

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 728
LAND DISPOSAL RESTRICTIONS

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AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4, and 27].

SOURCE: Adopted in R87-5 at 11 Ill. Reg. 19354, effective ~~Nov.~~ November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13046, effective July 29, 1988; amended in R89-1 at 13 Ill. Reg. 18403, effective ~~Nov.~~ November 13, 1989; amended in R89-9 at 14 Ill. Reg. 6232, effective April 16, 1990; amended in R90-2 at 14 Ill. Reg. 14470, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16508, effective ~~Sept.~~ September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9462, effective June 17, 1991; amended in R90-11 at 15 Ill. Reg. 11937, effective August 12, 1991; amendment withdrawn at 15 Ill. Reg. 14716, October 11, 1991; amended in R91-13 at 16 Ill. Reg. 9619, effective June 9, 1992; amended in R92-10 at 17 Ill. Reg. 5727, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20692, effective ~~Nov.~~ November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6799, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12203,

effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17563, effective ~~Nov.~~November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9660, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11100, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 783, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7685, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17706, effective ~~Sept.~~September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1964, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9204, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9623, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. 1296, effective January 11, 2001; amended in R01-21/R01-23 at 25 Ill. Reg. 9181, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6687, effective April 22, 2002; amended in R03-18 at 27 Ill. Reg. 13045, effective July 17, 2003; amended in R05-8 at 29 Ill. Reg. 6049, effective April 13, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. 3800, effective February 23, 2006; amended in ~~R07-5/R07-14~~R06-16/R06-17/R06-18 at ~~3231~~1254 Ill. Reg. ~~1254~~1254, effective ~~December 20, 2006~~July 5, 2007; amended in ~~R07-5/R07-14~~R06-16/R06-17/R06-18 at ~~3231~~1254 Ill. Reg. ~~1254~~1254, effective ~~December 20, 2006~~July 5, 2007.

SUBPART A: GENERAL

Section 728.102 Definitions

When used in this Part, the following terms have the meanings given below. All other terms have the meanings given under 35 Ill. Adm. Code 702.110, 720.110, or 721.102 through 721.104.

"Agency" means the Illinois Environmental Protection Agency.

"Board" means the Illinois Pollution Control Board.

"CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 USC 9601 et seq.)

"Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that ~~is~~ is a manufactured object; 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 Subpart D of this Part, 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 percent of their original volume. A mixture of debris that has not been treated to the standards provided by Section 728.145 of this Part and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

~~"End of pipe" refers to the point where effluent is discharged to the environment.~~

"Halogenated organic compounds" or "HOCs" means those compounds having a carbon-halogen bond that are listed under Appendix C of this Part.

"Hazardous constituent or constituents" means those constituents listed in Appendix H to 35 Ill. Adm. Code 721.

"Hazardous debris" means debris that contains a hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721 or that exhibits a characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721. Any deliberate mixing of prohibited waste with debris that changes its treatment classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibition in Section 728.103.

"Inorganic metal-bearing waste" is one for which USEPA has established treatment standards for metal hazardous constituents that does not otherwise contain significant organic or cyanide content, as described in Section 728.103(b)(1), and which is specifically listed in Appendix K of this Part.

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

"Land disposal restriction" or "LDR" is a restriction imposed on the land disposal of a hazardous waste pursuant to this Part or 40 CFR 738. The land disposal of hazardous waste is generally prohibited, except where the activity constituting land disposal is specifically allowed, pursuant to this Part or 40 CFR 738.

BOARD NOTE: The Board added this definition based on the preamble discussions at 51 Fed. Reg. 40572, 40573-74 (~~Nov.~~November 7, 1986) and 53 Fed. Reg. 28118, 28119-20 (July 26, 1988). The USEPA publication "Terms of Environment Glossary, Abbreviations, and Acronyms" (December 1997), USEPA, Communications, Education, and Public Affairs, EPA 175/B-97-001, defines "land disposal restrictions" as follows: "Rules that require hazardous wastes to be treated before disposal on land to destroy or immobilize hazardous constituents that might migrate into soil and ground water."

"Nonwastewaters" are wastes that do not meet the criteria for "wastewaters" in this Section.

"Polychlorinated biphenyls" or "PCBs" are halogenated organic compounds defined in accordance with federal 40 CFR 761.3 (Definitions), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

"ppm" means parts per million.

"RCRA corrective action" means corrective action taken under 35 Ill. Adm. Code 724.200 or 725.193, federal 40 CFR 264.100 or 265.93, or similar regulations in other states with RCRA programs authorized by USEPA pursuant to 40 CFR 271.

"Soil" means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles, as classified by the United States Natural Resources Conservation Service, or a mixture of such materials with liquids, sludges, or solids that is inseparable by simple mechanical removal processes and which is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited waste with debris that changes its treatment classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibition in Section 728.103.

~~"Stormwater impoundments" are surface impoundments that receive wet weather flow which receive hazardous waste only during wet weather events.~~

"Underlying hazardous constituent" means any constituent listed in Table U of this Part, "Universal Treatment Standards (UTS)," except fluoride, selenium, sulfides, vanadium, and zinc, that 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 standard.

"USEPA" or "U.S. EPA" means the United States Environmental Protection Agency.

"Wastewaters" are wastes that contain less than one percent by weight total organic carbon (TOC) and less than one percent by weight total suspended solids (TSS).

(Source: Amended at 32 Ill. Reg. _____, effective _____)

Section 728.104 Treatment Surface Impoundment Exemption

a) Wastes that are otherwise prohibited from land disposal under this Part may be treated in a surface impoundment or series of impoundments provided that all of the following conditions are fulfilled:

- 1) Treatment of such wastes occurs in the impoundments;
- 2) The following conditions are met:

A) Sampling and testing. For wastes with treatment standards in Subpart D or prohibition levels in Subpart C, the residues from treatment are analyzed, as specified in Section 728.107 or 728.132, 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 35 Ill. Adm. Code 724.113 or 725.113, must be designed such that representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples.

B) Removal. The following treatment residues (including any liquid waste) must be removed at least annually: residues that do not meet the treatment standards promulgated under Subpart D of this Part; residues that do not meet the prohibition levels established under Subpart C of this Part or imposed by federal statute (where no treatment standards have been established); residues that are from the treatment of wastes prohibited from land disposal under Subpart C of this Part (where no treatment standards have been established and no prohibition levels apply); or residues from managing listed wastes that are not delisted under 35 Ill. Adm. Code 720.122. 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.

C) Subsequent management. Treatment residues must not be placed in any other surface impoundment for subsequent management.

D) Recordkeeping. Sampling, testing, and recordkeeping provisions of 35 Ill. Adm. Code 724.113 or 725.113 apply;

3) The impoundment meets the design requirements of 35 Ill. Adm. Code 724.321(c) or 725.321(a) even though the unit may not be new, expanded or a

replacement, and must be in compliance with applicable groundwater monitoring requirements of Subpart F of 35 Ill. Adm. Code 724 or Subpart F of ~~this Part~~ 35 Ill. Adm. Code 725, unless any of the following conditions is fulfilled:

A) The impoundment is exempted pursuant to 35 Ill. Adm. Code 724.321(d) or (e), or to 35 Ill. Adm. Code 725.321(c) or (d);

B) Upon application by the owner or operator, the Agency has by permit provided that the requirements of this Part do not apply on the basis that the surface impoundment fulfills all of the following conditions:

i) The impoundment has at least one liner, for which there is no evidence that such liner is leaking;

ii) The impoundment is located more than one-quarter mile from an underground source of drinking water; and

iii) The impoundment is in compliance with generally applicable groundwater monitoring requirements for facilities with permits; or

C) Upon application by the owner or operator, the Board has, pursuant to Subpart D of 35 Ill. Adm. Code 104, granted an adjusted standard from the requirements of this Part. The justification for such an adjusted standard must be a demonstration 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; and

4) The owner or operator submits to the Agency a written certification that the requirements of subsection (a)(3) of this Section have been met. The following certification is required:

I certify under penalty of law that the requirements of 35 Ill. Adm. Code 728.104(a)(3) 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.

b) Evaporation of hazardous constituents as the principal means of treatment is not considered to be a treatment for purposes of an exemption under this Section.

(Source: Amended at 32 Ill. Reg. _____, effective _____)

Section 728.107 Testing, Tracking, and Recordkeeping Requirements for Generators, Treaters, and Disposal Facilities

a) Requirements for generators.

1) A generator of a hazardous waste must determine if the waste has to be treated before it can be land disposed. This is done by determining if the hazardous waste meets the treatment standards in Section 728.140, 728.145, or 728.149. This determination can be made concurrently with the hazardous waste determination required in 35 Ill. Adm. Code 722.111, in either of two ways: testing the waste or using knowledge of the waste. If the generator tests the waste, testing determines the total concentration of hazardous constituents or the concentration of hazardous constituents in an extract of the waste obtained using Method 1311 (Toxicity Characteristic Leaching Procedure) in "Test Methods

for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), depending on whether the treatment standard for the waste is expressed as a total concentration or concentration of hazardous constituent in the waste extract. (Alternatively, the generator must send the waste to a RCRA-permitted hazardous waste treatment facility, where the waste treatment facility must comply with the requirements of 35 Ill. Adm. Code 724.113 and subsection (b) of this Section.) In addition, some hazardous wastes must 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 Section 728.140 and Table T of this Part, and are described in detail in Table C of this Part. These wastes and soils contaminated with such wastes do not need to be tested (however, if they are in a waste mixture, other wastes with concentration level treatment standards must be tested). If a generator determines that it is managing a waste or soil contaminated with a waste that displays a hazardous characteristic of ignitability, corrosivity, reactivity, or toxicity, the generator must comply with the special requirements of Section 728.109 in addition to any applicable requirements in this Section.

2) If the waste or contaminated soil does not meet the treatment standard or if the generator chooses not to make the determination of whether its waste must be treated, the generator must send a one-time written notice to each treatment or storage facility receiving the waste with the initial shipment of waste to each treatment or storage facility, and the generator must place a copy of the one-time notice in the file. The notice must include the information in column "728.107(a)(2)" of the Generator Paperwork Requirements Table in Table I of this Part. (Alternatively, if the generator chooses not to make the determination of whether the waste must be treated, the notification must include the USEPA hazardous waste numbers and manifest number of the first shipment, and it must include the following statement: "This hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility must make the determination.") No further notification is necessary until such time that the waste or facility changes, in which case a new notification must be sent and a copy placed in the generator's file.

