

Chapter NR 668

HAZARDOUS WASTE LAND DISPOSAL RESTRICTIONS

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Note: This chapter is similar to federal regulations contained in [40 CFR part 268](#), revised as of July 1, 2003.

Subchapter A — General

NR 668.01 Purpose, scope and applicability. c1d

This chapter identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.

c2d Except as specifically provided otherwise in this chapter or ch. [NR 661](#), the requirements of this chapter apply to persons who generate or transport hazardous waste and owners and operators of hazardous waste treatment, storage and disposal facilities.

c3d Restricted wastes may continue to be land disposed if any of the following conditions are met:

cad The EPA administrator has granted an extension to the effective date of a prohibition under [40 CFR 268.5](#) with respect to those wastes covered by the extension.

cbd The EPA administrator has granted an exemption from a prohibition pursuant to a petition under [40 CFR 268.6](#), with respect to those wastes and units covered by the petition.

cd Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited under this chapter or [40 CFR part 148](#) are not prohibited if the wastes meet all of the following:

1. The wastes are disposed into a nonhazardous or hazardous injection well as defined under [40 CFR 146.6 cad](#).

2. The wastes at the point of injection do not exhibit any prohibited characteristic of hazardous waste as identified in subch. [C of ch. NR 661](#).

cdd The wastes are hazardous only because they exhibit a hazardous characteristic, unless the wastes are subject to a specified method of treatment other than DEACT in s. [NR 668.40](#), or are D003 reactive cyanide and the wastes meet subds. [1.](#) or [2.](#) or [3.](#) and subd. [4.](#)

1. The wastes are managed in a treatment system which sub-

sequently discharges to waters of the state pursuant to a permit issued under ch. [283](#), Stats.

2. The wastes are treated for purposes of the pretreatment requirements of ch. [283](#), Stats.

3. The wastes are managed in a zero discharge system engaged in CWA-equivalent treatment as defined in s. [NR 668.37](#).

4. The wastes no longer exhibit a prohibited characteristic at the point of land disposal i.e., placement in a surface impoundmentd.

c4d The requirements of this chapter may not affect the availability of a waiver under [42 USC 9621 cdd c4d](#).

c5d All of the following hazardous wastes are not subject to this chapter:

cad Waste generated by very small quantity generators, as defined in s. [NR 660.10 c139d](#).

cbd Waste pesticides that a farmer disposes of pursuant to s. [NR 662.070](#).

ccd Wastes identified or listed as hazardous after November 8, 1984 for which EPA has not promulgated land disposal prohibitions or treatment standards.

cdd De minimis losses of characteristic wastes to wastewaters are not considered to be prohibited wastes and are defined as losses from normal material handling operations ce.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materialsd. The following are also considered to be de minimus losses: minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; and relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; rinsate from empty containers or from containers that are rendered empty by that rinsing; and laboratory wastes not exceeding one % of the total flow of wastewater into the facility[s headworks on an annual basis, or with a combined annualized average concentration not exceeding one part per million in the headworks of the facility[s wastewater treatment or pretreatment facility.

c6d Universal waste handlers and universal waste transporters, as defined in s. NR 660.10, are exempt from ss. NR 668.07 and 668.50 for all of the following hazardous wastes.

cad Batteries as described in s. NR 673.02.

cbd Pesticides as described in s. NR 673.03.

ccd Mercury-containing equipment as described in s. NR 673.04.

cdd Lamps as described in s. NR 673.05.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am. c6d ccd Register July 2017 No. 739, eff. 8-1-17; CR 19-082: cr. c3d ccd, r. and recr. c5d cad Register August 2020 No. 776, eff. 9-1-20; correction in c3d ccd intro.d, 1. made under s. 35.17, Stats., Register August 2020 No. 776.

NR 668.02 Definitions applicable in this chapter.

When used in this chapter the following terms have the meanings given below:

c1d XHalogenated organic compoundsY or XHOCsY means those compounds having a carbon-halogen bond which are listed under ch. NR 668 Appendix III.

c2d XHazardous constituentY or Xhazardous constituentsY means those constituents listed in ch. NR 661 Appendix VIII.

c3d XLand disposalY means placement in or on the land, except in a corrective action management unit or staging pile, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes.

c4d XNonwastewatersY means wastes that do not meet the criteria for wastewaters in s. NR 668.02 c6d.

c5d XPolychlorinated biphenylsY or XPCBsY means halogenated organic compounds defined in accordance with 40 CFR 761.3.

c6d XWastewatersY means wastes that contain less than one % by weight total organic carbon cTOCd and less than one% by weight total suspended solids cTSSd.

c7d XDebrisY means solid material exceeding a 60 mm particle size that is intended for disposal and that is a manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in subch. D, namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by s. NR 668.45 and other material is regulated as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

c8d XHazardous debrisY means debris that contains a hazardous waste listed in subch. D of ch. NR 661, or that exhibits a characteristic of hazardous waste identified in subch. C of ch. NR 661. Any deliberate mixing of prohibited hazardous waste with debris that changes its treatment classification, for example, from waste to hazardous debris, is not allowed under the dilution prohibition in s. NR 668.03.

c9d XUnderlying hazardous constituentY means any constituent listed in s. NR 668.48, Table UTS—Universal Treatment Standards, except fluoride, selenium, sulfides, vanadium, and zinc, which can reasonably be expected to be present at the point of generation of the hazardous waste at a concentration above the constituent-specific UTS treatment standards.

c10d XInorganic metal-bearing wasteY means waste for which EPA has established treatment standards for metal haz-

ardous constituents, and which does not otherwise contain significant organic or cyanide content as described in s. NR 668.03 c3d cad, and is specifically listed in ch. NR 668 Appendix XI.

c11d XSoilY means unconsolidated earth material composing the superficial geologic strata cmaterial overlying bedrockd, consisting of clay, silt, sand, or gravel size particles as classified by the U.S. natural resources conservation service, or a mixture of such materials with liquids, sludges or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited hazardous waste with soil that changes its treatment classification, for example, from waste to contaminated soil, is not allowed under the dilution prohibition in s. NR 668.03.

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

NR 668.03 Dilution prohibited as a substitute for treatment. **c1d** Except as provided in sub. c2d, 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 subch. D, to circumvent the effective date of a prohibition in subch. C, to otherwise avoid a prohibition in subch. C, or to circumvent a land disposal prohibition imposed by 42 USC 6924.

c2d Dilution of wastes that are hazardous only because they exhibit a characteristic in treatment systems which include land-based units which treat wastes subsequently discharged to a water of the State pursuant to a permit issued under section s. 283.31, Stats., or which treat wastes in a CWA-equivalent treatment system, or which treat wastes for the purposes of pretreatment requirements under ss. 283.11 and 283.21, Stats., is not impermissible dilution for purposes of this section unless a method other than DEACT has been specified in s. NR 668.40 as the treatment standard, or unless the waste is a D003 reactive cyanide wastewater or nonwastewater.

c3d Combustion of the hazardous waste codes listed in ch. NR 668 Appendix XI is prohibited, unless the waste, at the point of generation, or after any bona fide treatment such as cyanide destruction prior to combustion, complies with one or more of the criteria in pars. cad to cfd, and is not otherwise specifically prohibited from combustion:

cad The waste contains hazardous organic constituents or cyanide at levels exceeding the constituent-specific treatment standard found in s. NR 668.48.

cbd The waste consists of organic, debris-like materials, for example, wood, paper, plastic, or cloth, contaminated with an inorganic metal-bearing hazardous waste.

ccd The waste, at point of generation, has reasonable heating value, for example, greater than or equal to 5000 BTU per pound.

cdd The waste is co-generated with wastes for which combustion is a required method of treatment.

ced The waste is subject to federal or Wisconsin requirements necessitating reduction of organics, including biological agents.

cfd The waste contains greater than one% total organic carbon cTOCd.

c4d Persons may not add iron filings or other metallic forms of iron to lead-containing hazardous wastes in order to achieve any land disposal restriction treatment standard for lead. Lead-containing wastes include all of the following:

cad D008 wastes which exhibit a characteristic due to the presence of lead.

cbd All characteristic wastes containing lead as an underlying hazardous constituent.

ccd Listed wastes containing lead as a regulated constituent.

cdd Hazardous media containing any of the lead-containing wastes in this subsection.

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

NR 668.04 Treatment surface impoundment exemption. c1d Wastes which are otherwise prohibited from land disposal under this chapter, may be treated in a surface impoundment or series of impoundments if all of the following conditions are met:

cad Treatment of the wastes occurs in the impoundments.

cbd All of the following conditions are met:

1. Sampling and testing. For wastes with treatment standards in subch. D of ch. NR 668 or prohibition levels in subch. C, or both, or treatment standards in 42 USC 6924cdd, the residues from treatment are analyzed, as specified in s. NR 668.07 or 668.32, 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 664.0013 or 665.0013, 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. All of the following treatment residues, including any liquid waste, shall be removed at least annually: residues which do not meet the treatment standards promulgated under subch. D; residues which do not meet the prohibition levels established under subch. C or imposed by statute, where no treatment standards have been established; residues from the treatment of wastes prohibited from land disposal under subch. C, where no treatment standards have been established and no prohibition levels apply; or residues from managing listed wastes which are not delisted under 40 CFR 260.22. 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 flow-through 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. Sampling and testing and recordkeeping provisions of ss. NR 664.0013 and 665.0013 apply.

ccd The impoundment meets the design requirements of s. NR 664.0221 c3d or 665.0221 c1d, regardless that the unit may not be new, expanded, or a replacement, and the impoundment is in compliance with applicable groundwater monitoring requirements of ch. NR 664 unless one of the following conditions are met:

1. The surface impoundment is exempted pursuant to s. NR 664.0221 c4d or c5d, or pursuant to s. NR 665.0221 c3d or c4d.

2. Upon application by the owner or operator, the department, after notice and an opportunity to comment, grants a waiver of the design requirements on the basis that the surface impoundment meets all of the following conditions:

a. The surface impoundment has at least one liner, and there is no evidence that the liner is leaking.

b. The surface impoundment is located more than one-quarter mile from an underground source of drinking water.

c. The surface impoundment is in compliance with generally applicable groundwater monitoring requirements for facilities with licenses.

3. Upon application by the owner or operator, the department, after notice and an opportunity to comment, grants a modification to the design requirements on the basis of a demonstra-

tion that the surface impoundment is located, designed and operated so as to assure that there will be no migration of any hazardous constituent into groundwater or surface water at any future time.

cdd The owner or operator submits to the department a written certification that the requirements of par. ccd have been met. The following certification is required:

I certify under penalty of law that the requirements of s. NR 668.04 c1d ccd 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.

c2d Evaporation of hazardous constituents as the principal means of treatment is not treatment for purposes of an exemption under this section.

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

NR 668.05 Procedures for case-by-case extensions to an effective date. c1d Any person who generates, treats, stores, or disposes of a hazardous waste may submit an application under 40 CFR 268.5, to the EPA administrator for an extension to the effective date of any applicable restriction established under subch. C of ch. NR 668. The EPA administrator retains the authority to implement all requirements of 40 CFR 268.5.

c2d An extension granted by the EPA administrator will apply only to the waste generated at the individual facility covered by the application and will not apply to restricted waste from any other facility.

c3d Whenever the EPA administrator establishes an extension to an effective date under 40 CFR 268.5, during the period for which the extension is in effect all of the following conditions apply:

cad The hazardous waste covered by the extension is exempt from storage restrictions under s. NR 668.50 c1d.

cbd The hazardous waste covered by the extension may be disposed in a landfill or surface impoundment, regardless of whether the unit is existing, new, or a replacement or lateral expansion, if the unit complies with all of the following technical requirements:

1. The landfill, if under an interim license, complies with the requirements of subch. F of ch. NR 665 and s. NR 665.0301 c1d, c3d, and c4d.

2. The landfill, if licensed, complies with the requirements of subch. F of ch. NR 664 and s. NR 664.0301 c3d, c4d and c5d.

3. The surface impoundment, if under an interim license, complies with the requirements of subch. F of ch. NR 665 and s. NR 665.0221 c1d, c3d, and c4d, and 42 USC 6925cjdcl1d.

4. The surface impoundment, if licensed, complies with the requirements of subch. F of ch. NR 664 and s. NR 664.0221 c3d, c4d, and c5d.

5. The surface impoundment, if newly subject to 42 USC 6925cjdcl1d due to the promulgation of additional listings or characteristics for the identification of hazardous waste, complies with the requirements of subch. F of ch. NR 665 within 12 months after the promulgation of additional listings or characteristics of hazardous waste, and complies with the requirements of s. NR 665.0221 c1d, c3d, and c4d within 48 months after the promulgation of additional listings or characteristics of hazardous waste. If a national capacity variance is granted, during the period the variance is in effect, the surface impoundment, if newly subject to 42 USC 6925cjdcl1d due to the promulgation of addi-

tional listings or characteristics of hazardous waste, complies with the requirements of subch. F of ch. NR 665 within 12 months after the promulgation of additional listings or characteristics of hazardous waste, and with the requirements of s. NR 665.0221 c1d, c3d and c4d within 48 months after the promulgation of additional listings or characteristics of hazardous waste.

6. The landfill, if disposing of containerized liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm, also complies with 40 CFR 761.75 and chs. NR 664 and 665.

c4d Pending a decision by the EPA administrator on the application, the applicant is required to comply with all restrictions on land disposal under this chapter once the effective date for the waste has been reached.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am. c3d cbd 6. Register July 2017 No. 739, eff. 8-1-17.

NR 668.06 Petitions to allow land disposal of a waste prohibited under subch. C. c1d Any person seeking an exemption from a prohibition under subch. C of ch. NR 668 for the disposal of a restricted hazardous waste in a particular unit or units shall submit a petition under 40 CFR 268.6 to the EPA administrator demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The EPA administrator retains the authority to implement all requirements of 40 CFR 268.6.

c2d Prior to the EPA administrator[s] decision, the applicant shall comply with all restrictions on land disposal under this chapter once the effective date for the waste has been reached.

c3d The petition granted by the EPA administrator does not relieve the petitioner of the petitioner[s] responsibilities in the management of hazardous waste under chs. NR 660 to 670.

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

NR 668.07 Testing, tracking, and recordkeeping requirements for generators, reverse distributors, treaters, and disposal facilities. c1d Generators and pharmaceutical reverse distributors shall comply with all of the following requirements:

cad A generator of hazardous waste shall determine if the hazardous waste shall be treated before it can be land disposed. This determination shall be done by determining if the hazardous waste meets the treatment standards in s. NR 668.40, 668.45, or 668.49. This determination shall be made by testing the waste or using knowledge of the waste. If the generator tests the waste, testing should determine the total concentration of hazardous constituents, or the concentration of hazardous constituents in an extract of the waste obtained using test method 1311 in XTest Methods of Evaluating Solid Waste, Physical{Chemical MethodsY, EPA SW-846, incorporated by reference in s. NR 660.11, depending on whether the treatment standard for the waste is expressed as a total concentration or a concentration of hazardous constituent in the waste[s] extract. As an alternative to the generator determining if the hazardous waste is required to be treated before it can be land disposed, the generator shall send the waste to a RCRA licensed or permitted hazardous waste treatment facility, where the waste treatment facility shall comply with the requirements of sub. c2d and s. NR 664.0013. In addition, some hazardous wastes shall be treated by particular treatment methods before they can be land disposed and some soils are contaminated by such hazardous wastes. These treatment standards are also found in s. NR 668.40 and are described in detail in s. NR 668.42, Table 1. It is not necessary to test hazardous waste, or soil contaminated by hazardous waste, which is treated under ss. NR

668.40 and 668.42, Table 1, unless the waste or soil is in a waste mixture, in which case the other wastes in the mixture with concentration level treatment standards shall be tested. If a generator is managing a waste or soil contaminated with a waste, that displays a hazardous characteristic of ignitability, corrosivity, reactivity, or toxicity, the generator shall comply with the special requirements of s. NR 668.09 in addition to any applicable requirements in this section.

cbd If the waste or contaminated soil does not meet the applicable treatment standards or if the generator chooses not to make the determination of whether the waste is required to be treated, the generator shall send a one-time written notice to each treatment or storage facility receiving the waste with the initial waste shipment, and shall place a copy in the generator[s] file. The notice shall include the information in column X668.07 c1d cbdY of the Generator Paperwork Requirements Table in par. cdd. Alternatively, if the generator chooses not to make the determination of whether the waste is required to be treated, the notification shall include the EPA Hazardous Waste Numbers and Manifest Number of the first shipment and shall state XThis hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility shall make the determination.Y No further notification is necessary until the waste or facility change, in which case a new notification shall be sent and a copy placed in the generator[s] file.

ccd If the waste or contaminated soil meets the treatment standard at the original point of generation:, then generators shall meet all of the following conditions:

1. The generator shall send a one-time written notice to each treatment, storage, or disposal facility receiving the waste with the initial waste shipment, and place a copy in the generator[s] file. The notice shall include the information in column X668.07 c1d ccdY of the Generator Paperwork Requirements Table in par. cdd and the following certification statement, 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 or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in subch. D of ch. NR 668 [or 40 CFR 268]. 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.

2. If the generator ships contaminated soil, then with the initial waste shipment, the generator shall send a one-time written notice to each treatment, storage or disposal facility receiving the contaminated soil and place a copy in the generator[s] file. The notice shall include the information in column X668.07 c1d ccdY of the Generator Paperwork Requirements Table in par. cdd.

3. If the waste changes, the generator shall send a new notice and certification to the receiving facility, and place a copy in the generator[s] file. Generators of hazardous debris excluded from the definition of hazardous waste under s. NR 661.0003 c6d are not subject to these requirements.

cdd If the generator[s] waste or contaminated soil is not required to meet treatment standards before it is land disposed because the waste or soil qualifies for an exemption, including but not limited to case-by-case extensions under 40 CFR 268.5, disposal in a no-migration unit under 40 CFR 268.6, or a national capacity variance or case-by-case capacity variance under subch. C, then with the initial shipment of waste, the generator shall send a one-time written notice to each land disposal facility receiving the waste. The notice shall include the information indicated in column Xs. NR 668.07 c1d cddY of the Generator Paper-

work Requirements Table in this paragraph. If the waste changes, the generator shall send a new notice to the receiving facility, and place a copy in the generator[s] file.

Generator Paperwork Requirements Table

Required information	s. NR 668.07 c1d cbd	s. NR 668.07 c1d ccd	s. NR 668.07 c1d cdd	s. NR 668.07 c1d cid
1. EPA hazardous waste numbers and manifest number of first shipment	✓	✓	✓	✓
2. Statement: this waste is not prohibited from land disposal			✓	
3. The waste is subject to the LDRs. The constituents of concern for F001-F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice	✓	✓		
4. The notice must include the applicable wastewater{ nonwastewater category csee s. NR 668.02 c4d and c6dd and subcategories made within a waste code based on waste-specific criteria csuch as D003 reactive cyanided	✓	✓		
5. Waste analysis data cwhen availabled	✓	✓	✓	
6. Date the waste is subject to the prohibition			✓	
7. For hazardous debris, when treating with the alternative treatment technologies provided by s. NR 668.45: the contaminants subject to treatment, as described in s. NR 668.45 c2d; and an indication that these contaminants are being treated to comply with s. NR 668.45	✓		✓	
8. For contaminated soil subject to LDRs as provided in s. NR 668.49 c1d, the constituents subject to treatment as described in s. NR 668.49 c4d, and the following statement: This contaminated soil [does{ does not} contain listed hazardous waste and [does{ does not} exhibit a characteristic of hazardous waste and [is subject to{complies with the soil treatment standards as provided by s. NR 668.49 c3d or the universal treatment standards	✓	✓		
9. A certification is needed csee applicable section for exact wordingd		✓		✓

ced If a generator is managing and treating prohibited waste or contaminated soil in tanks, containers or containment buildings regulated under ss. NR 662.015, 662.016, and 662.017 to meet applicable LDR treatment standards found at s. NR 668.40, the generator shall develop and follow a written waste analysis plan which describes the procedures they will carry out to comply with the treatment standards. Generators treating hazardous debris under the alternative treatment standards of s. NR 668.45, Table 1, however, are not subject to the waste analysis requirements in this section. The plan shall be kept on site in the generator[s] records, and all of 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. The plan shall be kept in the facility[s] on-site files and made available to inspectors.

3. Wastes shipped off-site pursuant to this subsection shall comply with the notification requirements of par. ccd.

cfid If a generator determines that the waste or contaminated soil 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 that the waste is restricted based on testing this waste or an extract developed using the test method 1311 in XTest Methods for Evaluating Solid Waste, Physical{Chemical MethodsY, EPA SW-846, incorporated by reference in s. NR 660.11, then all waste analysis data shall be retained on-site in the generator[s] files.

cgd If a generator determines that the generator is managing a prohibited waste that is excluded from the definition of hazardous or solid waste or is not regulated under ch. 291, Stats., and chs. NR 660 to 673 pursuant to ss. NR 661.0002 to 661.0006 subsequent to the point of generation, including deactivated characteristic hazardous wastes managed in wastewater treatment systems subject to 33 USC 1342 as specified at s. NR 661.0004 c1d cbd or that are CWA-equivalent, the generator shall place a one-

time notice describing the generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from ch. 291, Stats., and chs. NR 660 to 673 regulation, and the disposition of the waste, in the facility[s] on-site files.

chd Generators shall retain on-site a copy of all notices, certifications, waste analysis data and other documentation produced pursuant to this section for at least 3 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. The 3-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the department. The requirements of this subsection 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 under ss. NR 661.0002 to 661.0006, or exempted from ch. 291, Stats., and chs. NR 660 to 673, subsequent to the point of generation.

cid If a generator is managing a lab pack containing hazardous wastes and wishes to use the alternative treatment standard for lab packs found at s. NR 668.42 c3d, then the generator shall comply with all of the following:

1. With the initial shipment of waste to a treatment facility, the generator shall submit a notice and place a copy in the generator[s] file. The notice shall provide the information in column X668.07 c1d cidY in the Generator Paperwork Requirements Table of par. cdd, and shall include the following certification statement 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 wastes that have not been excluded under ch. NR 668 Appendix IV and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at s. NR 668.42 c3d [or 40 CFR 268.42ccd]. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

2. No further notification is necessary until the time that the wastes in the lab pack change, or the receiving facility changes, in

which case a new notice and certification shall be sent and a copy placed in the generator[s] file.

3. If the lab pack contains characteristic hazardous wastes cD001 to D008, and D010 to D043d, the generator does not need to determine the underlying hazardous constituents, as defined in s. NR 668.02 c9d.

4. The generator shall also comply with the requirements in pars. cfd and cgd.

cjd Small quantity generators with tolling agreements pursuant to s. NR 662.020 c5d shall comply with the applicable notification and certification requirements of this subsection for the initial shipment of the waste subject to the agreement. Generators shall retain on-site a copy of the notification and certification, together with the tolling agreement, for at least 3 years after termination or expiration of the agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the department.

c2d Treatment facilities shall test their wastes according to the frequency specified in their waste analysis plans as required by s. NR 664.0013 cfor licensed TSDsd or s. NR 665.0013 cfor interim license facilitiesd. Testing shall be performed as provided in pars. cad to ccd.

cad For wastes or contaminated soil with treatment standards expressed in the waste extract cTCLPd, the owner or operator of the treatment facility shall test an extract of the treatment residues, using test method 1311 cthe Toxicity Characteristic Leaching Procedure, described in XTest Methods for Evaluating Solid Waste, Physical{Chemical MethodsY, EPA SW-846, incorporated by reference in s. NR 660.11d to assure that the treatment residues extract meet the applicable treatment standards.

cbd For wastes or contaminated soil with treatment standards expressed as concentrations in the waste, the owner or operator of the treatment facility shall test the treatment residues, not an extract of the residues, to assure that they meet the applicable treatment standards.

ccd A one-time notice shall be sent with the initial shipment of waste or contaminated soil to the land disposal facility. A copy of the notice shall be placed in the treatment facility[s] file.

1. No further notification is necessary until the waste or receiving facility change, in which case a new notice shall be sent and a copy placed in the treatment facility[s] file.

2. The one-time notice shall include all of the following requirements:

Treatment Facility Paperwork Requirements Table

Required information	s. NR 668.07 c2d
1. EPA hazardous waste numbers and manifest number of first shipment	✓
2. The waste is subject to the LDRs. The constituents of concern for F001-F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice	✓
3. The notice must include the applicable wastewater{ nonwastewater category csee s. NR 668.02 c4d and c6dd and subcategories made within a waste code based on waste-specific criteria csuch as D003 reactive cyanided	✓
4. Waste analysis data cwhen availabled	✓
5. For contaminated soil subject to LDRs as provided in s. NR 668.49 c1d, the constituents subject to treatment as described in s. NR 668.49 c4d and the following statement: XThis contaminated soil [does{does not} exhibit a characteristic of hazardous waste and [is subject to{complies with} the soil treatment standards as provided by s. NR 668.49 c3d.Y	✓
6. A certification is needed csee applicable section for exact wordingd	✓

cdd The treatment facility shall submit a one-time certification signed by an authorized representative with the initial shipment of waste or treatment residue of a restricted waste to the land disposal facility. The certification shall state:

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. 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 comply with the treatment standards specified in s. NR 668.40 [or 40 CFR 268.40] without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

A certification is also necessary for contaminated soil and it 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 believe that it has been maintained and operated properly so as to comply with treatment standards specified in s. NR 668.49 [or 40 CFR 268.49] without impermissible dilution of the prohibited wastes. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

1. A copy of the certification shall be placed in the treatment facility[s] on-site files. If the waste or treatment residue changes,

or the receiving facility changes, a new certification shall be sent to the receiving facility, and a copy placed in the treatment facility[s] on-site file.

2. Debris excluded from the definition of hazardous waste under s. NR 661.0003 c6d ci.e., debris treated by an extraction or destruction technology provided by s. NR 668.45, Table 1, and debris that the department has determined does not contain hazardous waste, is subject to the notification and certification requirements of sub. c4d rather than the certification requirements of this subsection.

3. For wastes with organic constituents having treatment standards expressed as concentration levels, if compliance with the treatment standards is based in whole or in part on the analytical detection limit alternative specified in s. NR 668.40 c4d, then the certification, signed by an authorized representative, 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. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion units as specified in s. NR 668.42 [or 40 CFR 268.42], Table 1. I have been unable to detect the nonwastewater organic constituents, despite having used best good-faith efforts to analyze for these constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

4. For characteristic wastes that are subject to the treatment standards in s. NR 668.40, other than those expressed as a method of treatment, or s. NR 668.49, and that contain underlying hazardous constituents as defined in s. NR 668.02 c9d; if these wastes are treated on-site to remove the hazardous characteristic; and are then sent off-site for treatment of underlying hazardous constituents, the certification shall state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of s. NR 668.40 or 668.49 [or 40 CFR 268.40 or 268.49] to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

5. For characteristic wastes that contain underlying hazardous constituents as defined in s. NR 668.02 c9d that are treated on-site to remove the hazardous characteristic, and to treat underlying hazardous constituents to meet the universal treatment standards in s. NR 668.48, the certification shall state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of s. NR 668.40 [40 CFR 268.40] to remove the hazardous characteristic and that underlying hazardous constituents, as defined in s. NR 668.02 c9d have been treated on-site to meet the universal treatment standards under s. NR 668.48 [or 40 CFR 268.48]. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

ced If the waste or treatment residue will be further managed at a different treatment, storage or disposal 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.

cfid Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of s. NR 666.020 c2d regarding treatment standards and prohibition levels, the owner or operator of a treatment facility cfor instance, the recyclerd shall, for the initial shipment of waste, prepare a one-time certification described in par. cdd, and a one-time notice which includes the information in par. ccd cexcept the manifest numberd. The certification and notification shall be placed in the facility[s on-site files. If the waste or the receiving facility changes, a new certification and notification shall be prepared and placed in the on-site files. In addition, the recycling facility shall also keep records of the name and location of each entity receiving the hazardous waste-derived product.

c3d Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to s. NR 666.020 c2d, the owner or operator of any land disposal facility disposing any waste subject to restrictions under this chapter shall comply with all of the following:

cad Have copies of the notice and certifications specified in subs. c1d and c2d.

cbd Test the waste, or an extract of the waste or treatment residue developed using test method 1311 cthe Toxicity Characteristic Leaching Procedure, described in XTest Methods for Evaluating Solid Waste, Physical{Chemical MethodsY, EPA SW-846, incorporated by reference in s. NR 660.11d, to assure that the wastes or treatment residues are in compliance with the applicable treatment standards set forth in subch. D. This testing shall be performed according to the frequency specified in the facil-

ity[s waste analysis plan as required by s. NR 664.0013 or 665.0013.

c4d Generators or treaters who claim that hazardous debris is excluded from the definition of hazardous waste under s. NR 661.0003 c6d ci.e., debris treated by an extraction or destruction technology provided by s. NR 668.45, Table 1, and debris that the department has determined does not contain hazardous waste are subject to all of the following notification and certification requirements:

cad A one-time notification, including the following information, shall be submitted to the department:

1. The name and address of the approved facility for solid waste disposal which is receiving the treated debris.

2. A description of the hazardous debris as initially generated, including the applicable EPA hazardous waste number or numbers.

