ammonium salt
P120	01314-62-1	Vanadium oxide V2O5
P120	01314-62-1	Vanadium pentoxide
P084	04549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	[1] 00081-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P121	00557-21-1	Zinc cyanide
P121	00557-21-1	Zinc cyanide Zn(CN)2
P122	01314-84-7	Zinc phosphide Zn3P2, when present at concentrations greater than 10% (R,T

1 CAS Number given for parent compound only.

(c) The commercial chemical products, manufacturing chemical intermediates, off-specification commercial chemical products or manufacturing chemical intermediates described in par. (a) 1. or 2. or materials or items described in par. (a) 3. or 4. listed in table V are identified as toxic wastes (T) unless otherwise designated and are subject to the small quantity exclusion in s. NR 610.05 (1). These wastes and their corresponding hazardous waste numbers are:

Table V
Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U001	00075-07-0	Acetaldehyde (I)
U034	00075-87-6	Acetaldehyde, trichloro-
U187	00062-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	00053-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	[1] 00094-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	00141-78-6	Acetic acid ethyl ester (I)
U144	00301-04-2	Acetic acid, lead(2+) salt
U214	00563-68-8	Acetic acid, thallium(1+) salt
See F027	00093-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	00067-64-1	Acetone (I)
U003	00075-05-8	Acetonitrile (I,T)
U004	00098-86-2	Acetophenone
U005	00053-96-3	2-Acetylaminofluorene
U006	00075-36-5	Acetyl chloride (C,R,T)
U007	00079-06-1	Acrylamide
U008	00079-10-7	Acrylic acid (I)
U009	00107-13-1	Acrylonitrile
U011	00061-82-5	Amitrole
U012	00062-53-3	Aniline (I,T)
U136	00075-60-5	Arsinic acid, dimethyl-
U014	00492-80-8	Auramine
U015	00115-02-6	Azaserine
U010	00050-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5 -methyl-, [1aS-(1aalpha, 8beta,8aalpha,8balpha)]-
U157	00056-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	00225-51-4	Benz[c]acridine
U017	00098-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	00056-55-3	Benz[a]anthracene
U094	00057-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	00062-53-3	Benzenamine (I,T)
U014	00492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	03165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	00060-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	00095-53-4	Benzenamine, 2-methyl-
U353	00106-49-0	Benzenamine, 4-methyl-
U158	00101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	00636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	00099-55-8	Benzenamine, 2-methyl-5-nitro-
U019	00071-43-2	Benzene (I,T)
U038	00510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethy ester
U030	00101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	00305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	00108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	00117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	00084-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	00084-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	00131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	00117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	00095-50-1	Benzene, 1,2-dichloro-
U071	00541-73-1	Benzene, 1,3-dichloro-
U072	00106-46-7	Benzene, 1,4-dichloro-
U060	00072-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	00098-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	01330-20-7	Benzene, dimethyl- (I,T)
U201	00108-46-3	1,3-Benzenediol
U127	00118-74-1	Benzene, hexachloro-
U056	00110-82-7	Benzene, hexahydro- (I)

