# Chapter NR 675

## LAND DISPOSAL RESTRICTIONS



**NR 675.01 Purpose.** The purpose of this chapter is to identify hazardous wastes that are restricted from land disposal and define those limited circumstances under which an otherwise prohibited waste may continue to be disposed on land.

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

**NR 675.02 Applicability.** Except as specifically provided, the requirements of this chapter apply to generators and transporters of hazardous waste and owners and operators of hazardous waste treatment, storage or disposal facilities. This chapter does not apply to solid waste generators, transporters or solid waste treatment, storage or disposal facilities that generate, transport or receive only:

**(1)** Non-hazardous solid waste,

**(2)** Metallic mining wastes resulting from a mining operation as defined in s. 144.81 (5), Stats., or

**(3)** A combination of wastes described in subs. (1) and (2).

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; correction made under s. 13.93 (2m) (b) 1, Stats., Register, August, 1992, No. 440; **am. (2), r. (3), renum, (4) to be (3) and am., Register, May, 1995, No. 473, 6-1-95.**

**NR 675.03 Definitions.** The definitions in s. NR 600.03 apply to this chapter. In addition, the following definitions also apply to this chapter:

**(1)** "Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that is one of the following:

(a) A manufactured object.

(b) Plant or animal matter.

(c) Natural geologic material.

**Note:** The following materials are not debris:

(a) Any material for which a specific treatment standard is provided in ss. NR 675.21 to 675.23.

(b) Process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges or air emission residues.

(c) Intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume.

**Note:** A mixture of debris that has not been treated to the standards provided by s. NR 675.25 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

**(2)** "Halogenated organic compounds" means those compounds having a carbon-halogen bond which are listed under Appendix II to this chapter.

**(3)** "Hazardous constituent or constituents" means those constituents listed in ch. NR 605, Appendix IV.

**(4)** "Hazardous debris" means debris that contains a hazardous waste listed in s. NR 605.09, or that exhibits a characteristic of hazardous waste identified in s. NR 605.08.

**(5)** "Inorganic solid debris" means nonfriable inorganic solids contaminated with D004-D011 hazardous wastes that are incapable of passing through a 9.5 mm standard sieve; and that require cutting, or crushing and grinding in mechanical sizing equipment prior to stabilization; and are limited to the following inorganic or metal materials:

(a) Metal slags, whether dross or scoria;

(b) Glassified slag;

(c) Glass;

(d) Concrete, excluding cementitious or pozzolanic stabilized hazardous wastes;

(e) Masonry and refractory bricks;

(f) Metal cans, containers, drums or tanks;

(g) Metal nuts, bolts, pipes, pumps, valves, appliances or industrial equipment;

(h) Scrap metal as defined in s. NR 600.03.

**(6)** "Land disposal" means placement in or on the land, except in a corrective action management unit, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation,

underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes.

**(7)** "Nonwastewaters" means wastes that do not meet the criteria for wastewaters in sub. (8).

**(8)** "Wastewasters" means wastes that contain less than 1% by weight total organic carbon and less than 1% by weight total suspended solids, with the following exceptions:

(a) F001, F002, F003, F004, F005, wastewaters are solvent-water mixtures that contain less than 1% by weight total organic carbon or less than 1% by weight total F001, F002, F003, F004, F005 solvent constituents listed in s. NR 675.21, Table CCWE.

(b) K011, K013, K014 wastewaters contain less than 5% by weight total organic carbon and less than 1% by weight total suspended solids, as generated.

(c) K103 and K104 wastewaters containing less than 4% by weight total organic carbon and less than 1% by weight total suspended solids.

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

**NR 675.04 Exemptions. (1)** Wastes which are otherwise prohibited from land disposal under this chapter may be treated in a surface impoundment or series of impoundments provided that:

(a) Treatment of wastes occurs in the impoundments;

(b) The following conditions are met:

1. Sampling and testing. For wastes with treatment standards in ss. NR 675.20 to 675.24 or prohibition levels in ss. NR 675.11 to 675.16 or both, the residues from treatment shall be analyzed as specified in s. NR 675.07 or 675.13 to determine if they meet the applicable treatment standards or, where no treatment standards have been established for the waste, the applicable prohibition levels. The sampling method, specified in the waste analysis plan under s. NR 630.13, shall be designed such that representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples.

2. Removal. The following treatment residues, including any liquid waste, shall be removed at least annually: residues which do not meet the treatment standards promulgated under ss. NR 675.20 to 675.24; residues which do not meet the prohibition levels established under ss. NR 675.11 to 675.16 or imposed by statute where no treatment standards have been established; residues which are from the treatment of wastes prohibited from disposal on land under ss. NR 675.11 to 675.16 where no treatment standards have been established and no prohibition levels apply; or residues from managing listed wastes which are not delisted under s. NR 605.10. If the volume of liquid flowing through the impoundment or series of impoundments annually is greater than the volume of the impoundment or impoundments, this flowthrough constitutes removal of the supernatant for the purpose of this requirement.

3. Subsequent management. Treatment residues may not be placed in any other surface impoundment for subsequent management.

4. Recordkeeping. The procedures and schedule for the sampling of impoundment contents, the analysis of test data and the annual removal of residues which do not meet the treatment standards, or prohibition levels where no treatment standards have been established, or which are from the treatment of wastes prohibited from disposal on land under ss. NR 675.11 to 675.16 where no treatment standards have been established and no prohibition levels apply, shall be specified in the facility's waste analysis plan as required under s. NR 630.13.

(c) The impoundment meets the design requirements of ch. NR 660, regardless that the unit may not be new, expanded, or a replacement, and shall be in compliance with applicable groundwater monitoring requirements of ch. NR 635, and

(d) The owner or operator submits to the department a written certification that the requirements of par. (b) have been met and submits a copy of the waste analysis plan required under par. (a). The following certification is required:

I certify under penalty of law that the requirements of s. NR 675.04 (1) (c), have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

**(2)** Evaporation of hazardous constituents as the principal means of treatment is not considered to be treatment for the purposes of an exemption under this section.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; renum. (1) (a) to (c) to be (1) (b) to (d) and am. (1) (b) 1., 2. and 4., cr. (1) (a), Register, August, 1992, No. 440, eff. 9-1-92.

**NR 675.05 General. (1)** (a) Any person who generates, treats, stores or disposes of a hazardous waste may seek an extension to the effective date of any applicable requirement under ss. NR 675.11 to 675.16 by submitting an application to EPA pursuant to 40 CFR 268.5, July 1, 1993.

(b) If EPA denies an application for an extension under 40 CFR 268.5, July 1, 1993, the department shall recognize that denial.

(c) Persons who have had their applications for an extension approved by EPA under 40 CFR 268.5, July 1, 1993, shall continue to manage their wastes in compliance with any applicable restrictions established under ss. NR 675.11 to 675.16 unless and until the department recognizes EPA's approval, except when the waste is being managed in another state and the person complies with that other state's requirements. A person may petition the department to recognize an EPA approval by submitting the following to the department:

1. Copies of all material and information received from EPA, including the extension under 40 CFR 268.5, July 1, 1993.

2. Copies of all material and information received from EPA, including the EPA notice of approval, concerning the extension under 40 CFR 268.5, July 1, 1993.

3. All other information that the department determines is necessary to evaluate the request for an extension.

(d) When determining whether to recognize an EPA-granted extension under 40 CFR 268.5, July 1, 1993, 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 268.5, July 1, 1993.

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

**Note:** An example of when an extension may be sought under this subsection is when there is a lack of treatment, recovery or disposal capacity.

**(2)** (a) Any person who seeks an exemption from a prohibition under ss. NR 675.11 to 675.16 for the disposal of a restricted hazardous waste in a particular unit or units shall submit a petition to the EPA pursuant to 40 CFR 268.6, July 1, 1993.

(b) If EPA denies a petition for an exemption under 40 CFR 268.6, July 1, 1993, the department shall recognize that denial.

(c) Persons who have had their petitions for an exemption approved by EPA under 40 CFR 268.6, July 1, 1993, shall continue to manage their wastes in compliance with any applicable restriction under ss. NR 675.11 to 675.16 until the department recognizes EPA's approval, except when the waste is being managed in another state and the person complies with that other state's requirements. A person may petition the department to recognize an EPA approval by submitting the following to the department:

1. Copies of all materials and information submitted to EPA concerning the exemption under 40 CFR 268.6, July 1, 1993;

2. Copies of all material and information received from EPA including the EPA notice of approval concerning the exemption under 40 CFR 268.6, July 1, 1993; and

3. All other information that the department determines is necessary to evaluate the request for an exemption.

(d) When determining whether to recognize an EPA-granted exemption under 40 CFR 268.6, July 1, 1993, 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 268.6, July 1, 1993.

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

**(3)** The following hazardous wastes are not subject to any provision of this chapter:

(a) Waste generated by very small quantity generators of less than 100 kilograms of non-acute hazardous waste or less than 1 kilogram of acute hazardous waste per month as specified in s. NR 610.07.

(b) Waste pesticides that a farmer disposes of pursuant to the requirements under subs. (2) and (3) or s. NR 615.04 (2).

(c) Wastes identified or listed as hazardous after November 8, 1984 for which EPA has not promulgated land disposal restrictions or treatment standards.

**Note:** The publication containing the CRF reference may be obtained from:

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

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (1) (a) to (c) 2., (d) (intro.), 2. and (2) (a) to (d), Register, August, 1992, No. 440, eff. 9-1-92; **am. (1) (a), (b), (c) (intro.), 1., 2., (d) (intro.), 2., (2) (a), (b), (c) (intro.), 1., 2., (d) (intro.), 2., Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.06 Dilution prohibition. (1)** Except as provided in sub. (2), no generator, transporter, handler or owner or operator of a treatment, storage or disposal facility may in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with ss. NR 675.20 to 675.24, to circumvent the effective date of or to otherwise avoid a prohibition in ss. NR 675.11 to 675.16, or to circumvent a land disposal prohibition imposed by 42 USC 6924.

**(2)** Dilution of wastes that are hazardous only because they exhibit a characteristic in a treatment system which treats wastes subsequently discharged to a water of the United States pursuant to a permit issued under section 402 of the clean water act or which treats wastes for purposes of pretreatment requirements under section 307 of the clean water act is not impermissible dilution for purposes of this section unless a method has been specified in s. NR 675.22, or unless the waste is a D003 reactive cyanide wastewater or nonwastewater.

**Note:** The publication containing title 42 of the United States code and the clean water act may be obtained from:

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

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; r. and recr., Register, August, 1992, No. 440, eff. 9-1-92; **am. (1), (2), Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.07 Waste analysis and recordkeeping. (1)** (a) Except as specified in s. NR 675.13, if a generator's waste is listed in s. NR 605.09, the generator shall test its waste or test an extract 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, or use knowledge of the waste, to determine if the waste is restricted from land disposal under this chapter.

**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) Except as specified in s. NR 675.13, if a generator's waste exhibits one or more of the characteristics in s. NR 605.08, the generator shall test an extract using the extraction procedure toxicity test, EPA method 1310A 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 use knowledge of the waste, to determine if the waste is restricted from land disposal under this chapter.

(c) If a generator determines that it is managing a restricted waste under this chapter and the waste exceeds the applicable treatment standards, with each shipment of waste the generator shall notify the treatment or storage facility in writing of the appropriate treatment standards in ss. NR 675.20 to 675.24 and any applicable prohibitions in s. NR 675.13 or 42 USC 6924 (d).

1. The notice shall include the following information:

a. EPA hazardous waste number;

b. The corresponding treatment standard for wastes F001-F005, F039 and wastes prohibited pursuant to s. NR 675.13 or 42 USC 6924 (d). Treatment standards for all other restricted wastes shall either be included or referenced by including on the notification the applicable wastewater category, the applicable subdivisions made within a waste code based on waste specific criteria, and the administrative code sections and paragraphs where the applicable treatment standard appears. Where the applicable treatment standards are expressed as specified technologies in s. NR 675.22, the applicable 5 letter treatment code found in table I of s. NR 675.22 shall also be listed on the notification;

c. The manifest number associated with the shipment of waste; and

d. For hazardous debris, the contaminants subject to treatment as provided by s. NR 675.25 and the following statement:

"This hazardous debris is subject to the alternative treatment standards of s. NR 675.25"; and

e. Waste analysis data, where available.

2. The generator shall keep a copy of this notice with the generator's copy of the manifest.

**Note:** The publication containing title 42 of the United States code may be obtained from:

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(d) If a generator determines that it is managing a restricted waste under this chapter, and determines that the waste may be disposed on land without further treatment, with each shipment of waste the generator shall submit, to the treatment, storage or land disposal facility, a notice and a certification stating that the waste meets applicable treatment standards in ss. NR 675.20 to 675.24 and the applicable prohibition levels in s. NR 675.13; or 42 USC 6924 (d).

**Note:** The publication containing title 42 of the United States code may be obtained from:

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1. The notice shall include the following information:

a. EPA hazardous waste number;

b. The corresponding treatment standards for wastes F001-F005, F039 and wastes prohibited pursuant to s. NR 675.13 or 42 USC 6924 (d). Treatment standards for all other restricted wastes shall either be included or be referenced by including on the notification the applicable wastewater or nonwastewater, the applicable subdivisions made within a waste code based on waste specific criteria and the administrative code sections and paragraphs where the applicable treatment standard appears. Where the applicable treatment standards are expressed as specified technologies in s. NR 675.22, the applicable 5 letter treatment code found in table I of s. NR 675.22 also shall be listed on the notification.

c. The manifest number associated with the shipment of waste; and

d. Waste analysis data, where available.

2. The certification shall be signed by an authorized representative and shall state the following:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in ss. NR 675.20 to 675.24 and all applicable prohibitions in s. NR 675.13 or 42 USC 6924 (d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

3. The generator shall keep a copy of this notice and certification with the generator's copy of the manifest.

**Note:** The publication containing title 42 of the United States code may be obtained from:

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(e) If a generator's waste is subject to an exemption from a prohibition against the type of land disposal method utilized for the waste, such as, but not limited to, a case-by-case extension under s. NR 675.05 (1) or an exemption under s. NR 675.05 (2) or a nationwide capacity variance under 40 CFR 268, Subpart C, July 1, 1993, with each shipment of waste the generator shall submit a notice to the facility receiving the waste stating that the waste is not prohibited from land disposal.

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

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1. The notice shall include the following information:

a. EPA hazardous waste number;

b. The corresponding treatment standards for wastes F001-F005, F039 and all wastes prohibited pursuant to s. NR 675.13 or 42 USC 6924 (d). Treatment standards for all other restricted wastes shall either be included or referenced by including on the notification the applicable wastewater or nonwastewater category, the applicable subdivisions made within a waste code based on waste specific criteria and the administrative code sections and paragraphs where the treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in s. NR 675.22, the applicable 5 letter treatment code found in table I of s. NR 675.22 also shall be listed on the notification.

c. The manifest number associated with the shipment of waste;

d. Waste analysis data, where available; and

e. The date the waste is subject to the prohibition.

2. The generator shall keep a copy of this notice with the generator's copy of the manifest.

**Note:** The publication containing title 42 of the United States code may be obtained from:

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(f) If a generator is managing a prohibited waste in tanks or containers regulated under s. NR 610.07 (2), 610.08 (4) or 615.05 (6) and is treating such waste in tanks or containers to meet applicable treatment standards specified in ss. NR 675.20 to 675.24, the generator shall develop and follow a written waste analysis plan which describes the procedures that the generator will carry out to comply with the treatment standards. The plan shall be kept on-site in the generator's operating record and the following requirements shall be met:

1. The waste analysis plan shall be based on a detailed chemical and physical analysis of a representative sample of the prohibited waste being treated, and contain all information necessary to treat the waste in accordance with the requirements of this chapter, including the selected testing frequency.

2. This plan shall be submitted to the department a minimum of 30 days prior to the treatment activity, with delivery verified.

3. Wastes shipped off-site pursuant to this paragraph shall comply with the notification requirements of par. (d).

(g) If a generator determines the waste is restricted based solely on the generator's knowledge of the waste, all supporting data used to make this determination shall be retained on-site in the generator's files. If a generator determines the waste is restricted based on testing this waste or an extract developed using the extraction procedure toxicity test, EPA method 1310A in SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", third edition, September, 1986, as amended by update I in July, 1992, all waste analysis data shall be retained on-site in the generator's files.

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(h) If a generator determines that it is managing a restricted waste that is excluded from the definition of hazardous or solid waste or exempt from regulation under chs. NR 600 to 685 subsequent to the point of generation, the generator shall place a one-time notice in the facility's file stating such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from chs. NR 600 to 685 and the disposition of the waste.

(i) Generators shall retain on-site a copy of all notices, certifications, demonstrations, waste analysis data and other documentation produced pursuant to this section for at least 5 years from the date that the waste that is the subject of the documentation was last sent to on-site or off-site treatment, storage or disposal. Upon written notice from the department to the generator, the period of retention may be extended beyond 5 years. The requirements of this paragraph apply to solid wastes even when the hazardous characteristic is removed prior to disposal or when the waste is excluded from the definition of hazardous or solid waste or exempted from regulation under chs. NR 600 to 685 subsequent to the point of generation.

(j) If a generator is managing a prohibited waste in tanks or containers regulated under ss. NR 610.08 and 615.05, and is treating the prohibited waste in the tanks or containers to meet applicable treatment standards under ss. NR 675.20 to 675.24, the generator shall develop and follow a written waste analysis plan which describes the procedures the generator will carry out to comply with the treatment standards. The plan shall be kept on-site in the generator's records and the following requirements shall be met:

1. The waste analysis plan shall be based on a detailed chemical and physical analysis of a representative sample of the prohibited wastes being treated and contain all information necessary to treat the wastes in accordance with the requirements of this chapter, including the selected testing frequency.

2. The waste analysis plan shall be filed with the department at least 30 days prior to the treatment activity, with delivery verified.

3. Wastes shipped off-site pursuant to this paragraph shall comply with the notification requirements of par. (b).

(k) If a generator is managing a lab pack that contains wastes identified in Appendix III and wishes to use the alternative treatment standards under s. NR 675.22, with

each shipment of waste the generator shall submit a notice to the treatment facility in accordance with par. (c). The generator shall also comply with the requirements in pars. (g) and (h), and shall submit the following certification signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only the wastes specified in ch. NR 675, Appendix III, Wis. Adm. Code, or solid wastes not subject to regulation under chs. NR 600 to 685, Wis. Adm. Code. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

(l) If a generator is managing a lab pack that contains organic wastes identified in Appendix IV and wishes to use the alternative treatment standards under s. NR 675.22, with each shipment of waste the generator shall submit a notice to the treatment facility in accordance with par. (c). The generator shall also comply with the requirements in pars. (g) and (h), and shall submit the following certification signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing and that the lab pack contains only organic waste specified in ch. NR 675, Appendix IV, Wis. Adm. Code, or solid wastes not subject to regulation under chs. NR 600 to 685, Wis. Adm. Code. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

**(2)** Treatment facilities shall test their wastes according to the frequency specified in their waste analysis plans as required by s. NR 630.13 (1) (h). Testing shall be performed as provided in pars. (a), (b) and (c).

(a) For wastes with treatment standards expressed as concentrations in the waste extract in s. NR 675.21, the owner or operator of the treatment facility shall test the treatment residues, or an extract of the residues developed 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, to ensure that the treatment residues or extract meet the applicable treatment standards.

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(b) For wastes that are prohibited under s. NR 675.13 but not subject to any treatment standards under ss. NR 675.20 to 675.24, the owner or operator of the treatment facility shall test the treatment residues according to the generator testing requirements specified in s. NR 675.13 to assure that the treatment residues comply with the applicable prohibitions.

(c) For wastes with treatment standards expressed as concentrations in the waste under s. NR 675.23, the owner or operator of the treatment facility shall test the treatment residues, not an extract of the residues, to assure that the treatment residues meet the applicable treatment standards.

(d) 1. A notice shall be sent with each waste shipment to the land disposal facility which includes the following information:

a. EPA hazardous waste number;

b. The corresponding treatment standards for wastes F001-F005, F039 and wastes prohibited under s. NR 675.13 or 42 USC 6924 (d). Treatment standards for all other restricted wastes shall either be included or be referenced by including on the notification the applicable wastewater or nonwastewater category, the applicable subdivisions made within a waste code based on waste specific criteria and the administrative code sections and paragraphs where the applicable treatment standard appears. Where the applicable treatment standards are expressed as specified technologies in s. NR 675.22, the applicable 5 letter code found in table I of s. NR 675.22 also shall be listed on the notification:

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c. The manifest number associated with the shipment of waste; and

d. Waste analysis data, where available.

2. The treatment facility shall keep a copy of this notice with the treatment facility's copy of the manifest.

(e) The treatment facility shall submit a certification with each shipment of waste or treatment residue of a restricted waste to the land disposal facility stating that the waste or treatment residue has been treated in compliance with the treatment standards in ss. NR 675.20 to 675.24 and the applicable prohibitions in s. NR 675.13 or 42 USC 6924 (d).

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1. For wastes with treatment standards expressed as concentrations in the waste extract or in the waste, the certification shall be signed by an authorized representative and shall state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to achieve the performance levels specified in ss. NR 675.20 to 675.24 and all applicable prohibitions in s. NR 675.13 without impermissible dilution of the prohibited waste. I am

aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

2. For wastes with treatment standards expressed as technologies specified in s. NR 675.22 the certification shall be signed by an authorized representative and shall state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of s. NR 675.22. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

3. For wastes with treatment standards expressed as concentrations in the waste pursuant to s. NR 675.23, if compliance with the treatment standards in ss. NR 675.20 to 675.24 is based in part or in whole on the analytical detection limit alternative specified in s. NR 675.23 (3), the certification also shall state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with chs. NR 600 to 685 or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

4. The treatment facility shall keep a copy of this certification with its copy of the manifest.

(f) If the waste or treatment residue will be further managed at a different treatment or storage facility, the treatment, storage or disposal facility sending the waste or treatment residue off-site shall comply with the notice and certification requirements applicable to generators under this section.

**(3)** The owner or operator of any land disposal facility disposing any waste subject to restrictions under this chapter shall:

(a) Have copies of the notice and certifications specified in sub. (1) or (2).

(b) Test the waste, or an extract of the waste or treatment residue developed 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, or using any methods required by generators under s. NR 675.13 to assure that the wastes or treatment residues are in compliance with the applicable treatment standards in ss. NR 675.20 to 675.24 and all applicable prohibitions in s. NR 675.13 or 42 USC 6924 (d). Testing shall be performed according to the frequency specified in the facility's waste analysis plan as required by s. NR 630.13.

**Note:** Publication SW-846 and title 42 of the United States code may be obtained from:

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**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (2) (a), (b), (d) 1. b., (e) (intro.), 1. and (g) 2., cr. (1) (b), (g), (i) to (k) and (2) (e) 3., renum. (1) (intro.), (a) to (e) and (2) (e) 3. to be (1) (a), (c) to (f), (h) and (2) (e) 4. and am. (1) (a), (c) (intro.), 1. b., (d) (intro.), 1. b., 2., (e) (intro.), 1. b., (f) and (h), Register, August, 1992, No. 440, eff. 9-1-92; correction made under s. 13.93 (2m) (b) 7, Stats., Register, March, 1993, No. 447; **am. (1) (a), (b), (e), (2) (a), (e) 2., (3) (a), (b), renum. (1) (c) 1. d., (f) to (k) to be (1) (c) 1. c., (g) to (l) and am. (1) (g), (k) and (l), cr. (1) (c) 1. d., (e) 2., (f), Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.09 Special rules regarding wastes that exhibit a characteristic. (1)** The initial generator of a solid waste shall determine each hazardous waste number, or hazardous waste code, applicable to the waste in order to determine the applicable treatment standards under ss. NR 675.20 to 675.24. For purposes of this chapter, the waste will carry the waste code for any applicable listing under s. NR 605.09. In addition, the waste will carry one or more of the waste codes under s. NR 605.08 where the waste exhibits a characteristic, except in the case when the treatment standard for the waste code listed in s. NR 605.09 operates in lieu of the standard for the waste code under s. NR 605.08 as specified in sub. (4).

**(2)** Where a prohibited waste is both listed under s. NR 605.09 and exhibits a characteristic under s. NR 605.08, the treatment standard for the waste code listed in s. NR 605.09 will operate in lieu of the standard for the waste code under s. NR 605.08, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste shall meet the treatment standards for all applicable listed and characteristic waste codes.

**(3)** In addition to any applicable standards determined from the initial point of generation, no prohibited waste which exhibits a characteristic under s. NR 605.08 may be land disposed unless the waste complies with the treatment standards under s. NR 605.09.

**(4)** Wastes that exhibit a characteristic are also subject to s. NR 675.07 requirements, except that once the waste is no longer hazardous, for each shipment of the wastes to a subtitle D facility the initial generator or the treatment facility need not send a s. NR 675.07 notification to the facility. In such circumstances, a notification and certification shall be sent to the department. The notification shall include:

(a) The name and address of the subtitle D facility receiving the waste shipment;

(b) A description of the waste as initially generated, including the applicable hazardous waste number, the applicable wastewater or nonwastewater category and the subdivisions made within a waste code based on waste specific criteria;

(c) The treatment standards applicable to the waste at the initial point of generation.

**(5)** Notifications sent under sub. (4) shall be signed by an authorized representative and shall state the language found in s. NR 675.07 (2) (e) 1.

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

**NR 675.10 Schedule for land disposal prohibition and establishment of treatment standards. (1)** IDENTIFICATION OF WASTES TO BE EVALUATED BY AUGUST 8, 1988. EPA will take action under 42 USC 6924 (g) (5) and 42 USC 6924 (m) by August 8, 1988, for the following wastes:

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

For ease of understanding the wastes have been listed by the section of ch. NR 605 under which they were listed.

(a) s. NR 605.09 (2) (a) Wastes

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/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.

F007 - Spent cyanide plating bath solutions from electroplating operations.

F008 - Plating bath sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process.

F009 - Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.

F019 - Wastewater treatment sludges from the chemical conversion coating of aluminum.

(b) s. NR 605.09 (2) (b) Wastes

K001 - Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.

K004 - Wastewater treatment sludge from the production of zinc yellow pigments.

K008 - Over residue from the production of chrome oxide green pigments.

K011 - Bottom stream from the wastewater stripper in the production of acrylonitrile.

K013 - Bottom stream from the acetonitrile column in the production of acrylonitrile.

K014 - Bottoms from the acetonitrile purification column in the production of acrylonitrile.

K015 - Still bottoms from the distillation of benzyl chloride.

K016 - Heavy ends or distillation residues from the production of carbon tetrachloride.

K017 - Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.

K018 - Heavy ends from the fractionation column in ethyl chloride production.

K020 - Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.

K021 - Aqueous spent antimony catalyst waste from fluoromethanes production.

K022 - Distillation bottom tars from the production of phenol/acetone from cumane.

K024 - Distillation bottoms from the production of phthalic anhydride from naphthalene.

K030 - Column bottom or heavy ends from the combined production of trichloroethylene and perchloroethylene.

K031 - By-products salts generated in the production of MSMA and cacodylic acid.

K035 - Wastewater treatment sludges generated in the production of creosote.

K036 - Still bottoms from toluene reclamation distillation in the production of disulfoton.

K037 - Wastewater treatment sludge from the production of disulfoton.

K044 - Wastewater treatment sludges from the manufacturing and processing of explosives.

K045 - Spent carbon from the treatment of wastewater containing explosives.

K046 - Wastewater treatment sludges from the manufacturing, formulation and loading of lead based initiating compounds.

K047 - Pink/red water from TNT operations.

K060 - Ammonia still lime sludge from coking operations.

K061 - Emission control dust/sludge from the primary production of steel in electric furnaces.

K062 - Spent pickle liquor from steel finishing operations in chlorine production.

K069 - Emission control dust/sludge from secondary lead smelting.

K071 - Brine purification muds from the mercury cells process in chlorine production, where separately prepurified brine is not used.

K073 - Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes.

K083 - Distillation bottoms from aniline production.

K084 - Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

K085 - Distillation of fractionation column bottoms from the production of chlorobenzenes.

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.

K087 - Decanter tank tar sludge from coking operations.

K099 - Untreated wastewater from the production of 2,4-D.

K101 - Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

K102 - Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

K103 - Process residues from aniline extraction from the production of aniline.

K104 - Combined wastewater streams generated from nitrobenzene/aniline production.

K106 - Waste water treatment sludge from the mercury cell process in chlorine production.

(c) s. NR 605.09 (3) (b) Wastes

P001 - Warfarin, when present at concentration greater than 0.3%

P004 - Aldrin

P005 - Allyl alcohol

P010 - Arsenic acid

P011 - Arsenic (V) oxide

P012 - Arsenic (III) oxide

P015 - Beryllium dust

P016 - Bis-(chloromethyl) ether

P018 - Brucine

P020 - Dinoseb

P030 - Soluble cyanide salts not elsewhere specified

P036 - Dichlorophenylarsine

P037 - Dieldrin

P039 - Disulfoton

P041 - Diethyl-p-nitrophenyl phosphate

P048 - 2,4-Dinitrophenol

P050 - Endosulfan

P058 - Fluoracetic acid, sodium salt

P059 - Heptachlor

P063 - Hydrogen cyanide

P068 - Methyl Hydrazine

P069 - Methyllactonitrile

P070 - Aldicarb

P071 - Methyl parathion

P081 - Nitroglycerine

P082 - N-Nitrosodimethylamine

P084 - N-Nitrosomethylvinylamine

P087 - Osmium tetraoxide

P089 - Parathion

P092 - Phenylmercuric acetate

P094 - Phorate

P097 - Famphur

P102 - Propargyl alcohol

P105 - Sodium azide

P108 - Strychnine and salts

P110 - Tetraethyl lead

P115 - Thallium (I) sulfate

P120 - Vanadium pentoxide

P122 - Zinc phosphide, when present at concentrations greater than 10%

P123 - Toxaphene

(d) s. NR 605.09 (3) (c) Wastes

U007 - Acrylamide

U009 - Acrylonitrile

U010 - Mitomycin C

U012 - Aniline

U016 - Benz(c)acridine

U018 - Benz(a)anthracene

U019 - Benzene

U022 - Benzo(a)pyrene

U029 - Methyl bromide

U031 - n-Butanol

U036 - Chlordane, technical

U037 - Chlorobenzene

U041 - n-Chloro-2,3-epoxypropane

U043 - Vinyl chloride

U044 - Chloroform

U046 - Chloromethyl methyl ether

U050 - Chrysene

U051 - Creosote

U053 - Crotonaldehyde

U061 - DDT

U063 - Dibenz o (a, h) anthracene

U064 - 1,2:7,8 Dibenzopyrene

U066 - Dibromo-3-chloropropane 1,2
U067 - Ethylene dibromide
U074 - 1,4-Dichloro-2-butene
U077 - Ethane, 1,2-dichloro
U078 - Dichloroethylene, 1,1
U086 - N,N Diethylhydrazine
U089 - Diethylstilbestrol
U103 - Dimethyl sulfate
U105 - 2,4-Dinitrotoluene
U108 - Dioxane, 1,4
U115 - Ethylene oxide
U122 - Formaldehyde
U124 - Furan
U129 - Lindane
U130 - Hexachlorocyclopentadiene
U133 - Hydrazine
U134 - Hydrofluoric acid
U137 - Indeno(1,2,3-cd)pyrene
U151 - Mercury
U154 - Methanol
U155 - Methapyrilene
U157 - 3-Methylcholanthrene
U158 - 4,4-Methylene-bis-(2-chloroaniline)
U159 - Methyl ethyl ketone
U171 - Nitropropane, 2
U177 - N-Nitroso-N-methylurea
U180 - N-Nitrosopyrrolidine
U185 - Pentachloronitrobenzene
U188 - Phenol
U192 - Pronamide
U200 - Reserpine
U209 - Tetrachloroethane, 1,1,2,2
U210 - Tetrachloroethylene
U211 - Carbon tetrachloride
U219 - Thiourea
U220 - Toluene
U221 - Toluenediamine
U223 - Toluene diisocyanate
U226 - Methylchloroform
U227 - Trichloroethane, 1,1,2
U228 - Trichloroethylene
U237 - Uracil mustard
U238 - Ethyl carbamate
U248 - Warfarin, when present at concentrations of 0.3% or less
U249 - Zinc phosphide, when present at concentrations of 10% or less

**(2)** IDENTIFICATION OF WASTES TO BE EVALUATED BY JUNE 8, 1989. By June 8, 1989, EPA will take action under the resource conservation and recovery act to evaluate the hazardous wastes associated with the following waste codes for either appropriate treatment technologies or standard or both. A description of each waste can be found in ch. NR 605.