~~A) For contaminated soil, the following certification statement should be included, signed by an authorized representative:~~

~~I certify under penalty of law that I personally have examined this contaminated soil and it (does/does not) contain listed hazardous waste and (does/does not) exhibit a characteristic of hazardous waste and requires treatment to meet the soil treatment standards as provided by 35 Ill. Adm. Code 728.149(e).~~

~~B) This subsection (a)(2)(B) corresponds with 40 CFR 268.7(a)(2)(ii), which is marked "reserved" by USEPA. This statement maintains structural consistency with USEPA rules.~~

3) If the waste or contaminated soil meets the treatment standard at the original point of generation, the waste generator must do the following:

A) With the initial shipment of waste to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each treatment, storage, or disposal facility receiving the waste, and place a copy in its own file. The notice must include the information indicated in column

"728.107(a)(3)" of the Generator Paperwork Requirements Table in Table I of this Part 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 Subpart D of 35 Ill. Adm. Code 728. 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.

B) For contaminated soil, with the initial shipment of wastes to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each facility receiving the waste and place a copy in the file. The notice must include the information in the column headed "(a)(3)" in Table I of this Part.

C) If the waste changes, the generator must send a new notice and certification to the receiving facility and place a copy in its files. A generator of hazardous debris excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(f) is not subject to these requirements.

4) For reporting, tracking and recordkeeping when exceptions allow certain wastes or contaminated soil that do not meet the treatment standards to be land disposed, there are certain exemptions from the requirement that hazardous wastes or contaminated soil meet treatment standards before they can be land disposed. These include, but are not limited to, case-by-case extensions under Section 728.105, disposal in a no-migration unit under Section 728.106, or a national capacity variance or case-by-case capacity variance under Subpart C of this Part. If a generator's waste is so exempt, then with the initial shipment of waste, the generator must send a one-time written notice to each land disposal facility receiving the waste. The notice must include the information indicated in column "728.107(a)(4)" of the Generator Paperwork Requirements Table in Table I of this Part. If the waste changes, the generator must send a new notice to the receiving facility, and place a copy in its file.

5) If a generator is managing and treating prohibited waste or contaminated soil in tanks, containers, or containment buildings regulated under 35 Ill. Adm. Code 722.134 to meet applicable LDR treatment standards found at Section 728.140, the generator must develop and follow a written waste analysis plan that describes the procedures it will carry out to comply with the treatment standards. (Generators treating hazardous debris under the alternative treatment standards of Table F of this Part, however, are not subject to these waste analysis requirements.) The plan must be kept on site in the generator's records, and the following requirements must be met:

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

B) Such plan must be kept in the facility's on-site files and made available to inspectors; and

C) Wastes shipped off-site pursuant to this subsection (a)(5) of this Section must comply with the notification requirements of subsection (a)(3) of this Section.

6) If a generator determines that the waste or contaminated soil is restricted based solely on its knowledge of the waste, all supporting data used to make this determination must 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 Method 1311 (Toxicity Characteristic Leaching Procedure) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, all waste analysis data must be retained on-site in the generator's files.

7) If a generator determines that it is managing a prohibited waste that is excluded from the definition of hazardous or solid waste or which is exempt from Subtitle C regulation under 35 Ill. Adm. Code 721.102 through 721.106 subsequent to the point of generation (including deactivated characteristic hazardous wastes that are managed in wastewater treatment systems subject to the CWA, as specified at 35 Ill. Adm. Code 721.104(a)(2); that are CWA-equivalent; or that are managed in an underground injection well regulated under 35 Ill. Adm. Code 730), the generator must place a one-time notice stating such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from RCRA Subtitle C regulation, and the disposition of the waste in the generating facility's on-site file.

8) A generator must retain a copy of all notices, certifications, waste analysis data, and other documentation produced pursuant to this Section on-site for at least three years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal. 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 Agency. The requirements of this subsection (a)(8) 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 35 Ill. Adm. Code 721.102 through 721.106, or exempted from RCRA Subtitle C regulation, subsequent to the point of generation.

9) If a generator is managing a lab pack containing hazardous wastes and wishes to use the alternative treatment standard for lab packs found at Section 728.142(c), the generator must fulfill the following conditions:

A) With the initial shipment of waste to a treatment facility, the generator must submit a notice that provides the information in column "Section 728.107(a)(9)" in the Generator Paperwork Requirements Table of Table I of this Part and the following certification. The certification, which must be signed by an authorized representative and must be placed in the generator's files, must say the following:

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 Appendix D to 35 Ill. Adm. Code 728 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 35 Ill. Adm. Code 728.142(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

B) No further notification is necessary until such time as the wastes in the lab pack change, or the receiving facility changes, in which case a new notice and certification must be sent and a copy placed in the generator's file.

C) If the lab pack contains characteristic hazardous wastes (D001-D043), underlying hazardous constituents (as defined in Section 728.102(i)) need not be determined.

D) The generator must also comply with the requirements in subsections (a)(6) and (a)(7) of this Section.

10) Small quantity generators with tolling agreements pursuant to 35 Ill. Adm. Code 722.120(e) must comply with the applicable notification and certification requirements of subsection (a) of this Section for the initial shipment of the waste subject to the agreement. Such generators must retain on-site a copy of the notification and certification, together with the tolling agreement, for at least three 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 Agency.

b) The owner or operator of a treatment facility must test its wastes according to the frequency specified in its waste analysis plan, as required by 35 Ill. Adm. Code 724.113 (for permitted TSDs) or 725.113 (for interim status facilities). Such testing must be performed as provided in subsections (b)(1), (b)(2), and (b)(3) of this Section.

1) For wastes or contaminated soil with treatment standards expressed in the waste extract (TCLP), the owner or operator of the treatment facility must test an extract of the treatment residues using Method 1311 (Toxicity Characteristic Leaching Procedure) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, to assure that the treatment residues extract meets the applicable treatment standards.

2) For wastes or contaminated soil with treatment standards expressed as concentrations in the waste, the owner or operator of the treatment facility must test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards.

3) A one-time notice must be sent with the initial shipment of waste or contaminated soil to the land disposal facility. A copy of the notice must be placed in the treatment facility's file.

A) No further notification is necessary until such time that the waste or receiving facility changes, in which case a new notice must be sent and a copy placed in the treatment facility's file.

B) The one-time notice must include the following requirements :

i) USEPA hazardous waste number and manifest number of first shipment;

ii) The waste is subject to the LDRs. The constituents of concern for F001 through F005 and F039 waste 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;

iii) The notice must include the applicable wastewater/ nonwastewater category (see Section 728.102(d) and (f)) and subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide);

iv) Waste analysis data (when available);

v) For contaminated soil subject to LDRs as provided in Section 728.149(a), the constituents subject to treatment as described in Section 728.149(d) 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 Section 728.149(c)"; and

vi) A certification is needed (see applicable Section for exact wording).

4) The owner or operator of a treatment facility must submit a 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 must state as follows:

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 35 Ill. Adm. Code 728.140 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 must state as follows:

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 35 Ill. Adm. Code 728.149 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.

A) A copy of the certification must 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 must be sent to the receiving facility, and a copy placed in the treatment facility's file.

B) Debris excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(e) ~~721.103(f)~~ (i.e., debris treated by an extraction or destruction technology listed in Table F of this Part and debris that the Agency has determined does not contain hazardous waste) is subject to the notification and certification requirements of subsection (d) of this Section rather than the certification requirements of this subsection (b)(4).

C) For wastes with organic constituents having treatment standards expressed as concentration levels, if compliance with the treatment standards is based in part or in whole on the analytical detection limit alternative specified in

Section 728.140(d), the certification must be signed by an authorized representative and must state as follows:

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 Table C to 35 Ill. Adm. Code 728. I have been unable to detect the nonwastewater organic constituents, despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

D) For characteristic wastes that are subject to the treatment standards in Section 728.140 and Table T of this Part (other than those expressed as a required method of treatment) or Section 728.149 and which contain underlying hazardous constituents, as defined in Section 728.102(i); if these wastes are treated on-site to remove the hazardous characteristic; and that are then sent off-site for treatment of underlying hazardous constituents, the certification must state as follows:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.140 and Table T of Section 728.149 of that Part 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.

E) For characteristic wastes that contain underlying hazardous constituents, as defined in Section 728.102(i), that are treated on-site to remove the hazardous characteristic and to treat underlying hazardous constituents to levels in Section 728.148 and Table U of this Part universal treatment standards, the certification must state as follows:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.140 and Table T of that Part to remove the hazardous characteristic and that underlying hazardous constituents, as defined in 35 Ill. Adm. Code 728.102(i), have been treated on-site to meet the universal treatment standards of 35 Ill. Adm. Code 728.148 and Table U of that Part. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

5) If the waste or treatment residue will be further managed at a different treatment, storage, or disposal facility, the treatment, storage, or disposal facility that sends the waste or treatment residue off-site must comply with the notice and certification requirements applicable to generators under this Section.

6) Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of 35 Ill. Adm. Code 726.120(b), regarding treatment standards and prohibition levels, the owner or operator of a treatment facility (i.e., the recycler) ~~is not required to notify the receiving facility pursuant to subsection (b) (3) of this Section. With each shipment of such wastes the owner or operator of the recycling facility must submit~~ must, for the

initial shipment of waste, prepare a one-time certification described in subsection (b) (4) of this Section and a notice that includes the information listed in subsection (b) (3) of this Section (except the manifest number) ~~to the Agency~~. The certification and notification must be placed in the facility's on-site files. If the waste or the receiving facility changes, a new certification and notification must be prepared and placed in the on-site files. ~~The~~ In addition, the owner or operator of the recycling facility also must keep records of the name and location of each entity receiving the hazardous waste-derived product.

c) Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to 35 Ill. Adm. Code 726.120(b), the owner or operator of any land disposal facility disposing any waste subject to restrictions under this Part must do the following:

1) Maintain in its files copies of the notice and certifications specified in subsection (a) or (b) of this Section.

2) Test the waste or an extract of the waste or treatment residue developed using Method 1311 (Toxicity Characteristic Leaching Procedure) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-~~846,846~~) to assure that the waste or treatment residue is in compliance with the applicable treatment standards set forth in Subpart D of this Part. Such testing must be performed according to the frequency specified in the facility's waste analysis plan as required by 35 Ill. Adm. Code 724.113 or 35 Ill. Adm. Code 725.113.