Hazardous Waste Number	Chemical Abstracts No.	Substance
U220	00108-88-3	Benzene, methyl-
U105	00121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	00606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	00098-82-8	Benzene, (1-methylethyl)- (I)
U169	00098-95-3	Benzene, nitro-
U183	00608-93-5	Benzene, pentachloro-
U185	00082-68-8	Benzene, pentachloronitro-
U020	00098-09-9	Benzenesulfonic acid chloride (C,R)
U020	00098-09-9	Benzenesulfonyl chloride (C,R)
U207	00095-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	00050-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	00072-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4- methoxy-
U023	00098-07-7	Benzene, (trichloromethyl)-
U234	00099-35-4	Benzene, 1,3,5-trinitro-
U021	00092-87-5	Benzidine
U202	[1] 00081-07-2	1,2-Benzisothiazol-3 (2H)-one, 1,1-dioxide, & salts
U203	00094-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	00120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	00094-58-6	1,3-Benzodioxole, 5-propyl-
U064	00189-55-9	Benzo[rst]pentaphene
U248	[1] 00081-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, whe present at concentrations of 0.3% or less
U022	00050-32-8	Benzo[a]pyrene
U197	00106-51-4	p-Benzoquinone
U023	00098-07-7	Benzotrichloride (C,R,T)
U085	01464-53-5	2,2'-Bioxirane
U021	00092-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	00091-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	00119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	00119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U225	00075-25-2	Bromoform
U030	00101-55-3	4-Bromophenyl phenyl ether
U128	00087-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	00924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	00071-36-3	1-Butanol (I)
U159	00078-93-3	2-Butanone (I,T)
U160	01338-23-4	2-Butanone, peroxide (R,T)
U053	04170-30-3	2-Butenal
U074	00764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	00303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy 2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-
U031	00071-36-3	n-Butyl alcohol (I)
U136	00075-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U238	00051-79-6	Carbamic acid, ethyl ester
U178	00615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U097	00079-44-7	Carbamic chloride, dimethyl-
U114	[1] 00111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U062	02303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U215	06533-73-9	Carbonic acid, dithallium(1+) salt
U033	00353-50-4	Carbonic difluoride
U156	00079-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	00353-50-4	Carbon oxyfluoride (R,T)
U211	00056-23-5	Carbon tetrachloride
U034	00075-87-6	Chloral
U035	00305-03-3	Chlorambucil
U036	00057-74-9	Chlordane, alpha & gamma isomers
U026	00494-03-1	Chlornaphazin
U037	00108-90-7	Chlorobenzene
U038	00510-15-6	Chlorobenzilate
U039	00059-50-7	p-Chloro-m-cresol
U042	00110-75-8	2-Chloroethyl vinyl ether
U044	00067-66-3	Chloroform
U046	00107-30-2	Chloromethyl methyl ether

Hazardous Waste Number	Chemical Abstracts No.	Substance
U047	00091-58-7	beta-Chloronaphthalene
U048	00095-57-8	o-Chlorophenol
U049	03165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H2CrO4, calcium salt
U050	00218-01-9	Chrysene
U051	. . . . .	Creosote
U052	01319-77-3	Cresol (Cresylic acid)
U053	04170-30-3	Crotonaldehyde
U055	00098-82-8	Cumene (I)
U246	00506-68-3	Cyanogen bromide (CN)Br
U197	00106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	00110-82-7	Cyclohexane (I)
U129	00058-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-(1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U057	00108-94-1	Cyclohexanone (I)
U130	00077-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	00050-18-0	Cyclophosphamide
U240	[1] 00094-75-7	2,4-D, salts & esters
U059	20830-81-3	Daunomycin
U060	00072-54-8	DDD
U061	00050-29-3	DDT
U062	02303-16-4	Diallate
U063	00053-70-3	Dibenz[a,h]anthracene
U064	00189-55-9	Dibenzo[a,i]pyrene
U066	00096-12-8	1,2-Dibromo-3-chloropropane
U069	00084-74-2	Dibutyl phthalate
U070	00095-50-1	o-Dichlorobenzene
U071	00541-73-1	m-Dichlorobenzene
U072	00106-46-7	p-Dichlorobenzene
U073	00091-94-1	3,3'-Dichlorobenzidine
U074	00764-41-0	1,4-Dichloro-2-butene (I,T)
U075	00075-71-8	Dichlorodifluoromethane
U078	00075-35-4	1,1-Dichloroethylene
U079	00156-60-5	1,2-Dichloroethylene
U025	00111-44-4	Dichloroethyl ether
U027	00108-60-1	Dichloroisopropyl ether
U024	00111-91-1	Dichloromethoxy ethane
U081	00120-83-2	2,4-Dichlorophenol
U082	00087-65-0	2,6-Dichlorophenol
U084	00542-75-6	1,3-Dichloropropene
U085	01464-53-5	1,2:3,4-Diepoxybutane (I,T)
U108	00123-91-1	1,4-Diethyleneoxide
U028	00117-81-7	Diethylhexyl phthalate
U086	01615-80-1	N,N'-Diethylhydrazine
U087	03288-58-2	O,O-Diethyl S-methyl dithiophosphate
U088	00084-66-2	Diethyl phthalate
U089	00056-53-1	Diethylstilbesterol
U090	00094-58-6	Dihydrosafrole
U091	00119-90-4	3,3'-Dimethoxybenzidine
U092	00124-40-3	Dimethylamine (I)
U093	00060-11-7	p-Dimethylaminoazobenzene
U094	00057-97-6	7,12-Dimethylbenz[a]anthracene
U095	00119-93-7	3,3'-Dimethylbenzidine
U096	00080-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	00079-44-7	Dimethylcarbamoyl chloride
U098	00057-14-7	1,1-Dimethylhydrazine
U099	00540-73-8	1,2-Dimethylhydrazine
U101	00105-67-9	2,4-Dimethylphenol
U102	00131-11-3	Dimethyl phthalate
U103	00077-78-1	Dimethyl sulfate
U105	00121-14-2	2,4-Dinitrotoluene
U106	00606-20-2	2,6-Dinitrotoluene
U107	00117-84-0	Di-n-octyl phthalate
U108	00123-91-1	1,4-Dioxane