3. For debris excluded under s. NR 661.0003 c6d cad, the technology from s. NR 668.45, Table 1, used to treat the debris.

cbd The notification shall be updated if the debris is shipped to a different facility, and, for debris excluded under s. NR 661.0002 c5d cad, if a different type of debris is treated or if a different technology is used to treat the debris.

ccd For debris excluded under s. NR 661.0003 c6d cad, the owner or operator of the treatment facility shall document and certify compliance with the treatment standards of s. NR 668.45, Table 1, by meeting all of the following criteria:

1. The owner or operator of the treatment facility shall keep records of all inspections, evaluations and analyses of treated debris that are made to determine compliance with the treatment standards.

2. The owner or operator of the treatment facility shall keep records of any data or information the treatment facility obtains during treatment of the debris that identifies key operating parameters of the treatment unit.

3. For each shipment of treated debris, a certification of compliance with the treatment standards shall be signed by an authorized representative and placed in the facility[s files. The certification shall state the following: XI certify under penalty of law that the debris has been treated in accordance with the requirements of s. NR 668.45. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment. Y

c5d If the department determines that a contaminated soil subject to LDRs as provided in s. NR 668.49 c1d no longer contains a listed hazardous waste, or if a generator or treater determines that a contaminated soil subject to LDRs as provided in s. NR 668.49 c1d no longer exhibits a characteristic of hazardous waste, then the generator or treater shall meet all of the following conditions:

cad Prepare a one-time only documentation of these determinations including all supporting information.

cbd Maintain that information in the facility files and other records for a minimum of 3 years.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am. c1d cad, cbd, ccd 1., cdd, c2d cfd Register July 2017 No. 739, eff. 8-1-17; correction in c1d cad made under s. 35.17, Stats., Register July 2017 No. 739; CR 19-082: am. ctitled, c1d cintro.d, ccd 3., cdd Table, ced, egd, chd, c2d ccd 2., cdd 2., r. and recr. c2d cfd, am. c4d cintro.d, cad 3., cbd, and ccd cintro.d Register August 2020 No. 776, eff. 9-1-20; correction in c1d ced, c2d cTabled made under s. 35.17, Stats., Register August 2020 No. 776; correction in c1d cjd, c2d cfd made under s. 13.92 c4d cbd 7., Stats., Register April 2021 No. 784.

NR 668.09 Special rules regarding wastes that exhibit a characteristic. c1d The initial generator of a solid waste shall determine each EPA hazardous waste number c waste coded applicable to the waste to determine the applicable treat-

ment standards under subch. **D**. This determination may be made concurrently with the hazardous waste determination required in s. **NR 662.011**. For purposes of this chapter, the waste will carry the waste code for any applicable listed waste subch. **D** of ch. **NR 661d**. In addition, where the waste exhibits a characteristic, the waste will carry one or more of the characteristic waste codes subch. **C** of ch. **NR 661d**, except when the treatment standard for the listed waste operates in lieu of the treatment standard for the characteristic waste, as specified in sub. **c2d**. If the generator determines that their waste displays a hazardous characteristic, and is not D001 nonwastewaters treated by CMBST, RORGS, OR POLYM under s. **NR 668.42**, Table 1, then the generator shall determine the underlying hazardous constituents, as defined by s. **NR 668.02 c9d**, in the characteristic waste.

c2d Where a prohibited waste is both listed under subch. **D** of ch. **NR 661** and exhibits a characteristic under subch. **C** of ch. **NR 661**, the treatment standard for the waste code listed in subch. **D** of ch. **NR 661** will operate in lieu of the standard for the waste code under subch. **C** of ch. **NR 661**, if 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.

c3d In addition to any applicable standards determined from the initial point of generation, no prohibited waste that exhibits a characteristic under subch. **C** of ch. **NR 661** may be land disposed unless the waste complies with the treatment standards under subch. **D**.

c4d Wastes that exhibit a characteristic are also subject to s. **NR 668.07**, except that once the waste is no longer hazardous, a one-time notification and certification shall be placed in the generator[s] or treater[s] on-site files. The notification and certification that is placed in the generator[s] or treater[s] files shall be updated if the process or operation generating the waste changes or if the approved facility for solid waste disposal receiving the waste changes.

cad The notification shall include all of the following information:

1. Name and address of the approved facility for solid waste disposal which is receiving the waste shipment.
2. A description of the waste as initially generated, including the applicable EPA hazardous waste code or codes, treatability group or groups, and underlying hazardous constituents, as defined in s. **NR 668.02 c9d**, unless the waste will be treated and monitored for all underlying hazardous constituents. If all underlying hazardous constituents will be treated and monitored, there is no requirement to list any of the underlying hazardous constituents on the notice.

cbd The certification shall be signed by an authorized representative and shall include the language in s. **NR 668.07 c2d cdd**. If treatment removes the characteristic but does not meet standards applicable to underlying hazardous constituents, then the certification in s. **NR 668.07 c2d cdd 4**, applies.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am. c1d, c4d intro.d, Register July 2017 No. 739, eff. 8-1-17.

Subchapter B — Schedule for Land Disposal Prohibition and Establishment of Treatment Standards

NR 668.14 Surface impoundment exemptions. c1d This section defines additional circumstances under which an otherwise prohibited waste may continue to be placed in a surface impoundment.

c2d Wastes which are newly identified or listed under **42 USC 6921** after November 8, 1984, and stored in a surface im-

poundment that is newly subject to ch. **291**, Stats., and chs. **NR 660** to **673** as a result of the additional identification or listing, may continue to be stored in the surface impoundment for 48 months after the promulgation of the additional listing or characteristic, not withstanding that the waste is otherwise prohibited from land disposal, if the surface impoundment is in compliance with the requirements of subch. **F** of ch. **NR 665** within 12 months after promulgation of the new listing or characteristic.

c3d Wastes which are newly identified or listed under **42 USC 6921** after November 8, 1984, and treated in a surface impoundment that is newly subject to ch. **291**, Stats., and chs. **NR 660** to **673** as a result of the additional identification or listing, may continue to be treated in that surface impoundment, not withstanding that the waste is otherwise prohibited from land disposal, if the surface impoundment is in compliance with subch. **F** of ch. **NR 665** within 12 months after the promulgation of the new listing or characteristic. In addition, if the surface impoundment continues to treat hazardous waste after 48 months from promulgation of the additional listing or characteristic, it must then be in compliance with s. **NR 668.04**.

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

Subchapter C — Prohibitions on Land Disposal

NR 668.20 Waste specific prohibitions] Dyes or pigments production wastes. c1d Effective August 23, 2005, the waste specified in ch. **NR 661** and **40 CFR part 261** as hazardous waste number K181, and soil and debris contaminated with this waste, radioactive wastes mixed with this waste and soil and debris contaminated with radioactive wastes mixed with this waste are prohibited from land disposal.

c2d The requirements of sub. **c1d** do not apply if:

cad The wastes meet the applicable treatment standards specified in subch. **D** of ch. **NR 668**.

cbd The facility has been granted an exemption from a prohibition pursuant to a petition under s. **NR 668.06**, with respect to those wastes and units covered by the petition.

ccd The wastes meet the applicable treatment standards established pursuant to a petition granted under s. **NR 668.44**.

cdd Hazardous debris has met the treatment standards in s. **NR 668.40** or the alternative treatment standards in s. **NR 668.45**.

ced The facility has been granted an extension to the effective date of a prohibition pursuant to s. **NR 668.05**, with respect to these wastes covered by the extension.

c3d To determine whether a hazardous waste identified in this subsection exceeds the applicable treatment standards specified in s. **NR 668.40**, the initial generator shall test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract of the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable subch. **D** of ch. **NR 668** levels, the waste is prohibited from land disposal, and all requirements of ch. **NR 668** are applicable, except as otherwise specified.

History: CR 16-007: cr. Register July 2017 No. 739, eff. 8-1-17; correction in c2d cad to ced, c3d made under s. 35.17, Stats., Register July 2017 No. 739.

NR 668.30 Waste specific prohibitions — wood preserving wastes. c1d Effective August 11, 1997, the wastes specified in ch. **NR 661** as EPA Hazardous Waste numbers F032, F034, and F035 are prohibited from land disposal.

c2d Effective May 12, 1999, soil and debris contaminated with F032, F034, F035; and radioactive wastes mixed with EPA Hazardous waste numbers F032, F034, and F035 are prohibited from land disposal.

c3d Between May 12, 1997 and May 12, 1999, soil and debris contaminated with F032, F034, F035; and radioactive waste mixed with F032, F034, and F035 may be disposed in a landfill or surface impoundment only if the unit is in compliance with the requirements specified in [40 CFR 268.5chdc2d](#).

c4d The requirements of sub. [c1d](#) and [c2d](#) do not apply if any of the following conditions are met:

cad The wastes meet the applicable treatment standards specified in subch. [D](#).

cbd Persons have been granted an exemption from a prohibition pursuant to a petition under [40 CFR 268.6](#), with respect to those wastes and units covered by the petition.

ccd The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under [40 CFR 268.44cad](#) to [cgd](#) or s. [NR 668.44 c8d](#) to [c13d](#).

cdd Persons have been granted an extension to the effective date of a prohibition pursuant to [40 CFR 268.5](#), with respect to those wastes covered by the extension.

c5d To determine whether a hazardous waste identified in this chapter exceeds the applicable treatment standards specified in s. [NR 668.40](#), the initial generator shall test a 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 universal treatment standard levels of s. [NR 668.48](#), the waste is prohibited from land disposal, and all requirements of ch. [NR 668](#) are applicable, except as otherwise specified.

History: [CR 05-032](#): cr. [Register July 2006 No. 607](#), eff. 8-1-06; [CR 16-007](#): am. [c4d ccd](#) [Register July 2017 No. 739](#), eff. 8-1-17.

NR 668.31 Waste specific prohibitions — dioxin-containing wastes. **c1d** Effective November 8, 1988, the dioxin-containing wastes specified in s. [NR 661.0031](#) as EPA hazardous waste numbers F020, F021, F022, F023, F026, F027, and F028, are prohibited from land disposal, unless the F020 to F023 and F026 to F028 dioxin-containing waste is contaminated soil and debris resulting from a response action taken under [42 USC 9604](#) or [9606](#) or a corrective action taken under ch. [292](#), Stats.

c2d Effective November 8, 1990, the F020-F023 and F026-F028 dioxin-containing wastes listed in sub. [c1d](#) are prohibited from land disposal.

c3d Between November 8, 1988, and November 8, 1990, wastes included in sub. [c1d](#) may be disposed in a landfill or surface impoundment only if the unit complies with [40 CFR 268.5chdc2d](#) and all other applicable requirements of chs. [NR 664](#) and [665](#).

c4d The requirements of subs. [c1d](#) and [c2d](#) do not apply if any of the following conditions are met:

cad The wastes meet the standards of subch. [D](#).

cbd Persons have been granted an exemption from a prohibition pursuant to a petition under [40 CFR 268.6](#), with respect to those wastes and units covered by the petition.

ccd Persons have been granted an extension to the effective date of a prohibition pursuant to [40 CFR 268.5](#), with respect to those wastes covered by the extension.

History: [CR 05-032](#): cr. [Register July 2006 No. 607](#), eff. 8-1-06; [CR 19-082](#): am. [c1d](#) [Register August 2020 No. 776](#), eff. 9-1-20.

NR 668.32 Waste specific prohibitions — soils exhibiting the toxicity characteristic for metals and containing PCBs. **c1d** Effective December 26, 2000, any volumes of soil exhibiting the toxicity characteristic solely because

of the presence of metals [cD004](#) to [D011d](#) and containing PCBs, are prohibited from land disposal.

c2d The requirements of sub. [c1d](#) do not apply if any of the following conditions are met:

cad The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg and meet the treatment standards specified in subch. [D](#) for EPA hazardous waste numbers [D004](#) to [D011](#), as applicable.

cbd The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg and meet the alternative treatment standards specified in s. [NR 668.49](#) for contaminated soil.

ccd Persons have been granted an exemption from a prohibition pursuant to a petition under [40 CFR 268.6](#), with respect to those wastes and units covered by the petition.

cdd The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under [40 CFR 268.44cad](#) to [cgd](#) or s. [NR 668.44 c8d](#) to [c13d](#).

History: [CR 05-032](#): cr. [Register July 2006 No. 607](#), eff. 8-1-06; [CR 16-007](#): am. [c2d cdd](#) [Register July 2017 No. 739](#), eff. 8-1-17.

NR 668.33 Waste specific prohibitions — chlorinated aliphatic wastes. **c1d** Effective May 8, 2001, the wastes specified in ch. [NR 661](#) as EPA hazardous wastes numbers [K174](#) and [K175](#), soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.

c2d The requirements of sub. [c1d](#) do not apply if any of the following conditions are met:

cad The wastes meet the applicable treatment standards specified in subch. [D](#).

cbd Persons have been granted an exemption from a prohibition pursuant to a petition under [40 CFR 268.6](#), with respect to those wastes and units covered by the petition.

ccd The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under [40 CFR 268.44cad](#) to [cgd](#) or s. [NR 668.44 c8d](#) to [c13d](#).

cdd Hazardous debris has met the treatment standards in s. [NR 668.40](#) or the alternative treatment standards in s. [NR 668.45](#).

ced Persons have been granted an extension to the effective date of a prohibition pursuant to [40 CFR 268.5](#), with respect to these wastes covered by the extension.

c3d To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in s. [NR 668.40](#), the initial generator shall test a 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 regulated constituents in excess of the applicable levels of subch. [D](#), the waste is prohibited from land disposal, and all requirements of ch. [NR 668](#) are applicable, except as otherwise specified.

c4d Disposal of [K175](#) wastes which comply with all applicable s. [NR 668.40](#) treatment standards shall also be macroencapsulated in accordance with s. [NR 668.45](#), Table 1 unless one of the following conditions is met:

cad The waste is placed in a hazardous waste monofill which meets the requirements of ch. [291](#), Stats., and chs. [NR 660](#) to [673](#). The monofill shall contain only [K175](#) wastes that meet all applicable s. [NR 668.40](#) treatment standards.

cbd The waste is placed in a dedicated hazardous waste landfill cell which meets the requirements of ch. [291](#), Stats., and chs.

NR 660 to 673 and in which all other wastes being co-disposed are at pH=6.0.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am. c2d ccd Register July 2017 No. 739, eff. 8-1-17.

NR 668.34 Waste specific prohibitions — toxicity characteristic metal wastes. **c1d** Effective August 24, 1998, the newly identified wastes specified in ch. NR 661 as EPA hazardous waste numbers D004 to D011 ci.e. wastes, soil, or debris identified as hazardous by the toxic characteristic leaching procedure but not the extraction procedure, and waste, soil, or debris from mineral processing operations that is identified as hazardous by the specifications at ch. NR 661 are prohibited from land disposal.

c2d Effective November 26, 1998, slag from secondary lead smelting which exhibits the toxicity characteristic due to the presence of one or more metals is prohibited from land disposal.

c3d Effective May 26, 2000, newly identified characteristic wastes from elemental phosphorus processing; radioactive wastes mixed with newly identified wastes specified in EPA hazardous waste numbers D004 to D011 ci.e., wastes, soil, or debris identified as hazardous by the toxic characteristic leaching procedure but not the extraction procedure; or mixed with newly identified characteristic mineral processing wastes, soil, or debris are prohibited from land disposal.

c4d Between May 26, 1998 and May 26, 2000, newly identified characteristic wastes from elemental phosphorus processing, radioactive waste mixed with D004 to D011 wastes that are newly identified ci.e., wastes, soil, or debris identified as hazardous by the toxic characteristic leaching procedure but not the extraction procedure, or mixed with newly identified characteristic mineral processing wastes, soil, or debris may be disposed in a landfill or surface impoundment only if the unit is in compliance with 40 CFR 268.5chd.

c5d The requirements of subs. c1d and c2d do not apply if:

cad The wastes meet the applicable treatment standards specified in subch. D.

cbd EPA has granted an exemption from a prohibition pursuant to a petition under 40 CFR 268.6, with respect to those wastes and units covered by the petition.

ccd The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under 40 CFR 268.44.

cdd EPA has granted an extension to the effective date of a prohibition pursuant to 40 CFR 268.5, with respect to these wastes covered by the extension.

c6d To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in s. NR 668.40, the initial generator shall test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentration in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents including underlying hazardous constituents in characteristic wastes in excess of the applicable universal treatment standard levels of s. NR 668.48, then the waste is prohibited from land disposal, and all requirements of this chapter are applicable, except as otherwise specified.

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

NR 668.35 Waste specific prohibitions — petroleum refining wastes. **c1d** Effective February 8, 1999, wastes specified in ch. NR 661 as EPA hazardous waste numbers K169, K170, K171, and K172, soils and debris contaminated with these wastes, radioactive wastes mixed with these wastes,

and soils and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

c2d The requirements of sub. c1d do not apply if any of the following conditions are met:

cad The wastes meet the applicable treatment standards specified in subch. D.

cbd EPA has granted an exemption from a prohibition pursuant to a petition under 40 CFR 268.6, with respect to those wastes and units covered by the petition.

ccd The wastes meet the applicable treatment standards established pursuant to a petition granted under 40 CFR 268.44cad to cgd or s. NR 668.44 c8d to c13d.

cdd Hazardous debris have met treatment standards in s. NR 668.40 or the alternative treatment standards in s. NR 668.45.

ced EPA has granted an extension to the effective date of a prohibition pursuant to 40 CFR 268.5, with respect to these wastes covered by the extension.

c3d To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in s. NR 668.40, the initial generator shall test a 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 universal treatment standard levels of s. NR 668.48, then the waste is prohibited from land disposal, and all requirements of this chapter are applicable, except as otherwise specified.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am. c2d ccd Register July 2017 No. 739, eff. 8-1-17.

NR 668.36 Waste specific prohibitions — inorganic chemical wastes. **c1d** Effective May 20, 2002, the wastes specified in ch. NR 661 as EPA hazardous waste numbers K176, K177, and K178, and soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.

c2d The requirements of sub. c1d do not apply if any of the following conditions are met:

cad The wastes meet the applicable treatment standards specified in subch. D.

cbd EPA has granted an exemption from a prohibition pursuant to a petition under 40 CFR 268.6, with respect to those wastes and units covered by the petition.

ccd The wastes meet the applicable treatment standards established pursuant to a petition granted under 40 CFR 268.44cad to cgd or s. NR 668.44 c8d to c13d.

cdd Hazardous debris has met the treatment standards in s. NR 668.40 or the alternative treatment standards in s. NR 668.45.

ced EPA has granted an extension to the effective date of a prohibition pursuant to 40 CFR 268.5, with respect to these wastes covered by the extension.

c3d To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in s. NR 668.40, the initial generator must test a 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 regulated constituents in excess of the applicable subch. D levels, the waste is prohibited from land disposal, and all requirements of this chapter are applicable, except as otherwise specified.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am. c2d ccd Register July 2017 No. 739, eff. 8-1-17.

NR 668.37 Waste specific prohibitions — ignitable and corrosive characteristic wastes whose treatment standards were vacated.

Effective August 9, 1993, wastes specified in s. [NR 661.0021](#) as D001, which are not in the high TOC ignitable liquids subcategory, and specified in s. [NR 661.0022](#) as D002, which are managed in systems other than those whose discharge is regulated under ch. [283](#), Stats., or in systems that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation{sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 19-082: am. Register August 2020 No. 776, eff. 9-1-20.

NR 668.38 Waste specific prohibitions — newly identified organic toxicity characteristic wastes and newly listed coke by-product and chlorotoluene production wastes.

c1d Effective December 19, 1994, the wastes specified in s. [NR 661.0032](#) as EPA hazardous waste numbers K141, K142, K143, K144, K145, K147, K148, K149, K150, and K151 are prohibited from land disposal. In addition, debris contaminated with EPA hazardous waste numbers F037, F038, K107 to K112, K117, K118, K123 to K126, K131, K132, K136, U328, U353, U359, and soil and debris contaminated with D012 to D043, K141 to K145, and K147 to K151 are prohibited from land disposal. Wastes that are specified in s. [NR 661.0024](#), Table 1 as EPA hazardous waste numbers: D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043 that are not radioactive, or that are managed in systems other than those whose discharge is regulated under ch. [283](#), Stats., or that are zero dischargers that do not engage in CWA-equivalent treatment before ultimate land disposal are prohibited from land disposal.

c2d On September 19, 1996, radioactive wastes that are mixed with D018 to D043 that are managed in systems other than those whose discharge is regulated under ch. [283](#), Stats., or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation{sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies. Radioactive wastes mixed with K 141 to K 145, and K147 to K151 are also prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

c3d Between December 19, 1994 and September 19, 1996, the wastes included in sub. **c2d** may be disposed in a landfill or surface impoundment, only if the unit is in compliance with [40 CFR 268.5chdc2d](#).

c4d The requirements of subs. **c1d** to **c3d** do not apply if any of the following conditions are met:

cad The wastes meet the applicable treatment standards specified in subch. **D**.

cbd EPA has granted an exemption from a prohibition pursuant to a petition under [40 CFR 268.6](#), with respect to those wastes and units covered by the petition.

ccd The wastes meet the applicable alternate treatment stan-

dards established pursuant to a petition granted under [40 CFR 268.44cad](#) to [cgd](#) or s. [NR 668.44 c8d](#) to [c13d](#).

cdd EPA has granted an extension to the effective date of a prohibition pursuant to [40 CFR 268.5](#), with respect to these wastes covered by the extension.

c5d To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in s. [NR 668.40](#), the initial generator shall test a 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 subch. **D** levels, the waste is prohibited from land disposal, and all requirements of this chapter are applicable, except as otherwise specified.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am. c4d ccd Register July 2017 No. 739, eff. 8-1-17; CR 19-082: am. c1d Register August 2020 No. 776, eff. 9-1-20.

NR 668.39 Waste specific prohibitions — spent aluminum potliners, reactive and carbamate wastes.

c1d On July 8, 1996, the wastes specified in s. [NR 661.0032](#) as EPA Hazardous waste numbers K156 to K159, and K161; and in s. [NR 661.0033](#) as EPA hazardous waste numbers P127, P128, P185, P188 to P192, P194, P196 to P199, P201 to P205, U271, U278 to U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409 to U411 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.

c2d On July 8, 1996, the wastes identified in s. [NR 661.0023](#) as D003 that are managed in systems other than those whose discharge is regulated under ch. [283](#), Stats., or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. This prohibition does not apply to unexploded ordnance and other explosive devices which have been the subject of an emergency response. cThese D003 wastes are prohibited unless they meet the treatment standard of DEACT before land disposal as described in s. [NR 668.40d](#).

c3d On September 21, 1998, the wastes specified in s. [NR 661.0032](#) as EPA hazardous waste number K088 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.

c4d On April 8, 1998, radioactive wastes mixed with K088, K156 to K159, K161, P127, P128, P185, P188 to P192, P194, P196 to P199, P201 to P205, U271, U278 to U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409 to U411 are prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

c5d Between July 8, 1996, and April 8, 1998, the wastes included in subs. **c1d**, **c3d** and **c4d** may be disposed in a landfill or surface impoundment, only if the unit is in compliance with [40 CFR 268.5chdc2d](#).

c6d The requirements of subs. **c1d** to **c4d** do not apply if any of the following conditions are met:

cad The wastes meet the applicable treatment standards specified in subch. **D**.

cbd EPA has granted an exemption from a prohibition pursuant to a petition under [40 CFR 268.6](#), with respect to those wastes and units covered by the petition.

ccd The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under [40 CFR 268.44cad](#) to [cgd](#) or s. [NR 668.44 c8d](#) to [c13d](#).

add EPA has granted an extension to the effective date of a prohibition pursuant to 40 CFR 268.5, with respect to these wastes covered by the extension.

c7d To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in s. NR 668.40, the initial generator must test a 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 subch. D levels, the waste is prohibited from land disposal, and all requirements of this chapter are applicable, except as otherwise specified.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am. c2d, c6d ccd Register July 2017 No. 739, eff. 8-1-17; CR 19-082: am. c1d to c3d Register August 2020 No. 776, eff. 9-1-20.

Subchapter D — Treatment Standards

NR 668.40 Applicability of treatment standards.

c1d A prohibited waste identified in the table XTreatment Standards for Hazardous WastesY in this section may be land disposed only if it meets the requirements found in the table. For each waste, the table identifies one of the following three types of treatment standard requirements:

cad All hazardous constituents in the waste or in the treatment residue shall be at or below the values found for that waste in the table under the heading Xtotal waste standardsY.

cbd The hazardous constituents in the extract of the waste or in the extract of the treatment residue shall be at or below the values found in the table under the heading, Xwaste extract standardsY.

ccd The waste shall be treated using the technology specified in the table under the heading Xtechnology standardY, and described in detail in s. NR 668.42, Table 1—Technology Codes and Description of Technology-Based Standards.

c2d For wastewaters, compliance with concentration level standards is based on maximums for any one day, except for D004 through D011 wastes for which the previously promulgated treatment standards based on grab samples remain in effect. For all nonwastewaters, compliance with concentration level standards is based on grab sampling. For wastes covered by the waste extract standards, the test method 1311, the toxicity characteristic leaching procedure found in XTest Methods for Evaluating Solid Waste, Physical{Chemical MethodsY, EPA SW-846, incorporated by reference in s. NR 660.11 shall be used to measure compliance. An exception is made for D004 and D008, for which either of two test methods may be used: Method 1311 or Method 1310B, the extraction procedure toxicity test. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the EPA Administrator under the procedures set forth in 40 CFR 268.42cbd.

c3d 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.

c4d Notwithstanding the prohibitions specified in sub. c1d, treatment and disposal facilities may demonstrate and certify pursuant to s. NR 668.07 c2d ccd compliance with the treatment standards for organic constituents specified by a footnote in the table XTreatment Standards for Hazardous WastesY in this section, provided all of the following conditions are satisfied:

cad The treatment standards for the organic constituents were established based on incineration in units operated in accordance

with the technical requirements of subch. O of ch. NR 664, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements.

cbd The treatment or disposal facility has used the methods referenced in par. cad to treat the organic constituents.

ccd The treatment or disposal facility may demonstrate compliance with organic constituents if good-faith analytical efforts achieve detection limits for the regulated organic constituents that do not exceed the treatment standards specified in this section by an order of magnitude.

c5d For characteristic wastes cD001 to D043d that are subject to treatment standards in the table XTreatment Standards for Hazardous WastesY and are not managed in a wastewater treatment system that is regulated under ch. 283, Stats., or that is CWA-equivalent, all underlying hazardous constituents as defined in s. NR 668.02 c9d must meet universal treatment standards, found in s. NR 668.48, Table Universal Treatment Standards, prior to land disposal as defined in s. NR 668.02 c3d.

c6d The treatment standards for F001 to F005 nonwastewater constituents carbon disulfide, cyclohexanone, and methanol apply to wastes which contain only one, 2, or 3 of these constituents. Compliance is measured for these constituents in the waste extract from test Method 1311, the Toxicity Characteristic Leaching Procedure found in XTest Methods for Evaluating Solid Waste, Physical{Chemical MethodsY, EPA SW-846, incorporated by reference in s. NR 660.11. If the waste contains any of these three constituents along with any of the other 25 constituents found in F001 to F005, then compliance with treatment standards for carbon disulfide, cyclohexanone, and methanol are not required.

c7d Between August 26, 1996 and March 4, 1999 the treatment standards for the wastes specified in s. NR 661.0032 as EPA hazardous waste numbers K156 to K161 and in s. NR 661.0033 as EPA hazardous waste numbers P127, P128, P185, P188 to P192, P194, P196 to P199, P201 to P205, U271, U277 to U280, U364 to U367, U372, U373, U375 to U379, U381 to U387, U389 to U396, U400 to U404, U407, and U409 to U411; and soil contaminated with these wastes; shall be satisfied by either meeting the constituent concentrations presented in the table XTreatment Standards for Hazardous WastesY in this section, or by treating the waste by the following technologies: combustion, as defined by the technology code CMBST at s. NR 668.42, Table 1, for nonwastewaters; and, biodegradation as defined by the technology code BIODG, carbon adsorption as defined by the technology code CARBN; chemical oxidation as defined by the technology code CHOXD; or combustion as defined as technology code CMBST at s. NR 668.42, Table 1, for wastewaters.

c8d If prohibited D004 to D011 mixed radioactive wastes and mixed radioactive listed wastes containing metal constituents, have been previously treated by stabilization to the treatment standards in effect at that time and put into storage afterwards, then it is not necessary to re-treat the waste to meet treatment standards in this section prior to land disposal.

c10d Effective September 4, 1998, the treatment standards for the wastes specified in s. NR 661.0033 as EPA hazardous waste numbers P185, P191, P192, P197, U364, U394, and U395 shall be satisfied by either meeting the constituent concentrations presented in the table XTreatment Standards for Hazardous WastesY in this section, or by treating the waste by the following technologies: combustion, as defined by the technology code CMBST at s. NR 668.42, Table 1, for nonwastewaters; biodegradation as defined by the technology code BIODG; carbon adsorption as defined by the technology code CARBN; chemical oxidation as defined by the technology code CHOXD; or com-

bustion as defined as technology code CMBST at s. NR 668.42, Table 1, for wastewaters.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am.

c2d, cTabled Register July 2017 No. 739, eff. 8-1-17; CR 19-082: am. c7d, c10d, r. and recr. cTabled Register August 2020 No. 776, eff. 9-1-20; correction in cTabled made under s. 35.17, Stats., Register August 2020 No. 776.