**Table I - Second Third Wastes**

| | | | | | | |
|---|---|---|---|---|---|---|
| F010 | F011 | F012 | F024 | | | |
| K009 | K010 | K019 | K025 | K027 | K028 | K029 |
| K038 | K039 | K040 | K041 | K042 | K043 | K095 |
| K096 | K097 | K098 | K105 | | | |
| P002 | P003 | P007 | P008 | P014 | P026 | P027 |
| P029 | P040 | P043 | P044 | P049 | P054 | P057 |
| P060 | P062 | P066 | P067 | P072 | P074 | P085 |
| P098 | P104 | P106 | P107 | P111 | P112 | P113 |
| P114 | | | | | | |
| U002 | U003 | U005 | U008 | U011 | U014 | U015 |
| U020 | U021 | U023 | U025 | U026 | U028 | U032 |
| U035 | U047 | U049 | U057 | U058 | U059 | U060 |
| U062 | U070 | U073 | U080 | U083 | U092 | U093 |
| U094 | U095 | U097 | U098 | U099 | U101 | U106 |
| U107 | U109 | U110 | U111 | U114 | U116 | U119 |
| U127 | U128 | U131 | U135 | U138 | U140 | U142 |
| U143 | U144 | U146 | U147 | U149 | U150 | U161 |
| U162 | U163 | U164 | U165 | U168 | U169 | U170 |
| U172 | U173 | U174 | U176 | U178 | U179 | U189 |
| U193 | U196 | U203 | U205 | U206 | U208 | U213 |
| U214 | U215 | U216 | U217 | U218 | U235 | U239 |
| U244 | | | | | | |

**(3)** IDENTIFICATION OF WASTES TO BE EVALUATED BY MAY 8, 1990. By May 8, 1990, EPA will take action under the resource conservation and recovery act to evaluate the hazardous wastes associated with the following waste codes for either appropriate treatment technologies or standard or both. A description of each waste can be found in ch. NR 605.

**Table II - Final Third Wastes**

| | | | | | | |
|---|---|---|---|---|---|---|
| K002 | K003 | K005 | K006 | K007 | K023 | K026 |
| K032 | K033 | K034 | K048 | K049 | K050 | K051 |
| K052 | K093 | K094 | K100 | | | |
| P006 | P009 | P013 | P017 | P021 | P022 | P023 |
| P024 | P028 | P031 | P033 | P034 | P038 | P042 |
| P045 | P046 | P047 | P051 | P056 | P064 | P065 |
| P073 | P075 | P076 | P077 | P078 | P088 | P093 |
| P095 | P096 | P099 | P101 | P103 | P109 | P116 |
| P118 | P119 | P121 | | | | |
| U001 | U004 | U006 | U017 | U024 | U027 | U030 |
| U033 | U034 | U038 | U039 | U042 | U045 | U048 |
| U052 | U055 | U056 | U068 | U069 | U071 | U072 |
| U075 | U076 | U079 | U081 | U082 | U084 | U085 |
| U087 | U088 | U090 | U091 | U096 | U102 | U112 |
| U113 | U117 | U118 | U120 | U121 | U123 | U125 |
| U126 | U132 | U136 | U139 | U141 | U145 | U148 |
| U152 | U153 | U156 | U160 | U166 | U167 | U181 |
| U182 | U183 | U184 | U186 | U187 | U190 | U191 |
| U194 | U197 | U201 | U202 | U204 | U207 | U222 |
| U225 | U234 | U236 | U240 | U243 | U246 | U247 |

**(4)** EPA EVALUATION BASED UPON CHARACTERISTIC. By May 8, 1990, EPA shall take action under the resource conservation and recovery act to evaluate all wastes identified as hazardous based on a characteristic alone for either appropriate treatment technologies or standard or both.

**Note:** Examples of wastes identified hazardous based on a characteristic alone include corrosivity, reactivity, ignitability and toxicity.

**(5)** Wastewater residues, with less than 1% total organic carbon and less than 1% total suspended solids, resulting from the following well designed and well operated treatment methods for wastes listed in subs. (1) and (2) for which EPA has not promulgated wastewater treatment standards:

(a) Metals recovery;

(b) Metals precipitation;

(c) Cyanide destruction;

(d) Carbon adsorption;

(e) Chemical oxidation steam stripping;

(f) Biodegradation; and

(g) Incineration or other direct thermal destruction.

**(6)** Hazardous wastes listed in subs. (1) and (2) that are mixed radioactive and hazardous wastes.

**(7)** Multi-source leachate that is derived from disposal of any listed waste, except from hazardous waste D020, F021, F022, F023, F026, F027 or F028.

**(8)** Nonwastewater forms of wastes listed in sub. (1) that were originally disposed before August 17, 1988 and for which EPA has promulgated "no land disposal" as the treatment standard at s. NR 675.23, table CCW, no land disposal subtable. This provision does not apply to waste codes K044, K045, K047, and K061, high zinc subcategory.

**(9)** Nonwastewater forms of wastes listed in sub. (1) that were originally disposed of before August 17, 1988 and for which EPA has promulgated "no land disposal" as the treatment standard at s. NR 675.23, table CCW, no land disposal subtable. This provision does not apply to waste codes K044, K045, K047 and K061, high zinc subcategory.

**(10)** Nonwastewater forms of wastes listed in sub. (1) for which EPA has promulgated "no land disposal" as the treatment standard at s. NR 675.23, table CCW, no land disposal subtable, that are generated in the course of treating wastewater forms of the wastes. This provision does not apply to waste codes K044, K045, K047 and K061, high zinc subcategory.

**(11)** Nonwastewater forms of waste codes K015 and K083.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; renum. from NR 675.09 and am. (1) (b), (8) and (9), Register, August, 1992, No. 440, eff. 9-1-92; **am. (1) (d), (9), renum. (10) to be (11), cr. (10), Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.11 Waste specific prohibitions - solvent wastes. (1)** Effective March 1, 1991, the spent solvent wastes specified as hazardous by EPA hazardous waste nos. F001, F002, F003, F004 and F005, are prohibited from land disposal.

**(2)** Effective March 1, 1991, the F001 to F005 solvent wastes which are contaminated soil and debris resulting from a response action taken under 42 USC 9604 or 42 USC 9606 or a corrective action required under 42 USC 6921 to 6939a and the residues from treating these wastes are prohibited from land disposal.

**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

**(3)** The requirements of subs. (1) and (2) do not apply if:

(a) The wastes meet the treatment standards of ss. NR 675.20 to 675.24; or

(b) Persons have been granted an exemption from a prohibition pursuant to a no migration petition for a waste under s. NR 675.05 (2) with respect to those wastes and units covered by the petition; or

(c) Persons have been granted an extension to the effective date of a prohibition for a waste due to a nationwide capacity shortage pursuant to s. NR 675.05 (3), with respect to those wastes covered by the extension.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; renum. from NR 675.10, Register, August, 1992, No. 440, eff. 9-1-92.

**NR 675.12 Waste specific prohibitions - wastes containing dioxin. (1)** Effective March 1, 1991, dioxin containing wastes specified as hazardous by EPA hazardous waste nos. F020, F021, F022, F023, F026, F027 and F028 are prohibited from land disposal.

**(2)** The requirements of sub. (1) do not apply if:

(a) The wastes meet the standards of ss. NR 675.20 to 675.24; or,

(b) Persons have been granted an exemption from a prohibition pursuant to a no migration petition for a waste under s. NR 675.05 (3), with respect to those wastes and units covered by the petition; or

(c) Persons have been granted an extension to the effective date of a prohibition pursuant to s. NR 675.05 (1), with respect to those wastes covered by the extension.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; renum. from NR 675.11, Register, August, 1992, No. 440, eff. 9-1-92.

**NR 675.13 Waste specific prohibitions - California list. (1)** The following hazardous wastes are prohibited from land disposal effective March 1, 1991:

(a) Liquid hazardous wastes having a pH less than or equal to 2.0;

(b) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm;

(c) Liquid hazardous wastes that are primarily water and contain halogenated organic compounds (HOCs) in total concentration greater than or equal to 1,000 mg/l and less than 10,000 mg/l HOCs.

(d) Liquid hazardous wastes that contain HOCs in total concentration greater than or equal to 1,000 mg/l and are not prohibited under par. (c); and

(e) Nonliquid hazardous wastes containing HOCs in total concentration greater than or equal to 1,000 mg/kg.

**Note:** The term halogenated organic compound is defined in s. NR 600.03 (104) and includes compounds listed in Appendix II to this chapter.

**(2)** The requirements of sub. (1) do not apply if:

(a) Persons have been granted an exemption from a prohibition pursuant to a no migration petition for a waste under s. NR 675.05 (2), with respect to those wastes and units covered by the petition, except for liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 500 ppm which are not eligible for the exemptions; or

(b) Persons have been granted an extension to the effective date of a prohibition for a waste pursuant to s. NR 675.05 (1), with respect to those wastes covered by the extension; or

(c) The wastes meet the applicable standards specified in ss. NR 675.20 to 675.24 or, where treatment standards are not specified, the wastes are in compliance with the applicable prohibitions in this chapter, or 42 USC 6924 (d).

**Note:** The publication containing title 42 of the United States code may be obtained from:

The Superintendent of Documents
U.S. Government Printing Office
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(d) An exemption has been granted under s. NR 675.05 (3) due to a shortage of treatment capacity.

**(3)** The prohibitions and effective dates specified in sub. (1) do not apply where the waste is subject to a prohibition and effective date for a specified HOC.

**Note:** An example of a specified HOC would be a hazardous waste chlorinated solvent.

**(4)** To determine whether or not a waste is a liquid under this section, the following test shall be used: EPA method 9095, paint filter liquids test, as described 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 revisor of statutes.

**(5)** Except as otherwise provided in this subsection, the waste analysis and recordkeeping requirements of s. NR 675.07 are applicable to wastes prohibited under this chapter or 42 USC 6924 (d).

**Note:** The publication containing title 42 of the United States code may be obtained from:

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

(a) The initial generator of a liquid hazardous waste shall test its waste, not an extract or filtrate, in accordance with the procedures specified in s. NR 605.08, or use knowledge of the waste, to determine if the waste has a pH less than or equal to 2.0.

**Note:** If the liquid waste has a pH less than or equal to 2.0, it is restricted from land disposal and all requirements of this chapter are applicable, except as otherwise specified in this section.

(b) The initial generator of either a liquid hazardous waste containing polychlorinated biphenyls (PCBs) or a liquid or nonliquid hazardous waste containing halogenated organic compounds (HOCs) shall test its waste, not an extract or filtrate, or use knowledge of the waste, to determine whether the concentration levels in the waste equal or exceed the prohibition levels specified in this section.

**Note:** If the concentration of PCBs or HOCs in the waste is greater than or equal to the prohibition levels specified in this section, the waste is restricted from land disposal and all requirements of this chapter are applicable, except as otherwise specified in this section.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; renum. from NR 675.12, Register, August, 1992, No. 440, eff. 9-1-92; **am. (4), Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.14 Waste specific prohibitions - first third wastes. (1)** The wastes specified as hazardous by EPA hazardous waste nos. F006 (nonwastewater), K001, K004 wastes specified in s. NR 675.23 (1), K008 wastes specified in s. NR 675.23 (1), K016, K018, K019, K020, K021 wastes specified in s. NR 675.23 (1), K022 (nonwastewater), K024, K025 nonwastewaters specified in s. NR 675.23 (1), K030, K036 (nonwastewater), K037, K044, K045, nonexplosive K046 (nonwastewater), K047, K060 (nonwastewater), K061 (nonwastewaters containing less than 15% zinc), K062, non CaSO4 K069 (nonwastewaters), K086

(solvent washes), K087, K099, K100 nonwastewaters specified in s. NR 675.23 (1), K101 (wastewater), K101 (nonwastewater, low arsenic subcategory - less than 1% total arsenic), K102 (wastewater), K102 (nonwastewater, low arsenic subcategory - less than 1% total arsenic), K103 and K104 are prohibited from land disposal.

**(2)** Effective March 1, 1991, wastes specified as hazardous by EPA hazardous waste nos. K061, containing 15% zinc or greater, and K071 are prohibited from land disposal.

**(3)** Effective March 1, 1991, the wastes specified in s. NR 675.10 (1) having a treatment standard in ss. NR 675.20 to 675.24 based on incineration and which are contaminated soil and debris are prohibited from land disposal.

**(4)** The requirements of subs. (1) to (3) do not apply if:

(a) The wastes meet the applicable standards specified in ss. NR 675.20 to 675.24; or

(b) Persons have been granted an exemption from a prohibition pursuant to a no migration petition for a waste under s. NR 675.05 (2), with respect to those wastes and units covered by the petition; or

(c) Persons have been granted an extension to the effective date of a prohibition for a waste pursuant to s. NR 675.05 (1), with respect to those wastes covered by the extension.

(d) An exemption has been granted due to a shortage of treatment capacity by s. NR 675.05 (3).

**(5)** To determine whether a hazardous waste listed in s. NR 675.10 (1) exceeds the applicable treatment standards specified in ss. NR 675.21 to 675.23, the initial generator shall test a representative sample of the waste extract or the entire waste depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable ss. NR 675.20 to 675.24 levels, the waste is prohibited from land disposal and all requirements of this chapter are applicable, except as otherwise specified.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; renum. from NR 675.13 and am. (3) and (5), Register, August, 1992, No. 440, eff. 9-1-92; **am. (2), (5), Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.15 Waste specific prohibitions - second third wastes. (1)** Effective March 1, 1991, the following wastes specified in s. NR 605.09 (2) as EPA hazardous waste nos. F010; F024; the wastes specified in s. NR 605.09 (2) (b) as EPA hazardous waste nos. K005, K007, K009 (nonwastewaters), K010, K023, K027, K028, K029 (nonwastewaters), K036 (wastewaters), K038, K039, K040, K043, K093, K094, K095 (nonwastewaters), K096 (nonwastewaters), K113, K114, K115, K116 and the wastes specified in s. NR 605.09 (3) (b) as EPA hazardous wastes nos. P013, P021, P029, P030, P039, P040, P041, P043, P044, P062, P063, P071, P074, P085, P089, P094, P097, P098, P099, P104, P106, P109, P111, P121, U028, U058, U069, U087, U088, U102, U107, U221, U223 and U235 are prohibited from land disposal.

**(2)** Effective March 1, 1991, the wastes specified in s. NR 605.09 (2) (b) as EPA hazardous waste nos. K009 (wastewaters), K011 (nonwastewaters), K013 (nonwastewaters) and K014 (nonwastewaters) are prohibited from land disposal.

**(3)** Effective March 1, 1991, the wastes specified in s. NR 605.09 (2) as EPA hazardous wastes nos. F006 — cyanide (nonwastewater), F008, F009, F011 (wastewaters) and F012 (wastewaters) are prohibited from land disposal.

**(4)** Effective March 1, 1991, the waste specified in s. NR 605.09 (2) as EPA hazardous waste no. F007 is prohibited from land disposal.

**(5)** Effective March 1, 1991, F011 (nonwastewaters) and F012 (nonwastewaters) are prohibited from land disposal pursuant to the treatment standards specified in ss. NR 675.21 and 675.23 applicable to F011 (nonwastewaters) and F012 (nonwastewaters).

**(6)** Effective June 8, 1991, the wastes specified in this section have a treatment standard in ss. NR 675.20 to 675.24 based on incineration, and which are contaminated soil and debris are prohibited from land disposal.

**(7)** The requirements of subs. (1) to (6) do not apply if:

(a) The wastes meet the applicable standards specified in ss. NR 675.20 to 675.24, or

(b) Persons have been granted an exemption from a prohibition pursuant to a petition under s. NR 675.05 (2) regarding those wastes and units covered by the petition.

**(8)** The requirements of subs. (1) to (5) do not apply if persons have been granted an extension to the effective date of a prohibition pursuant to the requirements under 40 CFR 268.5, July 1, 1993, with respect to those wastes covered by the extension.

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

Superintendent of Documents
P.O. Box 371954
Pittsburgh, PA 15250-7954
(202) 783-3238

**(9)** To determine whether a hazardous waste listed in s. NR 675.10 exceeds the applicable treatment standards specified in ss. NR 675.21 and 675.23, the initial generator shall test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable ss. NR 675.20 to 675.24 levels, the waste is prohibited from land disposal and all requirements of this chapter are applicable, except as otherwise specified.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; renum. from NR 675.14 and am. (7), (9) and (10), Register, August, 1992, No. 440, eff. 9-1-92; **r. (7), renum. (8) to (10) to be (7) to (9) and am. (8), Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.16 Waste specific prohibitions — third third wastes. (1)** Effective September 1, 1992, the following wastes are prohibited from land disposal:

(a) The wastes specified in s. NR 605.09 (2) (a) as EPA hazardous waste numbers F002 (1, 1, 2-trichloroethane), F005 (benzene), F005 (2-ethoxy ethanol), F005 (2-nitropropane), F006 (wastewaters), F019, F025 and F039 (wastewaters);

(b) The wastes specified in s. NR 605.09 (2) (b) as EPA hazardous waste numbers K002; K003; K004 (wastewaters); K005 (wastewaters); K006; K008 (wastewaters); K011 (wastewaters); K013 (wastewaters), K014 (wastewaters); K015 (nonwastewaters); K017; K021 (wastewaters); K022 (wastewaters); K025 (wastewaters); K026; K029 (wastewaters); K031 (wastewaters); K032; K033; K034; K035; K041; K042; K046 (wastewaters, reactive nonwastewaters); K048 (wastewaters); K049 (wastewaters); K050 (wastewaters); K051 (wastewaters); K052 (wastewaters); K060 (wastewaters); K061 (wastewaters); and high zinc subcategory (15% zinc); K069 (wastewaters, calcium sulfate nonwastewaters); K073; K083; K084 (wastewaters); K085; K095 (wastewaters); K096 (wastewaters); K097; K098; K100 (wastewaters); K101 (wastewaters); K102 (wastewaters); K105; and K106 (wastewaters);

(c) The wastes specified in s. NR 605.09 (3) (b) as EPA hazardous waste numbers P001; P002; P003; P004; P005; P006; P007; P008; P009; P010 (wastewaters); P011 (wastewaters); P012 (wastewaters); P014; P015; P016; P017; P018; P020; P022; P023; P024; P026; P027; P028; P031; P033; P034; P036 (wastewaters); P037; P038 (wastewaters); P042; P045; P046; P047; P048; P049; P050; P051; P054; P056; P057; P058; P059; P060; P064; P065 (wastewaters); P066; P067; P068; P069; P070; P072; P073; P075; P076; P077; P078; P081; P082; P084; P088; P092 (wastewaters); P093; P095; P096; P101; P102; P103; P105; P108; P110; P112; P113; P114; P115; P116; P118; P119; P120; P122; and P123;

(d) The wastes specified in s. NR 605.09 (3) (c) as EPA hazardous waste numbers U001; U002; U003; U004; U005; U006; U007; U008; U009; U010; U011; U012; U014; U015; U016; U017; U018; U019; U020; U021; U022; U023; U024; U025; U026; U027; U029; U030; U031; U032; U033; U034; U035; U036; U037; U038; U039; U041; U042; U043; U044; U045; U046; U047; U048; U049; U050; U051; U052; U053; U055; U056; U057; U059; U060; U061; U062; U063; U064; U066; U067; U068; U070; U071; U072; U073; U074; U075; U076; U077; U078; U079; U080; U081; U082; U083; U084; U085; U086; U089; U090; U091; U092; U093; U094; U095; U096; U097; U098; U099; U101; U103; U105; U106; U108; U109; U110; U111; U112; U113; U114; U115; U116; U117; U118; U119; U120; U121; U122; U123; U124; U125; U126; U127; U128; U129; U130; U131; U132; U133; U134; U135; U136 (wastewaters); U137; U138; U140; U141; U142; U143; U144; U145; U146; U147; U148; U149; U150; U151 (wastewaters); U152; U153; U154; U155; U156; U157; U158; U159; U160; U161; U162; U163; U164; U165; U166; U167; U168; U169; U170; U171; U172; U173; U174; U176; U177; U178; U179; U180; U181; U182; U183; U184; U185; U186; U187; U188; U189; U191; U192; U193; U194; U196; U197; U200; U201; U202; U203; U204; U205; U206; U207; U208; U209; U210; U211; U213; U214; U215; U216; U217; U218; U219; U220; U222; U225; U226; U227; U228; U234; U236; U237; U238; U239; U240; U243; U244; U246; U247; U248; U249; and

(e) The following wastes identified as hazardous based on a characteristic alone: D001; D002, D003, D004 (wastewaters), D005, D006; D007; D008 (except for lead materials stored before secondary smelting), D009 (wastewaters), D010, D011, D012, D013, D014, D015, D016 and D017.

**(2)** Effective September 1, 1992, the following wastes specified in s. NR 605.09 (2) (b) as EPA hazardous waste numbers K048 (nonwastewaters), K049 (nonwastewaters), K050 (nonwastewaters), K051 (nonwastewaters), and K052 (nonwastewaters) are prohibited from land disposal.

**(3)** Effective May 8, 1992, the following waste specified in s. NR 605.09 (2) (a) as EPA hazardous waste numbers F039 (nonwastewaters); the wastes specified in s. NR 605.09 (2) (b) as EPA hazardous waste numbers K031 (nonwastewaters); K084 (nonwastewaters); K101 (nonwastewaters); K102 (nonwastewaters); K106 (nonwastewaters); the wastes specified in s. NR 605.09 (3) (b) as EPA hazardous waste numbers P010 (nonwastewaters); P011 (nonwastewaters); P012 (nonwastewaters); P036 (nonwastewaters); P038 (nonwastewaters); P065 (nonwastewaters); P087; and P092 (nonwastewaters); the wastes specified in s. NR 605.09 (3) (c) as EPA hazardous waste numbers U136 (nonwastewaters); and U151 (nonwastewaters); and the following wastes identified as hazardous based on a characteristic alone: D004 (nonwastewaters); and D009 (nonwastewaters); and RCRA hazardous wastes that contain naturally occurring radioactive materials are prohibited from land disposal.

**(4)** Effective May 8, 1992, hazardous wastes listed in ss. NR 675.10 to 675.13 that are mixed radioactive and hazardous wastes are prohibited from land disposal, except as provided in sub. (5).

**(5)** Subject to applicable prohibitions in ss. NR 675.11 to 675.13, contaminated soil and debris are prohibited from land disposal as follows:

(a) Effective May 8, 1993, debris that is contaminated with wastes listed in ss. NR 675.11 to 675.13, including such wastes that are mixed radioactive hazardous wastes, and debris that is contaminated with any characteristic waste for which treatment standards are established in ss. NR 675.21 to 675.23, including such wastes that are mixed radioactive hazardous wastes, are prohibited from land disposal.

(b) Effective May 8, 1993, hazardous soil having treatment standards in ss. NR 675.21 to 675.23 based on incineration, mercury retorting or vitrification, and soils contaminated with hazardous wastes listed in ss. NR 675.11 to 675.13 that are mixed radioactive hazardous wastes, are prohibited from land disposal.

**(6)** The requirements of subs. (1) to (5) do not apply if:

(a) The wastes meet the applicable standards specified in ss. NR 675.20 to 675.24;

(b) Persons have been granted an exemption from a prohibition pursuant to a petition under s. NR 675.05 (2), with respect to those wastes and units covered by the petition;

(c) The wastes meet the applicable alternate standards established pursuant to a petition granted under s. NR 675.24;

(d) Persons have been granted an extension to the effective date of a prohibition pursuant to s. NR 675.05 (1), with respect to these wastes covered by the extension.

**(7)** To determine whether a hazardous waste listed in s. NR 675.09 exceeds the applicable treatment standards specified in ss. NR 675.21 and 675.23, the initial generator shall test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable ss. NR 675.20 to 675.24 levels, the waste is prohibited from land disposal, and all requirements of this chapter are applicable, except as otherwise specified.

**(8)** Effective June 1, 1995, D008 lead materials stored before secondary smelting are prohibited from land disposal.

(a) On or before June 1, 1995, the owner or operator of each secondary lead smelting facility shall submit to the department the following:

1. A binding contractual commitment to construct or otherwise provide capacity for storing such D008 wastes prior to smelting which complies with all applicable storage standards;

2. Documentation that the capacity to be provided will be sufficient to manage the entire quantity of such D008 wastes; and

3. A detailed schedule for providing such capacity.

(b) Failure by a facility to submit such documentation shall render such D008 managed by that facility prohibited from land disposal effective June 1, 1995. In addition, no later than June 1, 1995, the owner or operator of each facility shall place in the facility record documentation of the manner and location in which such wastes will be managed pending completion of such capacity, demonstrating that such management capacity will be adequate and complies with all applicable requirements of chs. NR 600 to 685.

**History:** Cr. Register, August, 1992, No. 440, eff. 9-1-92; **am. (3), r. and recr. (4), (5), r. (6), renum. (7) and (8) to be (6) and (7), cr. (8), Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.20 Applicability of treatment standards. (1)** A restricted waste identified in s. NR 675.21 may be disposed on land only if an extract of the waste or of the treatment residue of the waste developed using the toxicity characteristic leaching procedure, EPA method 1311, does not exceed the value shown in Table CCWE of s. NR 675.21 for any hazardous constituent listed in Table CCWE for that waste, with the following exceptions: D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038 and U136. Wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038 and U136 may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using either the extraction procedure toxicity test, EPA method 1310A, or the toxicity characteristic leaching procedure, EPA method 1311, does not exceed the concentrations shown in table CCWE of s. NR 675.21 for any hazardous constituent listed in table CCWE for that waste. Methods 1310A and 1311 are both found 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.

**(2)** A restricted waste for which a treatment technology is specified under s. NR 675.22 (1) may be disposed on land after it is treated using that specified technology or an equivalent treatment method approved under s. NR 675.22 (2).

**(3)** Except as otherwise specified in s. NR 675.23 (3), a restricted waste identified in s. NR 675.23 may be disposed on land only if the constituent concentrations in the waste or treatment residue of the waste do not exceed the value shown in Table CCW of s. NR 675.23 for any hazardous constituent listed in Table CCW for that waste.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (1) and (3), Register, August, 1992, No. 440, eff. 9-1-92; **am. (1), Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.21 Treatment standards expressed as concentrations in waste extract. (1)** Table CCWE identifies the restricted wastes and the concentrations of their associated hazardous constituents which may not be exceeded in the extract of a waste or waste treatment residual extracted 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, for the allowable land disposal of such wastes. Compliance with these concentrations is required based on grab samples.

**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.

**Note:** Appendix I of this chapter provides guidance on treatment methods that have been shown to achieve the Table CCWE levels for the respective wastes. Appendix I is not a regulatory requirement but is provided to assist generators, owners and operators in their selection of appropriate treatment methods.