Hazardous Waste Number	Chemical Abstracts No.	Substance
U109	00122-66-7	1,2-Diphenylhydrazine
U110	00142-84-7	Dipropylamine (I)
U111	00621-64-7	Di-n-propylnitrosamine
U041	00106-89-8	Epichlorohydrin
U001	00075-07-0	Ethanal (I)
U174	00055-18-5	Ethanamine, N-ethyl-N-nitroso-
U155	00091-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U067	00106-93-4	Ethane, 1,2-dibromo-
U076	00075-34-3	Ethane, 1,1-dichloro-
U077	00107-06-2	Ethane, 1,2-dichloro-
U131	00067-72-1	Ethane, hexachloro-
U024	00111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	00060-29-7	Ethane, 1,1'-oxybis-(I)
U025	00111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	00076-01-7	Ethane, pentachloro-
U208	00630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	00079-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	00062-55-5	Ethanethioamide
U226	00071-55-6	Ethane, 1,1,1-trichloro-
U227	00079-00-5	Ethane, 1,1,2-trichloro-
U359	00110-80-5	Ethanol, 2-ethoxy-
U173	01116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U004	00098-86-2	Ethanone, 1-phenyl-
U043	00075-01-4	Ethene, chloro-
U042	00110-75-8	Ethene, (2-chloroethoxy)-
U078	00075-35-4	Ethene, 1,1-dichloro-
U079	00156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	00127-18-4	Ethene, tetrachloro-
U228	00079-01-6	Ethene, trichloro-
U112	00141-78-6	Ethyl acetate (I)
U113	00140-88-5	Ethyl acrylate (I)
U238	00051-79-6	Ethyl carbamate (urethane)
U117	00060-29-7	Ethyl ether (I)
U114	[1] 00111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U067	00106-93-4	Ethylene dibromide
U077	00107-06-2	Ethylene dichloride
U359	00110-80-5	Ethylene glycol monoethyl ether
U115	00075-21-8	Ethylene oxide (I,T)
U116	00096-45-7	Ethylenethiourea
U076	00075-34-3	Ethylidene dichloride
U118	00097-63-2	Ethyl methacrylate
U119	00062-50-0	Ethyl methanesulfonate
U120	00206-44-0	Fluoranthene
U122	00050-00-0	Formaldehyde
U123	00064-18-6	Formic acid (C,T)
U124	00110-00-9	Furan (I)
U125	00098-01-1	2-Furancarboxaldehyde (I)
U147	00108-31-6	2,5-Furandione
U213	00109-99-9	Furan, tetrahydro-(I)
U125	00098-01-1	Furfural (I)
U124	00110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)- carbonyl]amino]-
U126	00765-34-4	Glycidylaldehyde
U163	00070-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	00118-74-1	Hexachlorobenzene
U128	00087-68-3	Hexachlorobutadiene
U130	00077-47-4	Hexachlorocyclopentadiene
U131	00067-72-1	Hexachloroethane
U132	00070-30-4	Hexachlorophene
U243	01888-71-7	Hexachloropropene
U133	00302-01-2	Hydrazine (R,T)
U086	01615-80-1	Hydrazine, 1,2-diethyl-