Section NR 668.40 – Treatment Standards for Hazardous Wastes

Note: Xn.a.Y stands for Xnot applicableY; Xfb.Y stands for Xfollowed byY.

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
D001 ⁹	Ignitable Characteristic Wastes, except for the s. NR 661.0021 c1d cad High TOC Subcategory.	NA	NA	DEACT and meet s. NR 668.48 standards ⁸ ; or RORGS; or CMBST	DEACT and meet s. NR 668.48 standards ⁸ ; or RORGS; or CMBST
	High TOC Ignitable Characteristic Liquids Subcategory based on s. NR 661.0021 c1d cad—Greater than or equal to 10% total organic carbon. cNote: This subcategory consists of nonwastewaters only.d	NA	NA	NA	RORGS; CMBST; or POLYM
D002 ⁹	Corrosive Characteristic Wastes.	NA	NA	DEACT and meet s. NR 668.48 standards ⁸	DEACT and meet s. NR 668.48 standards ⁸
D002, D004, D005, D006, D007, D008, D009, D010, D011	Radioactive high-level wastes generated during the reprocessing of fuel rods. cNote: This subcategory consists of nonwastewaters only.d	Corrosivity cpHd	NA	NA	HLVIT
		Arsenic	7440-38-2	NA	HLVIT
		Barium	7440-39-3	NA	HLVIT
		Cadmium	7440-43-9	NA	HLVIT
		Chromium cTotald	7440-47-3	NA	HLVIT
		Lead	7439-92-1	NA	HLVIT
		Mercury	7439-97-6	NA	HLVIT
		Selenium	7782-49-2	NA	HLVIT
D003 ⁹	Reactive Sulfides Subcategory based on s. NR 661.0023 c1d ced.	NA	NA	DEACT	DEACT
	Explosives Subcategory based on s. NR 661.0023 c1d cfd, cgd, and chd.	NA	NA	DEACT and meet s. NR 668.48 standards ⁸	DEACT and meet s. NR 668.48 standards ⁸
	Unexploded ordnance and other explosive devices which have been the subject of an emergency response.	NA	NA	DEACT	DEACT
	Other Reactives Subcategory based on s. NR 661.0023 c1d cad.	NA	NA	DEACT and meet s. NR 668.48 standards ⁸	DEACT and meet s. NR 668.48 standards ⁸
	Water Reactive Subcategory based on s. NR 661.0023 c1d cbd, ccd, and cdd. cNote: This subcategory consists of nonwastewaters only.d	NA	NA	NA	DEACT and meet s. NR 668.48 standards ⁸
	Reactive Cyanides Subcategory based on s. NR 661.0023 c1d ced.	Cyanides cTotald7	57-12-5	Reserved	590
Cyanides cAmenabled7		57-12-5	0.86	30	
D004 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for arsenic based on the toxicity characteristic leaching procedure cTCLPd in SW846.	Arsenic	7440-38-2	1.4 and meet s. NR 668.48 standards ⁸	5.0 mg{L TCLP and meet s. NR 668.48 standards ⁸

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
D005 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for barium based on the toxicity characteristic leaching procedure cTCLPd in SW846.	Barium	7440-39-3	1.2 and meet s. NR 668.48 standards ⁸	21 mg{L TCLP and meet s. NR 668.48 standards ⁸
D006 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for cadmium based on the toxicity characteristic leaching procedure cTCLPd in SW846.	Cadmium	7440-43-9	0.69 and meet s. NR 668.48 standards ⁸	0.11 mg{L TCLP and meet s. NR 668.48 standards ⁸
	Cadmium Containing Batteries Subcategory. cNote: This subcategory consists of non-wastewaters onlyd.	Cadmium	7440-43-9	NA	RTHRM
	Radioactively contaminated cadmium containing batteries. cNote: This subcategory consists of nonwastewaters onlyd	Cadmium	7440-43-9	NA	Macroencapsulation in accordance with s. NR 668.45.
D007 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for chromium based on the toxicity characteristic leaching procedure cTCLPd in SW846.	Chromium cTotald	7440-47-3	2.77 and meet s. NR 668.48 standards ⁸	0.60 mg{L TCLP and meet s. NR 668.48 standards ⁸
D008 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for lead based on the toxicity characteristic leaching procedure cTCLPd in SW846.	Lead	7439-92-1	0.69 and meet s. NR 668.48 standards ⁸	0.75 mg{L TCLP and meet s. NR 668.48 standards ⁸
	Lead Acid Batteries Subcategory cNote: 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 this chapter or exempted under other department regulations csee s. NR 666.80d. This subcategory consists of nonwastewaters onlyd	Lead	7439-92-1	NA	RLEAD
	Radioactive Lead Solids Subcategory cNote: 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 organo-lead materials that can be incinerated and stabilized as ash. This subcategory consists of nonwastewaters onlyd	Lead	7439-92-1	NA	MACRO

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
D009 ⁹	Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure cTCLPd in SW846; and contain greater than or equal to 260 mg{kg total mercury that also contain organics and are not incinerator residues. cHigh Mercury-Organic Subcategoryd	Mercury	7439-97-6	NA	IMERC; OR RMERC
	Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure cTCLPd in SW846; and contain greater than or equal to 260 mg{kg total mercury that are inorganic, including incinerator residues and residues from RMERC. cHigh Mercury-Inorganic Subcategoryd	Mercury	7439-97-6	NA	RMERC
	Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure cTCLPd in SW846; and contain less than 260 mg{kg total mercury and that are residues from RMERC only. cLow Mercury Subcategoryd	Mercury	7439-97-6	NA	0.20 mg{L TCLP and meet s. NR 668.48 standards ⁸
	All other nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure cTCLPd in SW846; and contain less than 260 mg{kg total mercury and that are not residues from RMERC. cLow Mercury Subcategoryd	Mercury	7439-97-6	NA	0.025 mg{L TCLP and meet s. NR 668.48 standards ⁸
D009 ⁹	All D009 wastewaters.	Mercury	7439-97-6	0.15 mg{L TCLP and meet s. NR 668.48 standards ⁸	NA
	Elemental mercury contaminated with radioactive materials. cNote: This subcategory consists of nonwastewaters only.d	Mercury	7439-97-6	NA	AMLGM
	Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory. cNote: This subcategory consists of nonwastewaters only.d	Mercury	7439-97-6	NA	IMERC
	Radioactively contaminated mercury containing batteries. cNote: This subcategory consists of nonwastewaters onlyd	Mercury	7439-97-6	NA	Macroencapsulation in accordance with s. NR 668.45.
D010 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for selenium based on the toxicity characteristic leaching procedure cTCLPd in SW846.	Selenium	7782-49-2	0.82 and meet s. NR 668.48 standards ⁸	5.7 mg{L TCLP and meet s. NR 668.48 standards ⁸
D011 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for silver based on the toxicity characteristic leaching procedure cTCLPd in SW846.	Silver	7440-22-4	0.43 and meet s. NR 668.48 standards ⁸	0.14 mg{L TCLP and meet s. NR 668.48 standards ⁸
	Radioactively contaminated silver containing batteries. Note: This subcategory consists of nonwastewaters onlyd	Silver	7440-22-4	NA	Macroencapsulation in accordance with s. NR 668.45.
D012 ⁹	Wastes that are toxicity characteristic cTCd for Endrin based on the TCLP in SW846 Method 1311.	Endrin	72-20-8	BIODG; or CMBST	0.13 and meet s. NR 668.48 standards ⁸
		Endrin aldehyde	7421-93-4	BIODG; or CMBST	0.13 and meet s. NR 668.48 standards ⁸

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
D013 ⁹	Wastes that are TC for Lindane based on the TCLP in SW846 Method 1311.	alpha-BHC	319-84-6	CARBN; or CMBST	0.066 and meet s. NR 668.48 standards ⁸
		beta-BHC	319-85-7	CARBN; or CMBST	0.066 and meet s. NR 668.48 standards ⁸
		delta-BHC	319-86-8	CARBN; or CMBST	0.066 and meet s. NR 668.48 standards ⁸
		gamma-BHC cLindaned	58-89-9	CARBN; or CMBST	0.066 and meet s. NR 668.48 standards ⁸
D014 ⁹	Wastes that are TC for Methoxychlor based on the TCLP in SW846 Method 1311.	Methoxychlor	72-43-5	WETOX or CMBST	0.18 and meet s. NR 668.48 standards ⁸
D015 ⁹	Wastes that are TC for Toxaphene based on the TCLP in SW846 Method 1311.	Toxaphene	8001-35-2	BIODG or CMBST	2.6 and meet s. NR 668.48 standards ⁸
D016 ⁹	Wastes that are TC for 2,4-D c2,4-Dichlorophenoxyacetic acid based on the TCLP in SW846 Method 1311.	2,4-D c2,4-Dichlorophenoxyacetic acid	94-75-7	CHOXD, BIODG, or CMBST	10 and meet s. NR 668.48 standards ⁸
D017 ⁹	Wastes that are TC for 2,4,5-TP cSilvexd based on the TCLP in SW846 Method 1311.	2,4,5-TP cSilvexd	93-72-1	CHOXD or CMBST	7.9 and meet s. NR 668.48 standards ⁸
D018 ⁹	Wastes that are TC for Benzene based on the TCLP in SW846 Method 1311.	Benzene	71-43-2	0.14 and meet s. NR 668.48 standards ⁸	10 and meet s. NR 668.48 standards ⁸
D019 ⁹	Wastes that are TC for Carbon tetrachloride based on the TCLP in SW846 Method 1311.	Carbon tetrachloride	56-23-5	0.057 and meet s. NR 668.48 standards ⁸	6.0 and meet s. NR 668.48 standards ⁸
D020 ⁹	Wastes that are TC for Chlordane based on the TCLP in SW846 Method 1311.	Chlordane calpha and gamma isomersd	57-74-9	0.0033 and meet s. NR 668.48 standards ⁸	0.26 and meet s. NR 668.48 standards ⁸
D021 ⁹	Wastes that are TC for Chlorobenzene based on the TCLP in SW846 Method 1311.	Chlorobenzene	108-90-7	0.057 and meet s. NR 668.48 standards ⁸	6.0 and meet s. NR 668.48 standards ⁸
D022 ⁹	Wastes that are TC for Chloroform based on the TCLP in SW846 Method 1311.	Chloroform	67-66-3	0.046 and meet s. NR 668.48 standards ⁸	6.0 and meet s. NR 668.48 standards ⁸
D023 ⁹	Wastes that are TC for o-Cresol based on the TCLP in SW846 Method 1311.	o-Cresol	95-48-7	0.11 and meet s. NR 668.48 standards ⁸	5.6 and meet s. NR 668.48 standards ⁸
D024 ⁹	Wastes that are TC for m-Cresol based on the TCLP in SW846 Method 1311.	m-Cresol cdifficult to distinguish from p-cresold	108-39-4	0.77 and meet s. NR 668.48 standards ⁸	5.6 and meet s. NR 668.48 standards ⁸
D025 ⁹	Wastes that are TC for p-Cresol based on the TCLP in SW846 Method 1311.	p-Cresol cdifficult to distinguish from m-cresold	106-44-5	0.77 and meet s. NR 668.48 standards ⁸	5.6 and meet s. NR 668.48 standards ⁸
D026 ⁹	Wastes that are TC for Cresols cTotald based on the TCLP in SW846 Method 1311.	Cresol-mixed isomers cCresylic acid csum of o-, m-, and p-cresol concentrationsd	1319-77-3	0.88 and meet s. NR 668.48 standards ⁸	11.2 and meet s. NR 668.48 standards ⁸
D027 ⁹	Wastes that are TC for p-Dichlorobenzene based on the TCLP in SW846 Method 1311.	p-Dichlorobenzene c1,4-Dichlorobenzened	106-46-7	0.090 and meet s. NR 668.48 standards ⁸	6.0 and meet s. NR 668.48 standards ⁸
D028 ⁹	Wastes that are TC for 1,2-Dichloroethane based on the TCLP in SW846 Method 1311.	1,2-Dichloroethane	107-06-2	0.21 and meet s. NR 668.48 standards ⁸	6.0 and meet s. NR 668.48 standards ⁸
D029 ⁹	Wastes that are TC for 1,1-Dichloroethylene based on the TCLP in SW846 Method 1311.	1,1-Dichloroethylene	75-35-4	0.025 and meet s. NR 668.48 standards ⁸	6.0 and meet s. NR 668.48 standards ⁸
D030 ⁹	Wastes that are TC for 2,4-Dinitrotoluene based on the TCLP in SW846 Method 1311.	2,4-Dinitrotoluene	121-14-2	0.32 and meet s. NR 668.48 standards ⁸	140 and meet s. NR 668.48 standards ⁸

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg/L ³ ; or Technology Code ⁴	Concentration in mg/kg ⁵ unless noted as Xmg/L TCLPY; or Technology Code ⁴
D031 ⁹	Wastes that are TC for Heptachlor based on the TCLP in SW846 Method 1311.	Heptachlor	76-44-8	0.0012 and meet s. NR 668.48 standards ⁸	0.066 and meet s. NR 668.48 standards ⁸
		Heptachlor epoxide	1024-57-3	0.016 and meet s. NR 668.48 standards ⁸	0.066 and meet s. NR 668.48 standards ⁸
D032 ⁹	Wastes that are TC for Hexachlorobenzene based on the TCLP in SW846 Method 1311.	Hexachlorobenzene	118-74-1	0.055 and meet s. NR 668.48 standards ⁸	10 and meet s. NR 668.48 standards ⁸
D033 ⁹	Wastes that are TC for Hexachlorobutadiene based on the TCLP in SW846 Method 1311.	Hexachlorobutadiene	87-68-3	0.055 and meet s. NR 668.48 standards ⁸	5.6 and meet s. NR 668.48 standards ⁸
D034 ⁹	Wastes that are TC for Hexachloroethane based on the TCLP in SW846 Method 1311.	Hexachloroethane	67-72-1	0.055 and meet s. NR 668.48 standards ⁸	30 and meet s. NR 668.48 standards ⁸
D035 ⁹	Wastes that are TC for Methyl ethyl ketone based on the TCLP in SW846 Method 1311.	Methyl ethyl ketone	78-93-3	0.28 and meet s. NR 668.48 standards ⁸	36 and meet s. NR 668.48 standards ⁸
D036 ⁹	Wastes that are TC for Nitrobenzene based on the TCLP in SW846 Method 1311.	Nitrobenzene	98-95-3	0.068 and meet s. NR 668.48 standards ⁸	14 and meet s. NR 668.48 standards ⁸
D037 ⁹	Wastes that are TC for Pentachlorophenol based on the TCLP in SW846 Method 1311.	Pentachlorophenol	87-86-5	0.089 and meet s. NR 668.48 standards ⁸	7.4 and meet s. NR 668.48 standards ⁸
D038 ⁹	Wastes that are TC for Pyridine based on the TCLP in SW846 Method 1311.	Pyridine	110-86-1	0.014 and meet s. NR 668.48 standards ⁸	16 and meet s. NR 668.48 standards ⁸
D039 ⁹	Wastes that are TC for Tetrachloroethylene based on the TCLP in SW846 Method 1311.	Tetrachloroethylene	127-18-4	0.056 and meet s. NR 668.48 standards ⁸	6.0 and meet s. NR 668.48 standards ⁸
D040 ⁹	Wastes that are TC for Trichloroethylene based on the TCLP in SW846 Method 1311.	Trichloroethylene	79-01-6	0.054 and meet s. NR 668.48 standards ⁸	6.0 and meet s. NR 668.48 standards ⁸
D041 ⁹	Wastes that are TC for 2,4,5-Trichlorophenol based on the TCLP in SW846 Method 1311.	2,4,5-Trichlorophenol	95-95-4	0.18 and meet s. NR 668.48 standards ⁸	7.4 and meet s. NR 668.48 standards ⁸
D042 ⁹	Wastes that are TC for 2,4,6-Trichlorophenol based on the TCLP in SW846 Method 1311.	2,4,6-Trichlorophenol	88-06-2	0.035 and meet s. NR 668.48 standards ⁸	7.4 and meet s. NR 668.48 standards ⁸
D043 ⁹	Wastes that are TC for Vinyl chloride based on the TCLP in SW846 Method 1311.	Vinyl chloride	75-01-4	0.27 and meet s. NR 668.48 standards ⁸	6.0 and meet s. NR 668.48 standards ⁸

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
F001, F002, F003, F004, & F005	F001, F002, F003, F004 and/or F005 solvent wastes that contain any combination of one or more of the following spent solvents: acetone, benzene, n-butyl alcohol, carbon disulfide, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, o-cresol, m-cresol, p-cresol, cyclohexanone, o-dichlorobenzene, 2-ethoxyethanol, ethyl acetate, ethyl benzene, ethyl ether, isobutyl alcohol, methanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, nitrobenzene, 2-nitropropane, pyridine, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethylene, trichlorofluoromethane, and/or xylenes [except as specifically noted in other subcategories]. See further details of these listings in s. NR 661.0031.	Acetone	67-64-1	0.28	160
		Benzene	71-43-2	0.14	10
		n-Butyl alcohol	71-36-3	5.6	2.6
		Carbon disulfide	75-15-0	3.8	NA
		Carbon tetrachloride	56-23-5	0.057	6.0
		Chlorobenzene	108-90-7	0.057	6.0
		o-Cresol	95-48-7	0.11	5.6
		m-Cresol cdifficult to distinguish from p-cresold	108-39-4	0.77	5.6
		p-Cresol cdifficult to distinguish from m-cresold	106-44-5	0.77	5.6
		Cresol-mixed isomers cCresylic acidd csum of o-, m-, and p-cresol concentrationsd	1319-77-3	0.88	11.2
		Cyclohexanone	108-94-1	0.36	NA
		o-Dichlorobenzene	95-50-1	0.088	6.0
		Ethyl acetate	141-78-6	0.34	33
		Ethyl benzene	100-41-4	0.057	10
		Ethyl ether	60-29-7	0.12	160
		Isobutyl alcohol	78-83-1	5.6	170
		Methanol	67-56-1	5.6	NA
		Methylene chloride	75-9-2	0.089	30
		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	6.0
		Toluene	108-88-3	0.080	10
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30		
Trichloroethylene	79-01-6	0.054	6.0		
Trichlorofluoromethane	75-69-4	0.020	30		

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
F001, F002, F003, F004, & F005	F001, F002, F003, F004 and{ or F005 solvent wastes that contain any combination of one or more of the following spent solvents: acetone, benzene, n-butyl alcohol, carbon disulfide, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, o-cresol, m-cresol, p-cresol, cyclohexanone, o-dichlorobenzene, 2-ethoxyethanol, ethyl acetate, ethyl benzene, ethyl ether, isobutyl alcohol, methanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, nitrobenzene, 2-nitropropane, pyridine, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethylene, trichlorofluoromethane, and{ or xylenes [except as specifically noted in other subcategories]. See further details of these listings in s. NR 661.0031.	Xylenes-mixed isomers csum of o-, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
	F003 and{ or F005 solvent wastes that contain any combination of one or more of the following three solvents as the only listed F001-5 solvents: carbon disulfide, cyclohexanone, and{ or methanol. cformerly s. NR 668.41 c3dd	Carbon disulfide	75-15-0	3.8	4.8 mg{L TCLP
		Cyclohexanone	108-94-1	0.36	0.75 mg{L TCLP
		Methanol	67-56-1	5.6	0.75 mg{L TCLP
	F005 solvent waste containing 2-Nitropropane as the only listed F001-5 solvent.	2-Nitropropane	79-46-9	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
F005 solvent waste containing 2-Ethoxyethanol as the only listed F001-5 solvent.	2-Ethoxyethanol	110-80-5	BIODG; or CMBST	CMBST	
F006	Wastewater treatment sludges from electroplating operations except from the following processes: c1d Sulfuric acid anodizing of aluminum; c2d tin plating on carbon steel; c3d zinc plating csegregated basisd on carbon steel; c4d aluminum or zinc-aluminum plating on carbon steel; c5d cleaning{ stripping associated with tin, zinc and aluminum plating on carbon steel; and c6d chemical etching and milling of aluminum.	Cadmium	7440-43-9	0.69	0.11 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Nickel	7440-02-0	3.98	11 mg{L TCLP
		Silver	7440-22-4	NA	0.14 mg{L TCLP
F007	Spent cyanide plating bath solutions from electroplating operations.	Cadmium	7440-43-9	NA	0.11 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Nickel	7440-02-0	3.98	11 mg{L TCLP
		Silver	7440-22-4	NA	0.14 mg{L TCLP

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	Cadmium	7440-43-9	NA	0.11 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Nickel	7440-02-0	3.98	11 mg{L TCLP
		Silver	7440-22-4	NA	0.14 mg{L TCLP
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	Cadmium	7440-43-9	NA	0.11 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Nickel	7440-02-0	3.98	11 mg{L TCLP
		Silver	7440-22-4	NA	0.14 mg{L TCLP
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	NA
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	Cadmium	7440-43-9	NA	0.11 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Nickel	7440-02-0	3.98	11 mg{L TCLP
		Silver	7440-22-4	NA	0.14 mg{L TCLP
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.	Cadmium	7440-43-9	NA	0.11 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Nickel	7440-02-0	3.98	11 mg{L TCLP
		Silver	7440-22-4	NA	0.14 mg{L TCLP

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.	Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmendabled7	57-12-5	0.86	30
F020, F021, F022, F023, F026	Wastes cexcept wastewater and spent carbon from hydrogen chloride purificationd from the production or manufacturing use as a reactant, chemical intermediate, or component in a formulating processd of: c1d tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives, excluding wastes from the production of Hexachlorophene from highly purified, 2,4,5-trichlorophenol cF020d; c2d pentachlorophenol, or of intermediates used to produce its derivatives c.i.e., F021d; c3d tetra-, penta-, or hexachlorobenzenes under alkaline conditions c.i.e., F022d; and from the production of materials on equipment previously used for the production or manufacturing use as a reactant, chemical intermediate, or component in a formulating processd of: c1d tri- or tetrachlorophenols, excluding wastes from equipment used only for the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol cF023d; c2d tetra- penta, or hexachlorobenzenes under alkaline conditions c.i.e., F026d.	HxCDDs cAll Hexachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		Hx CDFs cAll Hexachlorodibenzofuransd	NA	0.000063	0.001
		PeCDDs cAll Pentachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		PeCDFs cAll Pentachlorodibenzofuransd	NA	0.000035	0.001
		Pentachlorophenol	87-86-5	0.089	7.4
		TCDDs cAll Tetrachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		TCDFs cAll Tetrachlorodibenzofuransd	NA	0.000063	0.001
		2,4,5-Trichlorophenol	95-95-4	.18	7.4
		2,4-6-Trichlorophenol	88-06-2	0.035	7.4
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
		F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. cThis listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in s. NR 661.0031 or 661.0032d.	All F024 wastes	NA
2-Chloro-1,3-butadiene	126-99-8			0.057	0.28
3-Chloropropylene	107-05-1			0.036	30
1,1-Dichloroethane	75-34-3			0.059	6.0
1,2-Dichloroethane	107-06-2			0.21	6.0
1,2-Dichloropropane	78-87-5			0.85	18
cis-1,3-Dichloropropylene	10061-01-5			0.036	18
trans-1-3-Dichloropropylene	10061-02-6			0.036	18
bisc2-Ethylhexyldphthalate	117-81-7			0.28	28
Hexachloroethane	67-72-1			0.055	30
Chromium cTotald	7440-47-3			2.77	0.60 mg{L TCLP
Nickel	7440-02-0			3.98	11 mg{L TCLP

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
F025	Condensed light ends from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. F025—Light Ends Subcategory	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		1,2-Dichloroethane	107-06-2	0.21	6.0
		1,1-Dichloroethylene	75-35-4	0.025	6.0
		Methylene chloride	75-9-2	0.089	30
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
		Trichloroethylene	79-01-6	0.054	6.0
		Vinyl chloride	75-01-4	0.27	6.0
	Spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. F025—Spent Filters{Aids and Desiccants Subcategory	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Hexachlorobenzene	118-74-1	0.055	10
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachloroethane	67-72-1	0.055	30
		Methylene chloride	75-9-2	0.089	30
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene		79-01-6	0.054	6.0	
Vinyl chloride	75-01-4	0.27	6.0		
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. cThis listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.d	HxCDDs cAll Hexachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		HxCDFs cAll Hexachlorodibenzofuransd	NA	0.000063	0.001
		PeCDDs cAll Pentachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		PeCDFs cAll Pentachlorodibenzofuransd	NA	0.000035	0.001
		Pentachlorophenol	87-86-5	0.089	7.4
		TCDDs cAll Tetrachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		TCDFs cAll Tetrachlorodibenzofuransd	NA	0.000063	0.001
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Wastes Nos. F020, F021, F023, F026, and F027.	HxCDDs cAll Hexachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		HxCDFs cAll Hexachlorodibenzofuransd	NA	0.000063	0.001
		PeCDDs cAll Pentachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		PeCDFs cAll Pentachlorodibenzofuransd	NA	0.000035	0.001
		Pentachlorophenol	87-86-5	0.089	7.4
		TCDDs cAll Tetrachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		TCDFs cAll Tetrachlorodibenzofuransd	NA	0.000063	0.001
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4

F032	Wastewaters except those that have not come into contact with process contaminants, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with s. NR 661.0035 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes c.i.e., F034 or F035d, and where the generator does not resume or initiate use of chlorophenolic formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or penta-chlorophenol.	Acenaphthene	83-32-9	0.059 0.059 0.059 0.11 0.11 0.061 0.059 0.055 0.036 0.059 0.000063, or CMBST11 0.000063, or CMBST11	3.4 3.4 3.4 6.8 6.8 3.4 3.4 8.2 14 3.4 0.001, or CMBST11 0.001, or CMBST11
		Anthracene	120-12-7		
		Benzcadanthracene	56-55-3		
		Benzocbdfuoranthene cdifficult to distinguish from benzockdfuoranthened	205-99-2		
		Benzockdfuoranthene cdifficult to distinguish from benzocbdfuoranthened	207-08-9		
		Benzocadpyrene	50-32-8		
		Chrysene	218-01-9		
		Dibenzca,hd anthracene	53-70-3		
		2-4-Dimethyl phenol	105-67-9		
		Fluorene	86-73-7		
		Hexachlorodibenzo-p-dioxins	NA		
		Hexachlorodibenzofurans	NA		
		Indeno c1,2,3-c,dd pyrene	193-39-5	0.0055	3.4
		Naphthalene	91-20-3	0.059	5.6
		Pentachlorodibenzo-p-dioxins	NA	0.000063, or CMBST11	0.001, or CMBST11
		Pentachlorodibenzofurans	NA	0.00035, or CMBST11	0.001, or CMBST11
		Pentachlorophenol	87-86-5	0.089	7.4
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
		Tetrachlorodibenzo-p-dioxins	NA	0.000063, or CMBST11	0.001, or CMBST11
		Tetrachlorodibenzofurans	NA	0.000063, or CMBST11	0.001, or CMBST11
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
F034	Wastewaters cexcept those that have not come into contact with process contaminantsd, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and{or pentachlorophenol.	Acenaphthene	83-32-9	0.059	3.4
		Anthracene	120-12-7	0.059	3.4
		Benzcadanthracene	56-55-3	0.059	3.4
		Benzocbdfluoranthene cdifficult to distinguish from benzocbdfluoranthened	205-99-2	0.11	6.8
		Benzocbdfluoranthene cdifficult to distinguish from benzocbdfluoranthened	207-08-9	0.11	6.8
		Benzocadpyrene	50-32-8	0.061	3.4
		Chrysene	218-01-9	0.059	3.4
		Dibenzca,hdanthracene	53-70-3	0.055	8.2
		Fluorene	86-73-7	0.059	3.4
		Indenoc 1,2,3-c,ddpyrene	193-39-5	0.0055	3.4
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Pyrene	129-00-0	0.067	8.2
		Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
F035	Wastewaters cexcept those that have not come into contact with process contaminantsd, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and{or pentachlorophenol.	Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
F037	Petroleum refinery primary oil{water{solids separation sludge—Any sludge generated from the gravitational separation of oil{water{solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil{water{solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in s. NR 661.0031 c2d cbd including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment unitsd and K051 wastes are not included in this listing.	Acenaphthene	83-32-9	0.059	NA
		Anthracene	120-12-7	0.059	3.4
		Benzene	71-43-2	0.14	10
		Benzcadanthracene	56-55-3	0.059	3.4
		Benzocadpyrene	50-32-8	0.061	3.4
		bisc2-Ethylhexylid phthalate	117-81-7	0.028	28
		Chrysene	218-01-9	0.059	3.4
		Di-n-butyl phthalate	84-74-2	0.057	28
		Ethylbenzene	100-41-4	0.057	10
		Fluorene	86-73-7	0.059	NA
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers csum of o, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
Cyanides cTotald7	57-12-5	1.2	590		
Lead	7439-92-1	0.69	NA		
Nickel	7440-02-0	NA	11 mg{L TCLP		