**Table CCWE-Constituent Concentrations in Waste Extract**

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS No. for regulated hazardous constituent | Wastewaters Concentration (mg/l) | Wastewaters Notes | Nonwastewaters Concentration (mg/l) | Nonwastewaters Notes |
|---|---|---|---|---|---|---|---|---|
| D004 | NA | Table CCW in s. NR 675.23 | Arsenic | 7440-38-2 | NA | | 5.0 | (1) |
| D005 | NA | Table CCW in s. NR 675.23 | Barium | 7440-39-3 | NA | | 100 | |
| D006 | NA | Table CCW in s. NR 675.23 | Cadmium | 7440-43-9 | NA | | 1.0 | |
| D007 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 5.0 | |
| D008 | NA | Table CCW in s. NR 675.23 | Lead | 7439-92-1 | NA | | 5.0 | (1) |
| D009 (Low Mercury Subcategory - Less than 260 mg/kg Mercury) | NA | Table 2 in s. NR 675.22 and Table CCW in s. NR 675.23 | Mercury | 7439-97-6 | NA | | 0.20 | |
| D010 | NA | Table CCW in s. NR 675.23 | Selenium | 7782-49-2 | NA | | 5.7 | |
| D011 | NA | Table CCW in s. NR 675.23 | Silver | 7440-22-4 | NA | | 5.0 | |
| F001-F005 spent solvents | NA | Table 2 in s. NR 675.22 and Table CCW in s. NR 675.23 | | 67-64-1 | 0.05 | | 0.59 | |
| | | | n-Butyl alcohol | 71-36-3 | 5.0 | | 5.0 | |
| | | | Carbon disulfide | 75-15-0 | 1.05 | | 4.81 | |
| | | | Carbon tetrachloride | 56-23-5 | 0.05 | | 0.96 | |
| | | | Chlorobenzene | 108-90-7 | 0.15 | | 0.05 | |
| | | | Cresols (and cresylic acid) | | 2.82 | | 0.75 | |
| | | | Cyclohexanone | 108-94-1 | 0.125 | | 0.75 | |
| | | | 1,2-Dichlorobenzene | 95-50-1 | 0.65 | | 0.125 | |
| | | | Ethyl acetate | 141-78-6 | 0.05 | | 0.75 | |
| | | | Ethylbenzene | 100-41-4 | 0.05 | | 0.053 | |
| | | | Ethyl ether | 60-29-7 | 0.05 | | 0.75 | |
| | | | Isobutanol | 78-83-1 | 5.0 | | 5.0 | |
| | | | Methanol | 67-56-1 | 0.25 | | 0.75 | |
| | | | Methylene chloride | 75-9-2 | 0.20 | | 0.96 | |
| | | | Methyl ethyl ketone | 78-93-3 | 0.05 | | 0.75 | |
| | | | Methyl isobutyl ketone | 108-10-1 | 0.05 | | 0.33 | |
| | | | Nitrobenzene | 98-95-3 | 0.66 | | 0.125 | |
| | | | Pyridine | 110-86-1 | 1.12 | | 0.33 | |
| | | | Tetrachloroethylene | 127-18-4 | 0.079 | | 0.05 | |
| | | | Toluene | 108-88-3 | 1.12 | | 0.33 | |
| | | | 1,1,1,-Trichloroethane | 71-55-6 | 1.05 | | 0.41 | |
| | | | 1,1,2-Trichloro-1,2,2-Trifluor- ethane | 76-13-1 | 1.05 | | 0.96 | |
| | | | Trichloroethylene | 79-01-6 | 0.062 | | 0.091 | |
| | | | Trichlorofluoromethane | 75-69-4 | 0.05 | | 0.96 | |
| | | | Xylene | | 0.05 | | 0.15 | |
| F006 | NA | Table CCW in s. NR 675.23 | Cadmium | 7440-43-9 | NA | | 0.066 | |
| | | | Chromium (Total) | 7440-47-3 | NA | | 5.2 | |
| | | | Lead | 7439-92-1 | NA | | 0.51 | |
| | | | Nickel | 7440-02-0 | NA | | 0.32 | |
| | | | Silver | 7440-22-4 | NA | | 0.072 | |
| F007 | NA | Table CCW in s. NR 675.23 | Cadmium | 7440-43-9 | NA | | 0.066 | |
| | | | Chromium (Total) | 7440-47-3 | NA | | 5.2 | |
| | | | Lead | 7439-92-1 | NA | | 0.51 | |
| | | | Nickel | 7440-02-0 | NA | | 0.32 | |
| | | | Silver | 7440-22-4 | NA | | 0.072 | |
| F008 | NA | Table CCW in s. NR 675.23 | Cadmium | 7440-43-9 | NA | | 0.066 | |
| | | | Chromium (Total) | 7440-47-3 | NA | | 5.2 | |
| | | | Lead | 7439-92-1 | NA | | 0.51 | |
| | | | Nickel | 7440-02-0 | NA | | 0.32 | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS No. for regulated hazardous constituent | Wastewaters Concentration (mg/l) | Wastewaters Notes | Nonwastewaters Concentration (mg/l) | Nonwastewaters Notes |
|---|---|---|---|---|---|---|---|---|
| | | | Silver | 7440-22-4 | NA | | 0.072 | |
| F009 | NA | Table CCW in s. NR 675.23 | Cadmium | 7440-43-9 | NA | | 0.066 | |
| | | | Chromium (Total) | 7440-47-3 | NA | | 5.2 | |
| | | | Lead | 7439-92-1 | NA | | 0.51 | |
| | | | Nickel | 7440-02-0 | NA | | 0.32 | |
| | | | Silver | 7440-22-4 | NA | | 0.072 | |
| F011 | NA | Table CCW in s. NR 675.23 | Cadmium | 7440-43-9 | NA | | 0.066 | |
| | | | Chromium (Total) | 7440-47-3 | NA | | 5.2 | |
| | | | Lead | 7439-92-1 | NA | | 0.51 | |
| | | | Nickel | 7440-02-0 | NA | | 0.32 | |
| | | | Silver | 7440-22-4 | NA | | 0.072 | |
| F012 | NA | Table CCW in s. NR 675.23 | Cadmium | 7440-43-9 | NA | | 0.066 | |
| | | | Chromium (Total) | 7440-47-3 | NA | | 5.2 | |
| | | | Lead | 7439-92-1 | NA | | 0.51 | |
| | | | Nickel | 7440-02-0 | NA | | 0.32 | |
| | | | Silver | 7440-22-4 | NA | | 0.072 | |
| F019 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 5.2 | |
| F020-F023 and F026-F028 dioxin containing wastes[2] | NA | NA | HxCDD-All Hexachloro-dibenzo-p-dioxins | | <1 ppb | | <1 ppb | |
| | | | HxCDF-All Hexachlorodibenzofurans | | <1 ppb | | <1 ppb | |
| | | | PeCDD-All Pentachloro-dibenzo-p-dioxins | | <1 ppb | | <1 ppb | |
| | | | PeCDF-All Pentachloro-dibenzofurans | | <1 ppb | | <1 ppb | |
| | | | TCDD-All Tetrachloro-dibenzo-p-dioxins | | <1 ppb | | <1 ppb | |
| | | | TCDF-All Tetrachloro-dibenzofurans | | <1 ppb | | <1 ppb | |
| | | | 2,4,5-Trichlorophenol | 95-95-4 | <1 ppb | | <1 ppb | |
| | | | 2,4,6-Trichlorophenol | 88-06-2 | <0.05 ppm | | <0.05 ppm | |
| | | | 2,3,4,6-Tetrachlorophenol | 58-90-2 | <0.05 ppm | | <0.05 ppm | |
| | | | Pentachlorophenol | 87-86-5 | <0.01 ppm | | <0.01 ppm | |
| F024 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.073 | |
| | | | Lead | 7439-92-1 | NA | | [Reserved] | |
| | | | Nickel | 7440-02-0 | NA | | 0.088 | |
| F039 | NA | Table CCW in s. NR 675.23 | Antimony | 7440-36-0 | NA | | 0.23 | |
| | | | Arsenic | 7440-38-2 | NA | | 5.0 | |
| | | | Barium | 7440-39-3 | NA | | 52 | |
| | | | Cadmium | 7440-43-9 | NA | | 0.066 | |
| | | | Chromium (Total) | 7440-47-3 | NA | | 5.2 | |
| | | | Lead | 7439-92-1 | NA | | 0.51 | |
| | | | Mercury | 7439-97-6 | NA | | 0.025 | |
| | | | Nickel | 7440-02-0 | NA | | 0.32 | |
| | | | Selenium | 7782-49-2 | NA | | 5.7 | |
| | | | Silver | 7440-22-4 | NA | | 0.072 | |
| K001 | NA | Table CCW in s. NR 675.23 | Lead | 7439-92-1 | NA | | 0.51 | |
| K002 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.094 | |
| | | | Lead | 7439-92-1 | NA | | 0.37 | |
| K003 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.094 | |
| | | | Lead | 7439-92-1 | NA | | 0.37 | |
| K004 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.094 | |
| | | | Lead | 7439-92-1 | NA | | 0.37 | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS No. for regulated hazardous constituent | Wastewaters Concentration (mg/l) | Wastewaters Notes | Nonwastewaters Concentration (mg/l) | Nonwastewaters Notes |
|---|---|---|---|---|---|---|---|---|
| K005 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.094 | |
| | | | Lead | 7439-92-1 | NA | | 0.37 | |
| K006 (anhydrous) | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.094 | |
| | | | Lead | 7439-92-1 | NA | | 0.37 | |
| K006 (hydrated) | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 5.2 | |
| K007 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.094 | |
| | | | Lead | 7439-92-1 | NA | | 0.37 | |
| K008 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.094 | |
| | | | Lead | 7439-92-1 | NA | | 0.37 | |
| K015 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 1.7 | |
| | | | Nickel | 7440-02-0 | NA | | 0.2 | |
| K021 | NA | Table CCW in s. NR 675.23 | Antimony | 7440-36-0 | NA | | 0.23 | |
| K022 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 5.2 | |
| | | | Nickel | 7440-02-0 | NA | | 0.32 | |
| K028 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.073 | |
| | | | Lead | 7439-92-1 | NA | | 0.021 | |
| | | | Nickel | 7440-02-0 | NA | | 0.088 | |
| K031 | NA | Table CCW in s. NR 675.23 | Arsenic | 7440-38-2 | NA | | 5.6 | (1) |
| K046 | NA | Table CCW in s. NR 675.23 | Lead | 7439-92-1 | NA | | 0.18 | |
| K048 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 1.7 | |
| | | | Nickel | 7440-02-0 | NA | | 0.20 | |
| K049 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 1.7 | |
| | | | Nickel | 7440-02-0 | NA | | 0.20 | |
| K050 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 1.7 | |
| | | | Nickel | 7440-02-0 | NA | | 0.20 | |
| K051 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 1.7 | |
| | | | Nickel | 7440-02-0 | NA | | 0.20 | |
| K052 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 1.7 | |
| | | | Nickel | 7440-02-0 | NA | | 0.20 | |
| K061 High Zinc Subcategory (greater than 15% Total Zinc) | Electric Arc Furnace Dust | Table CCW in s. NR 675.23 | Antimony | 7440-36-0 | NA | | 2.1 | |
| | | | Arsenic | 7440-38-2 | NA | | 0.055 | |
| | | | Barium | 7440-39-3 | NA | | 7.6 | |
| | | | Beryllium | 7440-41-7 | NA | | 0.014 | |
| | | | Cadmium | 7440-43-9 | NA | | 0.19 | |
| | | | Chromium (Total) | 7440-47-3 | NA | | 0.33 | |
| | | | Lead | 7439-92-1 | NA | | 0.37 | |
| | | | Mercury | 7439-97-6 | NA | | 0.0009 | |
| | | | Nickel | 7440-02-0 | NA | | 5 | |
| | | | Selenium | 7782-49-2 | NA | | 0.16 | |
| | | | Silver | 7440-22-4 | NA | | 0.3 | |
| | | | Thallium | 7440-28-0 | NA | | 0.078 | |
| | | | Vanadium | 7440-62-2 | NA | | Reserved | |
| | | | Zinc | 7440-66-6 | NA | | 5.3 | |
| K062 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.094 | |
| | | | Lead | 7439-92-1 | NA | | 0.37 | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS No. for regulated hazardous constituent | Wastewaters Concentration (mg/l) | Wastewaters Notes | Nonwastewaters Concentration (mg/l) | Nonwastewaters Notes |
|---|---|---|---|---|---|---|---|---|
| K069 (Calcium Sulfate Subcategory) | NA | Table 2 in s. NR 675.22 and Table CCW in s. NR 675.23 | Cadmium | 7440-43-9 | NA | | 0.14 | |
| | | | Lead | 7439-92-1 | NA | | 0.24 | |
| K071 | NA | Table CCW in s. NR 675.23 | Mercury | 7439-97-6 | NA | | 0.025 | |
| K083 | NA | Table CCW in s. NR 675.23 | Nickel | 7440-02-2 | NA | | 0.088 | |
| K084 | NA | Table CCW in s. NR 675.23 | Arsenic | 7440-38-2 | NA | | 5.6 | (1) |
| K086 | NA | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.094 | |
| | | | Lead | 7439-92-1 | NA | | 0.37 | |
| K087 | NA | Table CCW in s. NR 675.23 | Lead | 7439-92-1 | NA | | 0.51 | |
| K100 | NA | Table CCW in s. NR 675.23 | Cadmium | 7440-43-9 | NA | | 0.066 | |
| | | | Chromium (Total) | 7440-47-3 | NA | | 5.2 | |
| | | | Lead | 7439-92-1 | NA | | 0.51 | |
| K101 | NA | Table CCW in s. NR 675.23 | Arsenic | 7440-38-2 | NA | | 5.6 | (1) |
| K102 | NA | Table CCW in s. NR 675.23 | Arsenic | 7440-38-2 | NA | | 5.6 | (1) |
| K106 (Low Mercury Subcategory - less than 260 mg/kg Mercury - residues from RMERC) | NA | Table 2 in s. NR 675.22 and Table CCW in s. NR 675.23 | Mercury | 7439-97-6 | NA | | 0.020 | |
| K106 (Low Mercury Subcategory - less than 260 mg/kg Mercury - that are not residues from RMERC) | NA | Table 2 in s. NR 675.22 and Table CCW in s. NR 675.23 | Mercury | 7439-97-6 | NA | | 0.025 | |
| K115 | NA | Table CCW in s. NR 675.23 | Nickel | 7440-02-0 | NA | | 0.32 | |
| P010 | Arsenic acid | Table CCW in s. NR 675.23 | Arsenic | 7440-38-2 | NA | | 5.6 | (1) |
| P011 | Arsenic pentoxide | Table CCW in s. NR 675.23 | Arsenic | 7440-38-2 | NA | | 5.6 | (1) |
| P012 | Arsenic trioxide | Table CCW in s. NR 675.23 | Arsenic | 7440-38-2 | NA | | 5.6 | (1) |
| P013 | Barium cyanide | Table CCW in s. NR 675.23 | Barium | 7440-39-3 | NA | | 52 | |
| P036 | Dichlorophenylarsine | Table CCW in s. NR 675.23 | Arsenic | 7440-38-2 | NA | | 5.6 | (1) |
| P038 | Diethylarsine | Table CCW in s. NR 675.23 | Arsenic | 7440-38-2 | NA | | 5.6 | (1) |
| P065 (Low Mercury Subcategory - Less than 260 mg/kg Mercury - residues from RMERC) | Mercury fulminate | Table 2 in s. NR 675.22 and Table CCW in s. NR 675.23 | Mercury | 7439-97-6 | NA | | 0.20 | |
| P065 (Low Mercury Subcategory - Less than 260 mg/kg Mercury - incinerator residues (and are not residues from RMERC)) | Mercury fulminate | Table 2 in s. NR 675.22 and Table CCW in s. NR 675.23 | Mercury | 7439-97-6 | NA | | 0.025 | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS No. for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/l) | Notes |
| P073 | Nickel carbonyl | Table CCW in s. NR 675.23 | Nickel | 7440-02-0 | NA | | 0.32 | |
| P074 | Nickel cyanide | Table CCW in s. NR 675.23 | Nickel | 7440-02-0 | NA | | 0.32 | |
| P092 (Low Mercury Subcategory - Less than 260 mg/kg Mercury - residues from RMERC) | Phenyl mercury acetate | Table 2 in s. NR 675.22 and Table CCW in s. NR 675.23 | Mercury | 7439-97-6 | NA | | 0.20 | |
| P092 (Low Mercury Subcategory - Less than 260 mg/kg Mercury - incinerator residues (and are not residues from RMERC)) | Phenyl mercury acetate | Table 2 in s. NR 675.22 and Table CCW in s. NR 675.23 | Mercury | 7439-97-6 | NA | | 0.025 | |
| P099 | Potassium silver cyanide | Table CCW in s. NR 675.23 | Silver | 7440-22-4 | NA | | 0.072 | |
| P103 | Selenourea | Table CCW in s. NR 675.23 | Selenium | 7782-49-2 | NA | | 5.7 | |
| P104 | Silver cyanide | Table CCW in s. NR 675.23 | Silver | 7440-22-4 | NA | | 0.072 | |
| P110 | Tetraethyl lead | Table CCW in s. NR 675.23 | Lead | 7439-92-1 | NA | | 0.51 | |
| P114 | Thallium selenite | Table CCW in s. NR 675.23 | Selenium | 7782-49-2 | NA | | 5.7 | |
| U032 | Calcium chromate | Table CCW in s. NR 675.23 | Chromium (Total) | 7440-47-3 | NA | | 0.094 | |
| U051 | Creosote | Table CCW in s. NR 675.23 | Lead | 7439-92-1 | NA | | 0.51 | |
| U136 | Cacodylic acid | Table CCW in s. NR 675.23 | Arsenic | 7440-38-2 | NA | | 5.6 | (1) |
| U144 | Lead acetate | Table CCW in s. NR 675.23 | Lead | 7439-92-1 | NA | | 0.51 | |
| U145 | Lead phosphate | Table CCW in s. NR 675.23 | Lead | 7439-92-1 | NA | | 0.51 | |
| U146 | Lead subacetate | Table CCW in s. NR 675.23 | Lead | 7439-92-1 | NA | | 0.51 | |
| U151 (Low Mercury Subcategory - Less than 260 mg/kg Mercury - residues from RMERC) | Mercury | Table CCW in s. NR 675.23 and Table 2 in s. NR 675.22 | Mercury | 7439-97-6 | NA | | 0.20 | |
| U151 (Low Mercury Subcategory - Less than 260 mg/kg Mercury - that are not residues from RMERC). | Mercury | Table CCW in s. NR 675.23 and Table 2 in s. NR 675.22 | Mercury | 7439-97-6 | NA | | 0.025 | |
| U204 | Selenium dioxide | Table CCW in s. NR 675.23 | Selenium | 7782-49-2 | NA | | 5.7 | |
| U205 | Selenium sulfide | Table CCW in s. NR 675.23 | Selenium | 7782-49-2 | NA | | 5.7 | |

[1]These treatment standards have been based on EP Leachate analysis but this does not preclude the use of TCLP analysis.

[2]These waste codes are not subcategorized into wastewaters and nonwastewaters.

Note: NA means Not Applicable.

**(2)** When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue shall meet the lowest treatment standard for the constituent of concern, except that mixtures of high and low zinc nonwastewater K061 are subject to the treatment standard for high zinc K061.

**(3)** The treatment standards for the constituents in F001 to F005 which are listed in Table CCWE only apply to wastes which contain one, two or all three of these constituents. If the waste contains any of these three constituents along with any of the other 26 constituents found in F001 to F005, then only the treatment standards in s. NR 675.23 Table CCW are required.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (1), r. and recr. Table CCWE, Register, August, 1992, No. 440, eff. 9-1-92; **am. (1), table 1, (2), cr. (3), Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.22 Treatment standards expressed as specified technologies. (1)** The following wastes in pars. (a) and (b) and in tables 2 and 3 shall be treated using the identified technology or technologies in pars. (a) and (b) and table 1.

(a) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm shall be incinerated in accordance with the technical requirements of s. NR 157.07. Thermal treatment under this section shall also be in compliance with applicable regulations in chs. NR 625 and 665.

(b) Nonliquid hazardous wastes containing halogenated organic compounds (HOCs) in total concentration greater than or equal to 1,000 mg/kg and liquid HOC-containing wastes that are prohibited under s. NR 675.13 (1) (d) shall be incinerated in accordance with the requirements of ch. NR 665. These treatment standards do not apply where the waste is subject to a ch. NR 675 treatment standard for a specific HOC, such as a hazardous waste chlorinated solvent for which a treatment standard is established under s. NR 675.21 (1).

(c) A mixture consisting of wastewater, the discharge of which is subject to regulation under either section 402 or section 307 (b) of the clean water act, and de minimis losses of materials from manufacturing operations in which these materials are used as raw materials or are produced as products in the manufacturing process, and that meet the criteria of the D001 ignitable liquids containing greater than 10% total organic constituents (TOC) subcategory, is subject to the DEACT treatment standard described in table 1. For purposes of this paragraph, de minimis losses include those from normal material handling operations such as 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 from process equipment, storage tanks or containers; leaks from well maintained pump packings and seals; sample purgings; and relief device discharges.

**Table 1.-Technology Codes and Description of Technology-Based Standards**

| Technology code | Description of technology-based standards |
|---|---|
| ADGAS: | Venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid)-venting can be accomplished through physical release utilizing valves/piping; physical penetration of the container; and/or penetration through detonation. |
| AMLGM: | Amalgamation of liquid, elemental mercury contaminated with radioactive materials utilizing inorganic reagents such as copper, zinc, nickel, gold, and sulfur that result in a nonliquid, semi-solid amalgam and thereby reducing potential emissions of elemental mercury vapors to the air. |
| BIODG: | Biodegradation of organics or non-metallic inorganics (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues). |
| CARBN: | Carbon adsorption (granulated or powdered) of non-metallic inorganics, organo-metallics, and/or organic constituents, operated such that a surrogate compound or indicator parameter has not undergone breakthrough (e.g., Total Organic Carbon can often be used as an indicator parameter for the adsorption of many organic constituents that cannot be directly analyzed in wastewater residues). Breakthrough occurs when the carbon has become saturated with the constituent (or indicator parameter) and substantial change in adsorption rate associated with that constituent occurs. |
| CHOXD: | Chemical or electrolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combinations of reagents: (1) Hypochlorite (e.g. bleach); (2) chlorine; (3) chlorine dioxide; (4) ozone or UV (ultraviolet light) assisted ozone; (5) peroxides; (6) persulfates; (7) perchlorates; (8) permanganates; and/or (9) other oxidizing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues). Chemical oxidation specifically includes what is commonly referred to as alkaline chlorination. |
| CHRED: | Chemical reduction utilizing the following reducing reagents (or waste reagents) or combinations of reagents: (1) Sulfur dioxide; (2) sodium, potassium, or alkali salts or sulfites, bisulfites, metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG); (3) sodium hydrosulfide; (4) ferrous salts; and/or (5) other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Halogens can often be used as an indicator parameter for the reduction of many halogenated organic constituents that cannot be directly analyzed in wastewater residues). Chemical reduction is commonly used for the reduction of hexavalent chromium to the trivalent state. |
| DEACT: | Deactivation to remove the hazardous characteristics of a waste due to is ignitability, corrosivity, and/or reactivity. |
| FSUBS: | Fuel substitution in units operated in accordance with applicable technical operating requirements. |
| HLVIT: | Vitrification of high level mixed radioactive wastes in units in compliance with all applicable radioactive protection requirements under control of the Nuclear Regulatory Commission. |
| IMERC: | Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of ch. NR 665. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., High or Low Mercury Subcategories). |
| INCIN: | Incineration in units operated in accordance with the technical operating requirements of ch. NR 665. |

| Technology code | Description of technology-based standards |
|---|---|
| LLEXT: | Liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent affinity, resulting in an extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery/reuse and a raffinate (extracted liquid waste) proportionately low in organics that must undergo further treatment as specified in the standard. |
| MACRO: | Macroencapsulation with surface coating materials such as polymeric organics (e.g. resins and plastics) or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Macroencapsulation specifically does not include any material that would be classified as a tank or container according to s. NR 600.03. |
| NEUTR: | Neutralization with the following reagents (or waste reagents) or combinations of reagents: (1) Acids; (2) bases; (3) water (including wastewaters) resulting in a pH greater than 2 but less than 12. 5 as measured in the aqueous residuals. |
| NLDBR: | No land disposal based on recycling. |
| PRECP: | Chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, fluorides, or phosphates. The following reagents (or waste reagents) are typically used alone or in combination: (1) Lime (i.e., containing oxides and/or hydroxides of calcium and/or magnesium; (2) caustic (i.e., sodium and/or potassium hydroxides; (3) soda ash (i.e., sodium carbonate); (4) sodium sulfide; (5) ferric sulfate or ferric chloride; (6) alum; or (7) sodium sulfate. Additional flocculating, coagulation or similar reagents/processes that enhance sludge dewatering characteristics are not precluded from use. |
| RBERY: | Thermal recovery of Beryllium. |
| RCGAS: | Recovery/reuse of compressed gases including techniques such as reprocessing of the gases for reuse/resale; filtering/adsorption of impurities; remixing for direct reuse or resale; and use of the gas as a fuel source. |
| RCORR: | Recovery of acids or bases utilizing one or more of the following recovery technologies: (1) Distillation (i.e., thermal concentration); (2) ion exchange; (3) resin or solid adsorption; (4) reverse osmosis; and/or (5) incineration for the recovery of acid. Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when use in conjunction with the above listed recovery technologies. |
| RLEAD: | Thermal recovery of lead in secondary lead smelters. |
| RMERC: | Retorting or roasting in a thermal processing unit capable of volatilizing mercury and subsequently condensing the volatilized mercury for recovery. The retorting or roasting unit (or facility) must be subject to one or more of the following: (a) a National Emissions Standard for Hazardous Air Pollutants (NESHAP) for mercury; (b) a Best Available Control Technology (BACT) or a Lowest Achievable Emission Rate (LAER) standard for mercury imposed pursuant to a Prevention of Significant Deterioration (PSD) permit; or (c) a state permit that establishes emission limitations (within meaning of section 302 of the Clean Air Act) for mercury. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., High or Low Mercury Subcategories). |
| REMTL: | Recovery of metals or inorganics utilizing one or more of the following direct physical/removal technologies: (1) Ion exchange; (2) resin or solid (i.e., zeolites) adsorption; (3) reverse osmosis; (4) chelation/solvent extraction; (5) freeze crystallization; (6) ultrafiltration and/or (7) simple precipitation (i.e., crystallization) - Note: This does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies. |
| RORGS: | Recovery of organics utilizing one or more of the following technologies: (1) Distillation; (2) thin film evaporation; (3) steam stripping; (4) carbon adsorption; (5) critical fluid extraction; (6) Liquid- liquid extraction ; (7) precipitation/crystallization (including freeze crystallization); or (8) chemical phase separation techniques (i.e., addition of acids, bases, demulsifiers, or similar chemicals); - Note: this does not preclude the use of other physical phase separation techniques such as a decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies. |
| RTHRM: | Thermal recovery of metals or inorganics from nonwastewaters in units identified as industrial furnaces according to s. NR 600.03. |
| RZINC: | Resmelting in high temperature metal recovery units for the purpose of recovery of zinc. |
| STABL: | Stabilization with the following reagents (or waste reagents) or combinations of reagents: (1) Portland cement; or (2) lime/pozzolans (e.g., fly ash and cement kiln dust) - this does not preclude the addition of reagents (e.g., iron salts, silicates, and clays) designed to enhance the set/cure time and/or compressive strength, or to overall reduce the leachability of the metal or inorganic. |
| SSTRP: | Steam stripping of organics from liquid wastes utilizing direct application of steam to the wastes operated such that liquid and vapor flow rates, as well as, temperature and pressure ranges have been optimized, monitored, and maintained. These operating parameters are dependent upon the design parameters of the unit such as, the number of separation stages and the internal column design. Thus, resulting in a condensed extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery/reuse and an extracted wastewater that must undergo further treatment as specified in the standard. |
| WETOX: | Wet air oxidation performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues). |
| WTRRX: | Controlled reaction with water for highly reactive inorganic or organic chemicals with precautionary controls for protection of workers from potential violent reactions as well as precautionary controls for potential emissions of toxic/ignitable levels of gases released during the reaction. |

**Note 1:** When a combination of these technologies (i.e., a treatment train) is specified as a single treatment standard, the order of application is specified in NR 675.22 table 2 by indicating the five letter technology code that must be applied first, then the designation "fb." (an abbreviation for "followed by"), then the five letter technology code for the technology that must be applied next, and so on.

**Note 2:** When more than one technology (or treatment train) are specified as alternative treatment standards, the five letter technology codes (or the treatment trains) are separated by a semicolon (;) with the last technology preceded by the word "OR". This indicates that any one of these BDAT technologies or treatment trains can be used for compliance with the standard.