3) Where the owner or operator is disposing of any waste that is subject to the prohibitions under Section 728.133(f) but not subject to the prohibitions set forth in Section 728.132, the owner or operator must ensure that such waste is the subject of a certification according to the requirements of Section 728.108 prior to disposal in a landfill or surface impoundment unit, and that such disposal is in accordance with the requirements of Section 728.105(h) (2). The same requirement applies to any waste that is subject to the prohibitions under Section 728.133(f) and also is subject to the statutory prohibitions in the codified prohibitions in Section 728.139 or Section 728.132.

4) Where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal subject to the provisions of 35 Ill. Adm. Code 726.120(b), the owner or operator is not subject to subsections (c) (1) through (c) (3) of this Section with respect to such waste.

d) A generator or treater that first claims that hazardous debris is excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(~~e~~) ~~721.103~~(f) (i.e., debris treated by an extraction or destruction technology provided by Table F of this Part, and debris that has been delisted) is subject to the following notification and certification requirements:

1) A one-time notification must be submitted to the Agency including the following information:

A) The name and address of the RCRA Subtitle D (municipal solid waste landfill) facility receiving the treated debris;

B) A description of the hazardous debris as initially generated, including the applicable USEPA hazardous waste numbers; and

C) For debris excluded under 35 Ill. Adm. Code 721.103(e)(1), the technology from Table F of this Part used to treat the debris.

2) The notification must be updated if the debris is shipped to a different facility and, for debris excluded under 35 Ill. Adm. Code 721.102(e)(1) — ~~721.102(f)(1)~~, if a different type of debris is treated or if a different technology is used to treat the debris.

3) For debris excluded under 35 Ill. Adm. Code 721.102(e)(1) — ~~721.102(f)(1)~~, the owner or operator of the treatment facility must document and certify compliance with the treatment standards of Table F of this Part, as follows:

A) Records must be kept of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards;

B) Records must be kept of any data or information the treater obtains during treatment of the debris that identifies key operating parameters of the treatment unit; and

C) For each shipment of treated debris, a certification of compliance with the treatment standards must be signed by an authorized representative and placed in the facility's files. The certification must state as follows:

I certify under penalty of law that the debris has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.145. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment.

e) A generator or treater that first receives a determination from USEPA or the Agency that a given contaminated soil subject to LDRs, as provided in Section 728.149(a), no longer contains a listed hazardous waste and a generator or treater that first determines that a contaminated soil subject to LDRs, as provided in Section 728.149(a), no longer exhibits a characteristic of hazardous waste must do the following:

1) Prepare a one-time only documentation of these determinations including all supporting information; and

2) Maintain that information in the facility files and other records for a minimum of three years.

(Source: Amended at 32 Ill. Reg. _____, effective _____)

Section 728.109 Special Rules for Characteristic Wastes

a) The initial generator of a solid waste must determine each USEPA hazardous waste number (waste code) applicable to the waste in order to determine the applicable treatment standards under Subpart D of this Part. This determination may be made concurrently with the hazardous waste determination required in Section 722.111. For purposes of this Part, the waste must carry the waste code for any applicable listing under Subpart D of 35 Ill. Adm. Code 721. In addition, the waste must carry one or more of the waste codes under Subpart C of 35 Ill. Adm. Code 721 where the waste exhibits a characteristic, except in the case when the treatment standard for the listed waste operates in lieu of the treatment standard for the characteristic waste, as specified in subsection (b)

of this Section. If the generator determines that its waste displays a characteristic of hazardous waste (and the waste is not D001 nonwastewaters treated by CMBST, RORGS, or POLYM of Table C to this Part), the generator must determine the underlying hazardous constituents (as defined at Section 728.102(i)) in the characteristic waste.

b) Where a prohibited waste is both listed under Subpart D of 35 Ill. Adm. Code 721 and exhibits a characteristic of hazardous waste under Subpart C of 35 Ill. Adm. Code 721, the treatment standard for the waste code listed in Subpart D of 35 Ill. Adm. Code 721 will operate in lieu of the standard for the waste code under Subpart C of 35 Ill. Adm. Code 721, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes.

c) In addition to any applicable standards determined from the initial point of generation, no prohibited waste that exhibits a characteristic under Subpart C of 35 Ill. Adm. Code 721 must be land disposed, unless the waste complies with the treatment standards under Subpart D of this Part.

d) A waste that exhibits a characteristic of hazardous waste under Subpart C of 35 Ill. Adm. Code 721 is also subject to Section 728.107 requirements, except that once the waste is no longer hazardous, a one-time notification and certification must be placed in the generator's or treater's on-site files ~~and sent to the Agency, except for the s. facilities described in subsection (f) of this Section.~~ The notification and certification that is placed in the generator's or treater's files must be updated if the process or operation generating the waste changes or if the RCRA Subtitle D (municipal solid waste landfill) facility receiving the waste changes. ~~However, the generator or treater need only notify the Agency on an annual basis if such changes occur. Such notification and certification should be sent to the Agency by the end of the year, but no later than December 31.~~

1) The notification must include the following information:

A) The name and address of the RCRA Subtitle D (municipal solid waste landfill) facility receiving the waste shipment; and

B) A description of the waste as initially generated, including the applicable USEPA hazardous waste numbers, the treatability groups, and the underlying hazardous constituents (as defined in Section 728.102(i)), 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.

2) The certification must be signed by an authorized representative and must state the language found in Section 728.107(b)(4). If treatment removes the characteristic but does not meet standards applicable to underlying hazardous constituents, then the certification found in Section 728.107(b)(4)(D) applies.

~~3) For a characteristic waste whose ultimate disposal will be into a Class I nonhazardous waste injection well, and for which compliance with the treatment standards set forth in Section 728.148 and Table U to this Part for underlying hazardous constituents is achieved through pollution prevention that meets the~~

~~criteria set forth at 35 Ill. Adm. Code 738.101(d), the following information must also be included:~~

~~A) A description of the pollution prevention mechanism and when it was implemented, if already complete;~~

~~B) The mass of each underlying hazardous constituent before pollution prevention;~~

~~C) The mass of each underlying hazardous constituent that must be removed, adjusted to reflect variations in mass due to normal operating conditions; and~~

~~D) The mass reduction of each underlying hazardous constituent that is achieved.~~

~~e) For a decharacterized waste managed on-site in a wastewater treatment system subject to the federal Clean Water Act (CWA) or zero-dischargers engaged in CWA equivalent treatment, compliance with the treatment standards set forth in Sections 728.14, Table 1 to this part must be monitored quarterly, unless the treatment is passive biological treatment, in which case compliance must be monitored annually. Monitoring results must be kept in on-site files for five years.~~

~~f) For a decharacterized waste on-site in a wastewater treatment system subject to the federal Clean Water Act (CWA) for which all underlying hazardous constituents (as defined in Section 728.102) are addressed by a CWA permit, this compliance must be documented and this documentation must be kept in on-site files.~~

~~g) For a characteristic waste whose ultimate disposal will be into a Class I nonhazardous waste injection well that qualifies for the de minimis exclusion described in Section 728.101, information supporting that qualification must be kept in on-site files.~~

(Source: Amended at 32 Ill. Reg. _____, effective _____)

Section 728. ~~Table~~ TABLE C Technology Codes and Description of Technology-Based Standards

Technology

Code Description of Technology-Based Standard

ADGAS Venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid) -- venting can be accomplished through physical release utilizing valves 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 (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon (TOC) can often be

used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues).

CARBN Carbon adsorption (granulated or powdered) of non-metallic inorganics, organo-metallics, or organic constituents, operated so that a surrogate compound or indicator parameter has not undergone breakthrough (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the adsorption of many organic constituents that cannot be directly analyzed in wastewater residues). Breakthrough occurs when the carbon has become saturated with the constituent (or indicator parameter) and substantial change in adsorption rate associated with that constituent occurs.

CHOXD Chemical or electrolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combinations of reagents:

- 1) hypochlorite (e.g., bleach);
- 2) chlorine;
- 3) chlorine dioxide;
- 4) ozone or UV (ultraviolet light) assisted ozone;
- 5) peroxides;
- 6) persulfates;
- 7) perchlorates;
- 8) permanganates; or
- 9) other oxidizing reagents of equivalent efficiency, performed in units operated so that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues). Chemical oxidation specifically includes what is commonly referred to as alkaline chlorination.

CHRED Chemical reduction utilizing the following reducing reagents (or waste reagents) or combinations of reagents:

- 1) sulfur dioxide;
- 2) sodium, potassium, or alkali salts of sulfites, bisulfites, metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG);
- 3) sodium hydrosulfide;
- 4) ferrous salts; or
- 5) other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic halogens (TOX) 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 Subpart O of 35 Ill. Adm. Code 724, Subpart O of 35 Ill. Adm. Code 725, or Subpart H of 35 Ill. Adm. Code 726, 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 federal Nuclear Regulatory Commission.

IMERC Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., high or low mercury subcategories).

INCIN Incineration in units operated in accordance with the technical operating requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725.

LLEXT Liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent affinity, resulting in an extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery or reuse and a raffinate (extracted liquid waste) proportionately low in organics that must undergo further treatment as specified in the standard.

MACRO Macroencapsulation with surface coating materials such as polymeric organics (e.g., resins and plastics) or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Macroencapsulation specifically does not include any material that would be classified as a tank or container according to 35 Ill. Adm. Code 720.110.

NEUTR Neutralization with the following reagents (or waste reagents) or combinations of reagents:

- 1) acids;
- 2) bases; or
- 3) water (including wastewaters) resulting in a pH greater than two 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 nonwastewaters that 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 (or waste reagents) are typically used alone or in combination:

- 1) lime (i.e., containing oxides or hydroxides of calcium or magnesium);
- 2) caustic (i.e., sodium or potassium hydroxides);
- 3) soda ash (i.e., sodium carbonate);
- 4) sodium sulfide;
- 5) ferric sulfate or ferric chloride;
- 6) alum; or
- 7) sodium sulfate. Additional flocculating, coagulation, or similar reagents 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:

- 1) distillation (i.e., thermal concentration);
- 2) ion exchange;
- 3) resin or solid adsorption;
- 4) reverse osmosis; or
- 5) incineration for the recovery of acid

Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.

RLEAD Thermal recovery of lead in secondary lead smelters.