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
F038	Petroleum refinery secondary cemulsified oil{ water{ solids separation sludge and{ or float generated from the physical and{ or chemical separation of oil{ water{ solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air floatation cIAFd units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in s. NR 661.0031 c2d cbd cincluding sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological unitsd and F037, K048, and K051 are not included in this listing.	Benzene	71-43-2	0.14	10
		Benzocadpyrene	50-32-8	0.061	3.4
		bisc2-Ethylhexyld phthalate	117-81-7	0.28	28
		Chrysene	218-01-9	0.059	3.4
		Di-n-butyl phthalate	84-74-2	0.057	28
		Ethylbenzene	100-41-4	0.057	10
		Fluorene	86-73-7	0.059	NA
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers csum of o, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA		
Nickel	7440-02-0	NA	11 mg{L TCLP		

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
F039	Leachate liquids that have percolated through land disposed wastes resulting from the disposal of more than one restricted waste classified as hazardous under subch. D. c. Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number: F020, F021, F022, F026, F027, and/or F028.d	Acenaphthylene	208-96-8	0.059	3.4
		Acenaphthene	83-32-9	0.059	3.4
		Acetone	67-64-1	0.28	160
		Acetonitrile	75-05-8	5.6	NA
		Acetophenone	96-86-2	0.010	9.7
		2-Acetylaminofluorene	53-96-3	0.059	140
		Acrolein	107-02-8	0.29	NA
		Acrylonitrile	107-13-1	0.24	84
		Aldrin	309-00-2	0.021	0.066
		4-Aminobiphenyl	92-67-1	0.13	NA
		Aniline	62-53-3	0.81	14
		o-Anisidine c2-methoxyaniline	90-04-0	0.010	0.66
		Anthracene	120-12-7	0.059	3.4
		Aramite	140-57-8	0.36	NA
		alpha-BHC	319-84-6	0.00014	0.066
		beta-BHC	319-85-7	0.00014	0.066
		delta-BHC	319-86-8	0.023	0.066
		gamma-BHC	58-89-9	0.0017	0.066
		Benzene	71-43-2	0.14	10
		Benzcadanthracene	56-55-3	0.059	3.4
		Benzocdfluoranthene cdifficult to distinguish from benzocdfluoranthened	205-99-2	0.11	6.8
		Benzocdfluoranthene cdifficult to distinguish from benzocdfluoranthened	207-08-9	0.11	6.8
		Benzocg,h,iperylene	191-24-2	0.0055	1.8
		Benzocadpyrene	50-32-8	0.061	3.4
		Bromodichloromethane	75-27-4	0.35	15
		Methyl bromide cBromomethaned	74-83-9	0.11	15
4-Bromophenyl phenyl ether	101-55-3	0.055	15		
n-Butyl alcohol	71-36-3	5.6	2.6		
Butyl benzyl phthalate	85-68-7	0.017	28		

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
		2-sec-Buty-4,6-dinitrophenol cDinosebd	88-85-7	0.066	2.5
		Carbon disulfide	75-15-0	3.8	NA
		Carbon tetrachloride	56-23-5	0.057	6.0
		Chlordane calpha and gamma isomersd	57-74-9	0.0033	0.26
		p-Chloroaniline	106-47-8	0.46	16
		Chlorobenzene	108-90-7	0.057	6.0
		Chlorobenzilate	510-15-6	0.10	NA
		2-Chloro-1,3-butadiene	126-99-8	0.057	NA
		Chlorodibromomethane	124-48-1	0.057	15
		Chloroethane	75-00-3	0.27	6.0
		bisc2-Chloroethoxydmethane	111-91-1	0.036	7.2
		bisc2-Chloroethyldether	111-44-4	0.033	6.0
		Chloroform	67-66-3	0.046	6.0
		bisc2-Chloroisopropyldether	39638-32-9	0.055	7.2
		p-Chloro-m-cresol	59-50-7	0.018	14
		Chloromethane cMethyl chlorided	74-87-3	0.19	30
		2-Chloronaphthalene	91-58-7	0.055	5.6
		2-Chlorophenol	95-57-8	0.044	5.7
		3-Chloropropylene	107-05-1	0.036	30
		Chrysene	218-01-9	0.059	3.4
		o-Cresol	95-48-7	0.11	5.6
		p-Cresidine	120-71-8	0.010	0.66
		m-Cresol cdifficult to distinguish from p-cresold	108-39-4	0.77	5.6
		p-Cresol cdifficult to distinguish from m-cresold	106-44-5	0.77	5.6
		Cyclohexanone	108-94-1	0.36	NA
		1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
		Ethylene dibromide c1,2- Dibromoethaned	106-93-4	0.028	15

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
		Dibromomethane	74-95-3	0.11	15
		2,4-D c2,4-Dichlorophenoxyacetic acidd	94-75-7	0.72	10
		o,p'-DD	53-19-0	0.023	0.087
		p,p'-DDD	72-54-8	0.023	0.087
		o,p'-DDE	3424-82-6	0.031	0.087
		p,p'-DDE	72-55-9	0.031	0.087
		o,p'-DDT	789-02-6	0.0039	0.087
		p,p'-DDT	50-29-3	0.0039	0.087
		Dibenzca,hdanthracene	53-70-3	0.055	8.2
		Dibenzca,edpyrene	192-65-4	0.061	NA
		m-Dichlorobenzene	541-73-1	0.036	6.0
		o-Dichlorobenzene	95-50-1	0.088	6.0
		p-Dichlorobenzene	106-46-7	0.090	6.0
		Dichlorodifluoromethane	75-71-8	0.23	7.2
		1,1-Dichloroethane	75-34-3	0.059	6.0
		1,2-Dichloroethane	107-06-2	0.21	6.0
		1,1-Dichloroethylene	75-35-4	0.025	6.0
		trans-1,2-Dichloroethylene	156-60-5	0.054	30
		2,4-Dichlorophenol	120-83-2	0.044	14
		2,6-Dichlorophenol	87-65-0	0.044	14
		1,2-Dichloropropane	78-87-5	0.85	18
		cis-1,3-Dichloropropylene	10061-01-5	0.036	18
		trans-1,3-Dichloropropylene	10061-02-6	0.036	18
		Dieldrin	60-57-1	0.017	0.13
		Diethyl phthalate	84-66-2	0.20	28
		2,4-Dimethylaniline c2,4-xylidined	95-68-1	0.010	0.66
		2,4-Dimethyl phenol	105-67-9	0.036	14
		Dimethyl phthalate	131-11-3	0.047	28

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
		Di-n-butyl phthalate	84-74-2	0.057	28
		1,4-Dinitrobenzene	100-25-4	0.32	2.3
		4,6-Dinitro-o-cresol	534-52-1	0.28	160
		2,4-Dinitrophenol	51-28-5	0.12	160
		2,4-Dinitrotoluene	121-14-2	0.32	140
		2,6-Dinitrotoluene	606-20-2	0.55	28
		Di-n-octyl phthalate	117-84-0	0.017	28
		Di-n-propylNitrosamine	621-64-7	0.40	14
		1,4-Dioxane	123-91-1	12.0	170
		Diphenylamine cdifficult to distinguish from diphenylNitrosamined	122-39-4	0.92	NA
		DiphenylNitrosamine cdifficult to distinguish from diphenylamined	86-30-6	0.92	NA
		1,2-Diphenylhydrazine	122-66-7	0.087	NA
		Disulfoton	298-04-4	0.017	6.2
		Endosulfan I	939-98-8	0.023	0.066
		Endosulfan II	33213-6-5	0.029	0.13
		Endosulfan sulfate	1031-07-8	0.029	0.13
		Endrin	72-20-8	0.0028	0.13
		Endrin aldehyde	7421-93-4	0.025	0.13
		Ethyl acetate	141-78-6	0.34	33
		Ethyl cyanide cPropanenitriled	107-12-0	0.24	360
		Ethyl benzene	100-41-4	0.057	10
		Ethyl ether	60-29-7	0.12	160
		bisc2-Ethylhexyld phthalate	117-81-7	0.28	28
		Ethyl methacrylate	97-63-2	0.14	160
		Ethylene oxide	75-21-8	0.12	NA
		Famphur	52-85-7	0.017	15
		Fluoranthene	206-44-0	0.068	3.4

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
		Fluorene	86-73-7	0.059	3.4
		Heptachlor	76-44-8	0.0012	0.066
		Heptachlor epoxide	1024-57-3	0.016	0.066
		1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin c1,2,3,4,6,7,8-HpCDDd	35822-46-9	0.000035	0.0025
		1, 2,3,4,6,7,8-Heptachlorodibenzofuran c1,2,3,4,6,7,8-HpCDFd	67562-39-4	0.000035	0.0025
		1,2,3,4,7,8,9-Heptachlorodibenzofuran c1,2,3,4,7,8,9-HpCDFd	55673-89-7	0.000035	0.0025
		Hexachlorobenzene	118-74-1	0.055	10
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachlorocyclopentadiene	77-47-4	0.057	2.4
		HxCDDs cAll Hexachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		HxCDFs cAll Hexachlorodibenzofuransd	NA	0.000063	0.001
		Hexachloroethane	67-72-1	0.055	30
		Hexachloropropylene	1888-71-7	0.035	30
		Indeno c1,2,3-c,dd pyrene	193-39-5	0.0055	3.4
		Indomethane	74-88-4	0.019	65
		Isobutyl alcohol	78-83-1	5.6	170
		Isodrin	465-73-6	0.021	0.066
		Isosafrole	120-58-1	0.081	2.6
		Kepone	143-50-8	0.0011	0.13
		Methacrylonitrile	126-98-7	0.24	84
		Methanol	67-56-1	5.6	NA
		Methapyrilene	91-80-5	0.081	1.5
		Methoxychlor	72-43-5	0.25	0.18
		3-Methylcholanthrene	56-49-5	0.0055	15
		4,4-Methylene bis(c2-chloroanilined	101-14-4	0.50	30
		Methylene chloride	75-09-2	0.089	30

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
		Methyl ethyl ketone	78-93-3	0.28	36
		Methyl isobutyl ketone	108-10-1	0.14	33
		Methyl methacrylate	80-62-6	0.14	160
		Methyl methanesulfonate	66-27-3	0.018	NA
		Methyl parathion	298-00-0	0.014	4.6
		Naphthalene	91-20-3	0.059	5.6
		2-Naphthylamine	91-59-8	0.52	NA
		p-Nitroaniline	100-01-6	0.028	28
		Nitrobenzene	98-95-3	0.068	14
		5-Nitro-o-toluidine	99-55-8	0.32	28
		p-Nitrophenol	100-02-7	0.12	29
		N-Nitrosodiethylamine	55-18-5	0.40	28
		N-Nitrosodimethylamine	62-75-9	0.40	NA
		N-Nitroso-di-n-butylamine	924-16-3	0.40	17
		N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
		N-Nitrosomorpholine	59-89-2	0.40	2.3
		N-Nitrosopiperidine	100-75-4	0.013	35
		N-Nitrosopyrrolidine	930-55-2	0.013	35
		1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin cOCDDd	3268-87-9	0.000063	0.005
		1,2,3,4,6,7,8,9-Octachlorodibenzofuran cOCDFd	39001-02-0	0.000063	0.005
		Parathion	56-38-2	0.014	4.6
		Total PCBs csum of all PCB isomers, or all Aroclorsd	1336-36-3	0.10	10
		Pentachlorobenzene	608-93-5	0.055	10
		PeCDDs cAll Pentachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		PeCDFs cAll Pentachlorodibenzofuransd	NA	0.000035	0.001
		Pentachloronitrobenzene	82-68-8	0.055	4.8

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
		Pentachlorophenol	87-86-5	0.089	7.4
		Phenacetin	62-44-2	0.081	16
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		2,4-Dimethylaniline c2,4-xylidined	108-45-2	0.010	0.66
		Phorate	298-02-2	0.021	4.6
		Phthalic anhydride	85-44-9	0.055	NA
		Pronamide	23950-58-5	0.093	1.5
		Pyrene	129-00-0	0.067	8.2
		Pyridine	110-86-1	0.014	16
		Safrole	94-59-7	0.081	22
		Silvex c2,4,5-TPd	93-72-1	0.72	7.9
		2,4,5-T	93-76-5	0.72	7.9
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		TCDDs cAll Tetrachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		TCDFs cAll Tetrachlorodibenzofuransd	NA	0.000063	0.001
		1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
		Toluene	108-88-3	0.080	10
		Toxaphene	8001-35-2	0.0095	2.6
		Bromoform cTribromomethaned	75-25-2	0.63	15
		1,2,4-Trichlorobenzene	120-82-1	0.055	19
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
		Trichloroethylene	79-01-6	0.054	6.0

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		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
		Trichlorofluoromethane	75-69-4	0.020	30
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		1,2,3-Trichloropropane	96-18-4	0.85	30
		1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
		tris(2,3-Dibromopropyl) phosphate	126-72-7	0.11	NA
		Vinyl chloride	75-01-4	0.27	6.0
		Xylenes-mixed isomers csum of o-, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
		Antimony	7440-36-0	1.9	1.15 mg{L TCLP
		Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
		Barium	7440-39-3	1.2	21 mg{L TCLP
		Beryllium	7440-41-7	0.82	NA
		Cadmium	7440-43-9	0.69	0.11 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	NA
		Fluoride	16984-48-8	35	NA
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Mercury	7439-97-6	0.15	0.25 mg{L TCLP
		Nickel	7440-02-0	3.98	11 mg{L TCLP
		Selenium	7782-49-2	0.82	5.7 mg{L TCLP
		Silver	7440-22-4	0.43	0.14 mg{L TCLP
		Sulfide	8496-25-8	14	NA
		Thallium	7440-28-0	1.4	NA
		Vanadium	7440-62-2	4.3	NA

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and{or pentachlorophenol.	Naphthalene	91-20-3	0.059	5.6
		Pentachlorophenol	87-86-5	0.089	7.4
		Phenanthrene	85-01-8	0.059	5.6
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers csum of o-, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
K003	Wastewater treatment sludge from the production of molybdate orange pigments.	Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
K005	Wastewater treatment sludge from the production of chrome green pigments.	Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
K006	Wastewater treatment sludge from the production of chrome oxide green pigments canhydrousd.	Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
	Wastewater treatment sludge from the production of chrome oxide green pigments chhydratedd.	Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	NA
K007	Wastewater treatment sludge from the production of iron blue pigments.	Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
K008	Oven residue from the production of chrome oxide green pigments.	Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
K009	Distillation bottoms from the production of acetaldehyde from ethylene.	Chloroform	67-66-3	0.046	6.0
K010	Distillation side cuts from the production of acetaldehyde from ethylene.	Chloroform	67-66-3	0.046	6.0

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	Acetonitrile	75-05-8	5.6	38
		Acrylonitrile	107-13-1	0.24	84
		Acrylamide	79-06-1	19	23
		Benzene	71-43-2	0.14	10
		Cyanide cTotald	57-12-5	1.2	590
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	Acetonitrile	75-05-8	5.6	38
		Acrylonitrile	107-13-1	0.24	84
		Acrylamide	79-06-1	19	23
		Benzene	71-43-2	0.14	10
		Cyanide cTotald	57-12-5	1.2	590
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	Acetonitrile	75-05-8	5.6	38
		Acrylonitrile	107-13-1	0.24	84
		Acrylamide	79-06-1	19	23
		Benzene	71-43-2	0.14	10
		Cyanide cTotald	57-12-5	1.2	590
K015	Still bottoms from the distillation of benzyl chloride.	Anthracene	120-12-7	0.059	3.4
		Benzal chloride	98-87-3	0.055	6.0
		Benzocbdfuoranthene cdifficult to distinguish from benzockdfuoranthened	205-99-2	0.11	6.8
		Benzockdfuoranthene cdifficult to distinguish from benzocbdfuoranthened	207-08-9	0.11	6.8
		Phenanthrene	85-01-8	0.059	5.6
		Toluene	108-88-3	0.080	10
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Nickel	7440-02-0	3.98	11 mg{L TCLP
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	Hexachlorobenzene	118-74-1	0.055	10
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachlorocyclopentadiene	77-47-4	0.057	2.4
		Hexachloroethane	67-72-1	0.055	30
		Tetrachloroethylene	127-18-4	0.056	6.0
K017	Heavy ends still bottoms from the purification column in the production of epichlorohydrin.	bisc2-Chloroethyldether	111-44-4	0.033	6.0
		1,2-Dichloropropane	78-87-5	0.85	18
		1,2,3-Trichloropropane	96-18-4	0.85	30

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K018	Heavy ends from the fractionation column in ethyl chloride production.	Chloroethane	75-00-3	0.27	6.0
		Chloromethane	74-87-3	0.19	NA
		1,1-Dichloroethane	75-34-3	0.059	6.0
		1,2-Dichloroethane	107-06-2	0.21	6.0
		Hexachlorobenzene	118-74-1	0.055	10
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachloroethane	67-72-1	0.055	30
		Pentachloroethane	76-01-7	NA	6.0
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production	bisc2-Chloroethyldether	111-44-4	0.033	6.0
		Chlorobenzene	108-90-7	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		p-Dichlorobenzene	106-46-7	0.090	NA
		1,2-Dichloroethane	107-06-2	0.21	6.0
		Fluorene	86-73-7	0.059	NA
		Hexachloroethane	67-72-1	0.055	30
		Nephtalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	NA
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,2,4-Trichlorobenzene	120-82-1	0.055	19
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	1,2-Dichloroethane	107-06-2	0.21	6.0
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Antimony	7440-36-0	1.9	1.15 mg{L TCLP

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K022	Distillation bottoms tars from the production of phenol{acetone from cumene.	Toluene	108-88-3	0.080	10
		Acetophenone	96-86-2	0.010	9.7
		Diphenylamine cdifficult to distinguish from diphenylnitrosamined	122-39-4	0.92	13
		Diphenylnitrosamine cdifficult to distinguish from diphenylamined	86-30-6	0.92	13
		Phenol	108-95-2	0.039	6.2
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Nickel	7440-02-0	3.98	11 mg{L TCLP
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	Phthalic anhydride cmeasured as Phthalic acid or Terephthalic acidd	100-21-0	0.055	28
		Phthalic anhydride cmeasured as Phthalic acid or Terephthalic acidd	85-44-9	0.055	28
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	Phthalic anhydride cmeasured as Phthalic acid or Terephthalic acidd	100-21-0	0.055	28
		Phthalic anhydride cmeasured as Phthalic acid or Terephthalic acidd	85-44-9	0.055	28
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	NA	NA	LLEXT fb SSTRP fb CARBN; or CMBST	CMBST
K026	Stripping still tails from the production of methyl ethyl pyridines.	NA	NA	CMBST	CMBST
K027	Centrifuge and distillation residues from toluene diisocyanate production.	NA	NA	CARBNI; or CMBST	CMBST
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	1,1-Dichloroethane	75-34-3	0.059	6.0
		trans-1,2-Dichloroethylene	156-60-5	0.054	30
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachloroethane	67-72-1	0.055	30
		Pentachloroethane	76-01-7	NA	6.0
		1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
		Cadmium	7440-43-9	0.69	NA
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
Nickel	7440-02-0	3.98	11 mg{L TCLP		

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane.	Chloroform	67-66-3	0.046	6.0
		1,2-Dichloroethane	107-06-2	0.21	6.0
		1,1-Dichloroethylene	75-35-4	0.025	6.0
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
		Vinyl chloride	75-01-4	0.27	6.0
K030	Column bodies or heavy ends from the combined production of trichloroethylene and perchloroethylene.	o-Dichlorobenzene	95-50-1	0.088	NA
		p-Dichlorobenzene	106-46-7	0.090	NA
		Hexachlorobutadiene	87-68-3	0.055	5.6
		Hexachloroethane	67-72-1	0.055	30
		Hexachloropropylene	1888-71-7	NA	30
		Pentachlorobenzene	608-93-5	NA	10
		Pentachloroethane	76-01-7	NA	6.0
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,2,4-Trichlorobenzene	120-82-1	0.055	19
K031	By-product salts generated in the production of MSMA and cacodylic acid.	Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
K032	Wastewater treatment sludge from the production of chlordane.	Hexachlorocyclopentadiene	77-47-4	.057	2.4
		Chlordane calpha and gamma isomersd	57-74-9	0.0033	0.26
		Heptachlor	76-44-8	0.0012	0.066
		Heptachlor epoxide	1024-57-3	0.016	0.066
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	Hexachlorocyclopentadiene	77-47-4	0.057	2.4
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	Hexachlorocyclopentadiene	77-47-4	0.057	2.4

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K035	Wastewater treatment sludges generated in the production of cresote.	Acenaphthene	83-32-9	NA	3.4
		Anthracene	120-12-7	NA	3.4
		Benzcadanthracene	56-55-3	0.059	3.4
		Bemzocadpyrene	50-32-8	0.061	3.4
		Chrysene	218-01-9	0.059	3.4
		o-Cresol	95-48-7	0.11	5.6
		m-Cresol cdifficult to distinguish from p-cresold	108-39-4	0.77	5.6
		p-Cresol cdifficult to distinguish from m-cresold	106-44-5	0.77	5.6
		Dibenzca,hdanthracene	53-70-3	NA	8.2
		Fluoranthene	206-44-0	0.068	3.4
		Fluorene	86-73-7	NA	3.4
		Indenoc 1,2,3-cddpyrene	193-39-5	NA	3.4
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-1	0.059	5.6
		Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2		
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	Disulfoton	298-04-4	0.017	6.2
K037	Wastewater treatment sludges from the production of disulfoton.	Disulfoton Toluene	298-04-4 108-88-3	0.017 0.080	6.2 10
K038	Wastewater from the washing and stripping of phorate production.	Phorate	298-02-2	0.021	4.6
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	NA	NA	CARBN; or CMBST	CMBST
K040	Wastewater treatment sludge from the production of phorate.	Phorate	298-02-2	0.021	4.6
K041	Wastewater treatment sludge from the production of toxaphene.	Toxaphene	8001-35-2	0.0095	2.6
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	o-Dichlorobenzene	95-50-1	0.088	6.0
		p-Dichlorobenzene	106-46-7	0.090	6.0
		Pentachlorobenzene	608-93-5	0.055	10
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		1,2,4-Trichlorobenzene	120-82-1	0.055	19

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	2,4-Dichlorophenol	120-83-2	0.044	14
		2,6-Dichlorophenol	187-65-0	0.044	14
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
		Pentachlorophenol	87-86-5	0.089	7.4
		Tetrachloroethylene	127-18-4	0.056	6.0
		HxCDDs cAll Hexachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		HxCDFs cAll Hexachlorodibenzofuransd	NA	0.000063	0.001
		PeCDDs cAll Pentachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		PeCDFs cAll Pentachlorodibenzofuransd	NA	0.000035	0.001
		TCDDs cAll Tetrachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		TCDFs cAll Tetrachlorodibenzofuransd	NA	0.000063	0.001
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	NA	NA	DEACT	DEACT
K045	Spent carbon from the treatment of wastewater containing explosives.	NA	NA	DEACT	DEACT
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	Lead	7439-92-1	0.69	0.75 mg{L TCLP
K047	Pink{red water from TNT operations.	NA	NA	DEACT	DEACT

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K048	Dissolved air flotation cDAFd float from the petroleum refining industry.	Benzene	71-43-2	0.14	10
		Benzocadpyrene	50-32-8	0.061	3.4
		bisc2-Ethylhexyldphthalate	117-81-7	0.28	28
		Chrysene	218-01-9	0.059	3.4
		Di-n-butyl phthalate	84-74-2	0.057	28
		Ethylbenzene	100-41-4	0.057	10
		Fluorene	86-73-7	0.059	NA
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-33	0.080	10
		Xylenes-mixed isomers csum of o-, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Chanides cTotald7	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA		
Nickel	7440-02-0	NA	11 mg{L TCLP		

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K049	Slop oil emulsion solids from the petroleum refining industry.	Anthracene	120-12-7	0.059	3.4
		Benzene	71-43-2	0.14	10
		Benzocadpyrene	50-32-8	0.061	3.4
		bisc2-Ethylhexyldphthalate	117-81-7	0.28	28
		Carbon disulfide	75-15-0	3.8	NA
		Chrysene	218-01-9	0.059	3.4
		2,4-Dimethylphenol	105-67-9	0.036	NA
		Ethylbenzene	100-41-4	0.057	10
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers csum of o-, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
		Cyanides cTotald7	57-12-5	1.2	590
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
Lead	7439-92-1	0.69	NA		
Nickel	7440-02-0	NA	11 mg{L TCLP		
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	Benzocadpyrene	50-32-8	0.061	3.4
		Phenol	108-95-2	0.039	6.2
		Cyanides cTotald7	57-12-5	1.2	590
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	NA
		Nickel	7440-02-0	NA	11 mg{L TCLP

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K051	API separator sludge from the petroleum refining industry.	Acenaphthene	83-32-9	0.059	NA
		Anthracene	120-12-7	0.059	3.4
		Benzcadanthracene	56-55-3	0.059	3.4
		Benzene	71-43-2	0.14	10
		Benzocadpyrene	50-32-8	0.061	3.4
		bisc2-Ethylhexyldphthalate	117-81-7	0.28	28
		Chrysene	218-01-9	0.059	3.4
		Di-n-butyl phthalate	105-67-9	0.057	28
		Ethylbenzene	100-41-4	0.057	10
		Fluorene	86-73-7	0.059	NA
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.08	10
		Xylenes-mixed isomers csum of o-, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
		Cyanides cTotald7	57-12-5	1.2	590
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
Lead	7439-92-1	0.69	NA		
Nickel	7440-02-0	NA	11 mg{L TCLP		

Waste code	Waste description and treatment Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg/L ³ ; or Technology Code ⁴	Concentration in mg/kg ⁵ unless noted as Xmg/L TCLPY; or Technology Code ⁴
K052	Tank bottoms cleadedd from the petroleum re- fining industry.	Benzene	71-43-2	0.14	10
		Benzocadpyrene	50-32-8	0.061	3.4
		o-Cresol	95-48-7	0.11	5.6
		m-Cresol cdifficult to distinguish from p-cresold	108-39-4	0.77	5.6
		p-Cresol cdifficult to distinguish from m-cresold	106-44-5	0.77	5.6
		2,4-Dimethylphenol	105-67-9	0.036	NA
		Ethylbenzene	100-41-4	0.057	10
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Toluene	108-88-3	0.08	10
		Xylenes-mixed isomers csum of o-, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
		Chromium cTotald	7440-47-3	2.77	0.60 mg/L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
K060	Ammonia still lime sludge from coking operations.	Benzene	71-43-2	0.14	10
		Benzocadpyrene	50-32-8	0.061	3.4
		Naphthalene	91-20-3	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Cyanides cTotald7	57-12-5	1.2	590