**Table 2.-Technology-Based Standards by RCRA Waste Code**

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
|---|---|---|---|---|---|
| | | | | Wastewaters | Nonwastewaters |
| D001 | NA | Ignitable Liquids based on s. NR 605.08 (2) (a) 1-Wastewaters | NA | DEACT | NA |
| D001 | NA | Ignitable Liquids based on s. NR 605.08 (2) (a) 1-Low TOC Ignitable Liquids Subcategory-Less than 10% total organic carbon | NA | NA | DEACT |
| D001 | NA | Ignitable Liquids based on s. NR 605.08 (2) (a) 1-High TOC Ignitable Subcategory-Greater than or equal to 10% total organic carbon | NA | NA | FSUBS; RORGS; or INCIN |
| D001 | NA | Ignitable Liquids based on s. NR 605.08 (2) (a) 1 - Wastewaters | NA | DEACT | NA |
| D001 | NA | Ignitable Liquids based on s. NR 605.08 (2) (a) 1-Low TOC Ignitable Liquids Subcategory - Less than 10% total organic carbon. | NA | NA | DEACT |
| D001 | NA | Ignitable Liquids based on s. NR 605.08 (2) (a) 1 - High TOC Ignitable Subcategory - Greater than or equal to 10% total organic carbon | NA | NA | FSUBS;RORGS; or INCIN |
| D001 | NA | Ignitable compressed gases based on s. NR 605.08 (2) (a) 3. | NA | NA | DEACT[2] |
| D001 | NA | Ignitable reactives based on s. NR 605.08 (2) (a) 2. | NA | NA | DEACT |
| D001 | NA | Oxidizers based on s. NR 605.08 (2) (a) 4. | NA | DEACT | DEACT |
| D002 | NA | Acid subcategory based on s. NR 605.08 (3) (a) 1. | NA | DEACT | DEACT |
| D002 | NA | Alkaline subcategory based on s. NR 605.08 (3) (a) 1. | NA | DEACT | DEACT |
| D002 | NA | Other corrosives based on s. NR 605.08 (3) (a) 2. | NA | DEACT | DEACT |
| D003 | NA | Reactive sulfides | NA | DEACT but not including dilution as a substitute for adequate treatment. | DEACT but not including dilution as a substitute for adequate treatment. |
| D003 | NA | Explosives based on s. NR 605.08 (4) (a) 6., 7. and 8. | NA | DEACT | DEACT |
| D003 | NA | Water reactives based on s. NR 605.08 (4) (a) 2., 3. and 4. | NA | NA | DEACT |
| D003 | NA | Other reactives based on s. NR 605.08 (4) (a) 1. | NA | DEACT | DEACT |
| D006 | NA | Cadmium containing batteries | 7440-43-9 | NA | RTHRM |
| D008 | NA | Lead acid batteries (Note: This standard only applies to lead acid batteries that are identified as RCRA hazardous wastes and that are not excluded elsewhere from regulation under the land disposal restrictions of ch. NR 675 or exempted under other EPA regulations (see s. NR 625.12) | 7439-92-1 | NA | RLEAD |
| D009 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | Mercury: (High Mercury Subcategory-greater than or equal to 260 mg/kg total Mercury-contains mercury and organics (and are not incinerator residues)) | 7439-97-6 | NA | IMERC; or RMERC |
| D009 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | Mercury: (High Mercury Subcategory-greater than or equal to 260 mg/kg total Mercury-inorganics (including incinerator residues from RMERC)) | 7439-97-6 | NA | RMERC |
| D012 | Table CCW in s. NR 675.23 | Endrin | 72-20-8 | BIODG; or INCIN | NA |
| D013 | Table CCW in s. NR 675.23 | Lindane | 58-89-9 | CARBN; or INCIN | NA |
| D014 | Table CCW in s. NR 675.23 | Methoxychlor | 72-43-5 | WETOX; or INCIN | NA |
| D015 | Table CCW in s. NR 675.23 | Toxaphene | 8001-35-1 | BIODG; or INCIN | NA |
| D016 | Table CCW in s. NR 675.23 | 2,4-D | 94-75-7 | CHOXD; BIODG; or INCIN | NA |
| D017 | Table CCW in s. NR 675.23 | 2,4,5-TP | 93-72-1 | CHOXD; or INCIN | NA |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
|---|---|---|---|---|---|
| | | | | Wastewaters | Nonwastewaters |
| F005 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | 2-Nitropropane | 79-46-9 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| F005 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | 2-Ethoxyethanol | 110-80-5 | BIODG; or INCIN | INCIN |
| F024 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | | NA | INCIN | INCIN |
| K025 | NA | Distillation bottoms from the production of nitrobenzene by the nitration of benzene | NA | LLEXT fb SSTRP fb CARBN; or INCIN | INCIN |
| K026 | NA | Stripping still tails from the production of methl ethyl pyridines | NA | INCIN | INCIN |
| K027 | NA | Centrifuge and distillation residues from toluene diisocyanate production | NA | CARBN; or INCIN | FSUBS; or INCIN |
| K039 | NA | Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate | NA | CARBN; or INCIN | FSUBS; or INCIN |
| K044 | NA | Wastewater treatment sludges from the manufacturing and processing of explosives | NA | DEACT | DEACT |
| K045 | NA | Spent carbon from the treatment of wastewater containing explosives | NA | DEACT | DEACT |
| K047 | NA | Pink/red water from TNT operations | NA | DEACT | DEACT |
| K069 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | Emission control dust/sludge from secondary lead smelting: Non-Calcium Sulfate Subcategory | NA | NA | RLEAD |
| K106 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | Wastewater treatment sludge from the mercury cell process in chlorine production: (High Mercury Subcategory-greater than or equal to 260 mg/kg total mercury) | NA | NA | RMERC |
| K109 | | Spent filter cartridges from product purification from the production of 1,1-dimethyl- hydrazine (UDMH) from carboxylic acid hydrazides | NA | INCIN; or CHOXD fb, CARBN; BIODG or fb CARBN | INCIN |
| K110 | | Condensed column overheads from intermediate separation from the production of 1,1-dimethyl- hydrazine (UDMH) from carboxylic acid hydrazides | NA | INCIN; or CHOXD fb, CARBN; or BIODG fb CARBN | INCIN |
| K112 | | Reaction by product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene | NA | INCIN; or CHOXD fb, CARBN; or BIODG fb CARBN | INCIN |
| K113 | NA | Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene | NA | CARBN; or INCIN | FSUBS; or INCIN |
| K114 | NA | Vicinals from the purification of toluenediamine in the production of toluene-diamine via hydrogenation of dinitrotoluene | NA | CARBN: or INCIN | FSUBS; or INCIN |
| K115 | NA | Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene | NA | CARBN; or INCIN | FSUBS; or INCIN |
| K116 | NA | Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine | NA | CARBN; or INCIN | FSUBS; or INCIN |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
|---|---|---|---|---|---|
| | | | | Wastewaters | Nonwastewaters |
| K123 | | Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebis- dithiocarbamic acid and its salts | NA | INCIN; or CHOXD fb (BIODG or CARBN) | INCIN |
| K124 | | Reactor vent scrubber water from the production of ethylenebisdi-thiocarbamic acid and its salts | NA | INCIN; or CHOXD fb (BIODG or CARBN) | INCIN |
| K125 | | Filtration, evaporation, and centrifugation solids from the production of ethylenebisdi-thiocarbamic acid and its salts | NA | INCIN; or CHOXD fb (BIODG or CARBN) | INCIN |
| K126 | | Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylene bisdithiocarbamic acid and its salts | NA | INCIN; or CHOXD fb (BIODG or CARBN) | INCIN |
| P001 | NA | Warfarin (>0.3%) | 81-81-2 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| P002 | NA | 1-Acetyl-2-thiourea | 591-08-2 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P003 | Table CCW in s. NR 675.23 | Acrolein | 107-02-8 | NA | FSUBS; or INCIN |
| P005 | NA | Allyl alcohol | 107-18-6 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| P006 | NA | Aluminum phosphide | 20859-73-8 | CHOXD; CHRED; or INCIN | CHOXD; CHRED; or INCIN |
| P007 | NA | 5-Aminoethyl 3-isoxazolol | 2763-96-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P008 | NA | 4-Aminopyridine | 504-24-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P009 | NA | Ammonium picrate | 131-74-8 | CHOXD; CHRED, CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| P014 | NA | Thiophenol (Benzene thiol) | 108-98-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P015 | NA | Beryllium dust | 7440-41-7 | RMETL; or RTHRM | RMETL; or RTHRM |
| P016 | NA | Bis(chloromethyl) ether | 542-88-1 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P017 | NA | Bromoacetone | 598-31-2 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P018 | NA | Brucine | 357-57-3 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P022 | Table CCW in s. NR 675.23 | Carbon disulfide | 75-15-0 | NA | INCIN |
| P023 | NA | Chloroacetaldehyde | 107-20-0 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
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| | | | | Wastewaters | Nonwastewaters |
| P026 | NA | 1-(o-Chlorophenyl) thiourea | 5344-82-1 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P027 | NA | 3-Chloropropionitrile | 542-76-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P028 | NA | Benzyl chloride | 100-44-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P031 | NA | Cyanogen | 460-19-5 | CHOXD; WETOX or INCIN | CHOXD; WETOX; or INCIN |
| P033 | NA | Cyanogen chloride | 506-77-4 | CHOXD; WETOX or INCIN | CHOXD; WETOX; or INCIN |
| P034 | NA | 2-Cyclohexyl-4, 6-dinitrophenol | 131-89-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P040 | NA | O-O-Diethyl O-pyrazinyl phosphorothioate | 297-97-2 | CARBN; or INCIN | FSUBS; or INCIN |
| P041 | NA | Diethyl-p-nitrophenyl phosphate | 311-45-5 | CARBN; or INCIN | FSUBS; or INCIN |
| P042 | NA | Epinephrine | 51-43-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P043 | NA | Diisopropyl fluorophosphate (DFP) | 55-91-4 | CARBN; or INCIN | FSUBS; or INCIN |
| P044 | NA | Dimethoate | 60-51-5 | CARBN; or INCIN | FSUBS or INCIN |
| P045 | NA | Thiofanox | 39196-18-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P046 | NA | alpha, alpha-Dimethylphenethyl-amine | 122-09-8 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P047 | NA | 4,6-Dinitro-o-cresol salts | 534-52-1 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P049 | NA | 2,4-Dithiobiuret | 541-53-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P054 | NA | Aziridine | 151-56-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P056 | Table CCW in s. NR 675.23 | Fluorine | 7782-41-4 | NA | ADAS fb NEUTR |
| P057 | NA | Fluoroacetamide | 640-19-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P058 | NA | Fluoroacetic acid, sodium salt | 62-74-8 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P062 | NA | Hexaethyltetra-phosphate | 757-58-4 | CARBN; or INCIN | FSUBS; or INCIN |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
|---|---|---|---|---|---|
| | | | | Wastewaters | Nonwastewaters |
| P064 | NA | Isocyanic acid, ethyl ester | 624-83-9 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P065 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | Mercury fulminate: (High Mercury Subcategory-greater than or equal to 260 mg/kg total Mercury-either incinerator residues or residues from RMERC) | 628-86-4 | NA | RMERC |
| P065 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | Mercury fulminate: (All Nonwastewaters that are not incinerator residues or are not residues from RMERC; regardless of Mercury Content) | 628-86-4 | NA | IMERC |
| P066 | NA | Methomyl | 16752-77-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P067 | NA | 2-Methylaziridine | 75-55-8 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P068 | NA | Methyl hydrazine | 60-34-4 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| P069 | NA | Methyllactonitrile | 75-86-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P070 | NA | Aldicarb | 116-06-3 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P072 | NA | 1-Naphtyl-2-thiourea | 86-88-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P075 | NA | Nicotine and salts | [1]54-11-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P076 | NA | Nitric oxide | 10102-43-9 | ADGAS | ADGAS |
| P078 | NA | Nitrogen dioxide | 10102-44-0 | ADGAS | ADGAS |
| P081 | NA | Nitroglycerin | 55-63-0 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| P082 | Table CCW in s. NR 675.23 | N-Nitrosodimethylamine | 62-75-9 | NA | INCIN |
| P084 | NA | N-Nitrosomethyl-vinylamine | 4549-40-0 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P085 | NA | Octamethylpyro-phosphoramide | 152-16-9 | CARBN; or INCIN | FSUBS; or INCIN |
| P087 | NA | Osmium tetroxide | 20816-12-0 | RMETL; or RTHRM | RMETL; or RTHRM |
| P088 | NA | Endothall | 145-73-3 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
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| | | | | Wastewaters | Nonwastewaters |
| P092 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | Phenyl mercury acetate: (High Mercury Subcategory-greater than or equal to 260 mg/kg total Mercury-either incinerator residues or residues from RMERC) | 62-38-4 | NA | RMERC |
| P092 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | Phenyl mercury acetate: (All nonwastewaters that are not incinerator residues and are not residues from RMERC: regardless of Mercury Content) | 62-38-4 | NA | IMERC; or RMERC |
| P093 | NA | N-Phenylthiourea | 103-85-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P095 | NA | Phosgene | 75-44-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P096 | NA | Phosphine | 7803-51-2 | CHOXD; CHRED; or INCIN | CHOXD; CHRED; or INCIN |
| P102 | NA | Propargyl alcohol | 107-19-7 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| P105 | NA | Sodium azide | 26628-22-8 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS, CHOXD; CHRED; or INCIN |
| P108 | NA | Strychnine and salts | [1]57-24-9 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P109 | NA | Tetraethyldithio-pyrophosphate | 3689-24-5 | CARBN; or INCIN | FSUBS; or INCIN |
| P112 | NA | Tetranitromethane | 509-14-8 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS, CHOXD; CHRED; or INCIN |
| P113 | Table CCW in s. NR 675.23 | Thallic oxide | 1314-32-5 | NA | RTHRM; or STABL |
| P115 | Table CCW in s. NR 675.23 | Thallium (1) sulfate | 7446-18-6 | NA | RTHRM; or STABL |
| P116 | NA | Thiosemicarbazide | 79-19-6 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P118 | NA | Tricholoromethanetiol | 75-70-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| P119 | Table CCW in s. NR 675.23 | Ammonium vanadate | 7803-55-6 | NA | STABL |
| P120 | Table CCW in s. NR 675.23 | Vanadium pentoxide | 1314-62-1 | NA | STABL |
| P122 | NA | Zinc Phosphide (>10%) | 1314-84-7 | CHOXD; CHRED; or INCIN | CHOXD; CHRED; or INCIN |
| U001 | NA | Acetaldehyde | 75-07-0 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
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| | | | | Wastewaters | Nonwastewaters |
| U003 | Table CCW in s. NR 675.23 | Acetonitrile | 75-05-8 | NA | INCIN |
| U006 | NA | Acetyl Chloride | 75-36-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U007 | NA | Acrylamide | 79-06-1 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U008 | NA | Acrylic acid | 79-10-7 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U010 | NA | Mitomycin C | 50-07-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U011 | NA | Amitrole | 61-82-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U014 | NA | Auramine | 492-80-8 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U015 | NA | Azaserine | 115-02-6 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U016 | NA | Benz(c)acridine | 225-51-4 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U017 | NA | Benzal chloride | 98-87-3 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U020 | NA | Benzenesulfonyl chloride | 98-09-9 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U021 | NA | Benzidine | 92-87-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U023 | NA | Benzotrichloride | 98-07-7 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| U026 | NA | Chlornaphazin | 494-03-1 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U033 | NA | Carbonyl fluoride | 353-50-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U034 | NA | Trichloroacetaldehyde (Chloral) | 75-87-6 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U035 | NA | Chlorambucil | 305-03-3 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
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| | | | | Wastewaters | Nonwastewaters |
| U038 | Table CCW in s. NR 675.23 | Chlorobenzilate | 510-15-6 | NA | INCIN |
| U041 | NA | 1-Chloro-2, 3-epoxypropane (Epichlorohydrin) | 106-89-8 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U042 | Table CCW in s. NR 675.23 | 2-Chloroethyl vinyl ether | 110-75-8 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U046 | NA | Chloromethyl methyl ether | 107-30-2 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U049 | NA | 4-Chloro-o-toluidine hydrochloride | 3165-93-3 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U053 | NA | Crotonaldehyde | 4170-30-3 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U055 | NA | Cumene | 98-82-8 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U056 | NA | Cyclohexane | 110-82-7 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U057 | Table CCW in s. NR 675.23 | Cyclohexanone | 108-94-1 | NA | FSUBS; or INCIN |
| U058 | NA | Cyclophosphamide | 50-18-0 | CARBN; or INCIN | FSUBS; or INCIN |
| U059 | NA | Daunomycin | 20830-81-3 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U062 | NA | Diallate | 2303-16-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U064 | NA | 1,2,7,8-Dibenzopyrene | 189-55-9 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U073 | NA | 3,3'-Dichlorobenzidine | 91-94-1 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U074 | NA | cis-1,4-Dichloro-2-butylene trans-1, 4-Dichloro-2-butylene | 1476-11-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U085 | NA | 1,2:3,4-Diepoxybutane | 1464-53-5 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U086 | NA | N,N-Diethylhydrazine | 1615-80-1 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| U087 | NA | O,O-Diethyl S-methyldithiophosphate | 3288-58-2 | CARBN; or INCIN | FSUBS; or INCIN |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
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| | | | | Wastewaters | Nonwastewaters |
| U089 | NA | Diethyl stilbestrol | 56-53-1 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U090 | NA | Dihydrosafrole | 94-58-6 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U091 | NA | 3,3'-Dimethoxybenzidine | 119-90-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U092 | NA | Dimethylamine | 124-40-3 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U093 | Table CCW in s. NR 675.23 | p-Dimethylaminoazobenzene | 621-90-9 | NA | INCIN |
| U094 | NA | 7,12-Dimethyl benz(a)anthracene | 57-97-6 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U095 | NA | 3,3'-Dimethylbenzidine | 119-93-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U096 | NA | a,a-Dimethyl benzyl hydroperoxide | 80-15-9 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| U097 | NA | Dimethylcarbomyl chloride | 79-44-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U098 | NA | 1,1-Dimethyl-hydrazine | 57-14-7 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| U099 | NA | 1,2-Dimethyl-hydrazine | 540-73-8 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| U103 | NA | Dimethyl sulfate | 77-78-1 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| U109 | NA | 1,2-Diphenylhydrazine | 122-66-7 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| U110 | NA | Dipropylamine | 142-84-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U113 | NA | Ethyl acrylate | 140-88-5 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U114 | NA | Ethylene bis-dithiocarbamic acid | 111-54-6 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U115 | NA | Ethylene oxide | 75-21-8 | (WETOX or CHOXD) fb CARBN; or INCIN | CHOXD; or INCIN |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
|---|---|---|---|---|---|
| | | | | Wastewaters | Nonwastewaters |
| U116 | NA | Ethylene thiourea | 96-45-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U119 | NA | Ethyl methane sulfonate | 62-50-0 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U122 | NA | Formaldehyde | 50-00-0 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U123 | NA | Formic acid | 64-18-6 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U124 | NA | Furan | 110-00-9 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U125 | NA | Furfural | 98-01-1 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U126 | NA | Glycidaldehyde | 765-34-4 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U132 | NA | Hexachlorophenene | 70-30-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U133 | NA | Hydrazine | 302-01-2 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| U134 | Table CCW in s. NR 675.23 | Hydrogen Fluoride | 7664-39-3 | NA | ADGAS fb NEUTR; or NEUTR |
| U135 | NA | Hydrogen Sulfide | 7783-06-4 | CHOXD; CHRED; or INCIN | CHOXD; CHRED; or INCIN |
| U143 | NA | Lasiocarpine | 303-34-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U147 | NA | Maleic anhydride | 108-31-6 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U148 | NA | Maleic hydrazide | 123-33-1 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U149 | NA | Malononitrile | 109-77-3 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U150 | NA | Malphalan | 148-82-3 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U151 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | Mercury: (High Mercury Subcategory-greater than or equal to 260 mg/kg total Mercury) | 7439-97-6 | NA | RMERC |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
|---|---|---|---|---|---|
| | | | | Wastewaters | Nonwastewaters |
| U153 | NA | Methane thiol | 74-93-1 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U154 | Table CCW in s. NR 675.23 | Methanol | 67-56-1 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U156 | NA | Methyl chlorocarbonate | 79-22-1 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U160 | NA | Methyl ethyl ketone peroxide | 1338-23-4 | CHOXD; CHRED; CARBN; BIODG; or INCIN | FSUBS; CHOXD; CHRED; or INCIN |
| U163 | NA | N-Methyl N'-nitro N-Nitrosoguanidine | 70-25-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U164 | NA | Methylthiouracil | 56-04-2 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U166 | NA | 1,4-Naphthoquinone | 130-15-4 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U167 | NA | 1-Naphthylamine | 134-32-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U168 | Table CCW in s. NR 675.23 | 2-Naphthylamine | 91-59-8 | NA | INCIN |
| U171 | NA | 2-Nitropropane | 79-46-9 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U173 | NA | N-Nitroso-di-n-ethanolamine | 1116-54-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U176 | NA | N-Nitroso-N-ethylurea | 759-73-9 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U177 | NA | N-Nitroso-N-methylurea | 684-93-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U178 | NA | N-Nitroso-N-methylurethane | 615-53-2 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U182 | NA | Paraldehyde | 123-63-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U184 | NA | Pentachloroethane | 76-01-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U186 | NA | 1,3-Pentadiene | 504-60-9 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
|---|---|---|---|---|---|
| | | | | Wastewaters | Nonwastewaters |
| U189 | NA | Phosphorus sulfide | 1314-80-3 | CHOXD; CHRED; or INCIN | CHOXD; CHRED; or INCIN |
| U191 | NA | 2-Picoline | 109-06-8 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U193 | NA | 1,3-Propane sultone | 1120-71-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U194 | NA | n-Propylamine | 107-10-8 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U197 | NA | p-Benzoquinone | 106-51-4 | (WETOX or CHOXD) | FSUBS; or INCIN |
| U200 | NA | Reserpine | 50-55-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U201 | NA | Resorcinol | 108-46-3 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U202 | NA | Saccharin and salts | [1]81-07-2 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U206 | NA | Streptozatocin | 18883-66-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U213 | NA | Tetrahydrofuran | 109-99-9 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U214 | Table CCW in s. NR 675.23 | Thallium (I) acetate | 563-68-8 | NA | RTHRM; or STABL |
| U215 | Table CCW in s. NR 675.23 | Thallium (I) carbonate | 6533-73-9 | NA | RTHRM; or STABL |
| U216 | Table CCW in s. NR 675.23 | Thallium (I) chloride | 7791-12-0 | NA | RTHRM; or STABL |
| U217 | Table CCW in s. NR 675.23 | Thallium (I) nitrate | 10102-45-1 | NA | RTHRM; or STABL |
| U218 | NA | Thioacetamide | 62-55-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U219 | NA | Thiourea | 62-56-6 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U221 | NA | Toluenediamine | 25376-45-8 | CARBN; or INCIN | FSUBS; or INCIN |
| U222 | NA | o-Toluidine hydrochloride | 636-21-5 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U223 | NA | Toluene diisocyanate | 26471-62-5 | CARBN; or INCIN | FSUBS; or INCIN |

| Waste code | See also | Waste descriptions and/or treatment subcategory | CAS No. for regulated hazardous constituents | Technology code | |
|---|---|---|---|---|---|
| | | | | Wastewaters | Nonwastewaters |
| U234 | NA | sym-Trinitrobenzene | 99-35-4 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U236 | NA | Trypan Blue | 72-57-1 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U237 | NA | Uracil mustard | 66-75-1 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U238 | NA | Ethyl carbamate | 51-79-6 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U240 | NA | 2,4-Dichlorophenoxyacetic (salts and esters) | [1]94-75-7 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U244 | NA | Thiram | 137-26-8 | (WETOX or CHOXD) fb CARBN; or INCIN | INCIN |
| U246 | NA | Cyanogen bromide | 506-68-3 | CHOXD; WETOX; or INCIN | CHOXD; WETOX; or INCIN |
| U248 | NA | Warfarin (.3% or less) | 81-81-2 | (WETOX or CHOXD) fb CARBN; or INCIN | FSUBS; or INCIN |
| U249 | NA | Zinc Phosphide (<10%) | 1314-84-7 | CHOXD; CHRED; or INCIN | CHOXD; CHRED; or INCIN |
| U328 | | o-toluidine | 95-53-4 | INCIN; or CHOXD fb, (BIODG or CARBN); or BIODG fb CARBN | INCIN; or Thermal Destruction. |
| U353 | | p-toluidine | 106-49-0 | INCIN; or CHOXD fb, (BIODG or CARBN); or BIODG fb CARBN | INCIN; or Thermal Destruction. |
| U359 | | 2-ethoxy-ethanol | 110-80-5 | INCIN; or CHOXD fb, (BIODG or CARBN); or BIODG fb CARBN | INCIN; or FSUBS. |

[1]CAS Number given for parent compound only.

[2]This waste code exists in gaseous form and is not categorized as wastewater or nonwastewater forms.

Note: NA means Not Applicable.

Table 3.-Technology-Based Standards for Specific Radioactive Hazardous Mixed Waste

| Waste code | Waste descriptions and/or treatment category | CAS No. | Technology code | |
|---|---|---|---|---|
| | | | Waste-waters | Nonwaste-waters |
| D002 | Radioactive high level wastes generated during the reprocessing of fuel rods subcategory | NA | NA | HLVIT |
| D004 | Radioactive high level wastes generated during the reprocessing of fuel rod subcategory | NA | NA | HLVIT |
| D005 | Radioactive high level wastes generated during the reprocessing of fuel rods subcategory | NA | NA | HLVIT |
| D006 | Radioactive high level wastes generated during the reprocessing of fuel rods subcategory | NA | NA | HLVIT |
| D007 | Radioactive high level wastes generated during the reprocessing of fuel rods subcategory | NA | NA | HLVIT |
| D008 | Radioactive lead solids subcategory (Note: these lead solids include, but are not limited to, all forms of lead shielding, and other elemental forms of lead. These lead solids do not include treatment residuals such as hydroxide sludges, other wastewater treatment residuals, or incinerator ashes that can undergo conventional pozzolanic stabilization, nor do they include organolead materials that can be incinerated and stabilized as ash) | 7439-92-1 | NA | MACRO |
| D008 | Radioactive high level wastes generated during the reprocessing of fuel rods subcategory | NA | NA | HLVIT |
| D009 | Elemental mercury contaminated with radioactive materials | 7439-97-6 | NA | AMLGM |
| D009 | Hydraulic oil contaminated with mercury; radioactive materials subcategory | 7439-97-6 | NA | IMERC |
| D009 | Radioactive high level wastes generated during the reprocessing of fuel rods subcategory | NA | NA | HLVIT |
| D010 | Radioactive high level wastes generated during the reprocessing of fuel rods subcategory | NA | NA | HLVIT |
| D011 | Radioactive high level wastes generated during the reprocessing of fuel rods subcategory | NA | NA | HLVIT |
| U151 | Mercury: Elemental mercury contaminated with radioactive materials | 7439-97-6 | NA | AMLGM |

Note: NA means Not Applicable.

**(2)** (a) Any person may submit an application to EPA demonstrating that an alternative treatment method can achieve a level of performance equivalent to that achieved by methods specified in subs. (1), (4) and (5) for wastes or specified in Table 1 of s. NR 675.25 for hazardous debris. The applicant shall submit information demonstrating that the treatment method will not present an unreasonable risk to human health or the environment and is in compliance with federal, state and local requirements. On the basis of the information and any other available information, EPA may approve the use of the alternative treatment method if it finds that the alternative treatment method provides a level of performance equivalent to that achieved by methods specified in subs. (1), (4) and (5) for wastes or specified in Table 1 of s. NR 675.25 for hazardous debris. Any approval shall be stated in writing and may contain the provisions and conditions as EPA deems appropriate. The person to whom the certification is issued shall comply with all limitations contained in the determination.

(b) If EPA denies an application for an alternative treatment method under par. (a), the department shall recognize that denial.

(c) Persons who have had their applications for an alternative treatment method approved by EPA under par. (a) shall continue to use the treatment method specified in sub. (1) until the department recognizes EPA's approval of an alternative treatment method except when waste is being treated in another state and the person complies with that state's requirements. A person may petition the department to recognize an EPA alternative treatment method by submitting the following to the department:

1. Copies of all materials and information submitted to EPA concerning the alternative treatment method;

2. Copies of all materials and information received from EPA, including the EPA notice of approval, concerning the alternative treatment method;

3. All other information that the department determines is necessary to evaluate the request for an alternative treatment method.

(d) When determining whether to recognize an EPA-approved alternative treatment method, 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 par. (a).

(e) The department shall recognize the EPA-approved alternative treatment method unless the department clearly establishes that the alternative treatment method would threaten human health or the environment.

**(3)** Approval by EPA and the department of an alternative treatment method under sub. (2) shall allow a facility to dispose on land prohibited waste under this chapter.

**(4)** As an alternative to the otherwise applicable treatment standards in ss. NR 675.20 to 675.24, lab packs are eligible for land disposal provided the following requirements are met:

(a) The lab packs comply with the applicable provisions of s. NR 660.18 (9) (c);

(b) All hazardous wastes contained in the lab packs are specified in Appendix III or IV;

(c) The lab packs are incinerated in accordance with the requirements of ch. NR 665; and

(d) Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010 and D011 are treated in compliance with the applicable treatment standards for such wastes in ss. NR 675.20 to 675.24.

**(5)** Radioactive hazardous mixed wastes with treatment standards specified in table 3 are not subject to any treat-

ment standards specified in s. NR 675.21, 675.23 or table 2. Radioactive hazardous mixed wastes not subject to treatment standards in table 3 of this section remain subject to all applicable treatment standards specified in ss. NR 675.21, 675.23 and table 2. Hazardous debris containing radioactive waste is not subject to the treatment standards specified in Table 3 of this section but is subject to the treatment standards specified in 40 CFR s. 268.45.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (1) (intro)., (b) and (2) (a), cr. (4), (5) and Tables 1 to 3, r. (1) (d), r. and recr. (1) (c), Register, August, 1992, No. 440, eff. 9-1-92; **am. (1) (c), (1) (b) Table 1, Table 2, (2) (a), (c), (5), Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.23 Treatment standards expressed in waste concentrations. (1)** Table CCW identifies the restricted wastes and the concentrations of their associated hazardous constituents which may not be exceeded by the waste or treatment residual, not an extract of the waste or residual, for the allowable land disposal of the waste or residual. Compliance with these concentrations is required based upon grab samples unless otherwise noted in the following table CCW.