RMERC Retorting or roasting in a thermal processing unit capable of volatilizing mercury and subsequently condensing the volatilized mercury for recovery. The retorting or roasting unit (or facility) must be subject to one or more of the following:

- a) A federal national emissions standard for hazardous air pollutants (NESHAP) for mercury (subpart E of 40 CFR 61);
- b) A best available control technology (BACT) or a lowest achievable emission rate (LAER) standard for mercury imposed pursuant to a prevention of significant deterioration (PSD) permit (including 35 Ill. Adm. Code 201 through 203); or
- c) A state permit that establishes emission limitations (within meaning of Section 302 of the Clean Air Act) for mercury, including a permit issued pursuant to 35 Ill. Adm. Code 201. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., high or low mercury subcategories).

RMETL Recovery of metals or inorganics utilizing one or more of the following direct physical or removal technologies:

- 1) ion exchange;
- 2) resin or solid (i.e., zeolites) adsorption;
- 3) reverse osmosis;
- 4) chelation or solvent extraction;
- 5) freeze crystallization;
- 6) ultrafiltration; or
- 7) simple precipitation (i.e., crystallization)

Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.

RORGS Recovery of organics utilizing one or more of the following technologies:

- 1) Distillation;
- 2) thin film evaporation;
- 3) steam stripping;
- 4) carbon adsorption;
- 5) critical fluid extraction;
- 6) liquid-liquid extraction;
- 7) precipitation or crystallization (including freeze crystallization); or
- 8) chemical phase separation techniques (i.e., addition of acids, bases, demulsifiers, or similar chemicals).

Note: This does not preclude the use of other physical phase separation techniques such as decantation, filtration (including ultrafiltration), and

centrifugation, when used in conjunction with the above listed recovery technologies.

RTHRM Thermal recovery of metals or inorganics from nonwastewaters in units defined as cement kilns, blast furnaces, smelting, melting and refining furnaces, combustion devices used to recover sulfur values from spent sulfuric acid and "other devices" determined by the Agency pursuant to 35 Ill. Adm. Code 720.110, the definition of "industrial furnace."

RZINC Resmelting in high temperature metal recovery units for the purpose of recovery of zinc.

STABL Stabilization with the following reagents (or waste reagents) or combinations of reagents:

1) Portland cement; or

2) lime or pozzolans (e.g., fly ash and cement kiln dust) -- this does not preclude the addition of reagents (e.g., iron salts, silicates, and clays) designed to enhance the set or 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 must undergo either incineration, reuse as a fuel, or other recovery or reuse and an extracted wastewater that must undergo further treatment as specified in the standard.

WETOX Wet air oxidation performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues).

WTRRX Controlled reaction with water for highly reactive inorganic or organic chemicals with precautionary controls for protection of workers from potential violent reactions as well as precautionary controls for potential emissions of toxic or ignitable levels of gases released during the reaction.

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

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

BOARD NOTE: Derived from Table I in 40 CFR 268.42 (~~2005~~-(2007)).

(Source: Amended at 32 Ill. Reg. _____, effective _____)

Section 728. ~~Table~~ TABLE F Alternative Treatment Standards For Hazardous Debris

a) Hazardous debris must be treated by either the standards indicated in this Table F or by the waste-specific treatment standards for the waste contaminating the debris. The treatment standards must 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.

b) Definitions. For the purposes of this Table F, the following terms are defined as follows:

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

"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 must be subsequently treated by a technology for which it is not restricted in order to be land disposed (and excluded from Subtitle C regulation).

"Dioxin-listed wastes" means wastes having any of USEPA hazardous waste numbers FO20, FO21, FO22, FO23, FO26, or FO27.

c) Notes. In this Table F, the following text is to be read in conjunction with the tabulated text where the appropriate notations appear:

1 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/contaminant combination. For example, concentrated sulfuric acid may react violently with certain organic compounds, such as acrylonitrile.

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

3 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.

4 The demonstration of "equivalent technology" ~~under~~pursuant to Section 728.142(b) must 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.

5 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 must be separated from the debris using, at a minimum, simple physical or mechanical means. Examples of simple physical or mechanical means are vibratory or trommel screening or water washing. The debris surface need not be cleaned to a "clean debris surface" as defined in subsection (b) of this Section when separating treated debris from residue; rather, the surface must 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.

Technology description	Performance or design and operating standard
Contaminant restrictions	A. Extraction Technologies:1. Physical Extraction
Abrasive Blasting:	Removal of contaminated debris surface layers using water or air pressure to propel a solid media (e.g., steel shot, aluminum oxide grit, plastic beads).
Glass, Metal, Plastic, Rubber:	Treatment to a clean debris surface.
Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood:	Removal of at least 0.6 cm of the surface layer; treatment to a clean debris surface.
All Debris:	None.
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 that 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.
Vibratory Finishing:	Process utilizing scrubbing media, flushing fluid, and oscillating energy such that hazardous contaminants or contaminated debris surface layers are removed.
1 Same as above	Same as above.
2. 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;
Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood:	Debris must be no more than 1.2 cm (1/2 inch) in one dimension (i.e., thickness limit, ² except that this thickness limit may be waived under an "Equivalent Technology" approval under <u>pursuant to</u> Section 728.142(b); ⁴ debris surfaces must be in contact with water solution for at least 15 minutes
Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood:	Contaminant must be soluble to at least five percent by weight in water solution or five percent by weight in emulsion; if debris is contaminated with a dioxin-listed waste, ³ an "Equivalent Technology"

approval underpursuant to Section 728.142(b) must be obtained.4b. Liquid Phase Solvent Extraction: Removal of hazardous contaminants from debris surfaces and surface pores by applying a nonaqueous liquid or liquid solution that causes the hazardous contaminants to enter the liquid phase and be flushed away from the debris along with the liquid or liquid solution while using appropriate agitation, temperature, and residence time.1Same as aboveBrick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Same as above, except that contaminant must be soluble to at least five percent by weight in the solvent.c. Vapor Phase Solvent Extraction: Application of an organic vapor using sufficient agitation, residence time, and temperature to cause hazardous contaminants on contaminated debris surfaces and surface pores to enter the vapor phase and be flushed away with the organic vapor.1Same as above, except that brick, cloth, concrete, paper, pavement, rock and wood surfaces must be in contact with the organic vapor for at least 60 minutes.Same as above.3. Thermal Extractiona. High Temperature Metals Recovery: Application of sufficient heat, residence time, mixing, fluxing agents, or carbon in a smelting, melting, or refining furnace to separate metals from debris.For refining furnaces, treated debris must be separated from treatment residuals using simple physical or mechanical means,5 and, prior to further treatment, such residuals must meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris.Debris contaminated with a dioxin-listed waste:2 Obtain an "Equivalent Technology" approval underpursuant to Section 728.142(b).4b. Thermal Desorption: Heating in an enclosed chamber under either oxidizing or nonoxidizing atmospheres at sufficient temperature and residence time to vaporize hazardous contaminants from contaminated surfaces and surface pores and to remove the contaminants from the heating chamber in a gaseous exhaust gas.3All Debris: Obtain an "Equivalent Technology" approval underpursuant to Section 728.142(b);4 treated debris must be separated from treatment residuals using simple physical or mechanical means,5 and, prior to further treatment, such residue must meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris. Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Debris must be no more than 10 cm (4 inches) in one dimension (i.e., thickness limit),2 except that this thickness limit may be waived under the "Equivalent Technology" approvalAll Debris: Metals other than mercury.B. Destruction Technologies:1. Biological Destruction (Biodegradation): Removal of hazardous contaminants from debris surfaces and surface pores in an aqueous solution and ~~biodegradation~~ biodegradation of organic or nonmetallic inorganic compounds (i.e., inorganics that contain phosphorus, nitrogen, or sulfur) in units operated under either aerobic or anaerobic conditions.All Debris: Obtain an "Equivalent Technology" approval underpursuant to Section 728.142(b);4 treated debris must be separated from treatment residuals using simple physical or mechanical means,5 and, prior to further treatment, such residue must meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris. Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Debris must be no more than 1.2 cm (1/2 inch) in one dimension (i.e., thickness limit),2 except that this thickness limit may be waived under the "Equivalent Technology" approvalAll Debris: Metal contaminants.2. Chemical Destructiona. Chemical Oxidation: Chemical or electrolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combination of reagents: (1) hypochlorite (e.g., bleach); (2) chlorine; (3) chlorine dioxide; (4) ozone or UV (ultraviolet light) assisted ozone; (5) peroxides; (6) persulfates; (7) perchlorates; (8) permanganates; or (9) other oxidizing reagents of equivalent destruction efficiency.1 Chemical oxidation specifically includes what is referred to as alkaline chlorination.All Debris: Obtain an "Equivalent Technology" approval underpursuant to 35 Ill. Adm. Code.142(b);4 treated debris must be separated from treatment residuals using simple physical or mechanical means,5 and, prior

to further treatment, such residue must meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris.

Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Debris must be no more than 1.2 cm (1/2 inch) in one dimension (i.e., thickness limit),² except that this thickness limit may be waived under the "Equivalent Technology" approval.

All Debris: Metal contaminants.

b. Chemical Reduction: Chemical reaction utilizing the following reducing reagents (or waste reagents) or combination of reagents:

- (1) sulfur dioxide;
- (2) sodium, potassium, or alkali salts of sulfites, bisulfites, and metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG);
- (3) sodium hydrosulfide;
- (4) ferrous salts; or
- (5) other reducing reagents of equivalent efficiency.

1 Same as above. Same as above.

3. Thermal Destruction: Treatment in an incinerator operating in accordance with Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725; a boiler or industrial furnace operating in accordance with Subpart H of 35 Ill. Adm. Code 726, or other thermal treatment unit operated in accordance with Subpart X of 35 Ill. Adm. Code 724, or Subpart P of 35 Ill. Adm. Code 725, but excluding for purposes of these debris treatment standards Thermal Desorption units. Treated debris must be separated from treatment residuals using simple physical or mechanical means,⁵ and, prior to further treatment, such residue must meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris.

Brick, Concrete, Glass, Metal, Pavement, Rock, Metal: Metals other than mercury, except that there are no metal restrictions for vitrification.

Debris contaminated with a dioxin-listed waste.

3 Obtain an "Equivalent Technology" approval underpursuant to Section 728.142(b),⁴ except that this requirement does not apply to vitrification.