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K061	Emission control dust{sludge from the primary production of steel in electric furnaces.	Antimony	7440-36-0	NA	1.15 mg{L TCLP
		Arsenic	7440-38-2	NA	5.0 mg{L TCLP
		Barium	7440-39-3	NA	21 mg{L TCLP
		Beryllium	7440-41-7	NA	1.22 mg{L TCLP
		Cadmium	7440-43-9	0.69	0.11 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Mercury	7439-97-6	NA	0.025 mg{L TCLP
		Nickel	7440-02-0	3.98	11 mg{L TCLP
		Selenium	7782-49-2	NA	5.7 mg{L TCLP
		Silver	7440-22-4	NA	0.14 mg{L TCLP
		Thallium	7440-28-0	NA	0.20 mg{L TCLP
Zinc	7440-66-6	NA	4.3 mg{L TCLP		
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry cSIC Codes 331 and 332d.	Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Nickel	7440-02-0	3.98	NA
K069	Emission control dust{sludge from secondary lead smelting—Calcium Sulfate cLow Leadd Subcategory	Cadmium	7440-43-9	0.69	0.11 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
	Emission control dust{sludge from secondary lead smelting—Non-Calcium Sulfate cHigh Leadd Subcategory	NA	NA	NA	RLEAD
K071	K071 cBrine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not usedd nonwastewaters that are residues from RMERC.	Mercury	7439-97-6	NA	0.20 mg{L TCLP
	K071 cBrine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.d nonwastewaters that are not residues from RMERC.	Mercury	7439-97-6	NA	0.025 mg{L TCLP
	All K071 wastewaters.	Mercury	7439-97-6	0.15	NA
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Hexachloroethane	67-72-1	0.055	30
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,1,1-Trichloroethane	71-55-6	0.054	6.0

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K083	Distillation bottoms from aniline production.	Aniline	62-53-3	0.81	14
		Benzene	71-43-2	0.14	10
		Cyclohexanone	108-94-1	0.36	NA
		Diphenylamine cdifficult to distinguish from diphenylnitrosamine	122-39-4	0.92	13
		Diphenylnitrosamine cdifficult to distinguish from diphenylamined	86-30-6	0.92	13
		Nitrobenzene	98-95-3	0.068	14
		Phenol	108-95-2	0.039	6.2
		Nickel	7440-02-0	3.98	11 mg{L TCLP
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.	Benzene	71-43-2	0.14	10
		Chlorobenzene	108-90-7	0.057	6.0
		m-Dichlorobenzene	541-73-1	0.036	6.0
		o-Dichlorobenzene	95-50-1	0.088	6.0
		p-Dichlorobenzene	106-46-7	0.090	6.0
		Hexachlorobenzene	118-74-1	0.055	10
		Total PCBs csum of all PCB isomers, or all Aroclorsd	1336-36-3	0.10	10
		Pentachlorobenzene	608-93-5	0.055	10
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		1,2,4-Trichlorobenzene	120-82-1	0.055	19

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K086	Solvent wastes 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.	Acetone	67-64-1	0.28	160
		Acetophenone	96-86-2	0.010	9.7
		bisc2-Ethylhexylid phthalate	117-81-7	0.28	28
		n-Butyl alcohol	71-36-3	5.6	2.6
		Butylbenzyl phthalate	85-68-7	0.017	28
		Cyclohexanone	108-94-1	0.36	NA
		o-Dichlorobenzene	95-50-1	0.088	6.0
		Diethyl phthalate	84-66-2	0.20	28
		Dimethyl phthalate	131-11-3	0.047	28
		Di-n-butyl phthalate	84-74-2	0.057	28
		Di-n-octyl phthalate	117-84-0	0.017	28
		Ethyl acetate	141-78-6	0.34	33
		Ethylbenzene	100-41-4	0.057	10
		Methanol	67-56-1	5.6	NA
		Methyl ethyl ketone	78-93-3	0.28	36
		Methyl isobutyl ketone	108-10-1	0.14	33
		Methylene chloride	75-09-2	0.089	30
		Naphthalene	91-20-3	0.059	5.6
		Nitrobenzene	98-95-3	0.068	14
		Toluene	108-88-3	0.080	10
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
		Trichloroethylene	79-01-6	0.054	6.0
		Xylenes-mixed isomers csum of o-, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP		
Cyanides cTotald7	57-12-5	1.2	590		
Lead	7439-92-1	0.69	0.75 mg{L TCLP		

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg/L ³ ; or Technology Code ⁴	Concentration in mg/kg ⁵ unless noted as Xmg/L TCLPY; or Technology Code ⁴
K087	Decanter tank tar sludge from coking operations.	Acenaphthylene	208-96-8	0.059	3.4
		Benzene	71-43-2	0.14	10
		Chrysene	218-01-9	0.059	3.4
		Fluoranthene	206-44-0	0.068	3.4
		Indenoc1,2,3-cddpyrene	193-39-5	0.0055	3.4
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers csum of o, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
		Lead	7439-92-1	0.69	0.75 mg/L TCLP

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K088	Spent potliners from primary aluminum reduction.	Acenaphthene	83-32-9	0.059	3.4
		Anthracene	120-12-7	0.059	3.4
		Benzcadanthracene	56-55-3	0.059	3.4
		Benzocadpyrene	50-32-8	0.061	3.4
		Benzocbdfuoranthene	205-99-2	0.11	6.8
		Benzockdfuoranthene	207-08-9	0.11	6.8
		Benzocg,h,idperylene	191-24-2	0.0055	1.8
		Chrysene	218-01-9	0.059	3.4
		Dibenzca,h,danthracene	53-70-3	0.055	8.2
		Fluoranthene	206-44-0	0.068	3.4
		Indenoc 1,2,3,-cddpyrene	193-39-5	0.0055	3.4
		Phenanthrene	85-01-8	0.059	5.6
		Pyrene	129-00-0	0.067	8.2
		Antimony	7440-36-0	1.9	1.15 mg{L TCLP
		Arsenic	7440-38-2	1.4	26.1
		Barium	7440-39-3	1.2	21 mg{L TCLP
		Beryllium	7440-41-7	0.82	1.22 mg{L TCLP
		Cadmium	7440-43-9	0.69	0.11 mg{L TCLP
		Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Mercury	7439-97-6	0.15	0.025 mg{L TCLP
		Nickel	7440-02-0	3.98	11 mg{L TCLP
		Selenium	7782-49-2	0.82	5.7 mg{L TCLP
Silver	7440-22-4	0.43	0.14 mg{L TCLP		
Cyanide cTotald7	57-12-5	1.2	590		
Cyanide cAmenabled7	57-12-5	0.86	30		
Fluoride	16984-48-8	35	NA		
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene	Phthalic anhydride cmeasured as Phthalic acid or Terephthalic acidd	100-21-0	0.055	28
		Phthalic anhydride cmeasured as Phthalic acid or Terephthalic acidd	85-44-9	0.055	28

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	Phthalic anhydride cmeasured as Phthalic acid or Terephthalic acidd	100-21-0	0.055	28
		Phthalic anhydride cmeasured as Phthalic acid or Terephthalic acidd	85-44-9	0.055	28
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	Hexachloroethane	67-72-1	0.055	30
		Pentachloroethane	76-01-7	0.055	6.0
		1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
		Trichloroethylene	79-01-1	0.054	6.0
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	m-Dichlorobenzene	541-73-1	0.036	6.0
		Pentachloroethane	76-01-1	0.055	6.0
		1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0
		1,2,4-Trichlorobenzene	120-82-1	0.055	19
		1,1,2-Trichloroethane	79-00-5	0.054	6.0
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	Chlordane calpha and gamma isomersd	57-74-9	0.0033	0.26
		Heptachlor	76-44-8	0.0012	0.066
		Heptachlor epoxide	1024-57-3	0.016	0.066
		Hexachlorocyclopentadiene	77-47-4	0.057	2.4
K098	Untreated process wastewater from the production of toxaphene.	Toxaphene	8001-35-2	0.0095	2.6

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K099	Untreated wastewater from the production of 2,4-D.	2,4-Dichlorophenoxyacetic acid	94-75-7	0.72	10
		HxCDDs cAll Hexachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		HxCDFs cAll Hexachlorodibenzofuransd	NA	0.000063	0.001
		PeCDDs cAll Pentachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		PeCDFs cAll Pentachlorodibenzofuransd	NA	0.000035	0.001
		TCDDs cAll Tetrachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
		TCDFs cAll Tetrachlorodibenzofuransd	NA	0.000063	0.001
K100	Waste leaching solution from acid leaching of emission control dust{sludge from secondary lead smelting.	Cadmium Chromium cTotald Lead	7440-43-9 7440-47-3 7439-92-1	0.69 2.77 0.69	0.11 mg{L TCLP 0.60 mg{L TCLP 0.75 mg{L TCLP
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	o-Nitroaniline	88-74-4	0.27	14
		Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
		Cadmium	7440-43-9	0.69	NA
		Lead	7439-92-1	0.69	NA
		Mercury	7439-97-6	0.15	NA
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	o-Nitrophenol	88-75-5	0.028	13
		Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
		Cadmium	7440-43-9	0.69	NA
		Lead	7439-92-1	0.69	NA
		Mercury	7439-97-6	0.15	NA
K103	Process residues from aniline extraction from the production of aniline.	Aniline	62-53-3	0.81	14
		Benzene	71-43-2	0.14	10
		2,4-Dinitrophenol	51-28-5	0.12	160
		Nitrobenzene	98-95-3	0.068	14
		Phenol	108-95-2	0.039	6.2

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K104	Combined wastewater streams generated from nitrobenzene{aniline production.	Aniline	62-53-3	0.81	14
		Benzene	71-43-2	0.14	10
		2,4-Dinitrophenol	51-28-5	0.12	160
		Nitrobenzene	98-95-3	0.068	14
		Phenol	108-95-2	0.039	6.2
		Cyanides cTotald7	57-12-5	1.2	590
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	Benzene	71-43-2	0.14	10
		Chlorobenzene	108-90-7	0.057	6.0
		2-Chlorophenol	95-57-8	0.044	5.7
		o-Dichlorobenzene	95-50-1	0.088	6.0
		p-Dichlorobenzene	106-46-7	0.090	6.0
		Phenol	108-95-2	0.039	6.2
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
K106	K106 cwastewater treatment sludge from the mercury cell process in chlorine productiond nonwastewaters that contain greater than or equal to 260 mg{kg total mercury.	Mercury	7439-97-6	NA	RMERC
	K106 cwastewater treatment sludge from the mercury cell process in chlorine productiond nonwastewaters that contain less than 260 mg{kg total mercury that are residues from RMERC.	Mercury	7439-97-6	NA	0.20 mg{L TCLP
	Other K106 nonwastewaters that contain less than 260 mg{kg total mercury and are not residues from RMERC.	Mercury	7439-97-6	NA	0.025 mg{L TCLP
	All K106 wastewaters.	Mercury	7439-97-6	0.15	NA
K107	Column bottoms from production separation from the production of 1,1-dimethylhydrazine cUDMHd from carboxylic acid hydrazides.	NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine cUDMHd from carboxylic acid hydrazides.	NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine cUDMHd from carboxylic acid hydrazides.	NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine cUDMHd from carboxylic acid hydrazides.	NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene.	2,4-Dinitrotoluene	121-14-2	0.32	140
		2,6-Dinitrotoluene	606-20-2	0.55	28
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	NA	CARBN; or CMBST	CMBST
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	NA	CARBN; or CMBST	CMBST
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	Nickel	7440-02-2 NA	3.98	11 mg/L TCLP
		NA	NA	CARBN; or CMBST	CMBST
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	NA	NA	CARBN; or CMBST	CMBST
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	Methyl bromide cBromomethaned	74-83-9	0.11	15
		Chloroform	67-66-3	0.046	6.0
		Ethylene dibromide c1,2-Dibromoethaned	106-93-4	0.028	15
K118	Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	Methyl bromide cBromomethaned	74-83-9	0.11	15
		Chloroform	67-66-3	0.046	6.0
		Ethylene dibromide c1,2-Dibromoethaned	106-93-4	0.028	15
K123	Process wastewater including supernates, filtrates, and washwatersd from the production of ethylenebisdithiocarbamic acid and its salts.	NA	NA	CMBST; or CHOXD fb cBIODG or CARBNd	CMBST
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	NA	NA	CMBST; or CHOXD fb cBIODG or CARBNd	CMBST
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	NA	NA	CMBST; or CHOXD fb cBIODG or CARBNd	CMBST
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	NA	NA	CMBST; or CHOXD fb cBIODG or CARBNd	CMBST
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	Methyl bromide cBromomethaned	74-83-9	0.11	15
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	Methyl bromide cBromomethaned	74-83-9	0.11	15

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		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	Methyl bromide cBromomethaned	74-83-9	0.11	15
		Chloroform	67-66-3	0.46	6.0
		Ethylene dibromide c1,2-Dibromoethaned	106-93-4	0.028	15
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke or the recovery of coke by-products produced from coal. This listing does not include K087 cde-canter tank tar sludge from coking operationsd.	Benzene	71-43-2	0.14	10
		Benzcadanthracene	56-55-3	0.059	3.4
		Benzocadpyrene	50-2-8	0.061	3.4
		Benzocbdf fluoranthene cdifficult to distinguish from benzockdf fluoranthened	205-99-2	0.11	6.8
		Benzockdf fluoranthene cdifficult to distinguish from benzocbdf fluoranthened	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4
		Dibenzca,hdanthracene	53-70-3	0.055	8.2
		Indenoc1,2,3-cddpyrene	193-39-5	0.0055	3.4
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.	Benzene	71-43-2	0.14	10
		Benzcadanthracene	56-55-3	0.061	3.4
		Benzocadpyrene	50-32-8	0.059	3.4
		Benzocbdf fluoranthene cdifficult to distinguish from benzockdf fluoranthened	205-99-2	0.11	6.8
		Benzockdf fluoranthene cdifficult to distinguish from benzocbdf fluoranthened	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4
		Dibenzca,hdanthracene	53-70-3	0.055	8.2
		Indenoc1,2,3-cddpyrene	193-39-5	0.0055	3.4
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.	Benzene	71-43-2	0.14	10
		Benzcadanthracene	56-55-3	0.059	3.4
		Benzocadpyrene	50-32-8	0.061	3.4
		Benzocbdf fluoranthene cdifficult to distinguish from benzockdf fluoranthened	205-99-2	0.11	6.8
		Benzockdf fluoranthene cdifficult to distinguish from benzocbdf fluoranthene	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.	Benzene	71-43-2	0.14	10
		Benzocadanthracene	56-55-3	0.059	3.4
		Benzocadpyrene	50-32-8	0.061	3.4
		Benzocbdfuoranthene cdifficult to distinguish from benzockdfuoranthened	205-99-2	0.11	6.8
		Benzockdfuoranthene cdifficult to distinguish from benzocbdfuoranthened	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4
		Dibenzca,hdanthracene	53-70-3	0.055	8.2
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	Benzene	71-43-2	0.14	10
		Benzocadanthracene	56-55-3	0.059	3.4
		Benzocadpyrene	50-32-8	0.061	3.4
		Chrysene	218-01-9	0.059	3.4
		Dibenzca,hdanthracene	53-70-3	0.055	8.2
		Naphthalene	91-20-3	0.059	5.6
K147	Tar storage tank residues from coal tar refining.	Benzene	71-43-2	0.14	10
		Benzocadanthracene	56-55-3	0.059	3.4
		Benzocadpyrene	50-32-8	0.061	3.4
		Benzocbdfuoranthene cdifficult to distinguish from benzockdfuoranthened	205-99-2	0.11	6.8
		Benzockdfuoranthene cdifficult to distinguish from benzocbdfuoranthened	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4
		Dibenzca,hdanthracene	53-70-3	0.055	8.2
		Indenoc1,2,3-cddpyrene	193-39-5	0.0055	3.4

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K148	Residues from coal tar distillation, including, but not limited to, still bottoms.	Benzocadanthracene	56-55-3	0.059	3.4
		Benzocadpyrene	50-32-8	0.061	3.4
		Benzocbdfuoranthene cdifficult to distinguish from benzocckdfuoranthened	205-99-2	0.11	6.8
		Benzocckdfuoranthene cdifficult to distinguish from benzocbdfuoranthened	207-08-9	0.11	6.8
		Chrysene	218-01-9	0.059	3.4
		Dibenzca,hdanthracene	53-70-3	0.055	8.2
		Indenoc 1,2,3-cddpyrene	193-39-5	0.0055	3.4
K149	Distillation bottoms from the production of alpha- cor methyl-d chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. cThis waste does not include still bottoms from the distillations of benzyl chloride.d	Chlorobenzene	108-90-7	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Chloromethane	74-87-3	0.019	30
		p-Dichlorobenzene	106-46-7	0.090	6.0
		Hexachlorobenzene	118-74-1	0.055	10
		Pentachlorobenzene	608-93-5	0.055	10
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		Toluene	108-88-3	0.080	10
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- cor methyl-d chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Chloromethane	74-87-3	0.019	30
		p-Dichlorobenzene	106-46-7	0.090	6.0
		Hexachlorobenzene	118-74-1	0.055	10
		Pentachlorobenzene	608-93-5	0.055	10
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
		Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19		

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- or cmethyl-d chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	Benzene	71-43-2	0.14	10
		Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Hexachlorobenzene	118-74-1	0.055	10
		Pentachlorobenzene	608-93-5	0.055	10
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
		Tetrachloroethylene	127-18-4	0.056	6.0
		Toluene	108-88-3	0.080	10

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K156	Organic waste including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates from the production of carbamates and carbamoyl oximes.	Acetonitrile	75-05-8	5.6	1.8
		Acetophenone	98-86-2	0.010	9.7
		Aniline	62-53-3	0.81	14
		Benomy110	17804-35-2	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
		Benzene	71-43-2	0.14	10
		Carbaryl110	63-25-2	0.006; or CMBST, CHOXD, BIODG or CARBN	0.14; or CMBST
		Carbenzadim10	10605-21-7	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
		Carbofuran10	1563-66-2	0.006; or CMBST, CHOXD, BIODG or CARBN	0.14; or CMBST
		Carbosulfan10	55285-14-8	0.028; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
		Chlorobenzene	108-90-7	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		o-Dichlorobenzene	95-50-1	0.088	6.0
		Methomyl10	16752-77-5	0.028; or CMBST, CHOXD, BIODG or CARBN	0.14; or CMBST
		Methylene chloride	75-09-2	0.089	30
		Methyl ethyl ketone	78-93-3	0.28	36
		Naphthalene	91-20-3	0.059	5.6
		Phenol	108-95-2	0.039	6.2
		Pyridine	110-86-1	0.014	16
Toluene	108-88-3	0.080	10		
Triethylamine	121-44-8	0.081; or CMBST, CHOXD, BIODG or CARBN	1.5; or CMBST		

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K157	Wastewaters including scrubber waters, condenser waters, washwaters, and separation waters from the production of carbamates and carbamoyl oximes.	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Chloromethane	74-87-3	0.19	30
		Methomyl ¹⁰	16752-77-5	0.028; or CMBST, CHOXD, BIODG or CARBN	0.14; or CMBST
		Methylene chloride	75-09-2	0.089	30
		Methylethyl ketone	78-93-3	0.28	36
		Pyridine	110-86-1	0.014	16
		Triethylamine	121-44-8	0.081 or CMBST, CHOXD, BIODG or CARBN	1.5; or CMBST
K158	Bag house dusts and filter{separation solids from the production of carbamates and carbamoyl oximes.	Benzene	71-43-2	0.14	10
		Carbenzadim ¹⁰	10605-21-7	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
		Carbofuran ¹⁰	1563-66-2	0.006; or CMBST, CHOXD, BIODG or CARBN	0.14; or CMBST
		Carbosulfan ¹⁰	55285-14-8	0.028; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
		Chloroform	67-66-3	0.046	6.0
		Methylene chloride	75-09-2	0.089	30
		Phenol	108-95-2	0.039	6.2
K159	Organics from the treatment of thiocarbamate wastes.	Benzene	71-43-2	0.14	10
		Butylate ¹⁰	2008-41-5	0.042; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
		EPTC cEptamd ¹⁰	759-94-4	0.042; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
		Molinate ¹⁰	2212-67-1	0.042; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
		Pebulate ¹⁰	1114-71-2	0.042; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
		Vernolate ¹⁰	1929-77-7	0.042; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST

Waste code	Waste description and treatment Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg/L ³ ; or Technology Code ⁴	Concentration in mg/kg ⁵ unless noted as Xmg/L TCLP ^Y ; or Technology Code ⁴
K161	Purification solids including filtration, evaporation, and centrifugation solids, baghouse dust and floor sweepings from the production of dithiocarbamate acids and their salts.	Antimony	7440-36-0	1.9	1.15 mg/L TCLP
		Arsenic	7440-38-2	1.4	5.0 mg/L TCLP
		Carbon disulfide	75-15-0	3.8	4.8 mg/L TCLP
		Dithiocarbamates total ¹⁰	NA	0.028; or CMBST, CHOXD, BIODG or CARBN	28; or CMBST
		Lead	7439-92-1	0.69	0.75 mg/L TCLP
		Nickel	7440-02-0	3.98	11.0 mg/L TCLP
		Selenium	7782-49-2	0.82	5.7 mg/L TCLP
K169	Crude oil tank sediment from petroleum refining operations.	Benzo[a]anthracene	56-55-3	0.059	3.4
		Benzene	71-43-2	0.14	10
		Benzo[ghi]perylene	191-24-2	0.0055	1.8
		Chrysene	218-01-9	0.059	3.4
		Ethyl benzene	100-41-4	0.057	10
		Fluorene	86-73-7	0.059	3.4
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	81-05-8	0.059	5.6
		Pyrene	129-00-0	0.067	8.2
		Toluene cMethyl Benzene ^d	108-88-3	0.080	10
		Xylenes ^c Total ^d	1330-20-7	0.32	30

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K170	Clarified slurry oil sediment from petroleum refining operations.	Benzcadanthracene	56-55-3	0.059	3.4
		Benzene	71-43-2	0.14	10
		Benzocg,h,iperylene	191-24-2	0.0055	1.8
		Chrysene	218-01-9	0.059	3.4
		Dibenzca,h,danthracene	53-70-3	0.055	8.2
		Ethyl benzene	100-41-4	0.057	10
		Fluorene	86-73-7	0.059	3.4
		Indenoc 1,3,4-cddpyrene	193-39-5	0.0055	3.4
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	81-05-8	0.059	5.6
		Pyrene	129-00-0	0.067	8.2
		Toluene cMethyl Benzened	108-88-3	0.080	10
		Xylenecsd cTotald	1330-20-7	0.32	30
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support mediad.	Benzcadanthracene	56-55-3	0.059	3.4
		Benzene	71-43-2	0.14	10
		Chrysene	218-01-9	0.059	3.4
		Ethyl benzene	100-41-4	0.057	10
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	81-05-8	0.059	5.6
		Pyrene	129-00-0	0.67	8.2
		Toluene cMethyl Benzened	108-88-3	0.080	10
		Xylenecsd cTotald	1330-20-7	0.32	30
		Arsenic	7740-38-2	1.4	5 mg{L TCLP
		Nickel	7440-02-0	3.98	11.0 mg{L TCLP
		Vanadium	7440-62-2	4.3	1.6 mg{L TCLP
		Reactive sulfides	NA	DEACT	DEACT

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K172	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	Benzene	71-43-2	0.14	10
		Ethyl benzene	100-41-4	0.57	10
		Toluene cMethyl Benzene	108-88-3	0.080	10
		Xylenes cTotal	1330-20-7	0.32	30
		Antimony	7740-36-0	1.9	1.15 mg{L TCLP
		Arsenic	7740-38-2	1.4	5 mg{L TCLP
		Nickel	7440-02-0	3.98	11.0 mg{L TCLP
		Vanadium	7440-62-2	4.3	1.6 mg{L TCLP
		Reactive sulfides	NA	DEACT	DEACT
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer.	1,2,3,4,6,7,8-Heptachlorodibenzop-dioxin c1,2,3,4,6,7,8-HpCDDd	35822-46-9	0.000035 or CMBST11	0.0025 or CMBST11
		1,2,3,4,6,7,8-Heptachlorodibenzofuran c1,2,3,4,6,7,8-HpCDFd	67562-39-4	0.000035 or CMBST11	0.0025 or CMBST11
		1,2,3,4,7,8,9-Heptachlorodibenzofuran c1,2,3,4,7,8,9-HpCDFd	55673-89-7	0.000035 or CMBST11	0.0025 or CMBST11
		HxCDDs cAll Hexachlorodibenzop-dioxins	34465-46-8	0.000063 or CMBST11	0.001 or CMBST11
		HxCDFs cAll Hexachlorodibenzofurans	55684-94-1	0.000063 or CMBST11	0.001 or CMBST11
		1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin cOCDDd	3268-87-9	0.000063 or CMBST11	0.005 or CMBST11
		1,2,3,4,6,7,8,9-Octachlorodibenzofuran cOCDFd	39001-02-0	0.000063 or CMBST11	0.005 or CMBST11
		PeCDDs cAll Pentachlorodibenzo-p-dioxins	36088-22-9	0.000063 or CMBST11	0.001 or CMBST11
		PeCDFs cAll Pentachlorodibenzofurans	30402-15-4	0.000035 or CMBST11	0.001 or CMBST11
		TCDDs cAll tetrachlorodibenzo-p-dioxins	41903-57-5	0.000063 or CMBST11	0.001 or CMBST11
		TCDFs cAll tetrachlorodibenzofurans	55722-27-5	0.000063 or CMBST11	0.001 or CMBST11
		Arsenic	7440-36-0	1.4	5.0 mg{L TCLP
		K175	Wastewater treatment sludge from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process.	Mercury ¹²	7438-97-6
pH ¹²				NA	pH≤6.0
All K175 wastewaters.	Mercury		7438-97-6	0.15	NA

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates ce.g., antimony metal or crude antimony oxidized.	Antimony	7440-36-0	1.9	1.15 mg{L TCLP
		Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
		Cadmium	7440-43-9	0.69	0.11 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
		Mercury	7439-97-6	0.15	0.025 mg{L TCLP
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates ce.g., antimony metal or crude antimony oxidized.	Antimony	7440-36-0	1.9	1.15 mg{L TCLP
		Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
		Lead	7439-92-1	0.69	0.75 mg{L TCLP
K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.	1,2,3,4,6,7,8- Heptachlorodibenzo-p-dioxin c1,2,3,4,6,7,8-HpCDDd	35822-39-4	0.000035 or CMBST11	0.0025 or CMBST11
		1,2,3,4,6,7,8- Heptachlorodibenzofuran c1,2,3,4,6,7,8-HpCDFd	67562-39-4	0.000035 or CMBST11	0.0025 or CMBST11
		1,2,3,4,7,8,9- Heptachlorodibenzofuran c1,2,3,4,7,8,9-HpCDFd	55673-89-7	0.000035 or CMBST11	0.0025 or CMBST11
		HxCDDs cAll Hexachlorodibenzo-p-dioxinsd	34465-46-8	0.000063 or CMBST11	0.001 or CMBST11
		HxCDFs cAll Hexachlorodibenzofuransd	55684-94-1	0.000063 or CMBST11	0.001 or CMBST11
		1,2,3,4,6,7,8,9- Octachlorodibenzo-p-dioxin cOCDDd	3268-87-9	0.000063 or CMBST11	0.005 or CMBST11
		1,2,3,4,6,7,8,9- Octachlorodibenzofuran cOCDFd	39001-02-0	0.000063 or CMBST11	0.005 or CMBST11
		PeCDDs cAll Pentachlorodibenzo-p-dioxinsd	36088-22-9	0.000063 or CMBST11	0.001 or CMBST11
		PeCDFs cAll Pentachlorodibenzofuransd	30402-15-4	0.000035 or CMBST11	0.001 or CMBST11
		TCDDs cAll tetrachlorodibenzo-p-dioxinsd	41903-57-5	0.000063 or CMBST11	0.001 or CMBST11
		TCDFs cAll tetrachlorodibenzofuransd	55722-27-5	0.000063 or CMBST11	0.001 or CMBST11
		Thallium	7440-28-0	1.4	0.20 mg{L TCLP