**Table CCW.-Constituent Concentrations in Wastes**

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| D003 (Reactive Cyanides Subcategory based on s. NR 605.08 (4)(a)5.) | NA | NA | Cyanides (Total) | 57-12-5 | (4) | | 590 | (3) |
| | | | Cyanides (Amenable) | 57-12-5 | 0.86 | | 30 | |
| D004 | NA | Table CCWE in s. NR 675.21 | Arsenic | 7440-38-2 | 5.0 | | NA | |
| D005 | NA | Table CCWE in s. NR 675.21 | Barium | 7440-39-3 | 100 | | NA | |
| D006 | NA | Table CCWE in s. NR 675.21 | Cadmium | 7440-43-9 | 1.0 | | NA | |
| D007 | NA | Table CCWE in s. NR 675.21 | Chromium (Total) | 7440-47-3 | 5.0 | | NA | |
| D008 | NA | Table CCWE in s. NR 675.21 | Lead | 7439-92-1 | 5.0 | | NA | |
| D009 | NA | Table CCWE in s. NR 675.21 | Mercury | 7439-97-6 | 0.20 | | NA | |
| D010 | NA | Table CCWE in s. NR 675.21 | Selenium | 7782-49-2 | 1.0 | | NA | |
| D011 | NA | Table CCWE in s. NR 675.21 | Silver | 7440-22-4 | 5.0 | | NA | |
| D012 | NA | Table 2 in s. NR 675.22 | Endrin | 720-20-8 | NA | | 0.13 | (1) |
| D013 | NA | Table 2 in s. NR 675.22 | Lindane | 58-89-9 | NA | | 0.066 | (1) |
| D014 | NA | Table 2 in s. NR 675.22 | Methoxychlor | 72-43-5 | NA | | 0.18 | (1) |
| D015 | NA | Table 2 in s. NR 675.22 | Toxaphene | 8001-35-1 | NA | | 1.3 | (1) |
| D016 | NA | Table 2 in s. NR 675.22 | 2,4-D | 94-75-7 | NA | | 10.0 | (1) |
| D017 | NA | Table 2 in s. NR 675.22 | 2,4,5-TP (Silvex) | 93-76-5 | NA | | 7.9 | (1) |
| F001-F005 spent solvents | NA | | Acetone | 67-64-1 | 0.28 | | 160 | |
| | | | Benzene | 71-43-2 | 0.070 | | 3.7 | (1) |
| | | | n-Butyl alcohol | 71-36-3 | 5.6 | | 2.6 | |
| | | | Carbon tetrachloride | 56-23-5 | 0.057 | | 5.6 | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Chlorobenzene | 108-90-7 | 0.057 | | 5.7 | |
| | | | Cresol (m- and p-isomers) | | 0.77 | | 3.2 | |
| | | | o-cresol | | 0.11 | | 5.6 | |
| | | | o-Dichlorobenzene | 95-50-1 | 0.088 | | 6.2 | |
| | | | Ethyl acetate | 141-7-6 | 0.34 | | 33 | |
| | | | Ethyl benzene | 100-41-4 | 0.057 | | 6.0 | |
| | | | Ethyl ether | 60-29-7 | 0.12 | | 160 | |
| | | | Isobutyl alcohol | 78-83-1 | 5.6 | | 170 | |
| | | | Methylene chloride | 75-9-2 | 0.089 | | 33 | |
| | | | Methyl ethyl ketone | 78-93-3 | 0.28 | | 36 | |
| | | | Methyl isobutyl ketone | 108-10-1 | 0.14 | | 33 | |
| | | | Nitrobenzene | 98-95-3 | 0.068 | | 14 | |
| | | | Pyridine | 110-86-1 | 0.014 | | 16 | |
| | | | Tetrachloroethylene | 127-18-4 | 0.056 | | 5.6 | |
| | | | Toluene | 108-88-3 | 0.08 | | 28 | |
| | | | 1,1,1-Trichloroethane | 71-55-6 | 0.054 | | 5.6 | |
| | | | 1,1,2-Trichloroethane | 79-00-5 | 0.030 | | 7.6 | (1) |
| | | | Trichloroethylene | 79-01-6 | 0.054 | | 5.6 | |
| | | | 1,1,2-Trichloro-1,2,2-trifluoromethane | 76-13-1 | 0.057 | | 28 | |
| | | | Trichloromonofluoromethane | 75-69-4 | 0.02 | | 33 | |
| | | | Xylenes (total) | | 0.32 | | 28 | |
| F001-F005 spent solvents (Pharmaceutical Industry-Wastewater Subcategory). | NA | NA | Methylene chloride | 75-09-2 | 0.44 | | NA | |
| F006 | NA | Table CCWE in s. NR 675.21 | Cyanides (Total) | 57-12-5 | 1.2 | | 590 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.86 | | 30 | |
| | | | Cadmium | 7440-43-9 | 1.6 | | NA | |
| | | | Chromium | 7440-47-3 | 0.32 | | NA | |
| | | | Lead | 7439-92-1 | 0.040 | | NA | |
| | | | Nickel | 7440-02-0 | 0.44 | | NA | |
| F007 | NA | Table CCWE in s. NR 675.21 | Cyanides (Total) | 57-12-5 | 1.9 | | 590 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.1 | | 30 | |
| | | | Chromium (Total) | 7440-47-3 | 0.32 | | NA | |
| | | | Lead | 7439-92-1 | 0.04 | | NA | |
| | | | Nickel | 7440-02-0 | 0.44 | | NA | |
| F008 | NA | Table CCWE in s. NR 675.21 | Cyanides (Total) | 57-12-5 | 1.9 | | 590 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.1 | | 30 | |
| | | | Chromium | 7440-47-3 | 0.32 | | NA | |
| | | | Lead | 7439-92-1 | 0.04 | | NA | |
| | | | Nickel | 7440-02-0 | 0.44 | | NA | |
| F009 | NA | Table CCWE in s. NR 675.21 | Cyanides (Total) | 57-12-5 | 1.9 | | 590 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.1 | | 30 | |
| | | | Chromium | 7440-47-3 | 0.32 | | NA | |
| | | | Lead | 7439-92-1 | 0.04 | | NA | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Nickel | 7440-02-0 | 0.44 | | NA | |
| F010 | NA | NA | Cyanides (Total) | 57-12-5 | 1.9 | | 1.5 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.1 | | NA | |
| F011 | NA | Table CCWE in s. NR 675.21 | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.1 | | 9.1 | |
| | | | Chromium (Total) | 7440-47-3 | 0.32 | | NA | |
| | | | Lead | 7439-92-1 | 0.04 | | NA | |
| | | | Nickel | 7440-02-0 | 0.44 | | NA | |
| F012 | NA | Table CCWE in s. NR 675.21 | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.1 | | 9.1 | |
| | | | Chromium (Total) | 7440-47-3 | 0.32 | | NA | |
| | | | Lead | 7439-92-1 | 0.04 | | NA | |
| | | | Nickel | 7440-02-0 | 0.44 | | NA | |
| F019 | NA | Table CCWE in s. NR 675.21 | Cyanides (Total) | 57-12-5 | 1.2 | | 590 | (3) |
| | | | Cyanides (Amenable) | 57-12-5 | 0.86 | | 30 | (3) |
| | | | Chromium (Total) | 7440-47-3 | 0.32 | | NA | |
| F024 | NA | Table CCWE in s. NR 675.21 and Table 2 in s. NR 675.22 (Note: F024 organic standards must be treated via incineration (INCIN)) | 2-Chloro-1,3-butadiene | 126-99-8 | 0.28 | (1) | 0.28 | (1) |
| | | | 3-Chloropropene | 107-05-1 | 0.28 | (1) | 0.28 | (1) |
| | | | 1,1-Dichloroethane | 75-34-3 | 0.014 | (1) | 0.014 | (1) |
| | | | 1,2-Dichloroethane | 107-06-2 | 0.014 | (1) | 0.014 | (1) |
| | | | 1,2-Dichloropropane | 78-87-5 | 0.014 | (1) | 0.014 | (1) |
| | | | cis-1,3-Dichloropropene | 10061-01-5 | 0.014 | (1) | 0.014 | (1) |
| | | | trans-1,3-Dichloropropene | 10061-02-6 | 0.014 | (1) | 0.014 | (1) |
| | | | Bis(2-ethylhexyl)phthalate | 117-81-7 | 0.036 | (1) | 1.8 | (1) |
| | | | Hexachloroethane | 67-72-1 | 0.036 | (1) | 1.8 | (1) |
| | | | Chromium (Total) | 7440-47-3 | 0.35 | | NA | |
| | | | Nickel | 7440-02-0 | 0.47 | | NA | |
| F025 (Light Ends Sub-category). | NA | NA | Chloroform | 67-66-3 | 0.046 | (2) | 6.2 | (1) |
| | | | 1,2-Dichloroethane | 107-06-2 | 0.21 | (2) | 6.2 | (1) |
| | | | 1,1-Dichloroethylene | 75-35-4 | 0.025 | (2) | 6.2 | (1) |
| | | | Methylene chloride | 75-9-2 | 0.089 | (2) | 31 | (1) |
| | | | Carbon tetrachloride | 56-23-5 | 0.057 | (2) | 6.2 | (1) |
| | | | 1,1,2-Trichloroethane | 79-00-5 | 0.054 | (2) | 6.2 | (1) |
| | | | Trichloroethylene | 79-01-6 | 0.054 | (2) | 5.6 | (1) |
| | | | Vinyl chloride | 75-01-4 | 0.27 | (2) | 33 | (1) |
| F025 (Spent Filters or Aids and Desicants Sub-category). | NA | NA | Chloroform | 67-66-3 | 0.046 | (2) | 6.2 | (1) |
| | | | Methylene chloride | 75-9-2 | 0.089 | (2) | 31 | (1) |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Carbon tetrachloride | 56-23-5 | 0.057 | (2) | 6.2 | (1) |
| | | | 1,1,2-Trichloroethane | 79-00-5 | 0.054 | (2) | 6.2 | (1) |
| | | | Trichloroethylene | 79-01-6 | 0.054 | (2) | 5.6 | (1) |
| | | | Vinyl chloride | 75-01-4 | 0.27 | (2) | 33 | (1) |
| | | | Hexachlorobenzene | 118-74-1 | 0.055 | (2) | 37 | (1) |
| | | | Hexachlorobutadiene | 87-68-3 | 0.055 | (2) | 28 | (1) |
| | | | Hexachloroethane | 67-72-1 | 0.055 | (2) | 30 | (1) |
| F037 | NA | Table CCWE in s. NR 675.21 | Acenaphthene | 208-96-8 | 0.059 | (2) | NA | |
| | | | Anthracene | 120-12-7 | 0.059 | (2) | 28 | (1) |
| | | | Benzene | 71-43-2 | 0.14 | (2) | 14 | (1) |
| | | | Benzo(a)anthracene | 50-32-8 | 0.059 | (2) | 20 | (1) |
| | | | Benzo(a)pyrene | 117-81-7 | 0.061 | (2) | 12 | (1) |
| | | | Bis(2-ethylhexyl) phthalate | 75-15-0 | 0.28 | (2) | 7.3 | (1) |
| | | | Chrysene | 218-01-9 | 0.059 | (2) | 15 | (1) |
| | | | Di-n-butyl phthalate | 105-67-9 | 0.057 | (2) | 3.6 | (1) |
| | | | Ethylbenzene | 100-41-4 | 0.057 | (2) | 14 | (1) |
| | | | Fluorene | 86-73-7 | 0.059 | (2) | NA | |
| | | | Naphthalene | 91-20-3 | 0.059 | (2) | 42 | (1) |
| | | | Phenanthrene | 85-01-8 | 0.059 | (2) | 34 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | (2) | 3.6 | (1) |
| | | | Pyrene | 129-00-0 | 0.067 | (2) | 36 | (1) |
| | | | Toluene | 108-88-3 | 0.08 | (2) | 14 | (1) |
| | | | Xylene(s) | | 0.32 | (2) | 22 | (1) |
| | | | Cyanides (Total) | 57-12-5 | 0.028 | (1) | 1.8 | (1) |
| | | | Chromium (Total) | 7440-47-3 | 0.2 | | NA | |
| | | | Lead | 7439-92-1 | 0.037 | | NA | |
| F038 | NA | Table CCWE in s. NR 675.21 | Benzene | 71-43-2 | 0.14 | (2) | 14 | (1) |
| | | | Benzo(a)pyrene | 50-32-8 | 0.061 | (2) | 12 | (1) |
| | | | Bis(2-ethylhexyl) phthalate | 117-81-7 | 0.28 | (2) | 7.3 | (1) |
| | | | Chrysene | 218-01-9 | 0.059 | (2) | 15 | (1) |
| | | | Di-n-butyl phthalate | 84-74-2 | 0.057 | (2) | 3.6 | (1) |
| | | | Ethylbenzene | 100-41-4 | 0.057 | (2) | 14 | (1) |
| | | | Fluorene | 86-73-7 | 0.059 | (2) | NA | |
| | | | Naphthalene | 91-20-3 | 0.059 | (2) | 42 | (1) |
| | | | Phenanthrene | 85-01-8 | 0.059 | (2) | 34 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | (2) | 3.6 | (1) |
| | | | Pyrene | 129-00-0 | 0.067 | (2) | 36 | (1) |
| | | | Toluene | 108-88-3 | 0.080 | (2) | 14 | (1) |
| | | | Xylene(s) | | 0.32 | (2) | 22 | (1) |
| | | | Cyanides (Total) | 57-12-5 | 0.028 | (1) | 1.8 | (1) |
| | | | Chromium (Total) | 7440-47-3 | 0.2 | | NA | |
| | | | Lead | 7439-92-1 | 0.037 | | NA | |
| F039 | NA | Table CCWE in s. NR 675.21 | Acetone | 67-64-1 | 0.28 | (2) | 160 | (1) |
| | | | Acenaphthalene | 208-96-8 | 0.059 | (2) | 3.4 | (1) |
| | | | Acenaphthene | 83-32-9 | 0.059 | (2) | 4.0 | (1) |
| | | | Acetonitrile | 75-05-8 | 0.17 | (2) | NA | |
| | | | Acetophenone | 96-86-2 | 0.010 | (2) | 9.7 | |
| | | | 2-Acetylaminofluorene | 53-96-3 | 0.059 | (2) | 140 | (1) |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Acrolein | 107-02-8 | 0.29 | (2) | NA | |
| | | | Acrylonitrile | 107-13-1 | 0.24 | (2) | 84 | (1) |
| | | | Aldrin | 309-00-2 | 0.021 | (2) | 0.066 | (1) |
| | | | 4-Aminobiphenyl | 92-67-1 | 0.13 | (2) | NA | |
| | | | Aniline | 62-53-3 | 0.81 | (2) | 14 | (1) |
| | | | Anthracene | 120-12-7 | 0.059 | (2) | 4.0 | (1) |
| | | | Aramite | 140-57-8 | 0.36 | (2) | NA | |
| | | | Aroclor 1016 | 12674-11-2 | 0.013 | (2) | 0.92 | (1) |
| | | | Aroclor 1221 | 11104-28-2 | 0.014 | (2) | 0.92 | (1) |
| | | | Aroclor 1232 | 11141-16-5 | 0.013 | (2) | 0.92 | (1) |
| | | | Aroclor 1242 | 53469-21-9 | 0.017 | (2) | 0.92 | (1) |
| | | | Aroclor 1248 | 12672-29-6 | 0.013 | (2) | 0.92 | (1) |
| | | | Aroclor 1254 | 11097-69-1 | 0.014 | (2) | 1.8 | (1) |
| | | | Aroclor 1260 | 11096-82-5 | 0.014 | (2) | 1.8 | (1) |
| | | | alpha-BHC | 319-84-6 | 0.00014 | (2) | 0.066 | (1) |
| | | | beta-BHC | 319-85-7 | 0.00014 | (2) | 0.066 | (1) |
| | | | delta-BHC | 319-86-8 | 0.023 | (2) | 0.066 | (1) |
| | | | gamma-BHC | 58-89-9 | 0.0017 | (2) | 0.066 | (1) |
| | | | Benzene | 71-43-2 | 0.14 | (2) | 36 | (1) |
| | | | Benz(a)anthracene | 56-55-3 | 0.059 | (2) | 8.2 | (1) |
| | | | Benzo(b)fluoranthene | 205-99-2 | 0.055 | (2) | 3.4 | (1) |
| | | | Benzo(k)fluoranthene | 207-08-9 | 0.059 | (2) | 3.4 | (1) |
| | | | Benzo(g,h,i)perylene | 191-24-2 | 0.0055 | (2) | 1.5 | (1) |
| | | | Benzo(a)pyrene | 50-32-8 | 0.061 | (2) | 8.2 | (1) |
| | | | Bromodichloromethane | 75-27-4 | 0.35 | (2) | 15 | (1) |
| | | | Bromoform (Tribromomethane) | 75-25-2 | 0.63 | (2) | 15 | (1) |
| | | | Bromomethane (methyl bromide) | 74-83-9 | 0.11 | (2) | 15 | (1) |
| | | | 4-Bromophenyl phenyl ether | 101-55-3 | 0.055 | (2) | 15 | (1) |
| | | | n-Butyl alcohol | 71-36-3 | 5.6 | (2) | 2.6 | (1) |
| | | | Butyl benzyl phthalate | 85-68-7 | 0.017 | (2) | 7.9 | (1) |
| | | | 2-sec-Butyl-4,6-dinitrophenol | 88-85-7 | 0.066 | (2) | 2.5 | (1) |
| | | | Carbon tetrachloride | 56-23-5 | 0.057 | (2) | 5.6 | (1) |
| | | | Carbon disulfide | 75-15-0 | 0.014 | (2) | NA | |
| | | | Chlordane | 57-74-9 | 0.0033 | (2) | 0.13 | (1) |
| | | | p-Chloroaniline | 106-47-8 | 0.46 | (2) | 16 | (1) |
| | | | Chlorobenzene | 108-90-7 | 0.057 | (2) | 5.7 | (1) |
| | | | Chlorobenzilate | 510-15-6 | 0.10 | (2) | NA | |
| | | | 2-Chloro-1,3-butadiene | 126-99-8 | 0.057 | (2) | NA | |
| | | | Chlorodibromomethane | 124-48-1 | 0.057 | (2) | 15 | (1) |
| | | | Chloroethane | 75-00-3 | 0.27 | (2) | 6.0 | (1) |
| | | | bis(2-Chloroethoxy) methane | 111-91-1 | 0.036 | (2) | 7.2 | (1) |
| | | | bis(2-Chloroethyl) ether | 111-44-4 | 0.033 | (2) | 7.2 | (1) |
| | | | Chloroform | 67-66-3 | 0.046 | (2) | 5.6 | (1) |
| | | | bis(2-Chloroisopropyl) ether | 39638-32-9 | 0.055 | (2) | 7.2 | (1) |
| | | | p-Chloro-m-cresol | 59-50-7 | 0.018 | (2) | 14 | (1) |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Chloromethane (Methyl chloride) | 74-87-3 | 0.19 | (2) | 33 | (1) |
| | | | 2-Chloronaphthalene | 91-8-7 | 0.055 | (2) | 5.6 | (1) |
| | | | 2-Chlorophenol | 95-57-8 | 0.044 | (2) | 5.7 | (1) |
| | | | 3-Chloropropylene | 107-05-1 | 0.036 | (2) | 28 | (1) |
| | | | Chrysene | 218-01-9 | 0.059 | (2) | 8.2 | (1) |
| | | | o-Cresol | 95-48-7 | 0.11 | (2) | 5.6 | (1) |
| | | | Cresol (m- and p-isomers) | | 0.77 | (2) | 3.2 | (1) |
| | | | Cyclohexanone | 108-94-1 | 0.36 | (2) | NA | |
| | | | 1,2-Dibromo-3-chloropropane | 96-12-8 | 0.11 | (2) | 15 | (1) |
| | | | 1,2-Dibromoethane (Ethylene dibromide) | 106-93-4 | 0.028 | (2) | 15 | (1) |
| | | | Dibromomethane | 74-95-3 | 0.11 | (2) | 15 | (1) |
| | | | 2,4-Dichlorophenoxy-acetic acid (2, 4-D) | 94-75-7 | 0.72 | (2) | 10 | (1) |
| | | | o,p'-DDD | 53-19-0 | 0.023 | (2) | 0.087 | (1) |
| | | | p,p'-DDD | 72-54-8 | 0.023 | (2) | 0.087 | (1) |
| | | | o,p'-DDE | 3424-82-6 | 0.031 | (2) | 0.087 | (1) |
| | | | p,p'-DDE | 72-55-9 | 0.031 | (2) | 0.087 | (1) |
| | | | o,p'-DDT | 789-02-6 | 0.0039 | (2) | 0.087 | (1) |
| | | | p,p'-DDT | 50-29-3 | 0.0039 | (2) | 0.087 | (1) |
| | | | Dibenz(a,h)-anthracene | 53-70-3 | 0.055 | (2) | 8.2 | (1) |
| | | | Dibenzo(a,e)pyrene | 192-65-4 | 0.061 | (2) | NA | |
| | | | m-Dichlorobenzene | 541-73-1 | 0.036 | (2) | 6.2 | (1) |
| | | | o-Dichlorobenzene | 95-50-1 | 0.088 | (2) | 6.2 | (1) |
| | | | p-Dichlorobenzene | 106-46-7 | 0.090 | (2) | 6.2 | (1) |
| | | | Dichlorodi-fluoromethane | 75-71-8 | 0.23 | (2) | 7.2 | (1) |
| | | | 1,1-Dichloroethane | 75-34-3 | 0.059 | (2) | 7.2 | (1) |
| | | | 1,2-Dichloroethane | 107-06-2 | 0.21 | (2) | 7.2 | (1) |
| | | | 1,1-Dichloroethylene | 75-35-4 | 0.025 | (2) | 33 | (1) |
| | | | trans-1,2-Dichloroethylene | | 0.054 | (2) | 33 | (1) |
| | | | 2,4-Dichlorophenol | 120-83-2 | 0.044 | (2) | 14 | (1) |
| | | | 2,6-Dichlorophenol | 87-65-0 | 0.044 | (2) | 14 | (1) |
| | | | 1,2-Dichloropropane | 78-87-5 | 0.85 | (2) | 18 | (1) |
| | | | cis-1,3-Dichloropropene | 10061-01-5 | 0.036 | (2) | 18 | (1) |
| | | | trans-1,3-Dichloropropene | 10061-02-6 | 0.036 | (2) | 18 | (1) |
| | | | Dieldrin | 60-57-1 | 0.017 | (2) | 0.13 | (1) |
| | | | Diethyl phthalate | 84-66-2 | 0.20 | (2) | 28 | (1) |
| | | | 2,4-Dimethyl phenol | 105-67-9 | 0.036 | (2) | 14 | (1) |
| | | | Dimethyl phthalate | 131-11-3 | 0.047 | (2) | 28 | (1) |
| | | | Di-n-butyl phthalate | 84-74-2 | 0.057 | (2) | 28 | (1) |
| | | | 1,4-Dinitrobenzene | 100-25-4 | 0.32 | (2) | 2.3 | (1) |
| | | | 4,6-Dinitro-o-cresol | 534-52-1 | 0.28 | (2) | 160 | (1) |
| | | | 2,4-Dinitrophenol | 51-28-5 | 0.12 | (2) | 160 | (1) |
| | | | 2,4-Dinitrotoluene | 121-14-2 | 0.32 | (2) | 140 | (1) |
| | | | 2,6-Dinitrotoluene | 606-20-2 | 0.55 | (2) | 28 | (1) |
| | | | Di-n-octyl phthalate | 117-84-0 | 0.017 | (2) | 28 | (1) |
| | | | Di-n-propylni-trosoamine | 621-64-7 | 0.40 | (2) | 14 | (1) |
| | | | Diphenylamine | 122-39-4 | 0.52 | (2) | NA | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | 1,2-Diphenyl hydrazine | 122-66-7 | 0.087 | (2) | NA | |
| | | | Diphenyl nitrosamine | 621-64-7 | 0.40 | (2) | NA | |
| | | | 1, 4-Dioxane | 123-91-1 | 0.12 | (2) | 170 | (1) |
| | | | Disulfoton | 298-04-4 | 0.017 | (2) | 6.2 | (1) |
| | | | Endosulfan I | 939-98-8 | 0.023 | (2) | 0.066 | (1) |
| | | | Endosulfan II | 33213-6-5 | 0.029 | (2) | 0.13 | (1) |
| | | | Endosulfan sulfate | 1031-07-8 | 0.029 | (2) | 0.13 | (1) |
| | | | Endrin | 72-20-8 | 0.0028 | (2) | 0.13 | (1) |
| | | | Endrin aldehyde | 7421-93-4 | 0.025 | (2) | 0.13 | (1) |
| | | | Ethyl acetate | 141-78-6 | 0.34 | (2) | 33 | (1) |
| | | | Ethyl cyanide | 107-12-0 | 0.24 | (2) | 360 | (1) |
| | | | Ethyl benzene | 100-41-4 | 0.057 | (2) | 6.0 | (1) |
| | | | Ethyl ether | 60-29-7 | 0.12 | (2) | 160 | (1) |
| | | | bis(2-Ethylhexyl) phthalate | 117-81-7 | 0.28 | (2) | 28 | (1) |
| | | | Ethyl methacrylate | 97-63-2 | 0.14 | (2) | 160 | (1) |
| | | | Ethylene oxide | 75-21-8 | 0.12 | (2) | NA | |
| | | | Famphur | 52-85-7 | 0.017 | (2) | 15 | (1) |
| | | | Fluoranthene | 206-44-0 | 0.068 | (2) | 8.2 | (1) |
| | | | Fluorene | 86-73-7 | 0.059 | (2) | 4.0 | (1) |
| | | | Fluorotrichloromethane | 75-69-4 | 0.020 | (2) | 33 | (1) |
| | | | Heptachlor | 76-44-8 | 0.0012 | (2) | 0.066 | (1) |
| | | | Heptachlor epoxide | 1024-57-3 | 0.016 | (2) | 0.066 | (1) |
| | | | Hexachlorobenzene | 118-74-1 | 0.055 | (2) | 37 | (1) |
| | | | Hexachlorobutadiene | 87-68-3 | 0.055 | (2) | 28 | (1) |
| | | | Hexachlorocyclopentadiene | 77-47-4 | 0.057 | (2) | 3.6 | (1) |
| | | | Hexachlorodibenzofurans | | 0.000063 | (2) | 0.001 | (1) |
| | | | Hexachlorodibenzo-p-dioxins | | 0.000063 | (2) | 0.001 | (1) |
| | | | Hexachloroethane | 67-72-1 | 0.055 | (2) | 28 | (1) |
| | | | Hexachloropropene | 1888-71-7 | 0.035 | (2) | 28 | (1) |
| | | | Indeno(1,2,3-c,d) pyrene | 193-39-5 | 0.0055 | (2) | 8.2 | (1) |
| | | | Iodomethane | 74-88-4 | 0.19 | (2) | 65 | (1) |
| | | | Isobutanol | 78-83-1 | 5.6 | (2) | 170 | (1) |
| | | | Isodrin | 465-73-6 | 0.021 | (2) | 0.066 | (1) |
| | | | Isosafrole | 120-58-1 | 0.081 | (2) | 2.6 | (1) |
| | | | Kepone | 143-50-8 | 0.0011 | (2) | 0.13 | (1) |
| | | | Methacrylonitrile | 126-98-7 | 0.24 | (2) | 84 | (1) |
| | | | Methanol | 67-56-1 | 5.6 | (2) | NA | |
| | | | Methapyrilene | 91-80-5 | 0.081 | (2) | 1.5 | (1) |
| | | | Methoxychlor | 72-43-5 | 0.25 | (2) | 0.18 | (1) |
| | | | 3-Methylcholanthrene | 56-49-5 | 0.0055 | (2) | 15 | (1) |
| | | | 4,4-Methylene-bis-(2-chloroaniline) | 101-14-4 | 0.50 | (2) | 35 | (1) |
| | | | Methylene chloride | 75-09-2 | 0.089 | (2) | 33 | (1) |
| | | | Methyl ethyl ketone | 78-93-3 | 0.28 | (2) | 36 | (1) |
| | | | Methyl isobutyl ketone | 108-10-1 | 0.14 | (2) | 33 | (1) |
| | | | Methyl methacrylate | 80-62-6 | 0.14 | (2) | 160 | (1) |
| | | | Methyl methansulfonate | 66-27-3 | 0.018 | (2) | NA | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Methyl parathion | 298-00-0 | 0.014 | (2) | 4.6 | (1) |
| | | | Naphthalene | 91-20-3 | 0.059 | (2) | 3.1 | (1) |
| | | | 2-Naphthylamine | 91-59-8 | 0.52 | (2) | NA | |
| | | | p-Nitroaniline | 100-01-6 | 0.028 | (2) | 28 | (1) |
| | | | Nitrobenzene | 98-95-3 | 0.068 | (2) | 14 | (1) |
| | | | 5-Nitro-o-toluidine | 99-55-8 | 0.32 | (2) | 28 | (1) |
| | | | 4-Nitrophenol | 100-02-7 | 0.12 | (2) | 29 | (1) |
| | | | N-Nitrosodiethylamine | 55-18-5 | 0.40 | (2) | 28 | (1) |
| | | | N-Nitrosodimethylamine | 62-75-9 | 0.40 | (2) | NA | |
| | | | N-Nitroso-di-n-butylamine | 924-16-3 | 0.40 | (2) | 17 | (1) |
| | | | N-Nitrosomethylethylamine | 10595-95-6 | 0.40 | (2) | 2.3 | (1) |
| | | | N-Nitrosomorpholine | 59-89-2 | 0.40 | (2) | 2.3 | (1) |
| | | | N-Nitrosopiperidine | 100-75-4 | 0.013 | (2) | 35 | (1) |
| | | | N-Nitrosopyrrolidine | 930-55-2 | 0.013 | (2) | 35 | (1) |
| | | | Parathion | 56-38-2 | 0.014 | (2) | 4.6 | (1) |
| | | | Pentachlorobenzene | 608-93-5 | 0.055 | (2) | 37 | (1) |
| | | | Pentachlorodibenzofurans | | 0.000063 | (2) | 0.001 | (1) |
| | | | Pentachlorodibenzo-p-dioxins | | 0.000063 | (2) | 0.001 | (1) |
| | | | Pentachloronitrobenzene | 82-68-8 | 0.055 | (2) | 4.8 | (1) |
| | | | Pentachlorophenol | 87-86-5 | 0.089 | (2) | 7.4 | (1) |
| | | | Phenacetin | 62-44-2 | 0.081 | (2) | 16 | (1) |
| | | | Phenanthrene | 85-01-8 | 0.059 | (2) | 3.1 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | (2) | 6.2 | (1) |
| | | | Phorate | 298-02-2 | 0.021 | (2) | 4.6 | (1) |
| | | | Phthalic anhydride | 85-44-9 | 0.069 | (2) | NA | |
| | | | Pronamide | 23950-58-5 | 0.093 | (2) | 1.5 | (1) |
| | | | Pyrene | 129-00-0 | 0.067 | (2) | 8.2 | (1) |
| | | | Pyridine | 110-86-1 | 0.014 | (2) | 16 | (1) |
| | | | Safrole | 94-59-7 | 0.081 | (2) | 22 | (1) |
| | | | Silvex (2,4,5-TP) | 93-72-1 | 0.72 | (2) | 7.9 | (1) |
| | | | 2,4,5-T | 93-76-5 | 0.72 | (2) | 7.9 | (1) |
| | | | 1,2,4,5,-Tetrachlorobenzene | 95-94-3 | 0.055 | (2) | 19 | (1) |
| | | | Tetrachlorodibenzofurans | | 0.000063 | (2) | 0.001 | (1) |
| | | | Tetrachlorodibenzo-p-dioxins | | 0.000063 | (2) | 0.001 | (1) |
| | | | 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.057 | (2) | 42 | (1) |
| | | | 1,1,2,2-Tetrachloroethane | 79-34-6 | 0.057 | (2) | 42 | (1) |
| | | | Tetrachloroethylene | 127-18-4 | 0.056 | (2) | 5.6 | (1) |
| | | | 2,3,4,6-Tetrachlorophenol | 58-90-2 | 0.030 | (2) | 37 | (1) |
| | | | Toluene | 108-88-3 | 0.080 | (2) | 28 | (1) |
| | | | Toxaphene | 8001-35-1 | 0.0095 | (2) | 1.3 | (1) |
| | | | 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | (2) | 19 | (1) |
| | | | 1,1,1-Trichloroethane | 71-55-6 | 0.054 | (2) | 5.6 | (1) |
| | | | 1,1,2-Trichloroethane | 79-00-5 | 0.054 | (2) | 5.6 | (1) |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Trichloroethylene | 79-01-6 | 0.054 | (2) | 5.6 | (1) |
| | | | 2,4,5-Trichlorophenol | 95-95-4 | 0.18 | (2) | 37 | (1) |
| | | | 2,4,6-Trichlorophenol | 88-06-2 | 0.035 | (2) | 37 | (1) |
| | | | 1,2,3-Trichloropropane | 96-18-4 | 0.85 | (2) | 28 | (1) |
| | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 76-13-1 | 0.057 | (2) | 28 | (1) |
| | | | Tris(2,3-dibromopropyl) phosphate | 126-72-7 | 0.11 | (2) | NA | |
| | | | Vinyl chloride | 75-01-4 | 0.27 | (2) | 33 | (1) |
| | | | Xylene(s) | | 0.32 | (2) | 28 | (1) |
| | | | Cyanides (Total) | 57-12-5 | 1.2 | (2) | 1.8 | (1) |
| | | | Fluoride | 16964-48-8 | 35 | (2) | NA | |
| | | | Sulfide | 8496-25-8 | 14 | (2) | NA | |
| | | | Antimony | 7440-36-0 | 1.9 | (2) | NA | |
| | | | Arsenic | 7440-38-2 | 1.4 | (2) | NA | |
| | | | Barium | 7440-39-3 | 1.2 | (2) | NA | |
| | | | Beryllium | 7440-41-7 | 0.82 | (2) | NA | |
| | | | Cadmium | 7440-43-9 | 0.20 | (2) | NA | |
| | | | Chromium (Total) | 7440-47-3 | 0.37 | (2) | NA | |
| | | | Copper | 7440-50-8 | 1.3 | (2) | NA | |
| | | | Lead | 7439-92-1 | 0.28 | (2) | NA | |
| | | | Mercury | 7439-97-6 | 0.15 | (2) | NA | |
| | | | Nickel | 7440-02-0 | 0.55 | (2) | NA | |
| | | | Selenium | 7782-49-2 | 0.82 | (2) | NA | |
| | | | Silver | 7440-22-4 | 0.29 | (2) | NA | |
| | | | Thallium | 7440-28-0 | 1.4 | (2) | NA | |
| | | | Vanadium | 7440-62-2 | 0.042 | (2) | NA | |
| | | | Zinc | 7440-66-6 | 1.0 | (2) | NA | |
| K001 | NA | Table CCWE in s. NR 675.21 | Naphthalene | 91-20-3 | 0.031 | (1) | 1.5 | (1) |
| | | | Pentachlorophenol | 87-86-5 | 0.18 | (1) | 7.4 | (1) |
| | | | Phenanthrene | 85-01-8 | 0.031 | (1) | 1.5 | (1) |
| | | | Pyrene | 129-00-0 | 0.028 | (1) | 1.5 | (1) |
| | | | Toluene | 108-88-3 | 0.028 | (1) | 28 | (1) |
| | | | Xylenes (Total) | | 0.032 | (1) | 33 | (1) |
| | | | Lead | 7439-92-1 | 0.037 | | NA | |
| K002 | NA | Table CCWE in s. NR 675.21 | Chromium (Total) | 7440-47-3 | 0.9 | (2) | NA | |
| | | | Lead | 7439-92-1 | 3.4 | (2) | NA | |
| K003 | NA | Table CCWE in s. NR 675.21 | Chromium (Total) | 7440-47-3 | 0.9 | (2) | NA | |
| | | | Lead | 7439-92-1 | 3.4 | (2) | NA | |
| K004 | NA | Table CCWE in s. NR 675.21 | Chromium (Total) | 7440-47-3 | 0.9 | (2) | NA | @ |
| | | | Lead | 7439-92-1 | 3.4 | (2) | NA | |
| K005 | NA | Table CCWE in s. NR 675.21 | Chromium (Total) | 7440-47-3 | 0.9 | (2) | NA | |
| | | | Lead | 7439-92-1 | 3.4 | (2) | NA | |
| | | | Cyanides (Total) | 57-12-5 | 0.74 | (2) | (4) | |
| K006 | NA | Table CCWE in s. NR 675.21 | Chromium (Total) | 7440-47-3 | 0.9 | 3.4 | (2) | NA |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Lead | 7439-92-1 | | | (2) | NA |
| K007 | NA | Table CCWE in s. NR 675.21 | Chromium (Total) | 7440-47-3 | 0.9 | (2) | NA | |
| | | | Lead | 7439-92-1 | 3.4 | (2) | NA | |
| | | | Cyanides (Total) | 57-12-5 | 0.74 | (2) | (4) | |
| K008 | NA | Table CCWE in s. NR 675.21 | Chromium (Total) | 7440-47-3 | 0.9 | (2) | NA | |
| | | | Lead | 7439-92-1 | 3.4 | (2) | NA | |
| K009 | NA | NA | Chloroform | 67-66-3 | 0.1 | | 6.0 | (1) |
| K010 | NA | NA | Chloroform | 67-66-3 | 0.1 | | 6.0 | (1) |
| K011 | NA | NA | Acetonitrile | 75-05-8 | 38 | | 1.8 | (1) |
| | | | Acrylonitrile | 107-13-1 | 0.06 | | 1.4 | (1) |
| | | | Acrylamide | 79-06-1 | 19 | | 23 | (1) |
| | | | Benzene | 71-43-2 | 0.02 | | 0.03 | (1) |
| | | | Cyanide (Total) | 57-12-5 | 21 | | 57 | |
| K013 | NA | NA | Acetonitrile | 75-05-8 | 38 | | 1.8 | (1) |
| | | | Acrylonitrile | 107-13-1 | 0.06 | | 1.4 | (1) |
| | | | Acrylamide | 79-06-1 | 19 | | 23 | (1) |
| | | | Benzene | 71-43-2 | 0.02 | | 0.03 | (1) |
| | | | Cyanide (Total) | 57-12-5 | 21 | | 57 | |
| K014 | NA | NA | Acetonitrile | 75-05-8 | 38 | | 1.8 | (1) |
| | | | Acrylonitrile | 107-13-1 | 0.06 | | 1.4 | (1) |
| | | | Acrylamide | 79-06-1 | 19 | | 23 | (1) |
| | | | Benzene | 71-43-2 | 0.02 | | 0.03 | (1) |
| | | | Cyanide (Total) | 57-12-5 | 21 | | 57 | |
| K015 | NA | Table CCWE in s. NR 675.21 | Anthracene | 120-12-7 | 0.059 | | 3.4 | (1) |
| | | | Benzal Chloride | 98-87-3 | 0.28 | | 6.2 | (1) |
| | | | Sum of Benzo(b) fluoranthene and Benzo(k) fluoranthene | 207-08-9 | 0.055 | | 3.4 | |
| | | | Phenanthrene | 85-01-8 | 0.059 | | 3.4 | (1) |
| | | | Toluene | 108-88-3 | 0.08 | | 6.0 | (1) |
| | | | Chromium (Total) | 7440-47-3 | 0.32 | | NA | |
| | | | Nickel | 7440-02-0 | 0.44 | | NA | |
| K016 | NA | | Hexachlorobenzene | 118-74-1 | 0.055 | | 28 | (1) |
| | | | Hexachlorobutadiene | 87-68-3 | 0.055 | | 5.6 | (1) |
| | | | Hexachloro-cyclopentadiene | 77-47-4 | 0.057 | | 5.6 | (1) |
| | | | Hexachloroethane | 67-72-1 | 0.055 | | 28 | (1) |
| | | | Tetrachloroethene | 127-18-4 | 0.056 | | 6.0 | (1) |
| K017 | NA | NA | 1,2-Dichloropropane | 78-87-5 | 0.85 | (1,2) | 18 | (1) |
| | | | 1,2,3-Trichloropropane | 96-18-4 | 0.85 | (1,2) | 28 | (1) |
| | | | Bis(2-chloroethyl)ether | 111-44-4 | 0.033 | (1,2) | 7.2 | (1) |
| K018 | NA | | Chloroethane | 76-00-3 | 0.27 | | 6.0 | (1) |
| | | | Chloromethane | 74-87-3 | 0.19 | | NA | |
| | | | 1,1-Dichloroethane | 75-34-3 | 0.059 | | 6.0 | (1) |
| | | | 1,2-Dichloroethane | 107-06-2 | 0.21 | | 6.0 | (1) |
| | | | Hexachlorobenzene | 118-74-1 | 0.055 | | 28 | (1) |
| | | | Hexachlorobutadiene | 87-68-3 | 0.055 | | 5.6 | (1) |
| | | | Pentachloroethane | 76-01-7 | NA | | 5.6 | |
| | | | 1,1,1-Trichloroethane | 71-55-6 | 0.054 | | 6.0 | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Hexachloroethane | 67-72-1 | 0.055 | | 28 | (1) |
| K019 | NA | | Bis(2-chloroethyl) ether | 111-44-4 | 0.033 | | 5.6 | (1) |
| | | | Chlorobenzene | 108-90-7 | 0.057 | | 6.0 | (1) |
| | | | Chloroform | 67-66-3 | 0.046 | | 6.0 | (1) |
| | | | p-Dichlorobenzene | 106-46-7 | 0.09 | | NA | |
| | | | 1,2-Dichloroethane | 107-06-2 | 0.21 | | 6.0 | (1) |
| | | | Fluorene | 86-73-7 | 0.059 | | NA | |
| | | | Hexachloroethane | 67-72-1 | 0.055 | | 28 | (1) |
| | | | Naphthalene | 91-20-3 | 0.059 | | 5.6 | (1) |
| | | | Phenanthrene | 85-01-8 | 0.059 | | 5.6 | (1) |
| | | | 1,2,4,5- Tetrachlorobenzene | 95-94-3 | 0.055 | | NA | |
| | | | Tetrachloroethene | 127-18-4 | 0.056 | | 6.0 | (1) |
| | | | 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | | 19 | (1) |
| | | | 1,1,1-Trichloroethane | 71-55-6 | 0.054 | | 6.0 | (1) |
| K020 | NA | | 1,2-Dichloroethane | 106-93-4 | 0.21 | | 6.0 | (1) |
| | | | 1,1,2,2-Tetrachloroethane | 79-34-6 | 0.057 | | 5.6 | (1) |
| | | | Tetrachloroethene | 127-18-4 | 0.056 | | 6.0 | (1) |
| K021 | NA | Table CCWE in s. NR 675.21 | Chloroform | 67-66-3 | 0.046 | (2) | 6.2 | (1) |
| | | | Carbon tetrachloride | 56-23-5 | 0.057 | (2) | 6.2 | (1) |
| | | | Antimony | 7440-36-0 | 0.60 | (2) | NA | (1) |
| K022 | NA | Table CCWE in s. NR 675.21 | Toluene | 108-88-3 | 0.080 | (2) | 0.034 | (1) |
| | | | Acetophenone | 96-86-2 | 0.010 | | 19 | (1) |
| | | | Diphenylamine | 22-39-4 | 0.52 | (2) | NA | |
| | | | Diphenylnitrosamine | 86-30-6 | 0.40 | (2) | NA | |
| | | | Sum of Diphenylamine and Diphenylnitrosamine | | NA | | 13 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | | 12 | (1) |
| | | | Chromium (Total) | 7440-47-3 | 0.35 | | NA | |
| | | | Nickel | 7440-02-0 | 0.47 | | NA | |
| K023 | NA | | Phthalic anhydride (measured as Phthalic acid) | 85-44-9 | 0.069 | | 28 | (1) |
| K024 | NA | | Phthalic anhydride (measured as Phthalic acid) | 85-44-9 | 0.069 | | 28 | (1) |
| K028 | NA | Table CCWE in s. NR 675.21 | 1,1-Dichloroethane trans-1,2- | 75-34-3 | 0.059 | | 6.0 | (1) |
| | | | Dichloroethane | | 0.054 | | 6.0 | (1) |
| | | | Hexachlorobutadiene | 87-68-3 | 0.055 | | 5.6 | (1) |
| | | | Hexachloroethane | 67-72-1 | 0.055 | | 28 | (1) |
| | | | Pentachloroethane | 76-01-7 | NA | | 5.6 | (1) |
| | | | 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.057 | | 5.6 | (1) |
| | | | 1,1,2,2-Tetrachloroethane | 79-34-6 | 0.057 | | 5.6 | (1) |
| | | | 1,1,1,-Trichloroethane | 71-55-6 | 0.054 | | 6.0 | (1) |
| | | | 1,1,2-Trichloroethane | 79-00-5 | 0.054 | | 6.0 | (1) |
| | | | Tetrachloroethylene | 127-18-4 | 0.056 | | 6.0 | (1) |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Cadmium | 7440-43-9 | 6.4 | | NA | |
| | | | Chromium (Total) | 7440-47-3 | 0.35 | | NA | |
| | | | Lead | 7439-92-1 | 0.037 | | NA | |
| | | | Nickel | 7440-02-0 | 0.47 | | NA | |
| K029 | NA | NA | Chloroform | 67-66-3 | 0.046 | | 6.0 | (1) |
| | | | 1,2-Dichloroethane | 107-06-2 | 0.21 | | 6.0 | (1) |
| | | | 1,1-Dichloroethylene | 75-35-4 | 0.025 | | 6.0 | (1) |
| | | | 1,1,1-Trichloroethane | 71-55-6 | 0.054 | | 6.0 | (1) |
| | | | Vinyl chloride | 75-01-4 | 0.27 | | 6.0 | (1) |
| K030 | NA | | o-Dichlorobenzene | 95-50-1 | 0.088 | | NA | |
| | | | p-Dichlorobenzene | 106-46-7 | 0.09 | | NA | |
| | | | Hexachlorobutadiene | 87-68-3 | 0.055 | | 5.6 | (1) |
| | | | Hexachloroethane | 67-72-1 | 0.055 | | 28 | (1) |
| | | | Hexachloropropene | 1888-71-7 | NA | | 19 | (1) |
| | | | Pentachlorobenzene | 608-93-5 | NA | | 28 | (1) |
| | | | Pentachloroethane | 76-01-7 | NA | | 5.6 | (1) |
| | | | 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | | 14 | (1) |
| | | | Tetrachloroethene | 127-18-4 | 0.056 | | 6.0 | (1) |
| | | | 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | | 19 | (1) |
| K030 | NA | | 2,4-Dichlorophenol | 120-83-2 | 0.044 | | 0.38 | (1) |
| | | | 2,6-Dichloropheno | 187-65-0 | 0.044 | | 0.34 | (1) |
| | | | 2,4,5-Trichlorophenol | 95-95-4 | 0.18 | | 8.2 | (1) |
| | | | 2,4,6-Trichlorophenol | 88-06-2 | 0.035 | | 7.6 | (1) |
| | | | Tetrachlorophenols (Total) | | NA | | 0.68 | (1) |
| | | | Pentachlorophenol | 87-86-5 | 0.089 | | 1.9 | (1) |
| | | | Tetrachloroethene | 79-01-6 | 0.056 | | 1.7 | (1) |
| | | | Hexachlorodibenzo-p-dioxins | | 0.000063 | | 0.001 | (1) |
| | | | Hexachlorodibenzofurans | | 0.000063 | | 0.001 | (1) |
| | | | Pentachlorodibenzo-p-dioxins | | 0.000063 | | 0.001 | (1) |
| | | | Pentachlorodibenzo furans | | 0.000063 | | 0.001 | (1) |
| | | | Tetrachlorodibenzo-p-dioxins | | 0.000063 | | 0.001 | (1) |
| | | | Tetrachlorodibenzofurans | | 0.000063 | | 0.001 | (1) |
| K031 | NA | Table CCWE in s. NR 675.21 | Arsenic | 7440-38-2 | 0.79 | | NA | (1) |
| K032 | NA | NA | Hexachloropentadiene | 77-47-4 | 0.057 | (2) | 2.4 | (1) |
| | | | Chlordane | 57-74-9 | 0.0033 | (2) | 0.26 | (1) |
| | | | Heptachlor | 76-44-8 | 0.0012 | (2) | 0.066 | (1) |
| | | | Heptachlor epoxide | 1024-57-3 | 0.016 | (2) | 0.066 | (1) |
| K033 | NA | NA | Hexachlorocyclopentadiene | 77-47-4 | 0.057 | (2) | 2.4 | (1) |
| K034 | NA | NA | Hexachlorocyclopentadiene | 77-47-4 | 0.057 | (2) | 2.4 | (1) |
| K035 | NA | NA | Acenaphthene | 83-32-9 | NA | | 3.4 | (1) |
| | | | Anthracene | 120-12-7 | NA | | 3.4 | (1) |
| | | | Benz(a)anthracene | 56-55-3 | 0.059 | (2) | 3.4 | (1) |
| | | | Benzo(a)pyrene | 50-32-8 | NA | | 3.4 | (1) |
| | | | Chrysene | 218-01-9 | 0.059 | (2) | 3.4 | (1) |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Dibenz(a,h)anthracene | 53-70-3 | NA | | 3.4 | (1) |
| | | | Fluoranthene | 206-44-0 | 0.068 | (2) | 3.4 | (1) |
| | | | Fluorene | 86-73-7 | NA | | 3.4 | (1) |
| | | | Indeno(1,2,3-cd)pyrene | 193-39-5 | NA | | 3.4 | (1) |
| | | | Cresols (m- and p-isomers) | | 0.77 | (2) | NA | |
| | | | Naphthalene | 91-20-3 | 0.059 | (2) | 3.4 | (1) |
| | | | o-cresol | 95-48-7 | 0.11 | (2) | NA | |
| | | | Phenanthrene | 85-01-8 | 0.059 | (2) | 3.4 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | | NA | |
| | | | Pyrene | 129-00-0 | 0.067 | (2) | 8-2 | (1) |