C. Immobilization Technologies:

1. Macroencapsulation: Application of surface coating materials such as polymeric organics (e.g., resins and plastics) or use of a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Encapsulating material must completely encapsulate debris and be resistant to degradation by the debris and its contaminants and materials into which it may come into contact after placement (leachate, other waste, microbes). None.
2. Microencapsulation: Stabilization of the debris with the following reagents (or waste reagents) such that the leachability of the hazardous contaminants is reduced: (1) Portland cement; or (2) lime/ pozzolans (e.g., fly ash and cement kiln dust). Reagents (e.g., iron salts, silicates, and clays) may be added to enhance the set/cure time or compressive strength, or to reduce the leachability of the hazardous constituents.
- 2 Leachability of the hazardous contaminants must be reduced. None.
3. Sealing: Application of an appropriate material that adheres tightly to the debris surface to avoid exposure of the surface to potential leaching media. When necessary to effectively seal the surface, sealing entails pretreatment of the debris surface to remove foreign matter and to clean and roughen the surface. Sealing materials include epoxy, silicone, and urethane compounds, but paint may not be used as a sealant. Sealing must avoid exposure of the debris surface to potential leaching media and sealant must be resistant to degradation by the debris and its contaminants and materials into which it may come into contact after placement (leachate, other waste, microbes). None.

BOARD NOTE: Derived from Table 1 to 40 CFR 268.45 (2005).

(Source: Amended at 32 Ill. Reg. _____, effective _____)

Section 728. ~~Table~~ TABLE T Treatment Standards for Hazardous Wastes

Note: The treatment standards that heretofore appeared in tables in Sections 728.141, 728.142, and 728.143 have been consolidated into this table.

Waste Code

Waste Description and Treatment or Regulatory Subcategory1

Regulated Hazardous ConstituentWastewatersNonwastewatersCommon NameCAS2
NumberConcentration3 in mg/l3; or Technology Code4Concentration5 in mg/kg5
unless noted as " mg/l TCLP"; or Technology Code4

D0019

Ignitable Characteristic Wastes, except for the 35 Ill. Adm. Code 721.121(a)(1)
High TOC Subcategory.

NANADEACT and meet Section 728.148 standards8; or RORGS; or CMBSTDEACT and meet
Section 728.148 standards8; or RORGS; or CMBST

D0019

High TOC Ignitable Characteristic Liquids Subcategory based on 35 Ill. Adm. Code
721.121(a)(1) - Greater than or equal to 10 percent total organic carbon.

(Note: This subcategory consists of nonwastewaters only.)

NANANARORGS; CMBST; or POLYM

D0029

Corrosive Characteristic Wastes.

NANADEACT and meet Section 728.148 standards8DEACT and meet Section 728.148
standards8

D002, D004, D005, D006, D007, D008, D009, D010, D011

Radioactive high level wastes generated during the reprocessing of fuel rods.

(Note: This subcategory consists of nonwastewaters only.)

Corrosivity (pH)NANAHLVITArsenic7440-38-2NAHLVITBarium7440-39-
3NAHLVITCadmium7440-43-9NAHLVITChromium (Total)7440-47-3NAHLVITLead7439-92-
1NAHLVITMercury7439-97-6NAHLVITSelenium7782-49-2NAHLVITSilver7440-22-4NAHLVIT

D0039

Reactive Sulfides Subcategory based on 35 Ill. Adm. Code 721.123(a)(5).

NANADEACTDEACT

D0039

Explosive subcategory based on 35 Ill. Adm. Code 721.123(a)(6), (a)(7), and
(a)(8).

NANADEACT and meet Section 728.148 standards8DEACT and meet Section 728.148
standards8

D0039

Unexploded ordnance and other explosive devices that have been the subject of an
emergency response.

NANADEACTDEACT

D0039

Other Reactives Subcategory based on 35 Ill. Adm. Code 721.123(a)(1).

NANADEACT and meet Section 728.148 standards8
standards8
D0039

Water Reactive Subcategory based on 35 Ill. Adm. Code 721.123(a)(2), (a)(3), and (a)(4).

(Note: This subcategory consists of nonwastewaters only.)

NANANADEACT and meet Section 728.148 standards8
D0039

Reactive Cyanides Subcategory based on 35 Ill. Adm. Code 721.123(a)(5).

Cyanides (Total)757-12-5--590Cyanides (Amenable)757-12-50.8630
D0049

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for arsenic based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Arsenic7440-38-21.4 and meet Section 728.148 standards85.0 mg/l TCLP and meet Section 728.148 standards8
D0059

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for barium based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Barium7440-39-31.2 and meet Section 728.148 standards821 mg/l TCLP and meet Section 728.148 standards8
D0069

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for cadmium based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Cadmium7440-43-90.69 and meet Section 728.148 standards80.11 mg/l TCLP and meet Section 728.148 standards8
D0069

Cadmium-Containing Batteries Subcategory.

(Note: This subcategory consists of nonwastewaters only.)

Cadmium7440-43-9NARTH RM
D0069

Radioactively contaminated cadmium-containing batteries.

(Note: This subcategory consists of nonwastewaters only.)

Cadmium7440-43-9NAMacroencapsulation in accordance with Section 728.145
D0079

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for chromium based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Chromium (Total)7440-47-32.77 and meet Section 728.148 standards80.60 mg/l TCLP and meet Section 728.148 standards8
D0089

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for lead based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Lead7439-92-10.69 and meet Section 728.148 standards80.75 mg/l TCLP and meet Section 728.148 standards8
D0089

Lead Acid Batteries Subcategory

(Note: This standard only applies to lead acid batteries that are identified as RCRA hazardous wastes and that are not excluded elsewhere from regulation under the land disposal restrictions of this Part or exempted under other regulations (see 35 Ill. Adm. Code 726.180). This subcategory consists of nonwastewaters only.)

Lead7439-92-1NARLEAD
D0089

Radioactive Lead Solids Subcategory

(Note: These lead solids include, but are not limited to, all forms of lead shielding and other elemental forms of lead. These lead solids do not include treatment residuals such as hydroxide sludges, other wastewater treatment residuals, or incinerator ashes that can undergo conventional pozzolanic stabilization, nor do they include organo-lead materials that can be incinerated and stabilized as ash. This subcategory consists of nonwastewaters only.)

Lead7439-92-1NAMACRO
D0099

Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain greater than or equal to 260 mg/kg total mercury that also contain organics and are not incinerator residues. (High Mercury-Organic Subcategory)

Mercury7439-97-6NAIMERC; or RMERC

D0099

Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain greater than or equal to 260 mg/kg total mercury that are inorganic, including incinerator residues and residues from RMERC. (High Mercury-Inorganic Subcategory)

Mercury7439-97-6NARMERC
D0099

Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain less than 260 mg/kg total mercury. (Low Mercury Subcategory)

Mercury7439-97-6NA0.20 mg/l TCLP and meet Section 728.148 standards8
D0099

All other nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain less than 260 mg/kg total mercury and that are not residues from RMERC. (Low Mercury Subcategory)

Mercury7439-97-6NA0.025 mg/l TCLP and meet Section 728.148 standards8
D0099

All D009 wastewaters.

Mercury7439-97-60.15 and meet Section 728.148 standards8NA
D0099

Elemental mercury contaminated with radioactive materials.

(Note: This subcategory consists of nonwastewaters only.)

Mercury7439-97-6NAAMLGM
D0099

Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory.

(Note: This subcategory consists of nonwastewaters only.)

Mercury7439-97-6NAIMERC
D0099

Radioactively contaminated mercury-containing batteries.

(Note: This subcategory consists of nonwastewaters only.)

Mercury7439-97-6NAMacroencapsulation in accordance with Section 728.145
D0109

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for selenium based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Selenium7782-49-20.825.7 mg/l TCLP and meet Section 728.148 standards8
D0119

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for silver based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Silver7440-22-40.430.14 mg/l TCLP and meet Section 728.148 standards8
D0119

Radioactively contaminated silver-containing batteries.

(Note: This subcategory consists of nonwastewaters only.)

Silver7440-22-4NAMacroencapsulation in accordance with Section 728.145
D0129

Wastes that are TC for endrin based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Endrin72-20-8BIODG; or CMBST0.13 and meet Section 728.148 standards8
aldehyde7421-93-4BIODG; or CMBST0.13 and meet Section 728.148 standards8
D0139

Wastes that are TC for lindane based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

-BHC319-84-6CARBN; or CMBST0.066 and meet Section 728.148 standards8-BHC319-85-7CARBN; or CMBST0.066 and meet Section 728.148 standards8-BHC319-86-8CARBN; or CMBST0.066 and meet Section 728.148 standards8?-BHC (Lindane)58-89-9CARBN; or CMBST0.066 and meet Section 728.148 standards8
D0149

Wastes that are TC for methoxychlor based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Methoxychlor72-43-5WETOX or CMBST0.18 and meet Section 728.148 standards8
D0159

Wastes that are TC for toxaphene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Toxaphene 8001-35-2 BIODG or CMBST 2.6 and meet Section 728.148 standards 8
D0169

Wastes that are TC for 2,4-D (2,4-dichlorophenoxyacetic acid) based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4-D (2,4-dichlorophenoxyacetic acid) 94-75-7 CHOXD; BIODG; or CMBST 10 and meet Section 728.148 standards 8
D0179

Wastes that are TC for 2,4,5-TP (Silvex) based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4,5-TP (Silvex) 93-72-1 CHOXD or CMBST 7.9 and meet Section 728.148 standards 8
D0189

Wastes that are TC for benzene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Benzene 71-43-20.14 and meet Section 728.148 standards 810 and meet Section 728.148 standards 8
D0199

Wastes that are TC for carbon tetrachloride based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Carbon tetrachloride 56-23-50.057 and meet Section 728.148 standards 86.0 and meet Section 728.148 standards 8
D0209

Wastes that are TC for chlordane based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Chlordane (and isomers) 57-74-90.0033 and meet Section 728.148 standards 80.26 and meet Section 728.148 standards 8
D0219

Wastes that are TC for chlorobenzene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Chlorobenzene 108-90-70.057 and meet Section 728.148 standards 86.0 and meet Section 728.148 standards 8
D0229

Wastes that are TC for chloroform based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Chloroform 67-66-30.046 and meet Section 728.148 standards 86.0 and meet Section 728.148 standards 8
D0239

Wastes that are TC for o-cresol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

o-Cresol 95-48-70.11 and meet Section 728.148 standards 85.6 and meet Section 728.148 standards 8
D0249