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
K181	Nonwastewaters from the production of dyes and{or pigments including nonwastewaters commingled at the point of generation with nonwastewaters from other processesd that, at the point of generation, contain mass loadings of any of the constituents identified in s. NR 661.0032 c3d that are equal to or greater than the corresponding s. NR 661.0032 c3d levels, as determined on a calendar year basis.	Aniline	62-53-3	0.81	14
		o-Anisidine c2-methoxyanilined	90-04-0	0.010	0.66
		4-Chloroaniline	106-47-8	0.46	16
		p-Cresidine	120-71-8	0.010	0.66
		2,4-Dimethylaniline c2,4-xylidined	95-68-1	0.010	0.66
		1,2-Phenylenediamine	95-54-5	CMBST; or CHOXD fb cBIODG or CARBNd; or BIODG fb CARBN	CMBST; or CHOXD fb cBIODG or CARBNd; or BIODG fb CARBN
		1,3-Phenylenediamine	108-45-2	0.010	0.66
P001	Warfarin, & salts, when present at concentrations greater than 0.3%.	Warfarin	81-81-2	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P002	1-Acetyl-2-thiourea	1-Acetyl-2-thiourea	591-08-2	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P003	Acrolein	Acrolein	107-02-8	0.29	CMBST
P004	Aldrin	Aldrin	309-00-2	0.021	0.066
P005	Allyl alcohol	Allyl alcohol	107-18-6	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P006	Aluminum phosphide	Aluminum phosphide	20859-73-8	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
P007	5-Aminomethyl 3-isoxazolol	5-Aminomethyl 3-isoxazolol	2763-96-4	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P008	4-Aminopyridine	4-Aminopyridine	504-24-5	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P009	Ammonium picrate	Ammonium picrate	131-74-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P010	Arsenic acid	Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
P011	Arsenic pentoxide	Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
P012	Arsenic trioxide	Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
P013	Barium cyanide	Barium	7440-39-3	NA	21 mg{L TCLP
		Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
P014	Thiophenol cBenzene thiold	Thiophenol cBenzene thiold	108-98-5	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P015	Beryllium dust	Beryllium	7440-41-7	RMETL; or RTHRM	RMETL; or RTHRM
P016	Dichloromethyl ether cBischloromethyl etherd	Dichloromethyl ether	542-88-1	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P017	Bromoacetone	Bromoacetone	598-31-2	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
P018	Brucine	Brucine	357-57-3	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
P020	2-sec-Butyl-4,6-dinitrophenol cDinosebd	2-sec-Butyl-4,6-dinitrophenol cDinosebd	88-85-7	0.066	2.5
P021	Calcium cyanide	Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
P022	Carbon disulfide	Carbon disulfide	75-15-0	3.8	CMBST
		Carbon disulfide; alternate6 standard for nonwastewaters only	75-15-0	NA	4.8 mg{L TCLP
P023	Chloroacetaldehyde	Chloroacetaldehyde	107-20-0	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
P024	p-Chloroaniline	p-Chloroaniline	106-47-8	0.46	16
P026	1-co-Chlorophenyldthiourea	1-co-Chlorophenyldthiourea	5344-82-1	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
P027	3-Chloropropionitrile	3-Chloropropionitrile	542-76-7	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
P028	Benzyl chloride	Benzyl chloride	100-44-7	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
P029	Copper cyanide	Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
P030	Cyanides csoluble salts and complexesd	Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
P031	Cyanogen	Cyanogen	460-19-5	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
P033	Cyanogen chloride	Cyanogen chloride	506-77-4	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
P034	2-Cyclohexyl-4,6-dinitrophenol	2-Cyclohexyl-4,6-dinitrophenol	131-89-5	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
P036	Dichlorophenylarsine	Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
P037	Dieldrin	Dieldrin	60-57-1	0.017	0.13
P038	Diethylarsine	Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
P039	Disulfoton	Disulfoton	298-04-4	0.017	6.2
P040	0,0-Diethyl O-pyrazinyl phosphorothioate	0,0-Diethyl O-pyrazinyl phosphorothioate	297-97-2	CARBN; or CMBST	CMBST
P041	Diethyl-p-nitrophenyl phosphate	Diethyl-p-nitrophenyl phosphate	311-45-5	CARBN; or CMBST	CMBST
P042	Epinephrine	Epinephrine	51-43-4	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
P043	Diisopropylfluorophosphate cDFPd	Diisopropylfluorophosphate cDFPd	55-91-4	CARBN; or CMBST	CMBST

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
P044	Dimethoate	Dimethoate	60-51-5	CARBN; or CMBST	CMBST
P045	Thiofanox	Thiofanox	39196-18-4	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P046	alpha, alpha-Dimethylphenethylamine	alpha, alpha-Dimethylphenethylamine	122-09-8	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P047	4,6-Dinitro-o-cresol	4,6-Dinitro-o-cresol	543-52-1	0.28	160
	4,6-Dinitro-o-cresol salts	NA	NA	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P048	2,4-Dinitrophenol	2,4-Dinitrophenol	51-28-5	0.12	160
P049	Dithiobiuret	Dithiobiuret	541-53-7	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P050	Endosulfan	Endosulfan I	939-98-8	0.023	0.066
		Endosulfan II	33213-6-5	0.029	0.13
		Endosulfan sulfate	1031-07-8	0.029	0.13
P051	Endrin	Endrin	72-20-8	0.0028	0.13
		Endrin aldehyde	7421-93-4	0.025	0.13
P054	Aziridine	Aziridine	151-56-4	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P056	Fluorine	Fluoride cmeasured in wastewaters onlyd	16984-48-8	35	ADGAS fb NEUTR
P057	Fluoroacetamide	Fluoroacetamide	640-19-7	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P058	Fluoroacetic acid, sodium salt	Fluoroacetic acid, sodium salt	62-74-8	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P059	Heptachlor	Heptachlor	76-44-8	0.0012	0.066
		Heptachlor epoxide	1024-57-3	0.016	0.066
P060	Isodrin	Isodrin	465-73-6	0.021	0.066
P062	Hexaethyl tetraphosphate	Hexaethyl tetraphosphate	757-58-4	CARBN; or CMBST	CMBST
P063	Hydrogen cyanide	Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
P064	Isocyanic acid, ethyl ester	Isocyanic acid, ethyl ester	624-83-9	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
P065	Mercury fulminate nonwastewaters, regardless of their total mercury content, that are not incinerator residues or are not residues from RMERC.	Mercury	7439-97-6	NA	IMERC
	Mercury fulminate nonwastewaters that are either incinerator residues or are residues from RMERC; and contain greater than or equal to 260 mg{kg total mercury.	Mercury	7439-97-6	NA	RMERC
	Mercury fulminate nonwastewaters that are residues from RMERC and contain less than 260 mg{kg total mercury.	Mercury	7439-97-6	NA	0.20 mg{L TCLP
	Mercury fulminate nonwastewaters that are incinerator residues and contain less than 260 mg{kg total mercury.	Mercury	7439-97-6	NA	0.025 mg{L TCLP
	All mercury fulminate wastewaters.	Mercury	7439-97-6	0.15	NA
P066	Methomyl	Methomyl	16752-77-5	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
P067	2-Methyl-aziridine	2-Methyl-aziridine	75-55-8	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
P068	Methyl hydrazine	Methyl hydrazine	60-34-4	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P069	2-Methylacetonitrile	2-Methylacetonitrile	75-86-5	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
P070	Aldicarb	Aldicarb	116-06-3	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
P071	Methyl parathion	Methyl parathion	298-00-0	0.014	4.6
P072	1-Naphthyl-2-thiourea	1-Naphthyl-2-thiourea	86-88-4	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
P073	Nickel carbonyl	Nickel	7440-02-0	3.98	11 mg{L TCLP
P074	Nickel cyanide	Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
		Nickel	7440-02-0	3.98	11 mg{L TCLP
P075	Nicotine and salts	Nicotine and salts	54-11-5	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
P076	Nitric oxide	Nitric oxide	10102-43-9	ADGAS	ADGAS
P077	p-Nitroaniline	p-Nitroaniline	100-01-6	0.028	28
P078	Nitrogen dioxide	Nitrogen dioxide	10102-44-0	ADGAS	ADGAS
P081	Nitroglycerin	Nitroglycerin	55-63-0	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P082	N-Nitrosodimethylamine	N-Nitrosodimethylamine	62-75-9	0.40	2.3
P084	N-Nitrosomethylvinylamine	N-Nitrosomethylvinylamine	4549-40-0	eWETOX or CHOXd fb CARBN; or CMBST	CMBST

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
P085	Octamethylpyrophosphoramide	Octamethylpyrophosphoramide	152-16-9	CARBN; or CMBST	CMBST
P087	Osmium tetroxide	Osmium tetroxide	20816-12-0	RMETL; or RTHRM	RMETL; or RTHRM
P088	Endothall	Endothall	145-73-3	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
P089	Parathion	Parathion	56-38-2	0.014	4.6
P092	Phenyl mercuric acetate nonwastewaters, regardless of their total mercury content, that are not incinerator residues or are not residues from RMERC.	Mercury	7439-97-6	NA	IMERC; or RMERC
	Phenyl mercuric acetate nonwastewaters that are either incinerator residues or are residues from RMERC; and still contain greater than or equal to 260 mg{kg total mercury.	Mercury	7439-97-6	NA	RMERC
	Phenyl mercuric acetate nonwastewaters that are residues from RMERC and contain less than 260 mg{kg total mercury.	Mercury	7439-97-6	NA	0.20 mg{L TCLP
	Phenyl mercuric acetate nonwastewaters that are incinerator residues and contain less than 260 mg{kg total mercury.	Mercury	7439-97-6	NA	0.025 mg{L TCLP
	All phenyl mercuric acetate wastewaters.	Mercury	7439-97-6	0.15	NA
P093	Phenylthiourea	Phenylthiourea	103-85-5	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
P094	Phorate	Phorate	298-02-2	0.021	4.6
P095	Phosgene	Phosgene	75-44-5	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
P096	Phosphine	Phosphine	7803-51-2	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
P097	Famphur	Famphur	52-85-7	0.017	15
P098	Potassium cyanide	Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
P099	Potassium silver cyanide	Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
		Silver	7440-22-4	0.43	0.14 mg{L TCLP
P101	Ethyl cyanide cPropanenitriled	Ethyl cyanide cPropanenitriled	107-12-0	0.24	360
P102	Propargyl alcohol	Propargyl alcohol	107-19-7	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
P103	Selenourea	Selenium	7782-49-2	0.82	5.7 mg{L TCLP
P104	Silver cyanide	Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
		Silver	7440-22-4	0.43	0.14 mg{L TCLP

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
P105	Sodium azide	Sodium azide	26628-22-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P106	Sodium cyanide	Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
P108	Strychnine and salts	Strychnine and salts	57-24-9	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P109	Tetraethylthiopyrophosphate	Tetraethylthiopyrophosphate	3689-24-5	CARBN; or CMBST	CMBST
P110	Tetraethyl lead	Lead	7439-92-1	0.69	0.75 mg{L TCLP
P111	Tetraethylpyrophosphate	Tetraethylpyrophosphate	107-49-3	CARBN; or CMBST	CMBST
P112	Tetranitromethane	Tetranitromethane	509-14-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P113	Thallic oxide	Thallium cmeasured in wastewaters onlyd	7440-28-0	1.4	RTHRM; or STABL
P114	Thallium selenite	Selenium	7782-49-2	0.82	5.7 mg{L TCLP
P115	Thallium cld sulfate	Thallium cmeasured in wastewaters onlyd	7440-28-0	1.4	RTHRM; or STABL
P116	Thiosemicarbazide	Thiosemicarbazide	79-19-6	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P118	Trichloromethanethiol	Trichloromethanethiol	75-70-7	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
P119	Ammonium vanadate	Vanadium cmeasured in wastewaters onlyd	7440-62-2	4.3	STABL
P120	Vanadium pentoxide	Vanadium cmeasured in wastewaters onlyd	7440-62-2	4.3	STABL
P121	Zinc cyanide	Cyanides cTotald7	57-12-5	1.2	590
		Cyanides cAmenabled7	57-12-5	0.86	30
P122	Zinc phosphide Zn3P2, when present at concentrations greater than 10%.	Zinc Phosphide	1314-84-7	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
P123	Toxaphene	Toxaphene	8001-35-2	0.0095	2.6
P127	Carbofuran ¹⁰	Carbofuran	1563-66-2	0.006; or CMBST, CHOXD, BIODG or CARBN	0.14; or CMBST
P128	Mexacarbate ¹⁰	Mexacarbate	315-18-4	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
P185	Tirpate ¹⁰	Tirpate	26419-73-8	0.056; or CMBST, CHOXD, BIODG or CARBN	0.28; or CMBST
P188	Physostigmine salicylate ¹⁰	Physostigmine salicylate	57-64-7	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
P189	Carbosulfan ¹⁰	Carbosulfan	55285-14-8	0.028; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
P190	Metolcarb ¹⁰	Metolcarb	1129-41-5	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
P191	Dimetilan ¹⁰	Dimetilan	644-64-4	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
P192	Isolan ¹⁰	Isolan	119-38-0	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
P194	Oxamyl ¹⁰	Oxamyl	23135-22-0	0.056; or CMBST, CHOXD, BIODG or CARBN	0.28; or CMBST
P196	Manganese dimethyldithio-carbamate ¹⁰	Dithiocarbamates ctotald	NA	0.028; or CMBST, CHOXD, BIODG or CARBN	28; or CMBST
P197	Formparanate ¹⁰	Formparante	17702-57-7	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
P198	Formetanate hydrochloride ¹⁰	Formetanate hydrochloride	23422-53-9	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
P199	Methiocarb ¹⁰	Methiocarb	2032-65-7	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
P201	Promecarb ¹⁰	Promecarb	2631-37-0	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
P202	m-Cumenyl methylcarbamate ¹⁰	m-Cumenyl methylcarbamate	64-00-6	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
P203	Aldicarb sulfone ¹⁰	Aldicarb sulfone	1646-88-4	0.056; or CMBST, CHOXD, BIODG or CARBN	0.28; or CMBST
P204	Physostigmine ¹⁰	Physostigmine	57-47-6	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
P205	Ziram ¹⁰	Dithiocarbamates ctotald	NA	0.028; or CMBST, CHOXD, BIODG or CARBN	28; or CMBST
U001	Acetaldehyde	Acetaldehyde	75-07-0	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
U002	Acetone	Acetone	67-64-1	0.28	160
U003	Acetonitrile	Acetonitrile	75-05-8	5.6	CMBST
		Acetonitrile; alternate6 standard for nonwastewaters only	75-05-8	NA	38
U004	Acetophenone	Acetophenone	98-86-2	0.010	9.7

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg/L ³ ; or Technology Code ⁴	Concentration in mg/kg ⁵ unless noted as Xmg/L TCLPY; or Technology Code ⁴
U005	2-Acetylaminofluorene	2-Acetylaminofluorene	53-96-3	0.059	140
U006	Acetyl chloride	Acetyl Chloride	75-36-5	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U007	Acrylamide	Acrylamide	79-06-1	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U008	Acrylic acid	Acrylic acid	79-10-7	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U009	Acrylonitrile	Acrylonitrile	107-13-1	0.24	84
U010	Mitomycin C	Mitomycin C	50-07-7	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U011	Amitrole	Amitrole	61-82-5	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U012	Aniline	Aniline	62-53-3	0.81	14
U014	Auramine	Auramine	492-80-8	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U015	Azaserine	Azaserine	115-02-6	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U016	Benzocadacridine	Benzocadacridine	225-51-4	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U017	Benzal chloride	Benzal chloride	98-87-3	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U018	Benzcadanthracene	Benzcadanthracene	56-55-3	0.059	3.4
U019	Benzene	Benzene	71-43-2	0.14	10
U020	Benzenesulfonyl chloride	Benzenesulfonyl chloride	98-09-9	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U021	Benzidine	Benzidine	92-87-5	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U022	Benzocadpyrene	Benzocadpyrene	50-32-8	0.061	3.4
U023	Benzotrichloride	Benzotrichloride	98-07-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOCS; CHRED; or CMBST
U024	bisc2-Chloroethoxydmethane	bisc2dChloroethoxydmethane	111-91-1	0.036	7.2
U025	bisc2-Chloroethyldether	bisc2-Chloroethyldether	111-44-4	0.033	6.0
U026	Chlornaphazine	Chlornaphazine	494-03-1	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U027	bisc2-Chloroisopropylidether	bisc2-Chloroisopropylidether	39638-32-9	0.055	7.2
U028	bisc2-Ethylhexyld phthalate	bisc2-Ethylhexyld phthalate	117-81-7	0.28	28
U029	Methyl bromide cBromomethaned	Methyl bromide cBromomethaned	74-83-9	0.11	15
U030	4-Bromophenyl phenyl ether	4-Bromophenyl phenyl ether	101-55-3	0.055	15
U031	n-Butyl alcohol	n-Butyl alcohol	71-36-3	5.6	2.6

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
U032	Calcium chromate	Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
U033	Carbon oxyfluoride	Carbon oxyfluoride	353-50-4	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
U034	Trichloroacetaldehyde cChlorald	Trichloroacetaldehyde cChlorald	75-87-6	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
U035	Chlorambucil	Chlorambucil	305-03-3	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
U036	Chlordane	Chlordane calpha and gamma isomersd	57-74-9	0.0033	0.26
U037	Chlorobenzene	Chlorobenzene	108-90-7	0.057	60
U038	Chlorobenzilate	Chlorobenzilate	510-15-6	0.10	CMBST
U039	p-Chloro-m-cresol	p-Chloro-m-cresol	59-50-7	0.018	14
U041	Epichlorohydrin c1-Chloro-2,3-epoxypropaned	Epichlorohydrin c1-Chloro-2,3-epoxypropaned	106-89-8	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
U042	2-Chloroethyl vinyl ether	2-Chloroethyl vinyl ether	110-75-8	0.062	CMBST
U043	Vinyl chloride	Vinyl chloride	75-01-4	0.27	6.0
U044	Chloroform	Chloroform	67-66-3	0.046	6.0
U045	Chloromethane cMethyl chlorided	Chloromethane cMethyl chlorided	74-87-3	0.19	30
U046	Chloromethyl methyl ether	Chloromethyl methyl ether	107-30-2	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
U047	2-Chloronaphthalene	2-Chloronaphthalene	91-58-7	0.055	5.6
U048	2-Chlorophenol	2-Chlorophenol	95-57-8	0.044	5.7
U049	4-Chloro-o-toluidine hydrochloride	4-Chloro-o-toluidine hydrochloride	3165-93-3	cWETOX or CHOXd fb CARBN; or CMBST	CMBST
U050	Chrysene	Chrysene	218-01-9	0.059	3.4
U051	Creosote	Naphthalene	91-20-3	0.059	5.6
		Pentachlorophenol	87-86-5	0.089	7.4
		Phenanthrene	85-01-8	0.059	5.6
		Pyrene	129-00-0	0.067	8.2
		Toluene	108-88-3	0.080	10
		Xylenes-mixed isomers csum of o-, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
		Lead	7439-92-1	0.69	0.75 mg{L TCLP

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
U052	Cresols cCresylic acidd	o-Cresol	95-48-7	0.11	5.6
		m-Cresol cdifficult to distinguish from p-cresold	108-39-4	0.77	5.6
		p-Cresol cdifficult to distinguish from m-cresold	106-44-5	0.77	5.6
		Cresol-mixed isomers cCresylic acidd csum of o- m-, and p-cresol concentrationsd	1319-77-3	0.88	11.2
U053	Crotonaldehyde	Crotonaldehyde	4170-30-3	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U055	Cumene	Cumene	98-82-8	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U056	Cyclohexane	Cyclohexane	110-82-7	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U057	Cyclohexanone	Cyclohexanone	108-94-1	0.36	CMBST
		Cyclohexanone; alternate ⁶ standard for nonwastewaters only	108-94-1	NA	0.75 mg{L TCLP
U058	Cyclophosphamide	Cyclophosphamide	50-18-0	CARBN; or CMBST	CMBST
U059	Daunomycin	Daunomycin	20830-81-3	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U060	DDD	o,p'-DDD	53-19-0	0.023	0.087
		p,p'-DDD	72-54-8	0.023	0.087
U061	DDT	o-p'-DDT	789-02-6	0.0039	0.087
		p,p'-DDT	50-29-3	0.0039	0.087
		o,p'-DDD	53-19-0	0.023	0.087
		p,p'-DDD	72-54-8	0.023	0.087
		o,p'-DDE	3424-82-6	0.031	0.087
		p,p'-DDE	72-55-9	0.031	0.087
U062	Diallate	Diallate	2303-16-4	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U063	Dibenzca,hdanthracene	Dibenzca,hdanthracene	53-70-3	0.055	8.2
U064	Dibenzca,idpyrene	Dibenzca,idpyrene	189-55-9	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U066	1,2-Dibromo-3-chloropropane	1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
U067	Ethylene dibromide c1,2-Dibromoethaned	Ethylene dibromide c1,2-Dibromoethaned	106-93-4	0.028	15
U068	Dibromomethane	Dibromomethane	74-95-3	0.11	15
U069	Di-n-butyl phthalate	Di-n-butyl phthalate	84-74-2	0.057	28

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
U070	o-Dichlorobenzene	o-Dichlorobenzene	95-50-1	0.088	6.0
U071	m-Dichlorobenzene	m-Dichlorobenzene	541-73-1	0.036	6.0
U072	p-Dichlorobenzene	p-Dichlorobenzene	106-46-7	0.090	6.0
U073	3,3'-Dichlorobenzidine	3,3'-Dichlorobenzidine	91-94-1	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U074	1,4-Dichloro-2-butene	cis,1,4-Dichloro-2-butene	1476-11-5	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
		trans-1,4-Dichloro-2-butene	764-41-0	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U075	Dichlorodifluoromethane	Dichlorodifluoromethane	75-71-8	0.23	7.2
U076	1,1-Dichloroethane	1,1-Dichloroethane	75-34-3	0.059	6.0
U077	1,2-Dichloroethane	1,2-Dichloroethane	107-06-2	0.21	6.0
U078	1,1-Dichloroethylene	1,1-Dichloroethylene	75-35-4	0.025	6.0
U079	1,2-Dichloroethylene	trans-1,2-Dichloroethylene	156-60-5	0.054	30
U080	Methylene chloride	Methylene chloride	75-09-2	0.089	30
U081	2,4-Dichlorophenol	2,4-Dichlorophenol	120-83-2	0.044	14
U082	2,6-Dichlorophenol	2,6-Dichlorophenol	87-65-0	0.044	14
U083	1,2-Dichloropropane	1,2-Dichloropropane	78-87-5	0.85	18
U084	1,3-Dichloropropylene	cis-1,3-Dichloropropylene	10061-01-5	0.036	18
		trans-1,3-Dichloropropylene	10061-02-6	0.036	18
U085	1,2:3,4-Diepoxybutane	1,2,3,4-Diepoxybutane	1464-53-5	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U086	N,N'-Diethylhydrazine	N,N'-Diethylhydrazine	1615-80-1	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U087	O,O-Diethyl S-methylthiophosphate	O,O-Diethyl S-methylthiophosphate	3288-58-2	CARBN; or CMBST	CMBST
U088	Diethyl phthalate	Diethyl phthalate	84-66-2	0.20	28
U089	Diethyl stilbestrol	Diethyl stilbestrol	56-53-1	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U090	Dihydrosafrole	Dihydrosafrole	94-58-6	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U091	3,3'-Dimethoxybenzidine	3,3'-Dimethoxybenzidine	119-90-4	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U092	Dimethylamine	Dimethylamine	124-40-3	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U093	p-Dimethylaminoazobenzene	p-Dimethylaminoazobenzene	60-11-7	0.13	CMBST

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
U094	7,12-Dimethylbenzcadanthracene	7,12-Dimethylbenzcadanthracene	57-97-6	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U095	3,3'-Dimethylbenzidine	3,3'-Dimethylbenzidine	119-93-7	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U096	alpha, alpha-Dimethyl benzyl hydroperoxide	alpha, alpha-Dimethyl benzyl hydroperoxide	80-15-9	CHOXD; CHRED; CARBN; BIODG; or CMBSt	CHOXD, CHRED; or CMBST
U097	Dimethylcarbamoyl chloride	Dimethylcarbamoyl chloride	79-44-7	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U098	1,1-Dimethylhydrazine	1,1-Dimethylhydrazine	57-14-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U099	1,2-Dimethylhydrazine	1,2-Dimethylhydrazine	540-73-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U101	2,4-Dimethylphenol	2,4-Dimethylphenol	105-67-9	0.036	14
U102	Dimethyl phthalate	Dimethyl phthalate	131-11-3	0.047	28
U103	Dimethyl sulfate	Dimethyl sulfate	77-78-1	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U105	2,4-Dinitrotoluene	2,4-Dinitrotoluene	121-14-2	0.32	140
U106	2,6-Dinitrotoluene	2,6-Dinitrotoluene	606-20-2	0.55	28
U107	Di-n-octyl phthalate	Di-n-octyl phthalate	117-84-0	0.017	28
U108	1,4-Dioxane	1,4-Dioxane	123-91-1	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
		1,4-Dioxane, alternate6	123-91-1	12.0	170
U109	1,2-Diphenylhydrazine	1,2-Diphenylhydrazine	122-66-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
		1,2-Diphenylhydrazine; alternate6 standard for wastewaters only	122-66-7	0.087	NA
U110	Dipropylamine	Dipropylamine	142-84-7	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U111	Di-n-propylnitrosamine	Di-n-propylnitrosamine	621-64-7	0.40	14
U112	Ethyl acetate	Ethyl acetate	141-78-6	0.34	33
U113	Ethyl acrylate	Ethyl acrylate	140-88-5	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U114	Ethylenebisdithiocarbamic acid salts and esters	Ethylenebisdithiocarbamic acid	111-54-6	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U115	Ethylene oxide	Ethylene oxide	75-21-8	eWETOX or CHOXdD fb CARBN; or CMBST	CHOXD; or CMBST
		Ethylene oxide; alternate6 standard for wastewaters only	75-21-8	0.12	NA

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
U116	Ethylene thiourea	Ethylene thiourea	96-45-7	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U117	Ethyl ether	Ethyl ether	60-29-7	0.12	160
U118	Ethyl methacrylate	Ethyl methacrylate	97-63-2	0.14	160
U119	Ethyl methane sulfonate	Ethyl methane sulfonate	62-50-0	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U120	Fluoranthene	Fluoranthene	206-44-0	0.068	3.4
U121	Trichlorofluoromethane	Trichlorofluoromethane	75-69-4	0.020	30
U122	Formaldehyde	Formaldehyde	50-00-0	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U123	Formic acid	Formic acid	64-18-6	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U124	Furan	Furan	110-00-9	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U125	Furfural	Furfural	98-01-1	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U126	Glycidyaldehyde	Glycidyaldehyde	765-34-4	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U127	Hexachlorobenzene	Hexachlorobenzene	118-74-1	0.055	10
U128	Hexachlorobutadiene	Hexachlorobutadiene	87-68-3	0.055	5.6
U129	Lindane	alpha-BHC	319-84-6	0.00014	0.066
		beta-BHC	319-85-7	0.00014	0.066
		delta-BHC	319-86-8	0.023	0.066
		gamma-BHC cLindaned	58-89-9	0.0017	0.066
U130	Hexachlorocyclopentadiene	Hexachlorocyclopentadiene	77-47-4	0.057	2.4
U131	Hexachloroethane	Hexachloroethane	67-72-1	0.055	30
U132	Hexachlorophene	Hexachlorophene	70-30-4	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U133	Hydrazine	Hydrazine	302-01-2	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U134	Hydrogen fluoride	Fluoride cmeasured in wastewaters onlyd	7664-39-3	35	ADGAS fb NEUTR; or NEUTR
U135	Hydrogen Sulfide	Hydrogen Sulfide	7783-06-4	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U136	Cacodylic acid	Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
U137	Indenoc 1,2,3-c,ddpyrene	Indenoc 1,2,3-cddpyrene	193-39-5	0.0055	3.4
U138	Iodomethane	Iodomethane	74-88-4	0.19	65

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
U140	Isobutyl alcohol	Isobutyl alcohol	78-83-1	5.6	170
U141	Isosafrole	Isosafrole	120-58-1	0.081	2.6
U142	Kepona	Kepona	143-50-8	0.0011	0.13
U143	Lasiocarpine	Lasiocarpine	303-34-4	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U144	Lead acetate	Lead	7439-92-1	0.69	0.75 mg{L TCLP
U145	Lead phosphate	Lead	7439-92-1	0.69	0.75 mg{L TCLP
U146	Lead subacetate	Lead	7439-92-1	0.69	0.75 mg{L TCLP
U147	Maleic anhydride	Maleic anhydride	108-31-6	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U148	Maleic hydrazide	Maleic hydrazide	123-33-1	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U149	Malononitrile	Malononitrile	109-77-3	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U150	Melphalan	Malphalan	148-82-3	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U151	U151 cmercuryd nonwastewaters that contain greater than or equal to 260 mg{kg total mercury.	Mercury	7439-97-6	NA	RMERC
	U151 cmercuryd nonwastewaters that contain less than 260 mg{kg total mercury and that are residues from RMERC only.	Mercury	7439-97-6	NA	0.20 mg{L TCLP
	U151 cmercuryd nonwastewaters that contain less than 260 mg{kg total mercury and that are not residues from RMERC.	Mercury	7439-97-6	NA	0.025 mg{L TCLP
	All U151 cmercuryd wastewaters.	Mercury	7439-97-6	0.15	NA
	Elemental Mercury Contaminated with Radioactive Materials	Mercury	7439-97-6	NA	AMLGM
U152	Methacrylonitrile	Methacrylonitrile	126-98-7	0.24	84
U153	Methanethiol	Methanethiol	74-93-1	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U154	Methanol	Methanol	67-56-1	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
		Methanol; alternate6 set of standards for both wastewaters and nonwastewaters	67-56-1	5.6	0.75 mg{L TCLP
U155	Methapyrilene	Methapyrilene	91-80-5	0.081	1.5
U156	Methyl chlorocarbonate	Methyl chlorocarbonate	79-22-1	eWETOX or CHOXd fb CARBN; or CMBST	CMBST
U157	3-Methylcholanthrene	3-Methylcholanthrene	56-49-5	0.0055	15
U158	4,4'-Methylene bisc2-chloroanilined	4,4'-Methylene bisc2-chloroanilined	101-14-4	0.50	30