| K036 | NA | NA | Disulfoton | 298-04-4 | 0.025 | (2) | 0.1 | (1) |
| K037 | NA | NA | Disulfoton | 298-04-4 | 0.025 | (2) | 0.1 | (1) |
| | | | Toluene | 108-88-3 | 0.080 | (2) | 28 | (1) |
| K038 | NA | NA | Phorate | 298-02-2 | 0.025 | (2) | 0.1 | (1) |
| K040 | NA | NA | Phorate | 298-02-2 | 0.025 | (2) | 0.1 | (1) |
| K041 | NA | NA | Toxaphene | 8001-35-1 | 0.0095 | (2) | 2.6 | (1) |
| K042 | NA | NA | 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | (2) | 4.4 | (1) |
| | | | o-Dichlorobenzene | 95-50-1 | 0.088 | (2) | 4.4 | (1) |
| | | | p-Dichlorobenzene | 106-46-7 | 0.090 | (2) | 4.4 | (1) |
| | | | Pentachlorobenzene | 608-93-5 | 0.055 | (2) | 4.4 | (1) |
| | | | 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | (2) | 4.4 | (1) |
| K043 | NA | NA | 2,4-Dichlorophenol | 120-83-2 | 0.049 | (1) | 0.38 | (1) |
| | | | 2,6-Dichlorophenol | 87-65-0 | 0.013 | (1) | 0.34 | |
| | | | 2,4,5-Trichlorophenol | 95-95-4 | 0.016 | (1) | 8.2 | (1) |
| | | | 2,4,6-Trichlorophenol | 88-06-2 | 0.039 | (1) | 7.6 | (1) |
| | | | Tetrachlorophenols (Total) | | 0.018 | (1) | 0.68 | (1) |
| | | | Pentachlorophenol | 87-86-5 | 0.022 | (1) | 1.9 | (1) |
| | | | Tetrachloroethene | 79-01-6 | 0.006 | (1) | 1.7 | (1) |
| | | | Hexachlorodibenzo-p-dioxins | | 0.001 | (1) | 0.001 | (1) |
| | | | Hexachlorodibenzofurans | | 0.001 | (1) | 0.001 | (1) |
| | | | Pentachlorodibenzo-p-dioxins | | 0.001 | (1) | 0.001 | (1) |
| | | | Pentachlorodibenzofurans | | 0.001 | (1) | 0.001 | (1) |
| | | | Tetrachlorodibenzo-p-dioxins | | 0.001 | (1) | 0.001 | (1) |
| | | | Tetrachlorodibenzofurans | | 0.001 | (1) | 0.001 | (1) |
| K046 | NA | Table CCWE in s. NR 675.21 | Lead | 7439-92-1 | 0.37 | | NA | |
| K048 | NA | Table CCWE in s. NR 675.21 | Benzene | 71-43-2 | 0.14 | (2) | 14 | (1) |
| | | | Benzo(a)pyrene | 50-32-8 | 0.061 | (2) | 12 | (1) |
| | | | Bis(2-ethylhexyl) phthalate | 117-81-7 | 0.28 | (2) | 7.3 | (1) |
| | | | Chrysene | 218-01-9 | 0.059 | (2) | 15 | (1) |
| | | | Di-n-butyl phthalate | 84-74-2 | 0.057 | (2) | 3.6 | (1) |
| | | | Ethylbenzene | 100-41-4 | 0.057 | (2) | 14 | (1) |
| | | | Fluorene | 86-73-7 | 0.059 | (2) | NA | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Naphthalene | 91-20-3 | 0.059 | (2) | 42 | (1) |
| | | | Phenanthrene | 85-01-8 | 0.059 | (2) | 34 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | (2) | 3.6 | (1) |
| | | | Pyrene | 129-00-0 | 0.067 | (2) | 36 | (1) |
| | | | Toluene | 108-88-3 | 0.080 | (2) | 14 | (1) |
| | | | Xylene(s) | | 0.32 | (2) | 22 | (1) |
| | | | Cyanides (Total) | 57-12-5 | 0.028 | (1) | 1.8 | (1) |
| | | | Chromium (Total) | 7440-47-3 | 0.2 | | NA | |
| | | | Lead | 7439-92-1 | 0.037 | | NA | |
| K049 | NA | Table CCWE in s. NR 675.21 | Anthracene | 120-12-7 | 0.059 | (2) | 28 | (1) |
| | | | Benzene | 71-43-2 | 0.14 | (2) | 14 | (1) |
| | | | Benzo(a)pyrene | 117-81-7 | 0.061 | (2) | 12 | (1) |
| | | | Bis(2-ethylhexyl) phthalate | 75-150-0 | 0.28 | (2) | 7.3 | (1) |
| | | | Carbon disulfide | 75-15-0 | 0.014 | (2) | NA | |
| | | | Chrysene | 2218-01-9 | 0.059 | (2) | 15 | (1) |
| | | | 2,4-Dimethyl phenol | 105-67-9 | 0.036 | (2) | NA | |
| | | | Ethylbenzene | 100-41-4 | 0.057 | (2) | 14 | (1) |
| | | | Naphthalene | 91-20-3 | 0.059 | (2) | 42 | (1) |
| | | | Phenanthrene | 85-01-8 | 0.059 | (2) | 34 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | (2) | 3.6 | (1) |
| | | | Pyrene | 129-00-0 | 0.067 | (2) | 36 | (1) |
| | | | Toluene | 108-88-3 | 0.08 | (2) | 14 | (1) |
| | | | Xylene(s) | | 0.32 | (2) | 22 | (1) |
| | | | Cyanides (Total) | 56-12-5 | 0.028 | (1) | 1.8 | (1) |
| | | | Chromium (Total) | 7440-47-3 | 0.2 | | NA | |
| K050 | NA | Table CCWE in s. NR 675.21 | Lead | 7439-92-1 | 0.037 | | NA | |
| | | | Benzo(a)pyrene | 50-32-8 | 0.061 | (2) | 12 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | (2) | 3.6 | (1) |
| | | | Cyanides (Total) | 57-12-5 | 0.028 | (1) | 1.8 | (1) |
| | | | Chromium (Total) | 7440-47-3 | 0.2 | | NA | |
| | | | Lead | 7439-29-1 | 0.037 | | NA | |
| K051 | NA | Table CCWE in s. NR 675.21 | Acenaphthene | 83-32-9 | 0.059 | (2) | NA | |
| | | | Anthracene | 120-12-7 | 0.059 | (2) | 28 | (1) |
| | | | Benzene | 71-43-2 | 0.14 | (2) | 14 | (1) |
| | | | Benzo(a) anthracene | 50-32-8 | 0.059 | (2) | 20 | (1) |
| | | | Benzo(a)pyrene | 117-81-7 | 0.061 | (2) | 12 | (1) |
| | | | Bis(2-ethylhexyl) phthalate | 75-15-0 | 0.28 | (2) | 7.3 | (1) |
| | | | Chrysene | 2218-01-9 | 0.059 | (2) | 15 | (1) |
| | | | Di-n-butyl phthalate | 105-67-9 | 0.057 | (2) | 3.6 | (1) |
| | | | Ethylbenzene | 100-41-4 | 0.057 | (2) | 14 | (1) |
| | | | Fluorene | 86-73-7 | 0.059 | (2) | NA | |
| | | | Naphthalene | 91-20-3 | 0.059 | (2) | 42 | (1) |
| | | | Phenanthrene | 85-01-8 | 0.059 | (2) | 34 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | (2) | 3.6 | (1) |
| | | | Pyrene | 129-00-0 | 0.067 | (2) | 36 | (1) |
| | | | Toluene | 108-88-3 | 0.08 | (2) | 14 | (1) |
| | | | Xylene(s) | | 0.32 | (2) | 22 | (1) |
| | | | Cyanides (Total) | 57-12-5 | 0.028 | (1) | 1.8 | (1) |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Chromium (Total) | 7440-47-3 | 0.2 | | NA | |
| | | | Lead | 7439-92-1 | 0.037 | | NA | |
| | | | Benzene | 71-43-2 | 0.14 | (2) | 14 | (1) |
| | | | Benzo(a)pyrene | 50-32-8 | 0.061 | (2) | 12 | (1) |
| K052 | NA | Table CCWE in s. NR 675.21 | o-Cresol | 95-48-7 | 0.11 | (2) | 6.2 | (1) |
| | | | p-Cresol | 106-44-5 | 0.77 | (2) | 6.2 | (1) |
| | | | 2,4-Dimethylphenol | 105-67-9 | 0.036 | (2) | NA | |
| | | | Ethylbenzene | 100-41-4 | 0.057 | (2) | 14 | (1) |
| | | | Naphthalene | 91-20-3 | 0.059 | (2) | 42 | (1) |
| | | | Phenanthrene | 85-01-8 | 0.059 | (2) | 34 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | (2) | 3.6 | (1) |
| | | | Toluene | 108-88-3 | 0.08 | (2) | 14 | (1) |
| | | | Xylenes | | 0.32 | (2) | 22 | (1) |
| | | | Cyanides (Total) | 56-12-5 | 0.028 | (1) | 1.8 | (1) |
| | | | Chromium (Total) | 7440-47-3 | 0.2 | | NA | |
| | | | Lead | 7439-92-1 | 0.037 | | NA | |
| K060 | NA | NA | Benzene | 71-43-2 | 0.17 | (1,2) | 0.071 | (1) |
| | | | Benzo(a)pyrene | 50-32-8 | 0.035 | (1,2) | 3.6 | (1) |
| | | | Naphthalene | 91-20-3 | 0.028 | (1,2) | 3.4 | (1) |
| | | | Phenol | 108-95-2 | 0.042 | (1,2) | 3.4 | (1) |
| | | | Cyanides (Total) | 57-12-5 | 1.9 | | 1.2 | |
| K061 | NA | Table CCWE in s. NR 675.21 | Cadmium | 7440-43-9 | 1.61 | | NA | |
| | | | Chromium (Total) | 7440-47-3 | 0.32 | | NA | |
| | | | Lead | 7439-92-1 | 0.51 | | NA | |
| | | | Nickel | 7440-02-0 | 0.44 | | NA | |
| K062 | NA | Table CCWE in s. NR 675.21 | Chromium (Total) | 7440-47-3 | 0.32 | | NA | |
| | | | Lead | 7439-92-1 | 0.04 | | NA | |
| | | | Nickel | 7440-02-0 | 0.44 | | NA | |
| K069 | NA | Table CCWE in s. NR 675.21 and Table 2 in s. NR 675.22 | Cadmium | 7440-43-9 | 1.6 | | NA | |
| | | | Lead | 7439-92-1 | 0.51 | | NA | |
| K071 | NA | Table CCWE in s. NR 675.21 | Mercury | 7439-97-6 | 0.030 | | NA | |
| K073 | NA | NA | Carbon tetrachloride | 56-23-5 | 0.057 | (2) | 6.2 | (1) |
| | | | Chloroform | 67-66-3 | 0.046 | (2) | 6.2 | (1) |
| | | | Hexachloroethane | 67-72-1 | 0.055 | (2) | 30 | (1) |
| | | | Tetrachloroethane | 127-18-4 | 0.056 | (2) | 6.2 | (1) |
| | | | 1,1,1-Trichloroethane | 71-55-6 | 0.054 | (2) | 6.2 | (1) |
| K083 | NA | Table CCWE in s. NR 675.21 | Benzene | 71-43-2 | 0.14 | (2) | 6.6 | (1) |
| | | | Aniline | 62-53-3 | 0.81 | | 14 | (1) |
| | | | Diphenylamine | 22-39-4 | 0.52 | (2) | NA | |
| | | | Diphenylnitrosamine | 86-30-6 | 0.40 | (2) | NA | |
| | | | Sum of Diphenylamine and Diphenylnitrosamine | | NA | | 14 | (1) |
| | | | Nitrobenzene | 98-95-3 | 0.068 | (2) | 14 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | | 5.6 | (1) |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| | | | Cyclohexanone | 108-94-1 | 0.36 | | NA | |
| | | | Nickel | 7440-02-0 | 0.47 | | NA | |
| K084 | NA | NA | Arsenic | 7440-38-2 | 0.79 | | NA | |
| K085 | NA | NA | Benzene | 71-43-2 | 0.14 | (2) | 4.4 | (1) |
| | | | Chlorobenzene | 108-90-7 | 0.057 | (2) | 4.4 | (1) |
| | | | o-Dichlorobenzene | 95-50-1 | 0.088 | (2) | 4.4 | (1) |
| | | | m-Dichlorobenzene | 541-73-1 | 0.036 | (2) | 4.4 | (1) |
| | | | p-Dichlorobenzene | 106-46-7 | 0.090 | (2) | 4.4 | (1) |
| | | | 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | (2) | 4.4 | (1) |
| | | | 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | (2) | 4.4 | (1) |
| | | | Pentachlorobenzene | 608-93-5 | 0.055 | (2) | 4.4 | (1) |
| | | | Hexachlorobenzene | 118-74-1 | 0.055 | (2) | 4.4 | (1) |
| | | | Aroclor 1016 | 12674-11-2 | 0.013 | (2) | 0.92 | (1) |
| | | | Aroclor 1221 | 11104-28-2 | 0.014 | (2) | 0.92 | (1) |
| | | | Aroclor 1232 | 11141-16-5 | 0.013 | (2) | 0.92 | (1) |
| | | | Aroclor 1242 | 53469-21-9 | 0.017 | (2) | 0.92 | (1) |
| | | | Aroclor 1248 | 12672-29-6 | 0.013 | (2) | 0.92 | (1) |
| | | | Aroclor 1254 | 11097-69-1 | 0.014 | (2) | 1.8 | (1) |
| | | | Aroclor 1260 | 11096-82-5 | 0.014 | (2) | 1.8 | (1) |
| K086 | NA | Table CCWE in s. NR 675.21 | Acetone | 67-64-1 | 0.28 | | 160 | (1) |
| | | | Acetophenone | 96-86-2 | 0.010 | | 9.7 | (1) |
| | | | Bis(2-ethylhexyl)phthalate | 117-81-7 | 0.28 | (2) | 28 | (1) |
| | | | n-Butyl alcohol | 71-36-3 | 5.6 | | 2.6 | (1) |
| | | | Butylbenzylphthalate | 85-68-7 | 0.017 | (2) | 7.9 | (1) |
| | | | Cyclohexanone | 108-94-1 | 0.36 | | NA | |
| | | | 1,2-Dichlorobenzene | 95-50-1 | 0.088 | | 6.2 | (1) |
| | | | Diethyl phthalate | 84-66-2 | 0.20 | (2) | 28 | (1) |
| | | | Dimethyl phthalate | 131-11-3 | 0.047 | (2) | 28 | (1) |
| | | | Di-n-butyl phthalate | 84-74-2 | 0.057 | (2) | 28 | (1) |
| | | | Di-n-octyl phthalate | 117-84-0 | 0.017 | (2) | 28 | (1) |
| | | | Ethyl acetate | 141-78-6 | 0.34 | (2) | 33 | (1) |
| | | | Ethylbenzene | 100-41-4 | 0.057 | (2) | 6.0 | (1) |
| | | | Methanol | 67-56-1 | 5.6 | (2) | NA | |
| | | | Methyl isobutyl ketone | 108-10-1 | 0.14 | | 33 | (1) |
| | | | Methyl ethyl ketone | 78-93-3 | 0.28 | | 36 | (1) |
| | | | Methylene chloride | 75-09-2 | 0.089 | (2) | 33 | (1) |
| | | | Naphthalene | 91-20-3 | 0.059 | (2) | 3.1 | (1) |
| | | | Nitrobenzene | 98-95-3 | 0.068 | (2) | 14 | (1) |
| | | | Toluene | 108-88-3 | 0.080 | (2) | 28 | (1) |
| | | | 1,1,1-Trichloroethane | 71-55-6 | 0.054 | (2) | 5.6 | (1) |
| | | | Trichloroethylene | 79-01-6 | 0.054 | (2) | 5.6 | (1) |
| | | | Xylenes (Total) | | 0.32 | (2) | 28 | (1) |
| | | | Cyanides (Total) | 57-12-5 | 1.9 | | 1.5 | (1) |
| | | | Chromium (Total) | 7440-47-3 | 0.32 | | NA | |
| | | | Lead | 7439-92-1 | 0.037 | | NA | |
| K087 | NA | Table CCWE in s. NR 675.21 | Acenaphthalene | 208-96-8 | 0.059 | (2) | 3.4 | |
| | | | Benzene | 71-43-2 | 0.14 | (2) | 0.071 | (1) |
| | | | Chrysene | 218-01-9 | 0.059 | (2) | 3.4 | (1) |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/1) | Notes | Concentration (mg/kg) | Notes |
| | | | Fluoranthene | 206-44-0 | 0.068 | (2) | 3.4 | (1) |
| | | | Indeno (1,2,3-cd) pyrene | 193-39-5 | 0.0055 | (2) | 3.4 | (1) |
| | | | Naphthalene | 91-20-3 | 0.059 | (2) | 3.4 | (1) |
| | | | Phenanthrene | 85-01-8 | 0.059 | (2) | 3.4 | (1) |
| | | | Toluene | 108-88-3 | 0.08 | (2) | 0.65 | (1) |
| | | | Xylenes | | 0.32 | (2) | 0.07 | (1) |
| | | | Lead | 7439-92-1 | 0.037 | | NA | |
| K093 | NA | | Phthalic anhydride (measured as Phthalic acid) | 85-44-9 | 0.069 | | 28 | (1) |
| K094 | NA | | Phthalic anhydride (measured as Phthalic acid) | 85-44-9 | 0.069 | | 28 | (1) |
| K095 | NA | NA | 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.057 | | 5.6 | (1) |
| | | | 1,1,2,2-Tetrachloroethane | 79-34-6 | 0.057 | | 5.6 | (1) |
| | | | Tetrachloroethene | 127-18-4 | 0.056 | | 6.0 | (1) |
| | | | 1,1,2-Trichloroethane | 79-00-5 | 0.054 | | 6.0 | (1) |
| | | | Trichloroethylene | 79-01-6 | 0.054 | | 5.6 | (1) |
| | | | Hexachloroethane | 67-72-1 | 0.055 | | 28 | (1) |
| | | | Pentachloroethane | 76-01-7 | 0.055 | | 5.6 | (1) |
| K096 | NA | NA | 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.057 | | 5.6 | (1) |
| | | | 1,1,2,2-Tetrachloroethane | 79-34-6 | 0.057 | | 5.6 | (1) |
| | | | Tetrachloroethene | 127-18-4 | 0.056 | | 6.0 | (1) |
| | | | 1,1,2-Trichloroethane | 79-00-5 | 0.054 | | 6.0 | (1) |
| | | | Trichloroethene | 79-01-6 | 0.054 | | 5.6 | (1) |
| | | | Trichloroethylene | 79-01-6 | 0.054 | | 5.6 | (1) |
| | | | 1,3-Dichlorobenzene | 541-73-1 | 0.036 | | 5.6 | (1) |
| | | | Pentachloroethane | 76-01-7 | 0.055 | | 5.6 | (1) |
| | | | 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | | 19 | (1) |
| K097 | NA | NA | Hexachlorocyclopentadiene | 77-47-4 | 0.057 | (2) | 2.4 | (1) |
| | | | Chlordane | 57-74-9 | 0.0033 | (2) | 0.26 | (1) |
| | | | Heptachlor | 76-44-8 | 0.0012 | (2) | 0.066 | (1) |
| | | | Heptachlor epoxide | 1024-57-3 | 0.016 | (2) | 0.066 | (1) |
| K098 | NA | NA | Toxaphene | 8001-35-1 | 0.0095 | (2) | 2.6 | (1) |
| K099 | NA | NA | 2,4-Dichlorophenoxyacetic acid | 94-75-7 | 1.0 | (1) | 1.0 | (1) |
| | | | Hexachlorodibenzo-p-dioxins | | 0.001 | (1) | 0.001 | (1) |
| | | | Hexachlorodibenzofurans | | 0.001 | (1) | 0.001 | (1) |
| | | | Pentachlorodibenzo-p-dioxins | | 0.001 | (1) | 0.001 | (1) |
| | | | Pentachlorodibenzofurans | | 0.001 | (1) | 0.001 | (1) |
| | | | Tetrachlorodibenzo-p-dioxins | | 0.001 | (1) | 0.001 | (1) |
| | | | Tetrachlorodibenzofurans | | 0.001 | (1) | 0.001 | (1) |
| K100 | NA | Table CCWE in s. NR 675.21 | Cadmium | 7440-43-9 | 1.6 | | NA | |
| | | | Chromium (Total) | 7440-47-3 | 0.32 | | NA | |
| | | | Lead | 7439-92-1 | 0.51 | | NA | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| K101 | NA | NA | o-Nitroaniline | | 0.27 | (1) | 14 | (1) |
| | | | Arsenic | 7440-38-2 | 0.79 | | NA | |
| | | | Cadmium | 7440-43-9 | 0.24 | | NA | |
| | | | Lead | 7439-92-1 | 0.17 | | NA | |
| | | | Mercury | 7439-97-6 | 0.082 | | NA | |
| K102 | NA | Table CCWE in s. NR 675.21 | o-Nitrophenol | | 0.028 | (1) | 13 | (1) |
| | | | Arsenic | 7440-38-2 | 0.79 | | NA | |
| | | | Cadmium | 7440-43-9 | 0.24 | | NA | |
| | | | Lead | 7439-92-1 | 0.17 | | NA | |
| | | | Mercury | 7439-97-6 | 0.082 | | NA | |
| K103 | NA | NA | Aniline | 62-53-3 | 4.5 | | 5.6 | (1) |
| | | | Benzene | 71-43-2 | 0.15 | | 6.0 | (1) |
| | | | 2,4-Dinitrophenol | 51-28-5 | 0.61 | | 5.6 | (1) |
| | | | Nitrobenzene | 98-95-3 | 0.073 | | 5.6 | (1) |
| | | | Phenol | 108-95-2 | 1.4 | | 5.6 | (1) |
| K104 | NA | NA | Aniline | 62-53-3 | 4.5 | | 5.6 | (1) |
| | | | Benzene | 71-43-2 | 0.15 | | 6.0 | (1) |
| | | | 2,4-Dinitrophenol | 51-28-5 | 0.61 | | 5.6 | (1) |
| | | | Nitrobenzene | 98-95-3 | 0.073 | | 5.6 | (1) |
| | | | Phenol | 108-95-2 | 1.4 | | 5.6 | (1) |
| | | | Cyanides (Total) | 57-12-5 | 2.7 | | 1.8 | (1) |
| K105 | NA | NA | Benzene | 71-43-2 | 0.14 | | 4.4 | (1) |
| | | | Chlorobenzene | 108-90-7 | 0.057 | | 4.4 | (1) |
| | | | o-Dichlorobenzene | 95-50-1 | 0.088 | | 4.4 | (1) |
| | | | p-Dichlorobenzene | 106-46-7 | 0.090 | | 4.4 | (1) |
| | | | 2,4,5-Trichlorophenol | 95-95-4 | 0.18 | | 4.4 | (1) |
| | | | 2,4,6-Trichlorophenol | 88-06-2 | 0.035 | | 4.4 | (1) |
| | | | 2-Chlorophenol | 95-57-8 | 0.044 | | 4.4 | (1) |
| | | | Phenol | 108-95-2 | 0.039 | | 4.4 | (1) |
| K106 | NA | Table CCWE in s. NR 675.21 and Table 2 in s. NR 675.22 | Mercury | 7439-97-6 | 0.030 | | NA | |
| K111 | NA | | 2,4-Dinitrotoluene | 121-14-2 | 0.32 | | 140 | (1) |
| | | | 2,6-Dinitrotoluene | 606-20-2 | 0.55 | | 28 | (1) |
| K115 | NA | Table CCWE in s. NR 675.21 | Nickel | 7440-02-0 | 0.47 | | NA | |
| K117 | NA | | Ethylene dibromide | 106-93-4 | 0.028 | | 15 | (1) |
| | | | Methyl bromide | 74-83-9 | 0.11 | | 15 | (1) |
| | | | Chloroform | 67-66-3 | 0.046 | | 5.6 | (1) |
| K118 | NA | | Ethylene dibromide | 106-93-4 | 0.028 | | 15 | (1) |
| | | | Methyl bromide | 74-83-9 | 0.11 | | 15 | (1) |
| | | | Chloroform | 67-66-3 | 0.046 | | 5.6 | (1) |
| K131 | NA | | Methyl bromide | 74-83-9 | 0.11 | | 15 | (1) |
| K132 | NA | | Methyl bromide | 74-83-9 | 0.11 | | 15 | (1) |
| K136 | NA | | Ethylene dibromide | 106-93-4 | 0.028 | | 15 | (1) |
| | | | Methyl bromide | 74-83-9 | 0.11 | | 15 | (1) |
| | | | Chloroform | 67-66-3 | 0.046 | | 5.6 | (1) |
| P004 | Aldrin | NA | Aldrin | 309-00-2 | 0.021 | (2) | 0.066 | (1) |
| P010 | Arsenic acid | Table CCWE in s. NR 675.21 | Arsenic | 7440-38-2 | 0.79 | | NA | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| P011 | Arsenic pentoxide | Table CCWE in s. NR 675.21 | Arsenic | 7440-38-2 | 0.79 | | NA | |
| P012 | Arsenic trioxide | Table CCWE in s. NR 675.21 | Arsenic | 7440-38-2 | 0.79 | | NA | |
| P013 | Barium cyanide | Table CCWE in s. NR 675.21 | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.1 | | 9.1 | |
| P020 | 2-sec-Butyl-4,6-dinitrophenol (Dinoseb) | NA | 2-sec-Butyl-4,6-dinitrophenol (Dinoseb) | 88-85-7 | 0.066 | | 2.5 | (1) |
| P021 | Calcium cyanide | NA | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.1 | | 9.1 | |
| P022 | Carbon disulfide | Table 2 in s. NR 675.22 | Carbon disulfide | 75-15-0 | 0.014 | | NA | |
| P024 | p-Chloroaniline | NA | p-Chloroaniline | 106-47-8 | 0.46 | | 16 | (1) |
| P029 | Copper cyanide | NA | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.1 | | 9.1 | |
| P030 | Cyanides (soluble salts and complexes) | NA | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.1 | | 9.1 | |
| P036 | Dichlorophenylarsine | Table CCWE in s. NR 675.21 | Arsenic | 7440-38-2 | 0.79 | | NA | |
| P037 | Dieldrin | NA | Dieldrin | 60-57-1 | 0.017 | (2) | 0.13 | (1) |
| P038 | Diethylarsine | Table CCWE in s. NR 675.21 | Arsenic | 7440-38-2 | 0.79 | | NA | |
| P039 | Disulfoton | NA | Disulfoton | 298-04-4 | 0.017 | | 0.1 | (1) |
| P047 | 4,6-Dinitro-o-cresol | NA | 4,6-Dinitro-o-cresol | 534-52-1 | 0.28 | (2) | 160 | (1) |
| P048 | 2,4-Dinitrophenol | NA | 2,4-Dinitrophenol | 51-28-5 | 0.12 | (2) | 160 | (1) |
| P050 | Endosulfan | NA | Endosulfan I | 939-98-8 | 0.023 | (2) | 0.066 | (1) |
| | | | Endosulfan II | 33213-6-5 | 0.029 | (2) | 0.13 | (1) |
| | | | Endosulfan sulfate | 1031-07-8 | 0.029 | (2) | 0.13 | (1) |
| P051 | Endrin | NA | Endrin | 72-20-8 | 0.0028 | (2) | 0.13 | (1) |
| | | | Endrin aldehyde | 7421-93-4 | 0.025 | (2) | 0.13 | (1) |
| P056 | Fluoride | Table 2 in s. NR 675.22 | Fluoride | 16964-48-8 | 35 | | NA | |
| P059 | Heptachlor | NA | Heptachlor | 76-44-8 | 0.0012 | (2) | 0.066 | (1) |
| | | | Heptachlor epoxide | 1024-57-3 | 0.016 | (2) | 0.066 | (1) |
| P060 | Isodrin | NA | Isodrin | 465-73-6 | 0.021 | (2) | 0.066 | (1) |
| P063 | Hydrogen cyanide | NA | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.10 | | 9.1 | |
| P065 | Mercury fulminate | Table CCWE in s. NR 675.21 and Table 2 in s. NR 675.22 | Mercury | 7439-97-6 | 0.030 | | NA | |
| P071 | Methyl parathion | NA | Methyl parathion | 298-00-0 | 0.025 | | 0.1 | (1) |
| P073 | Nickel carbonyl | Table CCWE in s. NR 675.21 | Nickel | 7440-02-0 | 0.44 | | NA | |
| P074 | Nickel cyanide | Table CCWE in s. NR 675.21 | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.10 | | 9.1 | |
| | | | Nickel | 7440-02-0 | 0.44 | | NA | |
| P077 | p-Nitroaniline | NA | p-Nitroaniline | 100-01-6 | 0.028 | (2) | 28 | (1) |
| P082 | N-Nitrosodimethylamine | Table 2 in s. NR 675.22 | N-Nitrosodimethylamine | 62-75-9 | 0.40 | (2) | NA | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| P089 | Parathion | NA | Parathion | 56-38-2 | 0.025 | | 0.1 | (1) |
| P092 | Phenylmercury acetate | Table CCWE in s. NR 675.21 and Table 2 in s. NR 675.22 | Mercury | 7439-97-6 | 0.030 | | NA | |
| P094 | Phorate | NA | Phorate | 298-02-2 | 0.025 | | 0.1 | (1) |
| P097 | Famphur | NA | Famphur | 52-85-7 | 0.025 | | 0.1 | (1) |
| P098 | Potassium cyanide | NA | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.10 | | 9.1 | |
| P099 | Potassium silver cyanide | Table CCWE in s. NR 675.21 | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.1 | | 9.1 | |
| | | | Silver | 7440-22-4 | 0.29 | | NA | |
| P101 | Ethyl cyanide (Propanenitrile) | NA | Ethyl cyanide (Propanenitrile) | 107-12-0 | 0.24 | (2) | 360 | (1) |
| P103 | Selenourea | Table CCWE in s. NR 675.21 | Selenium | 7782-49-2 | 1.0 | (2) | NA | |
| P104 | Silver cyanide | Table CCWE in s. NR 675.21 | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.10 | | 9.1 | |
| | | | Silver | 7440-22-4 | 0.29 | | NA | |
| P106 | Sodium cyanide | NA | Cyanides (Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.10 | | 9.1 | |
| P110 | Tetraethyl lead | Table CCWE in s. NR 675.21 and Table 2 in s. NR 675.22 | Lead | 7439-92-1 | 0.040 | | NA | |
| P113 | Thallic oxide | Table 2 in s. NR 675.22 | Thallium | 7440-28-0 | 0.14 | (2) | NA | |
| P114 | Thallium selenite | Table CCWE in s. NR 675.21 | Selenium | 7782-49-2 | 1.0 | | NA | |
| P115 | Thallium(I)sulfate | Table 2 in s. NR 675.22 | Thallium | 7440-28-0 | 0.14 | (2) | NA | |
| P119 | Ammonia vandate | Table 2 in s. NR 675.22 | Vanadium | 7440-62-2 | 28 | (2) | NA | |
| P120 | Vanadium pentoxide | Table 2 in s. NR 675.22 | Vanadium | 7440-62-2 | 28 | (2) | NA | |
| P121 | Zinc cyanide | NA | Cyanides Total) | 57-12-5 | 1.9 | | 110 | |
| | | | Cyanides (Amenable) | 57-12-5 | 0.10 | | 9.1 | |
| P123 | Toxaphene | NA | Toxaphene | 8001-35-1 | 0.0095 | (2) | 1.3 | (1) |
| U002 | Acetone | NA | Acetone | 67-64-1 | 0.28 | | 160 | (1) |
| U003 | Acetonitrile | Table 2 in s. NR 675.22 | Acetonitrile | 75-05-8 | 0.17 | | NA | |
| U004 | Acetophenone | NA | Acetophenone | 98-86-2 | 0.010 | (1) | 9.7 | (1) |
| U005 | 2-Acetylaminofluorene | NA | 2-Acetylaminofluorene | 53-96-3 | 0.059 | (2) | 140 | (1) |
| U009 | Acrylonitrile | NA | Acrylonitrile | 107-13-1 | 0.24 | (2) | 84 | (1) |
| U012 | Aniline | NA | Aniline | 62-53-3 | 0.81 | | 14 | (1) |
| U018 | Benz(a)anthracene | NA | Benz(a)anthracene | 56-55-3 | 0.059 | (2) | 8.2 | (1) |
| U019 | Benzene | NA | Benzene | 71-43-2 | 0.14 | (2) | 36 | (1) |
| U022 | Benzo(a)pyrene | NA | Benzo(a)pyrene | 50-32-8 | 0.061 | (2) | 8.2 | (1) |
| U024 | Bis(2-chloroethoxy) methane | NA | Bis(2-chloroethoxy) methane | 111-91-1 | 0.036 | | 7.2 | (1) |
| U025 | Bis(2-chloroethyl)ether | NA | Bis(2-chloroethyl)ether | 111-44-4 | 0.033 | | 7.2 | (1) |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| U027 | Bis(2-chloroisopropyl)ether | NA | Bis(2-chloroisopropyl)ether | 39638-32-9 | 0.055 | (2) | 7.2 | (1) |
| U028 | Bis(2-ethylhexyl) phthalate | | Bis(2-ethylhexyl) phthalate | 117-81-7 | 0.28 | | 28 | (1) |
| U029 | Bromomethane (Methyl bromide) | NA | Bromomethane (Methyl bromide) | 74-83-9 | 0.11 | (1) | 15 | (1) |
| U030 | 4-Bromophenyl phenyl ether | NA | 4-Bromophenyl phenyl ether | 101-55-3 | 0.055 | (1) | 15 | (1) |
| U031 | n-Butyl alcohol | NA | n-Butyl alcohol | 71-36-3 | 5.6 | | 2.6 | (1) |
| U032 | Calcium chromate | Table CCWE in s. NR 675.21 | Chromium (Total) | 7440-47-3 | 0.32 | | NA | |
| U036 | Chlordane (alpha and gamma) | NA | Chlordane (alpha and gamma) | 57-74-9 | 0.0033 | (2) | 0.13 | (1) |
| U037 | Chlorobenzene | NA | Chlorobenzene | 108-90-7 | 0.057 | (2) | 5.7 | (1) |
| U038 | Chlorobenzilate | Table 2 in s. NR 675.22 | Chlorobenzilate | 510-15-6 | 0.10 | (2) | NA | |
| U039 | p-Chloro-m-cresol | NA | p-Chloro-m-cresol | 59-50-7 | 0.018 | (2) | 14 | (1) |
| U043 | Vinyl chloride | NA | Vinyl chloride | 75-01-4 | 0.27 | (2) | 33 | (1) |
| U044 | Chloroform | NA | Chloroform | 67-66-3 | 0.046 | (2) | 5.6 | (1) |
| U045 | Chloromethane (Methyl chloride) | NA | Chloromethane (Methyl chloride) | 74-87-3 | 0.19 | (2) | 33 | (1) |
| U047 | 2-Chloronaphthalene | NA | 2-Chloronaphthalene | 91-58-7 | 0.055 | (2) | 5.6 | (1) |
| U048 | 2-Chlorophenol | NA | 2-Chlorophenol | 95-57-8 | 0.044 | (2) | 5.7 | (1) |
| U050 | Chrysene | NA | Chrysene | 218-01-9 | 0.059 | (2) | 8.2 | (1) |
| U051 | Creosote | Table CCWE in s. NR 675.21 | Naphthalene | 91-20-3 | 0.031 | | 1.5 | (1) |
| | | | Pentacholorophenol | 87-86-5 | 0.18 | | 7.4 | (1) |
| | | | Phenanthrene | 85-01-8 | 0.031 | | 1.5 | (1) |
| | | | Pyrene | 129-00-0 | 0.028 | | 1.5 | (1) |
| | | | Toluene | 108-88-3 | 0.028 | | 28 | (1) |
| | | | Xylenes (Total) | | 0.032 | | 33 | (1) |
| | | | Lead | 7439-92-1 | 0.037 | | NA | |
| U052 | Cresols (Cresylic acid) | NA | o-Cresol | 95-48-7 | 0.11 | (2) | 5.6 | (1) |
| | | | Cresols (m- and p-isomers) | | 0.77 | (2) | 3.2 | (1) |
| U057 | Cyclohexanone | Table 2 in s. NR 675.22 | Cyclohexanone | 108-94-1 | 0.36 | | NA | |
| U060 | DDD | NA | o,p'-DDD | 53-19-0 | 0.023 | | 0.087 | (1) |
| | | | p,p'-DDD | 72-54-8 | 0.023 | | 0.087 | (1) |
| U061 | DDT | NA | o,p'-DDT | 789-02-6 | 0.0039 | (2) | 0.087 | (1) |
| | | | p,p'-DDT | 50-29-3 | 0.0039 | (2) | 0.087 | (1) |
| | | | o,p'-DDD | 53-19-0 | 0.023 | (2) | 0.087 | (1) |
| | | | p,p'-DDD | 72-54-8 | 0.023 | (2) | 0.087 | (1) |
| | | | o,p'-DDE | 3424-82-6 | 0.031 | (2) | 0.087 | (1) |
| | | | p,p'-DDE | 72-55-9 | 0.031 | (2) | 0.087 | (1) |
| U063 | Dibenzo(a,h) anthracene | NA | Dibenzo(a,h) anthracene | 53-70-3 | 0.055 | (2) | 8.2 | (1) |
| U066 | 1,2-Dibromo-3-chloropropane | NA | 1,2-Dibromo-3-chloropropane | 96-12-8 | 0.11 | (2) | 15 | (1) |
| U067 | 1,2-Dibromoethane (Ethylene dibromide) | NA | 1,2-Dibromoethane (Ethylene dibromide) | 106-93-4 | 0.028 | (2) | 15 | (1) |
| U068 | Dibromomethane | NA | Dibromomethane | 74-95-3 | 0.11 | (2) | 15 | (1) |
| U069 | Di-n-butyl phthalate | | Di-n-butyl phthalate | 84-74-2 | 0.057 | | 28 | (1) |
| U070 | o-Dichlorobenzene | NA | o-Dichlorobenzene | 95-50-1 | 0.088 | (2) | 6.2 | (1) |
| U071 | m-Dichlorobenzene | NA | m-Dichlorobenzene | 541-73-1 | 0.036 | | 6.2 | (1) |
| U072 | p-Dichlorobenzene | NA | p-Dichlorobenzene | 104-46-7 | 0.090 | (2) | 6.2 | (1) |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| U075 | Dichlorodifluoromethane | NA | Dichlorodifluoromethane | 75-71-8 | 0.23 | (2) | 7.2 | (1) |
| U076 | 1,1-Dichloroethane | NA | 1,1-Dichloroethane | 75-34-3 | 0.059 | (2) | 7.2 | (1) |
| U077 | 1,2-Dichloroethane | NA | 1,2-Dichloroethane | 107-06-2 | 0.21 | (2) | 7.2 | (1) |
| U078 | 1,1-Dichloroethylene | NA | 1,1-Dichloroethylene | 75-35-4 | 0.025 | (2) | 33 | (1) |
| U079 | 1,2-Dichloroethylene | NA | trans-1,2-Dichloroethylene | 156-60-5 | 0.054 | (2) | 33 | (1) |
| U080 | Methylene chloride | NA | Methylene chloride | 75-09-2 | 0.089 | (2) | 33 | (1) |
| U081 | 2,4-Dichlorophenol | NA | 2,4-Dichlorophenol | 120-83-2 | 0.044 | (2) | 14 | (1) |
| U082 | 2,6-Dichlorophenol | NA | 2,6-Dichlorophenol | 87-65-0 | 0.044 | (2) | 14 | (1) |
| U083 | 1,2-Dichloropropane | NA | 1,2-Dichloropropane | 78-87-5 | 0.85 | (2) | 18 | (1) |
| U084 | 1,3-Dichloropropene | NA | cis-1,3-Dichloropropylene | 10061-01-5 | 0.036 | (2) | 18 | (1) |
| | | | trans-1,3-Dichloropropylene | 10061-02-6 | 0.036 | (2) | 18 | (1) |
| U088 | Diethyl phthalate | | Diethyl phthalate | 84-66-2 | 0.2 | | 28 | (1) |
| U093 | p-Dimethylaminoazobenzene | Table 2 in s. NR 675.22 | p-Dimethylaminoazobenzene | 60-11-7 | 0.13 | (2) | NA | |
| U101 | 2,4-Dimethylphenol | NA | 2,4-Dimethylphenol | 105-67-9 | 0.036 | (2) | 14 | (1) |
| U102 | Dimethyl phthalate | | Dimethyl phthalate | 131-11-3 | 0.047 | | 28 | (1) |
| U105 | 2,4-Dinitrotoluene | NA | 2,4-Dinitrotoluene | 121-14-2 | 0.32 | (2) | 140 | (1) |
| U106 | 2,6-Dinitrotoluene | NA | 2,6-Dinitrotoluene | 606-20-2 | 0.55 | (2) | 28 | (1) |
| U107 | Di-n-octyl phthalate | | Di-n-octyl phthalate | 117-84-0 | 0.017 | | 28 | (1) |
| U108 | 1,4-Dioxane | NA | 1,4-Dioxane | 123-91-1 | 0.12 | (2) | 170 | (1) |
| U111 | Di-n-propylnitrosoamine | NA | Di-n-propylnitrosoamine | 621-64-7 | 0.40 | (2) | 14 | (1) |
| U112 | Ethyl acetate | NA | Ethyl acetate | 141-78-6 | 0.34 | (2) | 33 | (1) |
| U117 | Ethyl ether | NA | Ethyl ether | 60-29-7 | 0.12 | (2) | 160 | (1) |
| U118 | Ethyl methacrylate | NA | Ethyl methacrylate | 97-63-2 | 0.14 | (2) | 160 | (1) |
| U120 | Fluoranthene | NA | Fluoranthene | 206-44-0 | 0.068 | (2) | 8.2 | (1) |
| U121 | Trichloromonofluoromethane | NA | Trichloromonofluoromethane | 75-69-4 | 0.020 | (2) | 33 | (1) |
| U127 | Hexachlorobenzene | NA | Hexachlorobenzene | 118-74-1 | 0.055 | (2) | 37 | (1) |
| U128 | Hexachlorobutadiene | NA | Hexachlorobutadiene | 87-68-3 | 0.055 | (2) | 28 | (1) |
| U129 | Lindane | NA | alpha-BHC | 319-84-6 | 0.00014 | (2) | 0.66 | (1) |
| | | | beta-BHC | 319-85-7 | 0.00014 | (2) | 0.66 | (1) |
| | | | Delta-BHC | 319-86-8 | 0.023 | (2) | 0.66 | (1) |
| | | | gamma-BHC (Lindane) | 58-89-9 | 0.0017 | (2) | 0.66 | (1) |
| U130 | Hexachlorocyclopentadiene | NA | Hexachlorocyclopentadiene | 77-47-7 | 0.057 | (2) | 3.6 | (1) |
| U131 | Hexachloroethane | NA | Hexachloroethane | 67-72-1 | 0.055 | (2) | 28 | (1) |
| U134 | Hydrogen fluoride | Table 2 in s. NR 675.22 | Fluoride | 16964-48-8 | 35 | | NA | |
| U136 | Cacodylic acid | Table CCWE in s. NR 675.21 | Arsenic | 7440-38-2 | 0.79 | | NA | |
| U137 | Indeno(1,2,3-c,d)pyrene | NA | Indeno(1,2,3-c,d)pyrene | 193-39-5 | 0.0055 | (2) | 8.2 | (1) |
| U138 | Iodomethane | NA | Iodomethane | 74-88-4 | 0.19 | (2) | 65 | (1) |
| U140 | Isobutyl alcohol | NA | Isobutyl alcohol | 78-83-1 | 5.6 | | 170 | (1) |
| U141 | Isosafrole | NA | Isosafrole | 120-58-1 | 0.081 | | 2.6 | (1) |
| U142 | Kepone | NA | Kepone | 143-50-8 | 0.0011 | | 0.13 | (1) |
| U144 | Lead acetate | Table CCWE in s. NR 675.21 | Lead | 7439-92-1 | 0.040 | | NA | |
| U145 | Lead phosphate | Table CCWE in s. NR 675.21 | Lead | 7439-92-1 | 0.040 | | NA | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| U146 | Lead subacetate | Table CCWE in s. NR 675.21 | Lead | 7439-92-1 | 0.040 | | NA | |
| U151 | Mercury | Table CCWE in s. NR 675.21 and Table 2 in s. NR 675.22 | Mercury | 7439-97-6 | 0.030 | | NA | |
| U152 | Methacrylonitrile | NA | Methacrylonitrile | 126-98-7 | 0.24 | (2) | 84 | (1) |
| U154 | Methanol | See also Table 2 in s. NR 675.22 | Methanol | 67-56-1 | 5.6 | | NA | |
| U155 | Methapyrilene | NA | Methapyrilene | 91-80-5 | 0.081 | | 1.5 | (1) |
| U157 | 3-Methylcholanthrene | NA | 3-Methylcholanthrene | 56-49-5 | 0.0055 | (2) | 15 | (1) |
| U158 | 4,4'-Methylenebis(2-chloroaniline) | NA | 4,4'-Methylenebis(2-chloroaniline) | 101-14-4 | 0.50 | (2) | 35 | (1) |
| U159 | Methyl ethyl ketone | NA | Methyl ethyl ketone | 78-93-3 | 0.28 | | 36 | (1) |
| U161 | Methyl isobutyl ketone | NA | Methyl isobutyl ketone | 108-10-1 | 0.14 | | 33 | (1) |
| U162 | Methyl methacrylate | NA | Methyl methacrylate | 80-62-6 | 0.14 | | 160 | (1) |
| U165 | Naphthalene | NA | Naphthalene | 91-20-3 | 0.059 | (2) | 3.1 | (1) |
| U168 | 2-Naphthylamine | Table 2 in s. NR 675.22 | 2-Naphthylamine | 91-59-8 | 0.52 | (2) | NA | |
| U169 | Nitrobenzene | NA | Nitrobenzene | 98-95-3 | 0.068 | (2) | 14 | (1) |
| U170 | 4-Nitrophenol | NA | 4-Nitrophenol | 100-02-7 | 0.12 | (2) | 29 | (1) |
| U172 | N-Nitrosodi-n-butylamine | NA | N-Nitrosodi-n-butylamine | 924-16-3 | 0.40 | (2) | 17 | (1) |
| U174 | N-Nitrosodiethylamine | NA | N-Nitrosodiethylamine | 55-18-5 | 0.40 | (2) | 28 | (1) |
| U179 | N-Nitrosopiperidine | NA | N-Nitrosopiperidine | 100-75-4 | 0.013 | (2) | 35 | (1) |
| U180 | N-Nitrosopyrrolidine | NA | N-Nitrosopyrrolidine | 930-55-2 | 0.013 | (2) | 35 | (1) |
| U181 | 5-Nitro-o-toluidine | NA | 5-Nitro-o-toluidine | 99-55-8 | 0.32 | (2) | 28 | (1) |
| U183 | Pentachlorobenzene | NA | Pentachlorobenzene | 608-93-5 | 0.055 | (2) | 37 | (1) |
| U185 | Pentachloronitrobenzene | NA | Pentachloronitrobenzene | 82-68-8 | 0.055 | (2) | 4.8 | (1) |
| U187 | Phenacetin | NA | Phenacetin | 62-44-2 | 0.081 | | 16 | (1) |
| U188 | Phenol | NA | Phenol | 108-95-2 | 0.039 | | 6.2 | (1) |
| U190 | Phthalic anhydride (measured as Phthalic acid) | | Phthalic anhydride (measured as Phthalic acid) | 85-44-9 | 0.069 | | 28 | (1) |
| U192 | Pronamide | NA | Pronamide | 23950-58-5 | 0.093 | | 1.5 | (1) |
| U196 | Pyridine | NA | Pyridine | 110-86-1 | 0.014 | (2) | 16 | (1) |
| U203 | Safrole | NA | Safrole | 94-59-7 | 0.081 | | 22 | (1) |
| U204 | Selenium dioxide | Table CCWE in s. NR 675.21 | Selenium | 7782-49-2 | 1.0 | | NA | |
| U205 | Selenium sulfide | Table CCWE in s. NR 675.21 | Selenium | 7782-49-2 | 1.0 | | NA | |
| U207 | 1,2,4,5-Tetrachlorobenzene | NA | 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | (2) | 19 | (1) |
| U208 | 1,1,1,2-Tetrachloroethane | NA | 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.057 | | 42 | (1) |
| U209 | 1,1,2,2-Tetrachloroethane | NA | 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.057 | (2) | 42 | (1) |
| U210 | Tetrachloroethylene | NA | Tetrachloroethylene | 127-18-4 | 0.056 | (2) | 5.6 | (1) |
| U211 | Carbon tetrachloride | NA | Carbon tetrachloride | 56-23-5 | 0.057 | (2) | 5.6 | (1) |
| U214 | Thallium(I)acetate | Table 2 in s. NR 675.22 | Thallium | 7440-28-0 | 0.14 | (2) | NA | |