Hazardous Waste Number	Chemical Abstracts No.	Substance
U098	00057-14-7	Hydrazine, 1,1-dimethyl-
U099	00540-73-8	Hydrazine, 1,2-dimethyl-
U109	00122-66-7	Hydrazine, 1,2-diphenyl-
U134	07664-39-3	Hydrofluoric acid (C,T)
U134	07664-39-3	Hydrogen fluoride (C,T)
U135	07783-06-4	Hydrogen sulfide
U135	07783-06-4	Hydrogen sulfide H2S
U096	00080-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	00096-45-7	2-Imidazolidinethione
U137	00193-39-5	Indeno[1,2,3-cd]pyrene
U190	00085-44-9	1,3-Isobenzofurandione
U140	00078-83-1	Isobutyl alcohol (I,T)
U141	00120-58-1	Isosafrole
U142	00143-50-0	Kepone
U143	00303-34-4	Lasiocarpine
U144	00301-04-2	Lead acetate
U146	01335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	07446-27-7	Lead phosphate
U146	01335-32-6	Lead subacetate
U129	00058-89-9	Lindane
U163	00070-25-7	MNNG
U147	00108-31-6	Maleic anhydride
U148	00123-33-1	Maleic hydrazide
U149	00109-77-3	Malononitrile
U150	00148-82-3	Melphalan
U151	07439-97-6	Mercury
U152	00126-98-7	Methacrylonitrile (I, T)
U092	00124-40-3	Methanamine, N-methyl- (I)
U029	00074-83-9	Methane, bromo-
U045	00074-87-3	Methane, chloro- (I, T)
U046	00107-30-2	Methane, chloromethoxy-
U068	00074-95-3	Methane, dibromo-
U080	00075-09-2	Methane, dichloro-
U075	00075-71-8	Methane, dichlorodifluoro-
U138	00074-88-4	Methane, iodo-
U119	00062-50-0	Methanesulfonic acid, ethyl ester
U211	00056-23-5	Methane, tetrachloro-
U153	00074-93-1	Methanethiol (I, T)
U225	00075-25-2	Methane, tribromo-
U044	00067-66-3	Methane, trichloro-
U121	00075-69-4	Methane, trichlorofluoro-
U036	00057-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U154	00067-56-1	Methanol (I)
U155	00091-80-5	Methapyrilene
U142	00143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U247	00072-43-5	Methoxychlor
U154	00067-56-1	Methyl alcohol (I)
U029	00074-83-9	Methyl bromide
U186	00504-60-9	1-Methylbutadiene (I)
U045	00074-87-3	Methyl chloride (I,T)
U156	00079-22-1	Methyl chlorocarbonate (I,T)
U226	00071-55-6	Methyl chloroform
U157	00056-49-5	3-Methylcholanthrene
U158	00101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	00074-95-3	Methylene bromide
U080	00075-09-2	Methylene chloride
U159	00078-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	01338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	00074-88-4	Methyl iodide
U161	00108-10-1	Methyl isobutyl ketone (I)
U162	00080-62-6	Methyl methacrylate (I,T)
U161	00108-10-1	4-Methyl-2-pentanone (I)
U164	00056-04-2	Methylthiouracil