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
U159	Methyl ethyl ketone	Methyl ethyl ketone	78-93-3	0.28	36
U160	Methyl ethyl ketone peroxide	Methyl ethyl ketone peroxide	1338-23-4	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U161	Methyl isobutyl ketone	Methyl isobutyl ketone	108-10-1	0.14	33
U162	Methyl methacrylate	Methyl methacrylate	80-62-6	0.14	160
U163	N-Methyl N'-nitro N-nitrosoguanidine	N-Methyl N'-nitro N-nitrosoguanidine	70-25-7	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U164	Methylthiouracil	Methylthiouracil	56-04-2	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U165	Naphthalene	Naphthalene	91-20-3	0.059	5.6
U166	1,4-Naphthoquinone	1,4-Naphthoquinone	130-15-4	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U167	1-Naphthylamine	1-Naphthylamine	134-32-7	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U168	2-Naphthylamine	2-Naphthylamine	91-59-8	0.52	CMBST
U169	Nitrobenzene	Nitrobenzene	98-95-3	0.068	14
U170	p-Nitrophenol	p-Nitrophenol	100-02-7	0.12	29
U171	2-Nitropropane	2-Nitropropane	79-46-9	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U172	N-Nitrosodi-n-butylamine	N-Nitrosodi-n-butylamine	924-16-3	0.040	17
U173	N-Nitrosodiethanolamine	N-Nitrosodiethanolamine	1116-54-7	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U174	N-Nitrosodiethylamine	N-Nitrosodiethylamine	55-18-5	0.40	28
U176	N-Nitroso-N-ethylurea	N-Nitroso-N-ethylurea	759-73-9	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U177	N-Nitroso-N-methylurea	N-Nitroso-N-methylurea	684-93-5	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U178	N-Nitroso-N-methylurethane	N-Nitroso-N-methylurethane	615-53-2	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U179	N-Nitrosopiperidine	N-Nitrosopiperidine	100-75-4	0.013	35
U180	N-Nitrosopyrrolidine	N-Nitrosopyrrolidine	930-55-2	0.013	35
U181	5-Nitro-o-toluidine	5-Nitro-o-toluidine	99-55-8	0.32	28
U182	Paraldehyde	Paraldehyde	123-63-7	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST
U183	Pentachlorobenzene	Pentachlorobenzene	608-93-5	0.055	10
U184	Pentachloroethane	Pentachloroethane	76-01-7	eWETOX or CHOXdD fb CARBN; or CMBST	CMBST

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
		Pentachloroethane; alternate standards for both wastewaters and nonwastewaters	76-01-7	0.055	6.0
U185	Pentachloronitrobenzene	Pentachloronitrobenzene	82-68-8	0.055	4.8
U186	1,3-Pentadiene	1,3-Pentadiene	504-60-9	eWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U187	Phenacetin	Phenacetin	62-44-2	0.081	16
U188	Phenol	Phenol	108-95-2	0.039	6.2
U189	Phosphorus sulfide	Phosphorus sulfide	1314-80-3	CHOXD; CHRED; or CMBST	CHOXd; CHRED; or CMBST
U190	Phthalic anhydride cmeasured as Phthalic acid or Terephthalic acid	Phthalic anhydride cmeasured as Phthalic acid or Terephthalic acid	100-21-0	0.055	28
		Phthalic anhydride cmeasured as Phthalic acid or Terephthalic acid	85-44-9	0.055	28
U191	2-Picoline	2-Picoline	109-06-8	eWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U192	Pronamide	Pronamide	23950-58-5	0.093	1.5
U193	1,3-Propane sultone	1,3-Propane sultone	1120-71-4	eWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U194	n-Propylamine	n-Propylamine	107-10-8	eWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U196	Pyridine	Pyridine	110-86-1	0.014	16
U197	p-Benzoquinone	p-Benzoquinone	106-51-4	eWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U200	Reserpine	Reserpine	50-55-5	eWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U201	Resorcinol	Resorcinol	108-46-3	eWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U203	Safrole	Safrole	94-59-7	0.081	22
U204	Selenium dioxide	Selenium	7782-49-2	0.82	5.7 mg{L TCLP
U205	Selenium sulfide	Selenium	7782-49-2	0.82	5.7 mg{L TCLP
U206	Streptozotocin	Streptozotocin	18883-66-4	eWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U207	1,2,4,5-Tetrachlorobenzene	1,2,4,5-Tetrachlorobenzene	95-94-5	0.055	14
U208	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
U209	1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
U210	Tetrachloroethylene	Tetrachloroethylene	127-18-4	0.056	6.0
U211	Carbon tetrachloride	Carbon tetrachloride	56-23-5	0.057	6.0
U213	Tetrahydrofuran	Tetrahydrofuran	109-99-9	eWETOX or CHOXDd fb CARBN; or CMBST	CMBST

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
U214	Thallium cld acetate	Thallium cmeasured in wastewaters onlyd	7440-28-0	1.4	RTHRM; or STABL
U215	Thallium cld carbonate	Thallium cmeasured in wastewaters onlyd	7440-28-0	1.4	RTHRM; or STABL
U216	Thallium cld chloride	Thallium cmeasured in wastewaters onlyd	7440-28-0	1.4	RTHRM; or STABL
U217	Thallium cld nitrate	Thallium cmeasured in wastewaters onlyd	7440-28-0	1.4	RTHRM; or STABL
U218	Thioacetamide	Thioacetamide	62-55-5	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U219	Thiourea	Thiourea	62-56-6	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U220	Toluene	Toluene	108-88-3	0.080	10
U221	Toluenediamine	Toluenediamine	25376-45-8	CARBN; or CMBST	CMBST
U222	o-Toluidine hydrochloride	o-Toluidine hydrochloride	636-21-5	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U223	Toluene diisocyanate	Toluene diisocyanate	26471-62-5	CARBN; or CMBST	CMBST
U225	Bromoform cTribromomethaned	Bromoform cTribromomethaned	75-25-2	0.63	15
U226	1,1,1-Trichloroethane	1,1,1-Trichloroethane	71-55-6	0.054	6.0
U227	1,1,2-Trichloroethane	1,1,2-Trichloroethane	79-00-5	0.054	6.0
U228	Trichloroethylene	Trichloroethylene	79-01-6	0.054	6.0
U234	1,3,5-Trinitrobenzene	1,3,5-Trinitrobenzene	99-35-4	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U235	tris-c2,3-Dibromopropyld-phosphate	tris-c2,3-Dibromopropyld-phosphate	126-72-7	0.11	0.10
U236	Trypan Blue	Trypan Blue	72-57-1	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U237	Uracil mustard	Uracil mustard	66-75-1	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U238	Urethane cEthyl carbamated	Urethane cEthyl carbamated	51-79-6	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U239	Xylenes	Xylenes-mixed isomers csum of o-, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
U240	2,4-D c2,4-Dichlorophenoxyacetic acidd	2,4-Dc2,4-Dichlorophenoxyacetic acidd	94-75-7	0.72	10
	2,4-D c2,4-Dichlorophenoxyacetic acidd salts and esters		NA	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST
U243	Hexachloropropylene	Hexachloropropylene	1888-71-7	0.035	30
U244	Thiram	Thiram	137-26-8	cWETOX or CHOXDd fb CARBN; or CMBST	CMBST

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
U246	Cyanogen bromide	Cyanogen bromide	506-68-3	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
U247	Methoxychlor	Methoxychlor	72-43-5	0.25	0.18
U248	Warfarin, & salts, when present at concentrations of 0.3% or less	Warfarin	81-81-2	eWETOX or CHOXd f b CARBN; or CMBST	CMBST
U249	Zinc phosphide, Zn ₃ P ₂ , when present at concentrations of 10% or less	Zinc Phosphide	1314-84-7	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U271	Benomyl ¹⁰	Benomyl	17804-35-2	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U278	Bendiocarb ¹⁰	Bendiocarb	22781-23-3	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U279	Carbaryl ¹⁰	Carbaryl	63-25-2	0.006; or CMBST, CHOXD, BIODG or CARBN	0.14; or CMBST
U280	Barban ¹⁰	Barban	101-27-9	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U328	o-Toluidine	o-Toluidine	95-53-4	CMBST; or CHOXD f b eBIODG or CARBNd; or BIODG f b CARBN	CMBST
U353	p-Toluidine	p-Toluidine	106-49-0	CMBST; or CHOXD f b eBIODG or CARBNd; or BIODG f b CARBN	CMBST
U359	2-Ethoxyethanol	2-Ethoxyethanol	110-80-5	CMBST; or CHOXD f b eBIODG or CARBNd; or BIODG f b CARBN	CMBST
U364	Bendiocarb phenol ¹⁰	Bendiocarb phenol	22961-82-6	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U367	Carbofuran phenol ¹⁰	Carbofuran phenol	1563-38-8	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U372	Carbendazim ¹⁰	Carbendazim	10605-21-7	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U373	Propham ¹⁰	Propham	122-42-9	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U387	Prosulfocarb ¹⁰	Prosulfocarb	52888-80-9	0.042; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U389	Triallate ¹⁰	Triallate	2303-17-5	0.042; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U394	A2213 ¹⁰	A2213	30558-43-1	0.042; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST

Waste code	Waste description and treatment{ Regulatory subcategory ¹	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS ² number	Concentration in mg{L ³ ; or Technology Code ⁴	Concentration in mg{kg ⁵ unless noted as Xmg{L TCLPY; or Technology Code ⁴
U395	Diethylene glycol, dicarbamate ¹⁰	Diethylene glycol, dicarbamate	5952-26-1	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U404	Triethylamine ¹⁰	Triethylamine	121-44-8	0.081; or CMBST, CHOXD, BIODG or CARBN	1.5; or CMBST
U409	Thiophanate-methyl ¹⁰	Thiophanate-methyl	23564-05-8	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U410	Thiodicarb ¹⁰	Thiodicarb	59669-26-0	0.019; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U411	Propoxur ¹⁰	Propoxur	114-26-1	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST

Footnotes to Treatment Standard Table 668.40

- The waste descriptions provided in this table do not replace waste descriptions in ch. NR 661. Descriptions of Treatment{Regulatory Subcategories are provided, as needed, to distinguish between applicability of different standards.
- CAS means Chemical Abstract Services. When the waste code and{or regulated constituents are described as a combination of a chemical with its salts and{or esters, the CAS number is given for the parent compound only.
- Concentration standards for wastewaters are expressed in mg{L and are based on analysis of composite samples.
- All treatment standards expressed as a Technology Code or combination of Technology Codes are explained in detail in s. NR 668.42 Table 1—Technology Codes and Descriptions of Technology-Based Standards.
- Except for metals cEP or TCLPd and cyanides ctotal and amenable the nonwastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated according to the technical requirements of subch. O of ch. NR 664 or subch. O of ch. NR 665, or based upon combustion in fuel substitution units operating according to applicable technical requirements. A facility may comply with these treatment standards according to s. NR 668.40 c4d. All concentration standards for nonwastewaters are based on analysis of grab samples.
- Both cyanides ctotal and cyanides camenable for nonwastewaters are to be analyzed using Method 9010C or 9012B, found in XTest Methods for Evaluating Solid Waste, Physical{Chemical Methods, Y EPA SW-846 incorporated by reference in s. NR 660.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.
- These wastes, when rendered nonhazardous and then subsequently managed under ch. 283, Stats., or CWA-equivalent systems are not subject to treatment standards csee s. NR 668.01 c3d cddd.
- These wastes, when rendered nonhazardous and then subsequently injected in a Class SDWA well, are not subject to treatment standards csee subch. R of ch. NR 665d.
- The treatment standard for this waste may be satisfied by either meeting the constituent concentrations in this table or by treating the waste by the specified technologies: combustion, as defined by the technology code CMBST at s. NR 668.42, Table 1, for nonwastewaters; and biodegradation as defined by the technology code BIODG, carbon adsorption as defined by the technology code CARBN, chemical oxidation as defined by the technology code CHOXD, or combustion as defined as technology code CMBST at s. NR 668.42, Table 1, for wastewaters.
- For these wastes, the definition of CMBST is limited to: c1d combustion units operating under ch. NR 666, c2d combustion units licensed under subch. O of ch. NR 664, or c3d combustion units licensed under subch. O of ch. NR 665 which have obtained a determination of equivalent treatment under s. NR 668.42 c2d.
- Disposal of K175 wastes that have complied with all applicable s. NR 668.40 treatment standards must also be macroencapsulated in accordance with s. NR 668.45, Table 1 unless the waste is placed in one of the following: c1d A hazardous waste monofill containing only K175 wastes that meet all applicable s. NR 668.40 treatment standards. c2d A dedicated hazardous waste landfill cell in which all other wastes being co-disposed are at pH <= 6.0.
- XTest Methods for Evaluating Solid Waste, Physical{Chemical MethodsY, EPA SW-846, incorporated by reference in s. NR 660.11.

NR 668.41 Treatment standards expressed as concentrations in waste extract. For the requirements and the treatment standards in Table CCWE]Constituent Concentrations

in Waste Extracts, both of which were found in s. NR 675.21 until June 1, 1998, refer to s. NR 668.40.

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

NR 668.42 Treatment standards expressed as specified technologies.

Note: For the requirements previously found in Table 2]Technology]Based Standards By RCRA Waste Code and Table 3]Technology] Based Standards for Specific Radioactive Hazardous Mixed Waste, refer to s. NR 668.40.

c1d In the table entitled Treatment Standards for Hazardous

Wastes, in s. NR 668.40, wastes for which standards are expressed as a treatment method rather than a concentration level, must be treated using the technology or technologies specified in the table entitled Technology Codes and Description of Technology-Based Standards.

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 c.i.e., solid or liquid—venting can be accomplished through physical release utilizing valves or piping; physical penetration of the container; 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 c.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 ce.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 cgranulated or powdered of non-metallic inorganics, organo-metallics, or organic constituents, operated such that a surrogate compound or indicator parameter has not undergone breakthrough ce.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 cor indicator parameterd and substantial change in adsorption rate associated with that constituent occurs.
CHOXD:	Chemical or electrolytic oxidation utilizing the following oxidation reagents cor waste reagentsd or combinations of reagents: c1d Hypochlorite ce.g., bleachd; c2d chlorine; c3d chlorine dioxide; c4d ozone or UV ultraviolet lightd assisted ozone; c5d peroxides; c6d persulfates; c7d perchlorates; c8d permangantes; or c9d 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 ce.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 cor waste reagentsd or combinations of reagents: c1d Sulfur dioxide; c2d sodium, potassium, or alkali salts or sulfites, bisulfites, metabisulfites, and polyethylene glycols ce.g., NaPEG and KPEGd; c3d sodium hydrosulfide; c4d ferrous salts; or c5d 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 ce.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.
CMBST:	High temperature organic destruction technologies, such as combustion in incinerators, boilers, or industrial furnaces operated in accordance with the applicable requirements of subch. O of ch. NR 664 or 665, or subch. H of ch. NR 666, and in other units operated in accordance with applicable technical operating requirements; and certain non-combustive technologies, such as the catalytic extraction process.
DEACT:	Deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, 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 according to the technical operating requirements of subch. O of ch. NR 664 and 665. All wastewater and nonwastewater residues derived from this process shall then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories ce.g., high or low mercury subcategoriesd.
INCIN:	Incineration in units operated in accordance with the technical operating requirements of subch. O of ch. NR 664 and 665.
LLEXT:	Liquid-liquid extraction often referred to as solvent extractiond 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 shall undergo either incineration, reuse as a fuel, or other recovery or reuse and a raffinate extracted liquid wasted proportionately low in organics that shall undergo further treatment as specified in the standard.
MACRO:	Macroencapsulation with surface coating materials such as polymeric organics ce.g., resins and plasticsd 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 660.10.
NEUTR:	Neutralization with the following reagents cor waste reagentsd or combinations of reagents: c1d acids; c2d bases; or c3d water cincluding wastewatersd 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.
POLYM:	Formation of complex high-molecular weight solids through polymerization of monomers in high-TOC D001 non-wastewaters which are chemical components in the manufacture of plastics.
PRECP:	Chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, fluorides, or phosphates. The following reagents cor waste reagentsd are typically used alone or in combination: c1d lime c.i.e., containing oxides or hydroxides of calcium or magnesium; c2d caustic c.i.e., sodium or potassium hydroxides; c3d soda ash c.i.e., sodium carbonated; c4d sodium sulfide; c5d ferric sulfate or ferric chloride; c6d alum; or c7d sodium sulfate. Additional flocculating, coagulation or similar reagents or processes that enhance sludge dewatering characteristics are not precluded from use.
RBERY:	Thermal recovery of beryllium.
RCGAS:	Recovery or reuse of compressed gases including techniques such as reprocessing of the gases for reuse or resale; filtering or 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: c1d distillation c.i.e., thermal concentrationd; c2d ion exchange; c3d resin or solid adsorption; c4d reverse osmosis; or c5d 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 cincluding ultrafiltrationd, and centrifugation, when used in conjunction with the above listed recovery technologies.
RLEAD:	Thermal recovery of lead in secondary lead smelters.

Technology code	Description of technology-based standards
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 cor facilityd shall be subject to one or more of the following: cad a National Emissions Standard for Hazardous Air Pollutants cNESHAPd for mercury; cbd a Best Available Control Technology cBACTd or a Lowest Achievable Emission Rate cLAERd standard for mercury imposed pursuant to a Prevention of Significant Deterioration cPSDd permit; or ccd a state permit that establishes emission limitations cwithin meaning of section 302 of the Clean Air Actd for mercury. All wastewater and nonwastewater residues derived from this process shall then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories ce.g., high or low mercury subcategoriesd.
RMETL:	Recovery of metals or inorganics utilizing one or more of the following direct physical or removal technologies: c1d ion exchange; c2d resin or solid ci.e., zeolitesd adsorption; c3d reverse osmosis; c4d chelation or solvent extraction; c5d freeze crystallization; c6d ultrafiltration and{or c7d simple precipitation ci.e., crystallizationd—Note: This does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration including ultrafiltrationd, and centrifugation, when used in conjunction with the above listed recovery technologies.
RORGS:	Recovery of organics utilizing one or more of the following technologies: c1d distillation; c2d thin film evaporation; c3d steam stripping; c4d carbon adsorption; c5d critical fluid extraction; c6d liquid-liquid extraction; c7d precipitation or crystallization including freeze crystallizationd; or c8d chemical phase separation techniques ci.e., addition of acids, bases, demulsifiers, or similar chemicals;d—Note: this does not preclude the use of other physical phase separation techniques such as a decantation, filtration including ultrafiltrationd, 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 660.10 cad, cfd, ckd and cLd under the definition of Xindustrial furnacesY.
RZINC:	Resmelting in high temperature metal recovery units for the purpose of recovery of zinc.
STABL:	Stabilization with the following reagents cor waste reagentsd or combinations of reagents: c1d Portland cement; or c2d lime{pozzolans ce.g., fly ash and cement kiln dust—this does not preclude the addition of reagents ce.g., iron salts, silicates, and claysd designed to enhance the set{cure time 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 shall undergo either incineration, reuse as a fuel, or other recovery or reuse and an extracted wastewater that shall 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 ce.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 residuesd.
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 or ignitable levels of gases released during the reaction.

Note: When more than one technology cor treatment traind are specified as alternative treatment standards, the 5 letter technology codes cor the treatment traind are separated by a semicolon ;d with the last technology preceded by the word XORY. This indicates that any one of these BDAT technologies or treatment trains can be used for compliance with the standard.

c2d Any person may submit an application to the EPA Administrator demonstrating that an alternative treatment method can achieve a measure of performance equivalent to that achieved by methods specified in subs. **c1d**, **c3d** and **c4d** for wastes, or specified in Table 1 for hazardous debris. The applicant shall submit information demonstrating that the treatment method is in compliance with federal, state and local requirements and is protective of human health and the environment. On the basis of this information and any other available information, the EPA Administrator may approve the use of the alternative treatment method if the EPA Administrator finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in subs. **c1d**, **c3d** and **c4d** for wastes or in s. NR 668.45, Table 1 for hazardous debris. The department shall accept any written determination issued by the EPA Administrator unless the department determines that the approved alternative method cannot achieve a measure of performance equivalent to that achieved by methods specified in subs. **c1d**, **c3d** and **c4d** for wastes, or specified in Table 1 for hazardous debris.

c3d As an alternative to the treatment standards required in subch. **D**, lab packs may be land disposed provided all of the following requirements are met:

cad The lab packs comply with s. NR 664.0316 and s. NR 665.0316.

cbd The lab packs do not contain any of the wastes listed in ch. NR 668 Appendix IV.

ccd The lab packs are incinerated in accordance with the requirements of subch. **O** of ch. NR 664 or subch. **O** of ch. NR 665.

cdd Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 are treated in com-

pliance with the applicable treatment standards specified for the wastes in subch. **D**.

c4d Radioactive hazardous mixed wastes are subject to the treatment standards in s. NR 668.40. Where the table entitled Treatment Standards for Hazardous Wastes found in s. NR 668.40 specifies treatment standards for radioactive mixed wastes, those treatment standards shall govern. Where there is no specific treatment standard for radioactive mixed waste, the treatment standard for the hazardous waste, as designated by EPA waste code, applies. Hazardous debris containing radioactive waste is subject to the treatment standards specified in s. NR 668.45.

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

NR 668.43 Treatment standards expressed as waste concentrations. For the requirements previously found in this section and for treatment standards in Table CCW—Constituent Concentrations in Wastes, refer to s. NR 668.40.

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

NR 668.44 Variance from a treatment standard.
c1d Based on a petition filed by a generator or treater of hazardous waste, the EPA administrator may approve a variance from an applicable treatment standard if any of the following are met:

cad It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner shall demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method.

cbd It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though the treatment is technically possible. To show that this is the case, the petitioner shall demonstrate one of the following:

1. Treatment to the specified level or by the specified method is technically inappropriate for example, resulting in combustion of large amounts of mildly contaminated environmental media.

2. For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

c2d Each petition shall be submitted to the EPA administrator according to the procedures in [40 CFR 260.20](#).

c6d A generator, treatment facility or disposal facility that is managing a waste covered by a variance from the treatment standards shall comply with the waste analysis requirements for restricted wastes found under s. [NR 668.07](#).

c7d During the petition review process, the applicant is required to comply with all restrictions on land disposal under this chapter once the effective date for the waste has been reached.

c8d Based on a petition filed by a generator or treater of hazardous waste, the department may approve a site-specific variance from an applicable treatment standard if one of the following conditions is met:

cad It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner shall demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method.

cbd It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though the treatment is technically possible. To show that this is the case, the petitioner shall demonstrate one of the following:

1. Treatment to the specified level or by the specified method is technically inappropriate, for example, the treatment would result in combustion of large amounts of mildly contaminated environmental media where the treatment standard is not based on combustion of the media.

2. For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

ccd For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are lower than the concentrations necessary to minimize short-term and long-term threats to human health and the environment. Treatment variances approved under this paragraph shall meet all of the following conditions:

1. At a minimum, treatment variances shall impose alternative land disposal restriction treatment standards that, using a reasonable maximum exposure scenario, meet all of the following conditions:

- a. For carcinogens, the treatment variances shall achieve constituent concentrations that result in the total excess risk to an individual exposed over a lifetime generally falling within a range from 10^{-4} to 10^{-6} .

- b. For constituents with non-carcinogenic effects, the treatment variances shall achieve constituent concentrations that an individual could be exposed to on a daily basis without appreciable risk of deleterious effect during a lifetime.

2. The treatment variances may not consider post-land-disposal controls.

cdd For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are lower than natural background concentrations at the site where the contaminated soil will be land disposed.

ced Public notice and a reasonable opportunity for public comment shall be provided before granting or denying a petition.

c9d Each application for a site-specific variance from a treatment standard shall include the information in s. [NR 660.20](#).

c10d After receiving an application for a site-specific variance from a treatment standard, the department may request any additional information or samples which may be required to evaluate the application.

c11d A generator, treatment facility or disposal facility that is managing a waste covered by a site-specific variance from a treatment standard shall comply with the waste analysis requirements for restricted wastes found in s. [NR 668.07](#).

c12d During the application review process, the applicant for a site-specific variance shall comply with all restrictions on land disposal in this chapter once the effective date for the waste has been reached.

c13d For all variances, the petitioner shall also demonstrate that compliance with any given treatment variance is sufficient to minimize threats to human health and the environment posed by land disposal of the waste. In evaluating this demonstration, the department may take into account whether a treatment variance should be approved if the subject waste is to be used in a manner constituting disposal pursuant to ss. [NR 666.020](#) to [666.023](#).

History: CR 05-032; cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007; am. c8d cintro.d, c10d, c13d Register July 2017 No. 739, eff. 8-1-17.

NR 668.45 Treatment standards for hazardous debris. **c1d** Hazardous debris shall be treated prior to land disposal unless the department determines under s. [NR 661.0003 c6d cbd](#) that the debris is no longer contaminated with hazardous waste or the debris is treated to the waste-specific treatment standard provided in this subchapter for the waste contaminating the debris.

cad *General.* Hazardous debris shall be treated for each Xcontaminant subject to treatment Y defined by sub. **c2d** using the technology or technologies identified in Table 1.

cbd *Characteristic debris.* Hazardous debris that exhibits the characteristic of ignitability, corrosivity, or reactivity identified under ss. [NR 661.0021](#), [661.0022](#) and [661.0023](#), respectively, shall be deactivated by treatment using one of the technologies identified in Table 1.

ccd *Mixtures of debris types.* The treatment standards of Table 1 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.

cdd *Mixtures of contaminant types.* Debris that is contaminated with 2 or more contaminants subject to treatment identified under sub. **c2d** shall be treated for each contaminant using one or more treatment technologies identified in Table 1. If an immobilization technology is used in a treatment train, it shall be the last treatment technology used.

ced *Waste PCBs.* Hazardous debris that is also a waste PCB under [40 CFR 761.3](#) is subject to the requirements of either [40 CFR 761.3](#) or the requirements of this section, whichever are more stringent.

c2d Hazardous debris shall be treated for each Xcontaminant

subject to treatment.Y The contaminants subject to treatment shall be determined using all of the following criteria:

cad *Toxicity characteristic debris.* The contaminants subject to treatment for debris that exhibits the toxicity characteristic cTCd by s. NR 661.0024 are those EP constituents for which the debris exhibits the TC toxicity characteristic.

cbd *Debris contaminated with listed waste.* The contaminants subject to treatment for debris that is contaminated with a prohibited listed hazardous waste are those constituents or wastes for which treatment standards are established for the waste under s. NR 668.40.

ccd *Cyanide reactive debris.* Hazardous debris that is reactive because of cyanide shall be treated for cyanide.

c3d Hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table 1 and that does not exhibit a characteristic of hazardous waste identified under subch. C of ch. NR 661 after treatment is not a hazardous waste and need not be managed in a facility licensed or permitted to accept hazardous waste. 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 facility licensed or permitted to accept hazardous waste.

c4d Treatment residuals shall be treated as follows:

cad *General requirements.* Except as provided by pars. cbd and cdd all of the following conditions shall be met:

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

2. Residue from the treatment of hazardous debris is subject to the waste-specific treatment standards provided by subch. D of ch. NR 668 for the waste contaminating the debris.

cbd *Nontoxic debris.* Residue from the deactivation of ignitable, corrosive or reactive characteristic hazardous debris other than cyanide-reacted that is not contaminated with a contaminant subject to treatment defined by sub. c2d, shall be deactivated prior to land disposal and is not subject to the waste-specific treatment standards of subch. D.

ccd *Cyanide-reactive debris.* Residue from the treatment of debris that is reactive because of cyanide shall meet the treatment standards for D003 in Treatment Standards for Hazardous Wastes in s. NR 668.40.

cdd *Ignitable nonwastewater residue.* Ignitable nonwastewater residue containing equal to or greater than 10% total organic carbon is subject to the technology specified in the treatment standard for D001: Ignitable Liquids.

ced *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 Debris¹

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 ce.g., 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.
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 surface ³ . Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Debris shall be no more than 1.2 cm c inchd in one dimension ci.e., thickness limit ⁵ , except that this thickness limit may be waived under an XEquivalent TechnologyY approval under s. NR 668.42 c2d8; 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 XEquivalent TechnologyY approval under s. NR 668.42 c2d shall be obtained ⁸ .