| Waste code | Commercial chemical name | See also | Regulated hazardous constituent | CAS number for regulated hazardous constituent | Wastewaters | | Nonwastewaters | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Concentration (mg/l) | Notes | Concentration (mg/kg) | Notes |
| U215 | Thallium(I) carbonate | Table 2 in s. NR 675.22 | Thallium | 7440-28-0 | 0.14 | (2) | NA | |
| U216 | Thallium(I)chloride | Table 2 in s. NR 675.22 | Thallium | 7440-28-0 | 0.14 | (2) | NA | |
| U217 | Thallium(I)nitrate | Table 2 in s. NR 675.22 | Thallium | 7440-28-0 | 0.14 | (2) | NA | |
| U220 | Toluene | NA | Toluene | 108-88-3 | 0.080 | (2) | 28 | (1) |
| U225 | Tribromomethane (Bromoform) | NA | Tribromomethane (Bromoform) | 75-25-2 | 0.63 | (2) | 15 | (1) |
| U226 | 1,1,1-Trichloroethane | NA | 1,1,1-Trichloroethane | 71-55-6 | 0.054 | (2) | 5.6 | (1) |
| U227 | 1,1,2-Trichloroethane | NA | 1,1,2-Trichloroethane | 79-00-5 | 0.054 | (2) | 5.6 | (1) |
| U228 | Trichloroethylene | NA | Trichloroethylene | 79-01-6 | 0.054 | (2) | 5.6 | (1) |
| U235 | tris-(2,3-Dibromopropyl) phosphate | NA | tris-(2,3-Dibromopropyl) phosphate | 126-72-7 | 0.025 | | 0.10 | (1) |
| U239 | Xylenes | NA | Xylenes | | 0.32 | (2) | 28 | (1) |
| U240 | 2,4-Dichlorophenoxyacetic acid | NA | 2,4-Dichlorophenoxyacetic acid | 94-75-7 | 0.72 | | 10 | (1) |
| U243 | Hexachloropropene | NA | Hexachloropropene | 1888-71-7 | 0.035 | (2) | 28 | |
| U247 | Methoxychlor | NA | Methoxychlor | 72-43-5 | 0.25 | (2) | 0.18 | (1) |