Wastes that are TC for m-cresol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

m-Cresol
(difficult to distinguish from p-cresol) 108-39-40.77 and meet Section 728.148 standards 85.6 and meet Section 728.148 standards 8
D0259

Wastes that are TC for p-cresol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

p-Cresol
(difficult to distinguish from m-cresol) 106-44-50.77 and meet Section 728.148 standards 85.6 and meet Section 728.148 standards 8
D0269

Wastes that are TC for cresols (total) based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Cresol-mixed isomers (Cresylic acid)
(sum of o-, m-, and p-cresol concentrations) 1319-77-30.88 and meet Section 728.148 standards 811.2 and meet Section 728.148 standards 8
D0279

Wastes that are TC for p-dichlorobenzene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

p-Dichlorobenzene (1,4-Dichlorobenzene)106-46-70.090 and meet Section 728.148 standards86.0 and meet Section 728.148 standards8
D0289

Wastes that are TC for 1,2-dichloroethane based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

1,2-Dichloroethane107-06-20.21 and meet Section 728.148 standards86.0 and meet Section 728.148 standards8
D0299

Wastes that are TC for 1,1-dichloroethylene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

1,1-Dichloroethylene75-35-40.025 and meet Section 728.148 standards86.0 and meet Section 728.148 standards8
D0309

Wastes that are TC for 2,4-dinitrotoluene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4-Dinitrotoluene121-14-20.32 and meet Section 728.148 standards8140 and meet Section 728.148 standards8
D0319

Wastes that are TC for heptachlor based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Heptachlor76-44-80.0012 and meet Section 728.148 standards80.066 and meet Section 728.148 standards8Heptachlor epoxide1024-57-30.016 and meet Section 728.148 standards80.066 and meet Section 728.148 standards8
D0329

Wastes that are TC for hexachlorobenzene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Hexachlorobenzene118-74-10.055 and meet Section 728.148 standards810 and meet Section 728.148 standards8
D0339

Wastes that are TC for hexachlorobutadiene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Hexachlorobutadiene87-68-30.055 and meet Section 728.148 standards85.6 and meet Section 728.148 standards8

D0349

Wastes that are TC for hexachloroethane based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Hexachloroethane 67-72-10.055 and meet Section 728.148 standards 830 and meet Section 728.148 standards 8
D0359

Wastes that are TC for methyl ethyl ketone based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Methyl ethyl ketone 78-93-30.28 and meet Section 728.148 standards 836 and meet Section 728.148 standards 8
D0369

Wastes that are TC for nitrobenzene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Nitrobenzene 98-95-30.068 and meet Section 728.148 standards 814 and meet Section 728.148 standards 8
D0379

Wastes that are TC for pentachlorophenol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Pentachlorophenol 87-86-50.089 and meet Section 728.148 standards 87.4 and meet Section 728.148 standards 8
D0389

Wastes that are TC for pyridine based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Pyridine 110-86-10.014 and meet Section 728.148 standards 816 and meet Section 728.148 standards 8
D0399

Wastes that are TC for tetrachloroethylene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Tetrachloroethylene 127-18-40.056 and meet Section 728.148 standards 86.0 and meet Section 728.148 standards 8
D0409

Wastes that are TC for trichloroethylene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Trichloroethylene 79-01-60.054 and meet Section 728.148 standards 86.0 and meet Section 728.148 standards 8
D0419

Wastes that are TC for 2,4,5-trichlorophenol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4,5-Trichlorophenol 95-95-40.18 and meet Section 728.148 standards 87.4 and meet Section 728.148 standards 8
D0429

Wastes that are TC for 2,4,6-trichlorophenol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4,6-Trichlorophenol 88-06-20.035 and meet Section 728.148 standards 87.4 and meet Section 728.148 standards 8
D0439

Wastes that are TC for vinyl chloride based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Vinyl chloride 75-01-40.27 and meet Section 728.148 standards 86.0 and meet Section 728.148 standards 8
F001, F002, F003, F004 & F005

F001, F002, F003, F004, 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, trichloromonofluoromethane, or xylenes (except as specifically noted in other subcategories). See further details of these listings in 35 Ill. Adm. Code 721.131.

Acetone 67-64-10.28160 Benzene 71-43-20.1410n-Butyl alcohol 71-36-35.62.6 Carbon disulfide 75-15-03.8NA Carbon tetrachloride 56-23-50.0576.0 Chlorobenzene 108-90-70.0576.0o-Cresol 95-48-70.115.6m-Cresol (difficult to distinguish from p-cresol) 108-39-40.775.6p-Cresol (difficult to distinguish from m-cresol) 106-44-50.775.6 Cresol-mixed isomers (Cresylic acid) (sum of o-, m-, and p-cresol concentrations) 1319-77-30.8811.2 Cyclohexanone 108-94-10.36NAo-Dichlorobenzene 95-50-10.0886.0 Ethyl acetate 141-78-60.3433 Ethyl benzene 100-41-40.05710 Ethyl ether 60-29-70.12160 Isobutyl alcohol 78-83-

15.6170Methanol67-56-15.6NAMethylene chloride75-9-20.08930Methyl ethyl ketone78-93-30.2836Methyl isobutyl ketone108-10-10.1433Nitrobenzene98-95-30.06814Pyridine110-86-10.01416Tetrachloroethylene127-18-40.0566.0Toluene108-88-30.080101,1,1-Trichloroethane71-55-60.0546.01,1,2-Trichloroethane79-00-50.0546.01,1,2-Trichloro-1,2,2-trifluoroethane76-13-10.05730Trichloroethylene79-01-60.0546.0Trichloromonofluoromethane75-69-40.02030Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)1330-20-70.3230
F001, F002, F003, F004 & F005

F003 and F005 solvent wastes that contain any combination of one or more of the following three solvents as the only listed F001 through F005 solvents: carbon disulfide, cyclohexanone, or methanol. (Formerly Section 728.141(c)).

Carbon disulfide75-15-03.84.8 mg/l TCLPCyclohexanone108-94-10.360.75 mg/l
TCLPMethanol67-56-15.60.75 mg/l TCLP
F001, F002, F003, F004 & F005

F005 solvent waste containing 2-Nitropropane as the only listed F001 through F005 solvent.

2-Nitropropane79-46-9(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
F001, F002, F003, F004 & F005

F005 solvent waste containing 2-Ethoxyethanol as the only listed F001 through F005 solvent.

2-Ethoxyethanol110-80-5BIODG; or CMBSTCMBST
F006

Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning or stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.

Cadmium7440-43-90.690.11 mg/l TCLPChromium (Total)7440-47-32.770.60 mg/l
TCLPCyanides (Total)757-12-51.2590Cyanides (Amenable)757-12-50.8630Lead7439-92-10.690.75 mg/l TCLPNickel7440-02-03.9811 mg/l TCLPSilver7440-22-4NA0.14 mg/l
TCLP
F007

Spent cyanide plating bath solutions from electroplating operations.

Cadmium7440-43-9NA0.11 mg/l TCLPChromium (Total)7440-47-32.770.60 mg/l
TCLPCyanides (Total)757-12-51.2590Cyanides (Amenable)757-12-50.8630Lead7439-92-10.690.75 mg/l TCLPNickel7440-02-03.9811 mg/l TCLPSilver7440-22-4NA0.14 mg/l
TCLP
F008

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

Cadmium7440-43-9NA0.11 mg/l TCLPChromium (Total)7440-47-32.770.60 mg/l
TCLPCyanides (Total)757-12-51.2590Cyanides (Amenable)757-12-50.8630Lead7439-92-10.690.75 mg/l TCLPNickel7440-02-03.9811 mg/l TCLPSilver7440-22-4NA0.14 mg/l
TCLP

F009

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

Cadmium 7440-43-9NA 0.11 mg/l TCLP Chromium (Total) 7440-47-32.770.60 mg/l
TCLP Cyanides (Total) 757-12-51.2590 Cyanides (Amenable) 757-12-50.8630 Lead 7439-92-
10.690.75 mg/l TCLP Nickel 7440-02-03.9811 mg/l TCLP Silver 7440-22-4NA 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 (Total) 757-12-51.2590 Cyanides (Amenable) 757-12-50.86NA
F011

Spent cyanide solutions from salt bath pot cleaning from metal heat-treating operations.

Cadmium 7440-43-9NA 0.11 mg/l TCLP Chromium (Total) 7440-47-32.770.60 mg/l
TCLP Cyanides (Total) 757-12-51.2590 Cyanides (Amenable) 757-12-50.8630 Lead 7439-92-
10.690.75 mg/l TCLP Nickel 7440-02-03.9811 mg/l TCLP Silver 7440-22-4NA 0.14 mg/l
TCLP
F012

Quenching wastewater treatment sludges from metal heat-treating operations where cyanides are used in the process.

Cadmium 7440-43-9NA 0.11 mg/l TCLP Chromium (Total) 7440-47-32.770.60 mg/l
TCLP Cyanides (Total) 757-12-51.2590 Cyanides (Amenable) 757-12-50.8630 Lead 7439-92-
10.690.75 mg/l TCLP Nickel 7440-02-03.9811 mg/l TCLP Silver 7440-22-4NA 0.14 mg/l
TCLP
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 (Total) 7440-47-32.770.60 mg/l TCLP Cyanides (Total) 757-12-
51.2590 Cyanides (Amenable) 757-12-50.8630
F020, F021, F022, F023, F026

Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of: (1) 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 (i.e., F020); (2) pentachlorophenol, or of intermediates used to produce its derivatives (i.e., F021); (3) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F022) and wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of: (1) tri- or tetrachlorophenols, excluding wastes from equipment used only for the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol (F023)

or (2) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F026).

HxCDDs (All Hexachlorodibenzo-p-dioxins)NA0.0000630.001HxCDFs (All Hexachlorodibenzofurans)55684-94-10.0000630.001PeCDDs (All Pentachlorodibenzo-p-dioxins)36088-22-90.0000630.001PeCDFs (All Pentachlorodibenzofurans)30402-15-40.0000350.001Pentachlorophenol87-86-50.0897.4TCDDs (All Tetrachlorodibenzo-p-dioxins)41903-57-50.0000630.001TCDFs (All Tetrachlorodibenzofurans)55722-27-50.0000630.0012,4,5-Trichlorophenol95-95-40.187.42,4,6-Trichlorophenol88-06-20.0357.42,3,4,6-Tetrachlorophenol58-90-20.0307.4
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. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in 35 Ill. Adm. Code 721.131 or 721.132.)