Technology description	Performance and/or design and operating standard	Contaminant restrictions ²
<p>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 time¹.</p>	<p>Same as above</p>	<p>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.</p>
<p>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 vapor⁴.</p>	<p>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.</p>	<p>Same as above.</p>
<p>3. Thermal Extraction</p>		
<p>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.</p>	<p>For refining furnaces, treated debris shall be separated from treatment residuals using simple physical or mechanical means⁹, and, prior to further treatment, the residuals shall meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris.</p>	<p>Debris contaminated with a dioxin-listed waste:⁵ Obtain an XEquivalent TechnologyY approval under s. NR 668.42 c2d 8.</p>
<p>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 gas⁷.</p>	<p>All Debris: Obtain an XEquivalent TechnologyY approval under s. NR 668.42 c2d8; treated debris shall be separated from treatment residuals using simple physical or mechanical means⁹, and, prior to further treatment, the residue shall meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris.</p> <p>Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Debris shall be no more than 10 cm c4 inchesd in one dimension ci.e., thickness limitd⁵, except that this thickness limit may be waived under the XEquivalent TechnologyY approval.</p>	<p>All Debris: Metals other than mercury.</p>
<p>B. Destruction Technologies:</p>		
<p>1. Biological Destruction cBiodegradation: Removal of hazardous contaminants from debris surfaces and surface pores in an aqueous solution and biodegradation of organic or nonmetallic inorganic compounds ci.e., inorganics that contain phosphorus, nitrogen or sulfur in units operated under either aerobic or anaerobic conditions.</p>	<p>All Debris: Obtain an XEquivalent TechnologyY approval under s. NR 668.42 c2d8; treated debris shall be separated from treatment residuals using simple physical or mechanical means⁹, and, prior to further treatment, the residue shall meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris.</p> <p>Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Debris shall be no more than 1.2 cm c inchd in one dimension ci.e., thickness limitd⁵, except that this thickness limit may be waived under the XEquivalent TechnologyY approval.</p>	<p>All Debris: Metal contaminants.</p>
<p>2. Chemical Destruction</p>		
<p>a. Chemical Oxidation: Chemical or electrolytic oxidation utilizing the following oxidation reagents cor waste reagentsd or combination of reagents—c1d hypochlorite ce.g., bleachd; c2d chlorine; c3d chlorine dioxide; c4d ozone or UV cultraviolet lightd assisted ozone; c5d peroxides; c6d persulfates; c7d perchlorates; c8d permanganates; or c9d other oxidizing reagents of equivalent destruction efficiency⁴. Chemical oxidation specifically includes what is referred to as alkaline chlorination.</p>	<p>All Debris: Obtain an XEquivalent TechnologyY approval under s. NR 668.42 c2d8; treated debris shall be separated from treatment residuals using simple physical or mechanical means⁹, and, prior to further treatment, the residue shall meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris.</p> <p>Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Debris shall be no more than 1.2 cm c inchd in one dimension ci.e., thickness limitd⁵, except that this thickness limit may be waived under the XEquivalent TechnologyY approval.</p>	<p>All Debris: Metal contaminants.</p>

Technology description	Performance and/or design and operating standard	Contaminant restrictions ²
<p>b. Chemical Reduction: Chemical reaction utilizing the following reducing reagents or waste reagents or combination of reagents: c1d sulfur dioxide; c2d sodium, potassium or alkali salts of sulfites, bisulfites and metabisulfites, and polyethylene glycols ce.g., NaPEG and KPEGd; c3d sodium hydrosulfide; c4d ferrous salts; or c5d other reducing reagents of equivalent efficiency⁴.</p> <p>3. Thermal Destruction: Treatment in an incinerator operating in accordance with subch. O of ch. NR 664 or 665; a boiler or industrial furnace operating in accordance with subch. H of ch. NR 666, or other thermal treatment unit operated in accordance with subch. X of ch. NR 664, or subch. P of ch. NR 665, but excluding for purposes of these debris treatment standards thermal desorption units.</p>	<p>Same as above.....</p> <p>Treated debris shall be separated from treatment residuals using simple physical or mechanical means⁹, and, prior to further treatment, the residue shall meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris.</p>	<p>Same as above.</p> <p>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 XEquivalent TechnologyY approval under s. NR 668.42 c2d8, except that this requirement does not apply to vitrification.</p>
<p>C. Immobilization Technologies:</p>		
<p>1. Macroencapsulation: Application of surface coating materials such as polymeric organics ce.g., resins and plastics or use of a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media.</p>	<p>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 cleachate, other waste, microbesd.</p>	<p>None.</p>
<p>2. Microencapsulation: Stabilization of the debris with the following reagents or waste reagents such that the leachability of the hazardous contaminants is reduced: c1d portland cement; or c2d lime { pozzolans ce.g., fly ash and cement kiln dust. Reagents ce.g., iron salts, silicates, and claysd may be added to enhance the set {cure time or compressive strength, or to reduce the leachability of the hazardous constituents⁵.</p>	<p>Leachability of the hazardous contaminants shall be reduced.</p>	<p>None.</p>
<p>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.</p>	<p>Sealing shall avoid exposure of the debris surface to potential leaching media and sealant shall be resistant to degradation by the debris and its contaminants and materials into which it may come into contact after placement cleachate, other waste, microbesd.</p>	<p>None.</p>

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.

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.

³ XClean debris surfaceY 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 if the 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.

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 debris and contamination combination. For example, concentrated sulfuric acid may react violently with certain organic compounds, such as acrylonitrile.

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, the 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 the cleaning and separation of nondebris materials to ensure that the debris surface is free of caked soil, waste or other nondebris material.

⁶ Dioxin-listed wastes are EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027.

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.

⁸ The demonstration XEquivalent TechnologyY under s. NR 668.42 c2d 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.

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 Xclean debris surfaceY 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 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am. Table 1, footnotes 3, 4, Register July 2017 No. 739, eff. 8-1-17; CR 19-082: am. c1d intro.d, cbd, c2d cad Register August 2020 No. 776, eff. 9-1-20.

NR 668.46 Alternative treatment standards based on HTMR. For the treatment standards previously found in this section, refer to s. NR 668.40.

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

NR 668.48 Universal treatment standards. c1d Table UTS identifies the hazardous constituents, along with the

nonwastewater and wastewater treatment standard levels, that are used to regulate most prohibited hazardous wastes with numerical limits. For determining compliance with treatment standards for underlying hazardous constituents as defined in s. NR 668.02 c9d, these treatment standards may not be exceeded. Compliance with these treatment standards is measured by an analysis of grab samples, unless otherwise noted in the following Table UTS.

Section NR 668.48 — Universal Treatment Standards

Regulated constituent common name	CAS ¹ Number	Wastewater Standard Concentration in mg{L ²	Nonwastewater Standard Concentration in mg{kg ³ unless noted as Xmg{L TCLPY
<i>Organic Constituents</i>			
Acenaphthylene	208-96-8	0.059	3.4
Acenaphthene	83-32-9	0.059	3.4
Acetone	67-64-1	0.28	160
Acetonitrile	75-05-8	5.6	38
Acetophenone	96-86-2	0.010	9.7
2-Acetylaminofluorene	53-96-3	0.059	140
Acrolein	107-02-8	0.29	NA
Acrylamide	79-06-1	19	23
Acrylonitrile	107-13-1	0.24	84
Aldrin	309-00-2	0.021	0.066
4-Aminobiphenyl	92-67-1	0.13	NA
Aniline	62-53-3	0.81	14
o-Anisidine c2-methoxyanilined	90-04-0	0.010	0.66
Anthracene	120-12-7	0.059	3.4
Aramite	140-57-8	0.36	NA
alpha-BHC	319-84-6	0.00014	0.066
beta-BHC	319-85-7	0.00014	0.066
delta-BHC	319-86-8	0.023	0.066
gamma-BHC	58-89-9	0.0017	0.066
Benzene	71-43-2	0.14	10
Benzcadanthracene	56-55-3	0.059	3.4
Benzal chloride	98-87-3	0.055	6.0
Benzocbdf fluoranthene cdifficult to distinguish from benzockdf fluoranthened	205-99-2	0.11	6.8
Benzockdf fluoranthene cdifficult to distinguish from benzocbdf fluoranthened	207-08-9	0.11	6.8
Benzocg,h, idperylene	191-24-2	0.0055	1.8
Benzocadpyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Bromomethane{ Methyl bromide	74-83-9	0.11	15
4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitrophenol{ Dinoseb	88-85-7	0.066	2.5
Carbon disulfide	75-15-0	3.8	4.8 mg{L TCLP
Carbon tetrachloride	56-23-5	0.057	6.0
Chlordane calpha and gamma isomersd	57-74-9	0.0033	0.26
p-Chloroaniline	106-47-8	0.46	16
Chlorobenzene	108-90-7	0.057	6.0
Chlorobenzilate	510-15-6	0.10	NA
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
Chlorodibromomethane	124-48-1	0.057	15
Chloroethane	75-00-3	0.27	6.0
bisc2-Chloroethoxydmethane	111-91-1	0.036	7.2
bisc2-Chloroethyl ether	111-44-4	0.033	6.0
Chloroform	67-66-3	0.046	6.0
bisc2-Chloroisopropyl ether	39638-32-9	0.055	7.2
p-Chloro-m-cresol	59-50-7	0.018	14
2-Chloroethyl vinyl ether	110-75-8	0.062	NA
Chloromethane{ Methyl chloride	74-87-3	0.19	30
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chlorophenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4

Regulated constituent common name	CAS ¹ Number	Wastewater Standard Concentration in mg/L ²	Nonwastewater Standard Concentration in mg/kg ³ unless noted as Xmg/L TCLPY
p-Cresidine	120-71-8	0.010	0.66
o-Cresol	95-48-7	0.11	5.6
m-Cresol cdifficult to distinguish from p-cresold	108-39-4	0.77	5.6
p-Cresol cdifficult to distinguish from m-cresold	106-44-5	0.77	5.6
Cyclohexanone	108-94-1	0.36	0.75 mg/L TCLP
o,p]-DDD	53-19-0	0.023	0.087
p,p]-DDD	72-54-8	0.023	0.087
o,p]-DDE	3424-82-6	0.031	0.087
p,p]-DDE	72-55-9	0.031	0.087
o,p]-DDT	789-02-6	0.0039	0.087
p,p]-DDT	50-29-3	0.0039	0.087
Dibenzca,hdanthracene	53-70-3	0.055	8.2
Dibenzca,edpyrene	192-65-4	0.061	NA
1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
1,2-Dibromoethane{Ethylene dibromide	106-93-4	0.028	15
Dibromomethane	74-95-3	0.11	15
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	87-65-0	0.044	14
2,4-Dichlorophenoxyacetic acid{2,4-D	94-75-7	0.72	10
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
Dieldrin	60-57-1	0.017	0.13
Diethyl phthalate	84-66-2	0.20	28
p-Dimethylaminoazobenzene	60-11-7	0.13	NA
2,4-Dimethylalanine c2,4-xyldined	95-68-1	0.010	0.66
2,4-Dimethyl phenol	105-67-9	0.036	14
Dimethyl phthalate	131-11-3	0.047	28
Di-n-butyl phthalate	84-74-2	0.057	28
1,4-Dinitrobenzene	100-25-4	0.32	2.3
4,6-Dinitro-o-cresol	534-52-1	0.28	160
2,4-Dinitrophenol	51-28-5	0.12	160
2,4-Dinitrotoluene	121-14-2	0.32	140
2,6-Dinitrotoluene	606-20-2	0.55	28
Di-n-octyl phthalate	117-84-0	0.017	28
Di-n-propylnitrosamine	621-64-7	0.40	14
1,4-Dioxane	123-91-1	12.0	170
Diphenylamine cdifficult to distinguish from diphenylnitrosamined	122-39-4	0.92	13
Diphenylnitrosamine cdifficult to distinguish from diphenylamined	86-30-6	0.92	13
1,2-Diphenylhydrazine	122-66-7	0.087	NA
Disulfoton	298-04-4	0.017	6.2
Endosulfan I	959-98-8	0.023	0.066
Endosulfan II	33213-65-9	0.029	0.13
Endosulfan sulfate	1031-07-8	0.029	0.13
Endrin	72-20-8	0.0028	0.13
Endrin aldehyde	7421-93-4	0.025	0.13

Regulated constituent common name	CAS ¹ Number	Wastewater Standard Concentration in mg{L ²	Nonwastewater Standard Concentration in mg{kg ³ unless noted as Xmg{L TCLPY
Ethyl acetate	141-78-6	0.34	33
Ethyl benzene	100-41-4	0.057	10
Ethyl cyanide{Propanenitrile	107-12-0	0.24	360
Ethyl ether	60-29-7	0.12	160
bisc2-Ethylhexyldphthalate	117-81-7	0.28	28
Ethyl methacrylate	97-63-2	0.14	160
Ethylene oxide	75-21-8	0.12	NA
Famphur	52-85-7	0.017	15
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	0.059	3.4
Heptachlor	76-44-8	0.0012	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxinc 1,2,3,4,6,7,8-HpCDDd	35822-46-9	0.000035	0.0025
1,2,3,4,6,7,8-Heptachlorodibenzofuran c 1,2,3,4,6,7,8-HpCDFd	67562-39-4	0.000035	0.0025
1,2,3,4,7,8,9-Heptachlorodibenzofuran c 1,2,3,4,7,8,9-HpCDFd	55673-89-7	0.000035	0.0025
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
HxCDDs cAll Hexachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
HxCDFs cAll Hexachlorodibenzofuransd	NA	0.000063	0.001
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	0.035	30
Indeno c1,2,3-c,dd pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65
Isobutyl alcohol	78-83-1	5.6	170
Isodrin	465-73-6	0.021	0.066
Isosafrole	120-58-1	0.081	2.6
Kepone	143-50-0	0.0011	0.13
Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	0.75 mg{L TCLP
Methapyrilene	91-80-5	0.081	1.5
Methoxychlor	72-43-5	0.25	0.18
3-Methylcholanthrene	56-49-5	0.0055	15
4,4-Methylene bisc2-chloroanilined	101-14-4	0.50	30
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methyl methacrylate	80-62-6	0.14	160
Methyl methansulfonate	66-27-3	0.018	NA
Methyl parathion	298-00-0	0.014	4.6
Naphthalene	91-20-3	0.059	5.6
2-Naphthylamine	91-59-8	0.52	NA
o-Nitroaniline	88-74-4	0.27	14
p-Nitroaniline	100-01-6	0.028	28
Nitrobenzene	98-95-3	0.068	14
5-Nitro-o-toluidine	99-55-8	0.32	28
o-Nitrophenol	88-75-5	0.028	13
p-Nitrophenol	100-02-7	0.12	29
N-Nitrosodiethylamine	55-18-5	0.40	28
N-Nitrosodimethylamine	62-75-9	0.40	2.3
N-Nitroso-di-n-butylamine	924-16-3	0.40	17
N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
N-Nitrosomorpholine	59-89-2	0.40	2.3
N-Nitrosopiperidine	100-75-4	0.013	35

Regulated constituent common name	CAS ¹ Number	Wastewater Standard Concentration in mg{L ²	Nonwastewater Standard Concentration in mg{kg ³ unless noted as Xmg{L TCLPY
N-Nitrosopyrrolidine	930-55-2	0.013	35
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin cOCDDd	3268-87-9	0.000063	0.005
1,2,3,4,6,7,8,9-Octachlorodibenzofuran cOCDFd	39001-02-0	0.000063	0.005
Parathion	56-38-2	0.014	4.6
Total PCBs csum of all PCB isomers, or all Aroclorsd ⁸	1336-36-3	0.10	10
Pentachlorobenzene	608-93-5	0.055	10
PeCDDs cAll Pentachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
PeCDFs cAll Pentachlorodibenzofuransd	NA	0.000035	0.001
Pentachloroethane	76-01-7	0.055	6.0
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
1,3-Phenylenediamine	108-45-2	0.010	0.66
Phorate	298-02-2	0.021	4.6
Phthalic acid	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28
Pronamide	23950-58-5	0.093	1.5
Pyrene	129-00-0	0.067	8.2
Pyridine	110-86-1	0.014	16
Safrole	94-59-7	0.081	22
Silvex {2,4,5-TP	93-72-1	0.72	7.9
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
TCDDs cAll Tetrachlorodibenzo-p-dioxinsd	NA	0.000063	0.001
TCDFs cAll Tetrachlorodibenzofuransd	NA	0.000063	0.001
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Tribromomethane{Bromofom	75-25-2	0.63	15
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,4,5-Trichlorophenoxyacetic acid{2,4,5-T	93-76-5	0.72	7.9
1,2,3-Trichloropropane	96-18-4	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
tris-c2,3-Dibromopropylid phosphate	126-72-7	0.11	0.10
Vinyl chloride	75-01-4	0.27	6.0
Xylenes-mixed isomers csum of o-, m-, and p-xylene concentrationsd	1330-20-7	0.32	30
<i>Inorganic Constituents</i>			
Antimony	7440-36-0	1.9	1.15 mg{L TCLP
Arsenic	7440-38-2	1.4	5.0 mg{L TCLP
Barium	7440-39-3	1.2	21 mg{L TCLP
Beryllium	7440-41-7	0.82	1.22 mg{L TCLP
Cadmium	7440-43-9	0.69	0.11 mg{L TCLP
Chromium cTotald	7440-47-3	2.77	0.60 mg{L TCLP
Cyanides cTotald ⁴	57-12-5	1.2	590

Regulated constituent common name	CAS ¹ Number	Wastewater Standard Concentration in mg{L ²	Nonwastewater Standard Concentration in mg{kg ³ unless noted as Xmg{L TCLPY
Cyanides cAmenabled ⁴	57-12-5	0.86	30
Fluoride ⁵	16984-48-8	35	NA
Lead	7439-92-1	0.69	0.75 mg{L TCLP
Mercury - Nonwastewater from Retort	7439-97-6	NA	0.20 mg{L TCLP
Mercury - All Others	7439-97-6	0.15	0.025 mg{L TCLP
Nickel	7440-02-0	3.98	11. mg{L TCLP
Selenium ⁷	7782-49-2	0.82	5.7 mg{L TCLP
Silver	7440-22-4	0.43	0.14 mg{L TCLP
Sulfide ⁵	18496-25-8	14	NA
Thallium	7440-28-0	1.4	0.20 mg{L TCLP
Vanadium ⁵	7440-62-2	4.3	1.6 mg{L TCLP
Zinc ⁵	7440-66-6	2.61	4.3 mg{L TCLP

NA means not applicable.

¹ CAS means Chemical Abstract Services. When the waste code or regulated constituents are described as a combination of a chemical with its salts or esters, the CAS number is given for the parent compound only.

² Concentration standards for wastewaters are expressed in mg{L and are based on analysis of composite samples.

³ Except for metals cEP or TCLPd and cyanides ctotal and amenable the nonwastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated according to the technical requirements of subch. O of ch. NR 664 or subch. O of ch. NR 665, or based upon combustion in fuel substitution units operating according to applicable technical requirements. A facility may comply with these treatment standards according to s. NR 668.40 c4d. All concentration standards for nonwastewaters are based on analysis of grab samples.

⁴ Both cyanides ctotald and cyanides camenabled for nonwastewaters are to be analyzed using Method 9010C or 9012B, found in XTest Methods for Evaluating Solid Waste, Physical{Chemical Methods, Y EPA SW-846, incorporated by reference in s. NR 660.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

⁵ These constituents are not Xunderlying hazardous constituentsY in characteristic wastes, according to the definition at s. NR 668.02 c9d.

⁷ This constituent is not an underlying hazardous constituent as defined at s. NR 668.02 c9d because its UTS level is greater than its TC level, thus a treatment selenium waste would always be characteristically hazardous, unless it is treated to below its characteristic level.

⁸ This standard is temporarily deferred for soil exhibiting a hazardous characteristic due to D004 to D011 only.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; CR 16-007: am. cTabled Register July 2017 No. 739, eff. 8-1-17; CR 19-082: am. cTabled Register August 2020 No. 776, eff. 9-1-20.

NR 668.49 Alternative LDR treatment standards for contaminated soil. c1d A person shall comply with LDRs prior to placing soil that exhibits a characteristic of hazardous waste, or exhibited a characteristic of hazardous waste at the time

it was generated, into a land disposal unit. The following chart describes whether a person is required to comply with LDRs prior to placing soil contaminated by listed hazardous waste into a land disposal unit:

If LDRs	And if LDRs	And if	Then a person
Applied to the listed waste when it contaminated the soil*.	Apply to the listed waste now.	Shall comply with LDRs
Didn[t apply to the listed waste when it contaminated the soil*.	Apply to the listed waste now.	The soil is determined to contain the listed waste when the soil is first generated.	Shall comply with LDRs.
Didn[t apply to the listed waste when it contaminated the soil*.	Apply to the listed waste now.	The soil is determined not to contain the listed waste when the soil is first generated.	Needn[t comply with LDRs.
Didn[t apply to the listed waste when it contaminated the soil*.	Don[t apply to the listed waste now.	Needn[t comply with LDRs.

* For dates of LDR applicability, see ch. NR 668 Appendix VII. To determine the date a listed hazardous waste contaminated a volume of soil, use the last date the listed hazardous waste was placed into the land disposal unit or, in the case of an accidental spill, the date of the spill.

c2d Prior to land disposal, contaminated soil identified by sub. c1d as needing to comply with LDRs shall be treated according to the applicable treatment standards specified in sub. c3d or according to the universal treatment standards specified in s. NR 668.48 applicable to the contaminating listed hazardous waste or the applicable characteristic of hazardous waste if the soil is characteristic, or both. The treatment standards specified in sub. c3d and the universal treatment standards may be modified through a treatment variance approved according to 40 CFR 268cad to cgd.

c3d Prior to land disposal, contaminated soil identified by sub. c1d as needing to comply with LDRs shall be treated according to all the standards specified in this subsection or according to the universal treatment standards specified in s. NR 668.48.

cad All soils. Prior to land disposal, all constituents subject to treatment shall be treated as follows:

1. For non-metals except carbon disulfide, cyclohexanone and methanol, treatment shall achieve 90% reduction in total constituent concentrations, except as provided by subd. 3.

2. For metals and carbon disulfide, cyclohexanone and methanol, treatment shall achieve 90% reduction in constituent concentrations as measured in leachate from the treated media ctested according to the TCLPd or 90 % reduction in total constituent concentrations cwhen a metal removal treatment technology is usedd, except as provided by subd. 3.

3. When treatment of any constituent subject to treatment to a 90% reduction standard would result in a concentration less than 10 times the universal treatment standard for that con-

stituent, then treatment to achieve constituent concentrations less than 10 times the universal treatment standard is not required. Universal treatment standards are identified in s. NR 668.48, Table UTS.

cbd *Soils that exhibit the characteristic of ignitability, corrosivity or reactivity.* In addition to the treatment required by par. **cad**, prior to land disposal, soils that exhibit the characteristic of ignitability, corrosivity or reactivity shall be treated to eliminate these characteristics.

ccd *Soils that contain nonanalyzable constituents.* In addition to the treatment requirements of pars. **cad** and **cbd**, prior to land disposal, the following treatment is required for soils that contain nonanalyzable constituents:

1. For soil that contains only analyzable and nonanalyzable organic constituents, the analyzable organic constituents shall be treated to the levels specified in pars. **cad** and **cbd**.

2. Soil that contains only nonanalyzable constituents shall be treated by the method or methods specified in s. NR 668.42 for the waste contained in the soil.

c4d When applying the soil treatment standards in sub. **c3d**, constituents subject to treatment are any constituents listed in s. NR 668.48, Table UTS that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium, and zinc, and that are present at concentrations greater than ten times the universal treatment standard. PCBs are not a constituent subject to treatment in any given volume of soil which exhibits the toxicity characteristic solely because of the presence of metals.

c5d Treatment residuals from treating contaminated soil identified by sub. **c1d** as needing to comply with LDRs shall be managed as follows:

cad Soil residuals are subject to the treatment standards of this section.

cbd Non-soil residuals are subject to all of the following requirements:

1. Soils contaminated by listed hazardous waste are subject to the standards applicable to the listed hazardous waste under ch. 291, Stats., and chs. NR 660 to 673.

2. Soils that exhibit a characteristic of hazardous waste, if the non-soil residual also exhibits a characteristic of hazardous waste, are subject to the treatment standards applicable to the characteristic hazardous waste.

History: CR 05-032: cr. Register July 2006 No. 607, eff. 8-1-06; correction in c5d **cbd** 1. made under s. 13.93 c2md **cbd** 7., Stats., Register October 2007 No. 622; CR 16-007: am. c1d Table, c4d Register July 2017 No. 739, eff. 8-1-17.

Subchapter E — Prohibitions on Storage

NR 668.50 Prohibitions on storage of restricted wastes. c1d Except as provided in this section, the storage of hazardous wastes restricted from land disposal under this chapter or 42 USC 6924 is prohibited, unless all of the following conditions are met:

cad A generator stores the wastes in tanks, containers, or containment buildings on-site solely for the purpose of the accumulation of quantities of hazardous waste necessary to facilitate proper recovery, treatment or disposal, and a generator complies with the requirements in ss. NR 662.016 and 662.017 and chs. NR 664 and 665.

cbd 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 quantities of hazardous waste necessary to facilitate proper recovery, treatment or disposal, and all of the following additional conditions are met:

1. Each container is clearly marked to identify its contents and with all of the following:

a. The words XHazardous Waste.Y

b. The applicable EPA hazardous waste number, EPA hazardous waste codes as specified in subchs. C and D of ch. NR 661; or use a nationally recognized electronic system, such as bar coding that identifies the EPA hazardous waste number.

c. An indication of the hazards of the contents. Examples to indicate a hazard include the applicable hazardous waste ignitable, corrosive, reactive, or toxic characteristic; hazard communication consistent with the department of transportation requirements under 49 CFR part 172 subpart E on labeling or subpart F on placarding; a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard under 29 CFR 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704.

d. 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 s. NR 664.0073 or s. NR 665.0073.

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

cdd A healthcare facility accumulates such wastes in containers on-site solely for the purpose of the accumulation of such quantities of hazardous waste pharmaceuticals as necessary to facilitate proper recovery, treatment, or disposal and the healthcare facility complies with the requirements specified in ss. NR 666.502 and 666.503.

ced A reverse distributor accumulates such wastes in containers on-site solely for the purpose of the accumulation of such quantities of hazardous waste pharmaceuticals as necessary to facilitate proper recovery, treatment, or disposal and the reverse distributor complies with s. NR 666.510.

c2d An owner or operator of a treatment, storage or disposal facility may store the wastes for up to one year unless the department can demonstrate that the storage was not solely for the purpose of accumulation of quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.

c3d A 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 quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.

c4d If a generator[s] waste is exempt from a prohibition on the type of land disposal utilized for the waste cfor example, because of an approved case-by-case extension under 40 CFR 268.5, an approved 40 CFR 268.6 petition, or a national capacity variance under subch. Cd, the prohibition in sub. **c1d** does not apply during the period of the exemption.

c5d The prohibition in sub. **c1d** does not apply to hazardous wastes that meet the treatment standards specified under ss. NR 668.41, 668.42 and 668.43 or the treatment standards specified under the variance in 40 CFR 268.44, or, where treatment standards have not been specified, is in compliance with the applicable prohibitions specified in s. NR 668.32 or s. 291.05 **c6d**, Stats.

c6d Liquid hazardous wastes containing polychlorinated biphenyls **cPCBs**d at concentrations greater than or equal to 50

ppm shall be stored at a facility that meets the requirements of [40 CFR 761.65cbd](#) 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. [c3d](#) do not apply to PCB wastes prohibited under s. [NR 668.32](#).

c7d The prohibition and requirements in this section do not apply to hazardous remediation wastes stored in a staging pile approved pursuant to s. [NR 664.0554](#).

History: CR 05-032: cr. [Register July 2006 No. 607](#), eff. 8-1-06; CR 16-007: am. [c7d Register July 2017 No. 739](#), eff. 8-1-17; CR 19-082: am. [c1d cad](#), renum. [c1d cbd](#) to [c1d cbd 1](#), [cintro.d](#) and am., cr. [c1d cbd 1. a. to c., cdd, ced Register August 2020 No. 776](#), eff. 9-1-20.