No Land Disposal for:

K005 Nonwastewaters generated by the process described in the waste listing description, and disposed after June 8, 1989, and not generated in the course of treating wastewater forms of these wastes. (Based on No Generation)

K007 Nonwastewaters generated by the process described in the waste listing description, and disposed after June 8, 1989, and not generated in the course of treating wastewater forms of these wastes. (Based on No Generation)

K021 Nonwastewater forms of these wastes generated by the process described in the waste listing description and disposed after August 17, 1988, and not generated in the course of treating wastewater forms of these wastes (Based on No Generation)

K025 Nonwastewater forms of these wastes generated by the process described in the waste listing description and disposed after August 17, 1988, and not generated in the course of treating wastewater forms of these wastes (Based on No Generation)

K036 Nonwastewater forms of these wastes generated by the process described in the waste listing description and disposed after August 17, 1988, and not generated in the course of treating wastewater forms of these wastes (Based on No Generation)

K044 (Based on Reactivity)

K045 (Based on Reactivity)

K047 (Based on Reactivity)

K060 Nonwastewater forms of these wastes generated by the process described in the waste listing description and disposed after August 17, 1988, and not generated in the course of treating wastewater forms of these wastes (Based on No Generation)

K061 Nonwastewaters – High Zinc Subcategory (greater than or equal to 15% total zinc) (Based on Recycling): effective 8/8/90

K069 Non-Calcium Sulfate Subcategory -- Nonwastewater forms of these wastes generated by the process described in the waste listing description and disposed after August 17, 1988, and not generated in the course of treating wastewater forms of these wastes (Based on Recycling)

K100 Nonwastewater forms of those wastes generated by the process described in the waste listing description and disposed after August 17, 1988, and not generated in the course of treating wastewater forms of these wastes (Based on No Generation)

**Note:** [1]Treatment standards for this organic constituent were established based upon incineration in units operated in accordance with the technical requirements in ch. NR 665, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may certify compliance with these treatment standards according to provisions in s. NR 675.07.

**Note:** [2]Based on analysis on composite samples.

**Note:** [3]As analyzed using EPA method 9010A or 9012 in SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", third edition, September, 1986, as amended by update I in July, 1992; sample size 10 gram; distillation time: one hour and fifteen minutes.

**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.

Note: [4]Reserved

Note: NA means Not Applicable.

**(2)** When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue shall meet the lowest treatment standard for the constituent of concern.

**(3)** Notwithstanding the prohibitions specified in sub. (1), owners or operators of treatment and disposal facilities may demonstrate, and certify pursuant to s. NR 675.07 (2) (e), compliance with the treatment standards for organic constituents specified by footnote 1 in table CCW provided the following conditions are met:

(a) The treatment standards for the organic constituents were established based on incineration in units operated in accordance with the technical requirements of ch. NR 665, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements;

(b) The treatment or disposal facility has used the methods referenced in par. (a) to treat the organic constituents; and

(c) The treatment or disposal facility has been unable to detect the organic constituents despite using its best good-faith efforts as defined by applicable department guidance or standards. Until guidance or standards are developed, the treatment or disposal facility may demonstrate good-faith efforts by achieving detection limits for the regulated organic constituents that do not exceed an order of magnitude of the treatment standard specified in this section.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (1), cr. (3), r. and recr. (1) Table CCW, Register, August, 1992, No. 440, eff. 9-1-92; **r. and recr. Table, Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.24 Variance from a treatment standard. (1)** (a) Where the treatment standard is expressed as a concentration in a waste or waste extract and a waste cannot be treated to the specified level, or where the treatment technology is not appropriate to the waste, the generator or treatment facility may petition EPA for a variance from the treatment standard under 40 CFR 268.44, July 1, 1993. The petitioner shall demonstrate that because the physical or chemical properties of the waste differ significantly from wastes analyzed in developing the treatment standard, the waste cannot be treated to specified levels or by the specified methods.

(b) If EPA denies the petition for a variance under 40 CFR 268.44, July 1, 1993, the department shall recognize that denial.

(c) Generators or owners or operators of treatment facilities who have had their petitions for a variance approved by EPA under 40 CFR 268.44, July 1, 1993, shall continue to treat their wastes in compliance with ss. NR 675.20 to 675.23 until the department recognizes EPA's approval of an alternative treatment method except when waste is being treated in another state and the person complies with that state's requirements. Generators or owners or operators of treatment facilities may petition the department to recognize an EPA variance by submitting the following to the department:

1. Copies of all materials and information submitted to EPA concerning the variance under 40 CFR 268.44, July 1, 1993.

2. Copies of all material and information received from EPA, including the EPA notice of approval, concerning the variance under 40 CFR 268.44, July 1, 1993.

3. All other information that the department determines is necessary to evaluate the request for a variance.

(d) When determining whether to recognize an EPA granted variance under 40 CFR 268.44, July 1, 1993, 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 268.44, July 1, 1993.

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

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

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

**(2)** During the petition review process, the applicant shall comply with all restrictions on land disposal under this chapter.

**(3)** Approval by EPA and the department of a variance from a treatment standard under sub. (1) shall allow a facility to land dispose of prohibited waste under this chapter.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (1), Register, August, 1992, No. 440, eff. 9-1-92; **am. (1) (a), (b), (c) (intro.), 1., 2., (d) (intro.), 2., Register, May, 1995, No. 473, eff. 6-1-95.**

**NR 675.25 Treatment standards for hazardous debris. (1)** TREATMENT STANDARDS. Hazardous debris shall be treated prior to land disposal as follows unless the department determines under s. NR 605.04 (4) (b) that the debris is no longer contaminated with hazardous waste or the debris is treated to the waste-specific treatment standard provided in this chapter for the waste contaminating the debris:

(a) *General.* Hazardous debris shall be treated for each "contaminant subject to treatment" defined by sub. (2) using the technology or technologies identified in Table 1 of this section.

(b) *Characteristic debris.* Hazardous debris that exhibits the characteristic of ignitability, corrosivity or reactivity identified under s. NR 605.08 (2) to (4) shall be deactivated by treatment using one of the technologies identified in Table 1 of this section.

(c) *Mixtures of debris types.* The treatment standards of Table 1 in this section shall be achieved for each type of

debris contained in a mixture of debris types. If an immobilization technology is used in a treatment train, it shall be the last treatment technology used.

(d) *Mixtures of contaminant types.* Debris that is contaminated with two or more contaminants subject to treatment identified under sub. (2) shall be treated for each contaminant using one or more treatment technologies identified in Table 1 of this section. If an immobilization technology is used in a treatment train, it shall be the last treatment technology used.

(e) *Waste PCBs.* Hazardous debris that is also a waste PCB under ch. NR 157 is subject to the requirements of either ch. NR 157 or this section, whichever are more stringent.

**(2)** CONTAMINANTS SUBJECT TO TREATMENT. Hazardous debris shall be treated for each "contaminant subject to treatment." The contaminants subject to treatment shall be determined as follows:

(a) *Toxicity characteristic debris.* The contaminants subject to treatment for debris that exhibits the Toxicity Characteristic by s. NR 605.08 (5) are those EP constituents for which the debris exhibits the TC toxicity characteristic.

(b) *Debris contaminated with listed waste.* The contaminants subject to treatment for debris that is contaminated with a prohibited listed hazardous waste are those constituents for which BDAT standards are established for the waste under ss. NR 675.21 and 675.23.

(c) *Cyanide reactive debris.* Hazardous debris that is reactive because of cyanide shall be treated for cyanide.

**(3)** CONDITIONED EXCLUSION OF TREATED DEBRIS. Hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table 1 of this section and that does not exhibit a characteristic of hazardous waste identified in s. NR 605.08 after treatment is not a hazardous waste and need not be managed in a hazardous waste facility. Hazardous debris contaminated with a listed waste that is treated by an immobilization technology specified in Table 1 is a hazardous waste and shall be managed in a hazardous waste facility.

**(4)** TREATMENT RESIDUALS (a) *General requirements.* Except as provided by pars. (b) and (d):

1. Residue from the treatment of hazardous debris shall be separated from the treated debris using simple physical or mechanical means; and

2. Residue from the treatment of hazardous debris is subject to the waste-specific treatment standards provided by ss. NR 675.20 to 675.24 for the waste contaminating the debris.

(b) *Nontoxic debris.* Residue from the deactivation of ignitable, corrosive or reactive characteristic hazardous debris that is not cyanide-reactive and that is not contaminated with a contaminant subject to treatment defined by sub. (2) shall be deactivated prior to land disposal and is not subject to the waste-specific treatment standards of ss. NR 675.20 to 675.24.

(c) *Cyanide-reactive debris.* Residue from the treatment of debris that is reactive because of cyanide shall meet the standards for D003 under s. NR 675.23.

(d) *Ignitable nonwastewater residue.* Ignitable nonwastewater residue containing equal to or greater than 10% total organic carbon is subject to the technology-based standards for D001: "Ignitable Liquids based on s. NR 605.08 (2) (a) 1." under s. NR 675.22.

(e) *Residue from spalling.* Layers of debris removed by spalling are hazardous debris that remain subject to the treatment standards of this section.

**Table 1.-Alternative Treatment Standards For Hazardous Debris[1]**

| Technology description | Performance and/or design and operating standard | Contaminant restrictions[2] |
|---|---|---|
| A. Extraction Technologies: | | |
| 1. Physical Extraction | | |
| a. Abrasive Blasting: Removal of contaminated debris surface layers using water or air pressure to propel a solid media, such as steel shot, aluminum oxide grit, plastic beads. | Glass, Metal, Plastic, Rubber: Treatment to a clean debris surface.[3] Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Removal of at least 0.6 cm of the surface layer; treatment to a clean debris surface.[3] | All Debris: None. |
| b. Scarification, Grinding, and Planing: Process utilizing striking piston heads, saws, or rotating grinding wheels such that contaminated debris surface layers are removed. | Same as above | Same as above |
| c. Spalling: Drilling or chipping holes at appropriate locations and depth in the contaminated debris surface and applying a tool which exerts a force on the sides of those holes such that the surface layer is removed. The surface layer removed remains hazardous debris subject to the debris treatment standards. | Same as above | Same as above |
| d. Vibratory Finishing: Process utilizing scrubbing media, flushing fluid, and oscillating energy such that hazardous contaminants or contaminated debris surface layers are removed.[4] | Same as above | Same as above |

| Technology description | Performance and/or design and operating standard | Contaminant restrictions[2] |
|---|---|---|
| e. High Pressure Steam and Water Sprays: Application of water or steam sprays of sufficient temperature, pressure, residence time, agitation, surfactants, and detergents to remove hazardous contaminants from debris surfaces or to remove contaminated debris surface layers | Same as above | Same as above. |
| 2. Chemical Extraction | | |
| a. Water Washing and Spraying: Application of water sprays or water baths of sufficient temperature, pressure, residence time, agitation, surfactants, acids, bases, and detergents to remove hazardous contaminants from debris surfaces and surface pores or to remove contaminated debris surface layers. | All Debris: Treatment to a clean debris surface3; Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: The thickness of the debris shall be limited to no more than 1.2 cm (1/2 inch) in one dimension,[5] except that this thickness limit may be waived under an "Equivalent Technology"approval under s. NR 675.22 (2);[8] debris surfaces shall be in contact with water solution for at least 15 minutes | Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Contaminant shall be soluble to at least 5% by weight in water solution or 5% by weight in emulsion; if debris is contaminated with a dioxin-listed waste,[6] an "Equivalent Technology" approval under s. NR 675.22 (2) shall be obtained [8] |
| b. Liquid Phase Solvent Extraction: Removal of hazardous contaminants from debris surfaces and surface pores by applying a nonaqueous liquid or liquid solution which causes the hazardous contaminants to enter the liquid phase and be flushed away from the debris along with the liquid or liquid solution while using appropriate agitation, temperature, and residence time.[4] | Same as above | Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Same as above, except that contaminant shall be soluble to at least 5% by weight in the solvent. |
| c. Vapor Phase Solvent Extraction: Application of an organic vapor using sufficient agitation, residence time, and temperature to cause hazardous contaminants on contaminated debris surfaces and surface pores to enter the vapor phase and be flushed away with the organic vapor.[4] | Same as above, except that brick, cloth, concrete, paper, pavement, rock and wood surfaces shall be in contact with the organic vapor for at least 60 minutes. | Same as above. |
| 3. Thermal Extraction a. High Temperature Metals Recovery: Application of sufficient heat, residence time, mixing, fluxing agents or carbon in a smelting, melting, or refining furnace to separate metals from debris. | For refining furnaces, treated debris shall be separated from treatment residuals using simple physical or mechanical means,[9]and, prior to further treatment, such residuals shall meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris. | Debris contaminated with a dioxin-listed waste:[5] Obtain an "Equivalent Technology" approval under s. NR 675.22 (2).[8] |
| b. Thermal Desorption: Heating in an enclosed chamber under either oxidizing or nonoxidizing atmospheres at sufficient temperature and residence time to vaporize hazardous contaminants from contaminated surfaces and surface pores and to remove the contaminants from the heating chamber in a gaseous exhaust gas.[7] | All Debris: Obtain an "Equivalent Technology" approval under s.NR 675.22 (2);[8] treated debris shall be separated from treatment residuals using simple physical or mechanical means,[9] and, prior to further treatment, such residue shall meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris. Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: The thickness of the debris shall be limited to no more than 10 cm (4 inches) in one dimension,[5] except that this thickness limit may be waived under the "Equivalent Technology" approval. | All Debris: Metals other than mercury. |
| B. Destruction Technologies: | | |
| 1. Biological Destruction (Biodegradation): Removal of hazardous contaminants from debris surfaces and surface pores in an aqueous solution and biodegration of organic or nonmetallic inorganic compounds, such as inorganics that contain phosphorus, nitrogen, or sulfur, in units operated under either aerobic or anaerobic conditions. | All Debris: Obtain an "Equivalent Technology" approval under s. NR 675.22 (2);[8] treated debris shall be separated from treatment residuals using simple physical or mechanical means,[9] and, prior to further treatment, such residue shall meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris. Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: The thickness of the debris shall be limited to no more than 1.2 cm (1/2 inch) in one dimension,[5] except that this thickness limit may be waived under the "Equivalent Technology" approval | All Debris: Metal contaminants. |

| Technology description | Performance and/or design and operating standard | Contaminant restrictions[2] |
|---|---|---|
| 2. Chemical Destruction | | |
| a. Chemical Oxidation: Chemical or electrolytic oxidation utilizing the following oxidation reagents, waste reagents or combination of reagents (1) hypochlorite (e.g., bleach); (2) chlorine; (3) chlorine dioxide; (4) ozone or UV (ultraviolet light) assisted ozone; (5) peroxides; (6) persulfates; (7) perchlorates; (8) permanganates; or (9) other oxidizing reagents of equivalent destruction efficiency. Chemical oxidation specifically includes what is referred to as alkaline chlorination. | All Debris: Obtain an "Equivalent Technology" approval under s. NR 675.22 (2);[8] treated debris shall be separated from treatment residuals using simple physical or mechanical means,[9] and, prior to further treatment, such residue shall meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris. Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: The thickness of this debris shall be limited to no more than 1.2 cm (1/2 inch) in one dimension, [5] except that this thickness limit may be waived under the "Equivalent Technology" approval | All Debris: Metal contaminants. |
| b. Chemical Reduction: Chemical reaction utilizing the following reducing reagents, waste reagents or combination of reagents: (1) sulfur dioxide; (2) sodium, potassium, or alkali salts of sulfites, bisulfites, and metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG); (3) sodium hydrosulfide; (4) ferrous salts; or (5) other reducing reagents of equivalent efficiency.[4] | Same as above | Same as above. |
| 3. Thermal Destruction: Treatment in an incinerator operating in accordance with ch. NR 665; a boiler or industrial furnace operating in accordance with 40 CFR Part 266, Subpart H or other thermal treatment unit operated in accordance with ch. NR 670, or s. NR 670.11, but excluding for purposes of these debris treatment standards Thermal Desorption units. | Treated debris shall be separated from treatment residuals using simple physical or mechanical means,[9] and, prior to further treatment, such residue shall meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris. | Brick, Concrete, Glass, Metal, Pavement, Rock, Metal: Metals other than mercury, except that there are no metal restrictions for vitrification. Debris contaminated with a dioxin-listed waste.[6] Obtain an "Equivalent Technology" approval under s. NR 675.22 (2),[8] except that this requirement does not apply to vitrification. |
| C. Immobilization Technologies: | | |
| 1. Macroencapsulation: Application of surface coating materials such as polymeric organics (e.g., resins and plastics) or use of a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. | Encapsulating material shall completely encapsulate debris and be resistant to degradation by the debris and its contaminants and materials into which it may come into contact after placement (leachate, other waste, microbes). | None. |
| 2. Microencapsulation: Stabilization of the debris with the following reagents or waste reagents such that the leachability of the hazardous contaminants is reduced: (1) Portland cement; or (2) lime/ pozzolans (e.g., fly ash and cement kiln dust). Reagents (e.g., iron salts, silicates, and clays) may be added to enhance the set and cure time or compressive strength, or to reduce the leachability of the hazardous constituents.[5] | Leachability of the hazardous contaminants shall be reduced. | None. |
| 3. Sealing: Application of an appropriate material which adheres tightly to the debris surface to avoid exposure of the surface to potential leaching media. When necessary to effectively seal the surface, sealing entails pretreatment of the debris surface to remove foreign matter and to clean and roughen the surface. Sealing materials include epoxy, silicone, and urethane compounds, but paint may not be used as a sealant. | Sealing shall avoid exposure of the debris surface to potential leaching media and sealant shall be resistent to degradation by the debris and its contaminants and materials into which it may come into contact after placement (leachate, other waste, microbes). | None. |

**Note:** [1]Hazardous debris shall be treated by either these standards or the waste-specific treatment standards for the waste contaminating the debris. The treatment standards shall be met for each type of debris contained in a mixture of debris types, unless the debris is converted into treatment residue as a result of the treatment process. Debris treatment residuals are subject to the waste-specific treatment standards for the waste contaminating the debris.

**Note:** [2]Contaminant restriction means that the technology is not BDAT for that contaminant. If debris containing a restricted contaminant is treated by the technology, the contaminant shall be subsequently treated by a technology for which it is not restricted in order to be land disposed and excluded from regulation as hazardous waste.

**Note:** [3]"Clean debris surface" means the surface, when viewed without magnification, shall be free of all visible contaminated soil and hazardous waste except that residual staining from soil and waste consisting of light shadows, slight streaks, or minor discolorations, and soil and waste in cracks, crevices, and pits may be present provided that such staining and waste and soil in cracks, crevices, and pits shall be limited to no more than 5% of each square inch of surface area.

**Note:** [4]Acids, solvents, and chemical reagents may react with some debris and contaminants to form hazardous compounds. For example, acid washing of cyanide-contaminated debris could result in the formation of hydrogen cyanide. Some acids may also react violently with some debris and contaminants, depending on the concentration of the acid and the type of debris and contaminants. Debris treaters should refer to the safety precautions specified in Material Safety Data Sheets for various acids to avoid applying an incompatible acid to a particular combination of debris and contaminant. For example, concentrated sulfuric acid may react violently with certain organic compounds, such as acrylonitrile.

**Note:** [5]If reducing the particle size of debris to meet the treatment standards results in material that no longer meets the 60 mm minimum particle size limit for debris, such material is subject to the waste-specific treatment standards for the waste contaminating the material, unless the debris has been cleaned and separated from contaminated soil and waste prior to size reduction. At a minimum, simple physical or mechanical means shall be used to provide such cleaning and separation of nondebris materials to ensure that the debris surface is free of caked soil, waste, or other nondebris material.

**Note:** [6]Dioxin-listed wastes are EPA Hazardous Waste numbers FO20, FO21, FO22, FO23, FO26, and FO27.

**Note:** [7]Thermal desorption is distinguished from Thermal Destruction in that the primary purpose of Thermal Desorption is to volatilize contaminants and to remove them from the treatment chamber for subsequent destruction or other treatment.

**Note:** [8]The demonstration "Equivalent Technology" under s. NR 675.22 (2) shall document that the technology treats contaminants subject to treatment to a level equivalent to that required by the performance and design and operating standards for other technologies in this table such that residual levels of hazardous contaminants will not pose a hazard to human health and the environment absent management controls.

**Note:** [9]Any soil, waste, and other nondebris material that remains on the debris surface or remains mixed with the debris after treatment is considered a treatment residual that shall be separated from the debris using, at a minimum, simple physical or mechanical means. Examples of simple physical or mechanical means are vibratory or trommel screening or water washing. The debris surface need not be cleaned to a "clean debris surface" as defined in note 3 when separating treated debris from residue; rather, the surface shall be free of caked soil, waste, or other nondebris material. Treatment residuals are subject to the waste-specific treatment standards for the waste contaminating the debris.

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

**NR 675.26 Alternative treatment standards based on HTMR.** Table 1 identifies alternative treatment standards for F006 and K062 nonwastewaters.

**Table 1.-Alternative Treatment Standards**

| Waste code | See also | Regulated hazardous constituent | CAS No. for regulated hazardous constituent | Nonwastewaters concentration (mg/l) TCLP |
|---|---|---|---|---|
| F006 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | Antimony | 7440-36-0 | 2.1 |
| | | Arsenic | 7440-38-2 | 0.055 |
| | | Barium | 7440-39-3 | 7.6 |
| | | Beryllium | 7440-41-7 | 0.014 |
| | | Cadmium | 7440-43-9 | 0.19 |
| | | Chromium (total) | 7440-47-32 | 0.33 |
| | | Cyanide (mg/kg) (total) | 57-12-5 | 1.8 |
| | | Lead | 7439-92-1 | 0.37 |
| | | Mercury | 7439-97-6 | 0.009 |
| | | Nickel | 7440-02-0 | 5.0 |
| | | Selenium | 7782-49-2 | 0.16 |
| | | Silver | 7440-22-4 | 0.30 |
| | | Thallium | | 0.078 |
| | | Zinc | 7440-66-6 | 5.3 |
| K062 | Table CCWE in s. NR 675.21 and Table CCW in s. NR 675.23 | Antimony | 7440-36-0 | 2.1 |
| | | Arsenic | 7440-38-2 | 0.055 |
| | | Barium | 7440-39-3 | 7.6 |
| | | Beryllium | 7440-41-7 | 0.014 |
| | | Cadmium | 7440-43-9 | 0.19 |
| | | Chromium (total | 7440-47-32 | 0.33 |
| | | Lean | 7439-92-1 | 0.37 |
| | | Mercury | 7439-97-6 | 0.009 |
| | | Nickel | 7440-02-0 | 5.0 |
| | | Selenium | 7782-49-2 | 0.16 |
| | | Silver | 7440-22-4 | 0.30 |
| | | Thallium | | 0.078 |
| | | Zinc | 7440-66-6 | 5.3 |

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

**NR 675.30 Prohibition on storage. (1)** Except as provided for in this section, the storage of hazardous wastes restricted from land disposal under this chapter or 42 USC 6924 is prohibited, unless following conditions are met:

**Note:** The publication containing title 42 of the United States code may be obtained from:

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

(a) A generator stores the wastes in tanks, containers, or containment buildings on-site solely for the purpose of the accumulation of the quantities of hazardous waste as necessary to facilitate proper recovery, treatment or disposal and the generator complies with the requirements in chs. NR 610 and 615. A generator existing on the effective date of a regulation under this chapter and storing hazardous wastes for longer than 90 days due to the regulations under this chapter becomes an owner or operator of a storage facility and shall obtain a hazardous waste operating license. A facility may qualify for an interim license upon compliance with the regulations governing interim license issuance under ch. NR 680.

(b) An owner or operator of a hazardous waste treatment, storage or disposal facility stores the wastes in tanks, containers, or containment buildings solely for the purpose of the accumulation of the quantities of hazardous waste as necessary to facilitate proper recovery, treatment or disposal and:

1. Each container is clearly marked to identify its contents and the date each period of accumulation begins;

2. Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or the information for each tank is recorded and maintained in the operating record at that facility. Regardless of whether the tank itself is marked, an owner or operator shall comply with the operating record requirements specified in ch. NR 630.

(c) A transporter stores manifested shipments of the wastes at a transfer facility for 10 days or less.

**(2)** An owner or operator of a treatment, storage or disposal facility may store the wastes for up to one year unless the department demonstrates that the storage was not solely for the purpose of accumulation of the quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.

**(3)** An owner or operator of a treatment, storage or disposal facility may store the wastes beyond one year; however, the owner or operator bears the burden of proving that the storage was solely for the purpose of accumulation of the quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.

**(4)** If a generator's waste is exempt from a prohibition against the type of land disposal utilized for the waste, the prohibition in sub. (1) does not apply during the period of the exemption.

**Note:** Examples of exemptions from the prohibition against the type of land disposal include a case-by-case extension granted under s. NR 675.05 (1), an approved petition granted under 40 CFR 268.6, July 1, 1993, or a national capacity variance granted under 40 CFR 268 Subpart C, July 1, 1993.

**(5)** The prohibition in sub. (1) does not apply to hazardous wastes that meet the treatment standards specified under ss. NR 675.21 to 675.23, or the treatment standards specified under the variance in s. NR 675.24, or where treatment standards have not been specified is in compliance with the applicable prohibitions in ss. NR 675.11 to 675.16, or 42 USC 6924 (d).

**Note:** The publication containing title 42 of the United States code may be obtained from:

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

**(6)** Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm shall be stored at a facility that meets the requirements of ch. NR 157 and shall be removed from storage and treated or disposed as required by this chapter within one year of the date when the wastes are first placed into storage. The provisions of sub. (3) do not apply to the PCB wastes prohibited under s. NR 675.13.

**History:** Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (5) and (6), Register, August, 1992, No. 440, eff. 9-1-92; **am. (1) (a), (b) (intro.), Register, May, 1995, No. 473, eff. 6-1-95.**