All F024 wastesNACMBST11CMBST112-Chloro-1,3-butadiene126-99-80.0570.283-Chloropropylene107-05-10.036301,1-Dichloroethane75-34-30.0596.01,2-Dichloroethane107-06-20.216.01,2-Dichloropropane78-87-50.8518cis-1,3-Dichloropropylene10061-01-50.03618trans-1,3-Dichloropropylene10061-02-60.03618bis(2-Ethylhexyl) phthalate117-81-70.2828Hexachloroethane67-72-10.05530Chromium (Total)7440-47-32.770.60 mg/l TCLPNickel7440-02-03.9811 mg/l TCLP
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 up to and including five, with varying amounts and positions of chlorine substitution.
F025 -- Light Ends Subcategory.

Carbon tetrachloride56-23-50.0576.0Chloroform67-66-30.0466.01,2-Dichloroethane107-06-20.216.01,1-Dichloroethylene75-35-40.0256.0Methylene chloride75-9-20.089301,1,2-Trichloroethane79-00-50.0546.0Trichloroethylene79-01-60.0546.0Vinyl chloride75-01-40.276.0
F025

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 tetrachloride56-23-50.0576.0Chloroform67-66-30.0466.0Hexachlorobenzene118-74-10.05510Hexachlorobutadiene87-68-30.0555.6Hexachloroethane67-72-10.05530Methylene chloride75-9-20.089301,1,2-Trichloroethane79-00-50.0546.0Trichloroethylene79-01-60.0546.0Vinyl chloride75-01-40.276.0
F027

Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing

hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)

HxCDDs (All Hexachlorodibenzo-p-dioxins)NA0.0000630.001HxCDFs (All Hexachlorodibenzofurans)55684-94-10.0000630.001PeCDDs (All Pentachlorodibenzo-p-dioxins)36088-22-90.0000630.001PeCDFs (All Pentachlorodibenzofurans)30402-15-40.0000350.001Pentachlorophenol87-86-50.0897.4TCDDs (All Tetrachlorodibenzo-p-dioxins)41903-57-50.0000630.001TCDFs (All Tetrachlorodibenzofurans)55722-27-50.0000630.0012,4,5-Trichlorophenol95-95-40.187.42,4,6-Trichlorophenol88-06-20.0357.42,3,4,6-Tetrachlorophenol58-90-20.0307.4
F028

Residues resulting from the incineration or thermal treatment of soil contaminated with USEPA hazardous waste numbers F020, F021, F023, F026, and F027.

HxCDDs (All Hexachlorodibenzo-p-dioxins)NA0.0000630.001HxCDFs (All Hexachlorodibenzofurans)55684-94-10.0000630.001PeCDDs (All Pentachlorodibenzo-p-dioxins)36088-22-90.0000630.001PeCDFs (All Pentachlorodibenzofurans)30402-15-40.0000350.001Pentachlorophenol87-86-50.0897.4TCDDs (All Tetrachlorodibenzo-p-dioxins)41903-57-50.0000630.001TCDFs (All Tetrachlorodibenzofurans)55722-27-50.0000630.0012,4,5-Trichlorophenol95-95-40.187.42,4,6-Trichlorophenol88-06-20.0357.42,3,4,6-Tetrachlorophenol58-90-20.0307.4
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 35 Ill. Adm. Code 721.135 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), 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 or penta-chlorophenol.

Acenaphthene83-32-90.0593.4Anthracene120-12-70.0593.4Benz(a)anthracene56-55-30.0593.4Benzo(b)fluoranthene (difficult to distinguish from benzo(k) fluoranthene)205-99-20.116.8Benzo(k)fluoranthene (difficult to distinguish from benzo(b) fluoranthene)207-08-90.116.8Benzo(a)pyrene50-32-80.0613.4Chrysene218-01-90.0593.4Dibenz(a,h)anthracene53-70-30.0558.22-4-Dimethyl phenol105-67-90.03614Fluorene86-73-70.0593.4Hexachlorodibenzo-p-dioxinsNA0.000063 or CMBST110.001 or CMBST11HexachlorodibenzofuransNA0.000063 or CMBST110.001 or CMBST11Indeno (1,2,3-c,d) pyrene193-39-50.00553.4Naphthalene91-20-30.0595.6Pentachlorodibenzo-p-dioxinsNA0.000063 or CMBST110.001 or CMBST11PentachlorodibenzofuransNA0.000035 or CMBST110.001 or CMBST11Pentachlorophenol87-86-50.0897.4Phenanthrene85-01-80.0595.6Phenol108-95-20.0396.2Pyrene129-00-00.0678.2Tetrachlorodibenzo-p-dioxinsNA0.000063 or CMBST110.001 or CMBST11TetrachlorodibenzofuransNA0.000063 or CMBST110.001 or CMBST112,3,4,6-Tetrachlorophenol58-90-20.0307.42,4,6-Trichlorophenol88-06-20.0357.4Arsenic7440-38-21.45.0 mg/l TCLPChromium (Total)7440-47-32.770.60 mg/l TCLP
F034

Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations

from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.

Acenaphthene83-32-90.0593.4Anthracene120-12-70.0593.4Benz(a)anthracene56-55-30.0593.4Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)205-99-20.116.8Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)207-08-90.116.8Benzo(a)pyrene50-32-80.0613.4Chrysene218-01-90.0593.4Dibenz(a,h)anthracene53-70-30.0558.2Fluorene86-73-70.0593.4Indeno(1,2,3-c,d)pyrene193-39-50.00553.4Naphthalene91-20-30.0595.6Phenanthrene85-01-80.0595.6Pyrene129-00-00.0678.2Arsenic7440-38-21.45.0 mg/l TCLPChromium (Total)7440-47-32.770.60 mg/l TCLP
F035

Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes that are 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 or pentachlorophenol.

Arsenic7440-38-21.45.0 mg/l TCLPChromium (Total)7440-47-32.770.60 mg/l TCLP
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 35 Ill. Adm. Code 721.131(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.

Acenaphthene83-32-90.059NAAnthracene120-12-70.0593.4Benzene71-43-20.1410Benz(a)anthracene56-55-30.0593.4Benzo(a)pyrene50-32-80.0613.4bis(2-Ethylhexyl) phthalate117-81-70.2828Chrysene218-01-90.0593.4Di-n-butyl phthalate84-74-20.05728Ethylbenzene100-41-40.05710Fluorene86-73-70.059NANaphthalene91-20-30.0595.6Phenanthrene85-01-80.0595.6Phenol108-95-20.0396.2Pyrene129-00-00.0678.2Toluene108-88-30.08010Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Chromium (Total)7440-47-32.770.60 mg/l TCLPCyanides (Total)757-12-51.2590Lead7439-92-10.69NANickel7440-02-0NA11 mg/l TCLP
F038

Petroleum refinery secondary (emulsified) oil/water/solids separation sludge or float generated from the physical 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 (IAF) units, tanks, and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through

cooling waters segregated for treatment from other process or oily cooling waters, sludges, and floats generated in aggressive biological treatment units as defined in 35 Ill. Adm. Code 721.131(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological units) and F037, K048, and K051 are not included in this listing.

Benzene71-43-20.1410Benzo(a)pyrene50-32-80.0613.4bis(2-Ethylhexyl) phthalate117-81-70.2828Chrysene218-01-90.0593.4Di-n-butyl phthalate84-74-20.05728Ethylbenzene100-41-40.05710Fluorene86-73-70.059NANaphthalene91-20-30.0595.6Phenanthrene85-01-80.0595.6Phenol108-95-20.0396.2Pyrene129-00-00.0678.2Toluene108-88-30.08010Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Chromium (Total)7440-47-32.770.60 mg/l TCLPCyanides (Total)757-12-51.2590Lead7439-92-10.69NANickel7440-02-0NA11 mg/l TCLP
F039

Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under Subpart D of this Part. (Leachate resulting from the disposal of one or more of the following USEPA hazardous wastes and no other hazardous wastes retains its USEPA hazardous waste numbers: F020, F021, F022, F026, F027, or F028.).

Acenaphthylene208-96-80.0593.4Acenaphthene83-32-90.0593.4Acetone67-64-10.28160Acetonitrile75-05-85.6NAAcetophenone96-86-20.0109.72-Acetylamino fluorene53-96-30.059140Acrolein107-02-80.29NAAcrylonitrile107-13-10.2484Aldrin309-00-20.0210.0664-Aminobiphenyl92-67-10.13NAAniline62-53-30.8114o-Anisidine (2-methoxyaniline)90-04-00.0100.66Anthracene120-12-70.0593.4Aramitel40-57-80.36NA-BHC319-84-60.000140.066-BHC319-85-70.000140.066-BHC319-86-80.0230.066?-BHC58-89-90.00170.066Benzene71-43-20.1410Benz(a)anthracene56-55-30.0593.4Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)205-99-20.116.8Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)207-08-90.116.8Benzo(g,h,i)perylene191-24-20.00551.8Benzo(a)pyrene50-32-80.0613.4Bromodichloromethane75-27-40.3515Methyl bromide (Bromomethane)74-83-90.11154-Bromophenyl phenyl ether101-55-30.05515n-Butyl alcohol71-36-35.62.6Butyl benzyl phthalate85-68-70.017282-sec-Butyl-4,6-dinitrophenol (Dinoseb)88-85-70.0662.5Carbon disulfide75-15-03.8NACarbon tetrachloride56-23-50.0576.0Chlordane (and isomers)57-74-90.00330.26p-Chloroaniline106-47-80.4616Chlorobenzene108-90-70.0576.0Chlorobenzilate510-15-60.10NA2-Chloro-1,3-butadiene126-99-80.057NACHlorodibromomethane124-48-10.05715Chloroethane75-00-30.276.0bis(2-Chloroethoxy)methane111-91-10.0367.2bis(2-Chloroethyl)ether111-44-40.0336.0Chloroform67-66-30.0466.0bis(2-Chloroisopropyl)ether39638-32-90.0557.2p-Chloro-m-cresol59-50-70.01814Chloromethane (Methyl chloride)74-87-30.19302-Chloronaphthalene91-58-70.0555.62-Chlorophenol95-57-80.0445.73-Chloropropylene107-05-10.03630Chrysene218-01-90.0593.4p-Cresidine120-71-80.0100.66o-Cresol95-48-70.115.6m-Cresol (difficult to distinguish from p-cresol)108-39-40.775.6p-Cresol (difficult to distinguish from m-cresol)106-44-50.775.6Cyclohexanone108-94-10.36NA1,2-Dibromo-3-chloropropane96-12-80.1115Ethylene dibromide (1,2-Dibromoethane)106-93-40.02815Dibromomethane74-95-30.11152,4-D (2,4-Dichlorophenoxyacetic acid)94-75-70.7210o,p'-DDD53-19-00.0230.087p,p'-DDD72-54-80.0230.087o,p'-DDE3424-82-60.0310.087p,p'-DDE72-55-90.0310.087o,p'-DDT789-02-60.00390.087p,p'-DDT50-29-30.00390.087Dibenz(a,h)anthracene53-70-30.0558.2Dibenz(a,e)pyrene192-65-40.061NAM-Dichlorobenzene541-73-10.0366.0o-Dichlorobenzene95-50-10.0886.0p-Dichlorobenzene106-46-