Hazardous Waste Number	Chemical Abstracts No.	Substance
U010	00050-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl) oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	00134-32-7	1-Naphthalenamine
U168	00091-59-8	2-Naphthalenamine
U026	00494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	00091-20-3	Naphthalene
U047	00091-58-7	Naphthalene, 2-chloro-
U166	00130-15-4	1,4-Naphthalenedione
U236	00072-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3' dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxyl-, tetrasodium salt
U166	00130-15-4	1,4-Naphthoquinone
U167	00134-32-7	alpha-Naphthylamine
U168	00091-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	00098-95-3	Nitrobenzene (I,T)
U170	00100-02-7	p-Nitrophenol
U171	00079-46-9	2-Nitropropane (I,T)
U172	00924-16-3	N-Nitrosodi-n-butylamine
U173	01116-54-7	N-Nitrosodiethanolamine
U174	00055-18-5	N-Nitrosodiethylamine
U176	00759-73-9	N-Nitroso-N-ethylurea
U177	00684-93-5	N-Nitroso-N-methylurea
U178	00615-53-2	N-Nitroso-N-methylurethane
U179	00100-75-4	N-Nitrosopiperidine
U180	00930-55-2	N-Nitrosopyrrolidine
U181	00099-55-8	5-Nitro-o-toluidine
U193	01120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	00050-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	00075-21-8	Oxirane (I,T)
U126	00765-34-4	Oxiranecarboxyaldehyde
U041	00106-89-8	Oxirane, (chloromethyl)-
U182	00123-63-7	Paraldehyde
U183	00608-93-5	Pentachlorobenzene
U184	00076-01-7	Pentachloroethane
U185	00082-68-8	Pentachloronitrobenzene (PCNB)
See F027	00087-86-5	Pentachlorophenol
U161	00108-10-1	Pentanol, 4-methyl-
U186	00504-60-9	1,3-Pentadiene (I)
U187	00062-44-2	Phenacetin
U188	00108-95-2	Phenol
U048	00095-57-8	Phenol, 2-chloro-
U039	00059-50-7	Phenol, 4-chloro-3-methyl-
U081	00120-83-2	Phenol, 2,4-dichloro-
U082	00087-65-0	Phenol, 2,6-dichloro-
U089	00056-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	00105-67-9	Phenol, 2,4-dimethyl-
U052	01319-77-3	Phenol, methyl-
U132	00070-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U170	00100-02-7	Phenol, 4-nitro-
See F027	00087-86-5	Phenol, pentachloro-
See F027	00058-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	00095-95-4	Phenol, 2,4,5-trichloro-
See F027	00088-06-2	Phenol, 2,4,6-trichloro-
U150	00148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	07446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	03288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	01314-80-3	Phosphorus sulfide (R)
U190	00085-44-9	Phthalic anhydride
U191	00109-06-8	2-Picoline
U179	00100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	00107-10-8	1-Propanamine (I,T)

Hazardous Waste Number	Chemical Abstracts No.	Substance
U111	00621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	00142-84-7	1-Propanamine, N-propyl- (I)
U066	00096-12-8	Propane, 1,2-dibromo-3-chloro-
U083	00078-87-5	Propane, 1,2-dichloro-
U149	00109-77-3	Propanedinitrile
U171	00079-46-9	Propane, 2-nitro- (I,T)
U027	00108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	01120-71-4	1,3-Propane sultone
See F027	00093-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	00126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	00078-83-1	1-Propanol, 2-methyl- (I,T)
U002	00067-64-1	2-Propanone (I)
U007	00079-06-1	2-Propenamide
U084	00542-75-6	1-Propene, 1,3-dichloro-
U243	01888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	00107-13-1	2-Propenenitrile
U152	00126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	00079-10-7	2-Propenoic acid (I)
U113	00140-88-5	2-Propenoic acid, ethyl ester (I)
U118	00097-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	00080-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U194	00107-10-8	n-Propylamine (I,T)
U083	00078-87-5	Propylene dichloride
U148	00123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	00110-86-1	Pyridine
U191	00109-06-8	Pyridine, 2-methyl-
U237	00066-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2- chloroethyl)amino]-
U164	00056-04-2	4 (1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	00930-55-2	Pyrrolidine, 1-nitroso-
U200	00050-55-5	Reserpine
U201	00108-46-3	Resorcinol
U202	[1] 00081-07-2	Saccharin, & salts
U203	00094-59-7	Safrole
U204	07783-00-8	Selenious acid
U204	07783-00-8	Selenium dioxide
U205	07488-56-4	Selenium sulfide
U205	07488-56-4	Selenium sulfide SeS2 (R,T)
U015	00115-02-6	L-Serine, diazoacetate (ester)
See F027	00093-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	00077-78-1	Sulfuric acid, dimethyl ester
U189	01314-80-3	Sulfur phosphide (R)
See F027	00093-76-5	2,4,5-T
U207	00095-94-3	1,2,4,5-Tetrachlorobenzene
U208	00630-20-6	1,1,1,2-Tetrachloroethane
U209	00079-34-5	1,1,2,2-Tetrachloroethane
U210	00127-18-4	Tetrachloroethylene
See F027	00058-90-2	2,3,4,6-Tetrachlorophenol
U213	00109-99-9	Tetrahydrofuran (I)
U214	00563-68-8	Thallium(I) acetate
U215	06533-73-9	Thallium(I) carbonate
U216	07791-12-0	Thallium(I) chloride
U216	07791-12-0	Thallium chloride TlCl
U217	10102-45-1	Thallium(I) nitrate
U218	00062-55-5	Thioacetamide
U153	00074-93-1	Thiomethanol (I,T)
U244	00137-26-8	Thioperoxydicarbonic diamide [(H2N)C(S)]2S2, tetramethyl-
U219	00062-56-6	Thiourea
U244	00137-26-8	Thiram
U220	00108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	00095-53-4	o-Toluidine

Hazardous Waste Number	Chemical Abstracts No.	Substance
U353	00106-49-0	p-Toluidine
U222	00636-21-5	o-Toluidine hydrochloride
U011	00061-82-5	1H-1,2,4-Triazol-3-amine
U227	00079-00-5	1,1,2-Trichloroethane
U228	00079-01-6	Trichloroethylene
U121	00075-69-4	Trichloromonofluoromethane
See F027	00095-95-4	2,4,5-Trichlorophenol
See F027	00088-06-2	2,4,6-Trichlorophenol
U234	00099-35-4	1,3,5-Trinitrobenzene (R,T)
U182	00123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	00126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	00072-57-1	Trypan blue
U237	00066-75-1	Uracil mustard
U176	00759-73-9	Urea, N-ethyl-N-nitroso-
U177	00684-93-5	Urea, N-methyl-N-nitroso-
U043	00075-01-4	Vinyl chloride
U248	[1] 00081-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	01330-20-7	Xylene (I)
U200	00050-55-5	Yohimban-16-carboxylic acid 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U249	01314-84-7	Zinc phosphide Zn3P2, when present at concentrations of 10% or les

1 CAS Number given for parent compound only.

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; correction in (2) (a) Table II made under s. 13.93 (2m) (b), 7, Stats., Register, March, 1993, No. 447; **am. (1) (b), (2) (a) Table II Entries F003, F019, F024, F026, F500, (2) (b) Table III Secondary Lead Group Entry K069, Ink Formulation Group Entry K086, cr. (2) (a) Table II Entries F025, F032, F034, F035, F037, F038, (2) (b) Table III Organic Chemical Group Entries K107, K108, K109, K110, K149, K150, K151, Pesticides Group Entries K131, K132, Primary Copper Group Entry K064, Primary Lead Group K065, Primary Zinc Group K066, Primary Aluminum Group K088, Ferroalloys Group Entries K090, K091, Coking Group Entries K141, K142, K143, K144, K145, K147, K148, r. and recr. (3) (b) Table IV, (3) (c) Table V,** Register, May, 1995, No. 473, eff. 6-1-95.

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:

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

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91; renum. (1) to be (1) (a), cr. (1) (b) to (e), 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, 1992, and that are hazardous only because they fail the test for the toxicity characteristic, hazardous waste codes D018 to D043 only, are exempt from regulation under chs. NR 600 to 685.

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

Superintendent of Documents
U.S. Government Printing Office
PO Box 371954
Pittsburgh, PA 15250-7954
(202) 783-3238

Note: The management of PCBs and products containing PCBs is regulated under ch. NR 157.

History: Cr. Register, August, 1992, No. 440, eff. 9-1-92; **am. Register, May, 1995, No. 473, eff. 6-1-95.**

NR 605.14 Listing specific definitions. (1) (a) For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one of the following 4 treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity and the units employ a minimum of 6 hp per million gallons of treatment volume; and either:

1. The hydraulic retention time of the unit is no longer than 5 days, or

2. The hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a hazardous waste by the toxicity characteristic.

(b) Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment, storage and disposal facilities shall maintain, in their operating or other onsite records, documents and data sufficient to prove that:

1. The unit is an aggressive biological treatment unit as defined in this section; and

2. The sludges sought to be exempted from the definitions of F037 or F038 were actually generated in the aggressive biological treatment unit.

(2) (a) For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

(b) For the purposes of the F038 listing,

1. Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement; and

2. Floats are considered to be generated at the moment they are formed in the top of the unit.

History: Cr. Register, May, 1995, No. 473, eff. 6-1-95.