70.0906.0Dichlorodifluoromethane75-71-80.237.21,1-Dichloroethane75-34-
30.0596.01,2-Dichloroethane107-06-20.216.01,1-Dichloroethylene75-35-
40.0256.0trans-1,2-Dichloroethylene156-60-50.054302,4-Dichlorophenol120-83-
20.044142,6-Dichlorophenol87-65-00.044141,2-Dichloropropane78-87-50.8518cis-1,3-
Dichloropropylene10061-01-50.03618trans-1,3-Dichloropropylene10061-02-
60.03618Dieldrin60-57-10.0170.132,4-Dimethylaniline (2,4-xylylidine)95-68-
10.0100.66Diethyl phthalate84-66-20.20282-4-Dimethyl phenol105-67-
90.03614Dimethyl phthalate131-11-30.04728Di-n-butyl phthalate84-74-20.057281,4-
Dinitrobenzene100-25-40.322.34,6-Dinitro-o-cresol534-52-10.281602,4-
Dinitrophenol51-28-50.121602,4-Dinitrotoluene121-14-20.321402,6-
Dinitrotoluene606-20-20.5528Di-n-octyl phthalate117-84-00.01728Di-n-
propyl nitrosamine621-64-70.40141,4-Dioxane123-91-112.0170Diphenylamine
(difficult to distinguish from diphenylnitrosamine)122-39-
40.92NADiphenylnitrosamine (difficult to distinguish from diphenylamine)86-30-
60.92NA1,2-Diphenylhydrazine122-66-70.087NADisulfoton298-04-40.0176.2Endosulfan
I939-98-80.0230.066Endosulfan II33213-6-50.0290.13Endosulfan sulfate1031-07-
80.0290.13Endrin72-20-80.00280.13Endrin aldehyde7421-93-40.0250.13Ethyl
acetate141-78-60.3433Ethyl cyanide (Propanenitrile)107-12-00.24360Ethyl
benzene100-41-40.05710Ethyl ether60-29-70.12160bis(2-Ethylhexyl) phthalate117-
81-70.2828Ethyl methacrylate97-63-20.14160Ethylene oxide75-21-80.12NAFamphur52-
85-70.01715Fluoranthene206-44-00.0683.4Fluorene86-73-70.0593.4Heptachlor76-44-
80.00120.0661,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-
HpCDD)35822-46-90.0000350.00251,2,3,4,6,7,8-Heptachlorodibenzofuran
(1,2,3,4,6,7,8-HpCDF)67562-39-40.0000350.00251,2,3,4,7,8,9-
Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)55673-89-70.0000350.0025Heptachlor
epoxide1024-57-30.0160.066Hexachlorobenzene118-74-10.05510Hexachlorobutadiene87-
68-30.0555.6Hexachlorocyclopentadiene77-47-40.0572.4HxCDDs (All
Hexachlorodibenzo-p-dioxins)NA0.0000630.001HxCDFs (All
Hexachlorodibenzofurans)55684-94-10.0000630.001Hexachloroethane67-72-
10.05530Hexachloropropylene1888-71-70.03530Indeno (1,2,3-c,d) pyrene193-39-
50.00553.4Iodomethane74-88-40.1965Isobutyl alcohol78-83-15.6170Isodrin465-73-
60.0210.066Isosafrole120-58-10.0812.6Kepone143-50-
80.00110.13Methacrylonitrile126-98-70.2484Methanol67-56-15.6NAMethapyrilene91-
80-50.0811.5Methoxychlor72-43-50.250.183-Methylcholanthrene56-49-50.0055154,4-
Methylene bis(2-chloroaniline)101-14-40.5030Methylene chloride75-09-
20.08930Methyl ethyl ketone78-93-30.2836Methyl isobutyl ketone108-10-
10.1433Methyl methacrylate80-62-60.14160Methyl methansulfonate66-27-
30.018NAMethyl parathion298-00-00.0144.6Naphthalene91-20-30.0595.62-
Naphthylamine91-59-80.52NAp-Nitroaniline100-01-60.02828Nitrobenzene98-95-
30.068145-Nitro-o-toluidine99-55-80.3228p-Nitrophenol100-02-70.1229N-
Nitrosodiethylamine55-18-50.4028N-Nitrosodimethylamine62-75-90.40NAN-Nitroso-di-
n-butylamine924-16-30.4017N-Nitrosomethylethylamine10595-95-60.402.3N-
Nitrosomorpholine59-89-20.402.3N-Nitrosopiperidine100-75-40.01335N-
Nitrosopyrrolidine930-55-20.013351,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin
(1,2,3,4,6,7,8,9-OCDD)3268-87-90.0000630.0025Parathion56-38-20.0144.6Total PCBs
(sum of all PCB isomers, or all Aroclors)1336-36-30.1010Pentachlorobenzene608-
93-50.05510PeCDDs (All Pentachlorodibenzo-p-dioxins)36088-22-
90.0000630.001PeCDFs (All Pentachlorodibenzofurans)30402-15-
40.0000350.001Pentachloronitrobenzene82-68-80.0554.8Pentachlorophenol87-86-
50.0897.4Phenacetin62-44-20.08116Phenanthrene85-01-80.0595.6Phenol108-95-
20.0396.21,3-Phenylenediamine108-45-20.0100.66Phorate298-02-20.0214.6Phthalic
anhydride85-44-90.055NAPronamide23950-58-50.0931.5Pyrene129-00-
00.0678.2Pyridine110-86-10.01416Safrole94-59-70.08122Silvex (2,4,5-TP)93-72-
10.727.92,4,5-T93-76-50.727.91,2,4,5-Tetrachlorobenzene95-94-30.05514TCDDs (All
Tetrachlorodibenzo-p-dioxins)41903-57-50.0000630.001TCDFs (All
Tetrachlorodibenzofurans)55722-27-50.0000630.0011,1,1,2-Tetrachloroethane630-20-
60.0576.01,1,2,2-Tetrachloroethane79-34-60.0576.0Tetrachloroethylene127-18-

40.0566.02,3,4,6-Tetrachlorophenol158-90-20.0307.4Toluene108-88-
30.08010Toxaphene8001-35-20.00952.6Bromoform (Tribromomethane)75-25-
20.63151,2,4-Trichlorobenzene120-82-10.055191,1,1-Trichloroethane71-55-
60.0546.01,1,2-Trichloroethane79-00-50.0546.0Trichloroethylene79-01-
60.0546.0Trichloromonofluoromethane75-69-40.020302,4,5-Trichlorophenol95-95-
40.187.42,4,6-Trichlorophenol88-06-20.0357.41,2,3-Trichloropropane96-18-
40.85301,1,2-Trichloro-1,2,2-trifluoroethane76-13-10.05730tris(2,3-
Dibromopropyl) phosphate126-72-70.11NAVinyl chloride75-01-40.276.0Xylenes-mixed
isomers
(sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Antimony7440-36-
01.91.15 mg/l TCLP Arsenic7440-38-21.45.0 mg/l TCLP Barium7440-39-31.221 mg/l
TCLP Beryllium7440-41-70.82NACadmium7440-43-90.690.11 mg/l TCLP Chromium
(Total)7440-47-32.770.60 mg/l TCLP Cyanides (Total)757-12-51.2590Cyanides
(Amenable)757-12-50.86NAFluoride16964-48-835NALead7439-92-10.690.75 mg/l
TCLP Mercury7439-97-60.150.025 mg/l TCLP Nickel7440-02-03.9811 mg/l
TCLP Selenium7782-49-20.825.7 mg/l TCLP Silver7440-22-40.430.14 mg/l
TCLP Sulfide8496-25-814NATHallium7440-28-01.4NAVanadium7440-62-24.3NA
K001

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

Naphthalene91-20-30.0595.6Pentachlorophenol87-86-50.0897.4Phenanthrene85-01-
80.0595.6Pyrene129-00-00.0678.2Toluene108-88-30.08010Xylenes-mixed isomers
(sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Lead7439-92-10.690.75
mg/l TCLP
K002

Wastewater treatment sludge from the production of chrome yellow and orange
pigments.

Chromium (Total)7440-47-32.770.60 mg/l TCLP Lead7439-92-10.690.75 mg/l TCLP
K003

Wastewater treatment sludge from the production of molybdate orange pigments.

Chromium (Total)7440-47-32.770.60 mg/l TCLP Lead7439-92-10.690.75 mg/l TCLP
K004

Wastewater treatment sludge from the production of zinc yellow pigments.

Chromium (Total)7440-47-32.770.60 mg/l TCLP Lead7439-92-10.690.75 mg/l TCLP
K005

Wastewater treatment sludge from the production of chrome green pigments.

Chromium (Total)7440-47-32.770.60 mg/l TCLP Lead7439-92-10.690.75 mg/l
TCLP Cyanides (Total)757-12-51.2590
K006

Wastewater treatment sludge from the production of chrome oxide green pigments
(anhydrous).

Chromium (Total)7440-47-32.770.60 mg/l TCLP Lead7439-92-10.690.75 mg/l TCLP
K006

Wastewater treatment sludge from the production of chrome oxide green pigments (hydrated).

Chromium (Total) 7440-47-32.770.60 mg/l TCLPLead 7439-92-10.69NA
K007

Wastewater treatment sludge from the production of iron blue pigments.

Chromium (Total) 7440-47-32.770.60 mg/l TCLPLead 7439-92-10.690.75 mg/l
TCLPCyanides (Total) 757-12-51.2590
K008

Oven residue from the production of chrome oxide green pigments.

Chromium (Total) 7440-47-32.770.60 mg/l TCLPLead 7439-92-10.690.75 mg/l TCLP
K009

Distillation bottoms from the production of acetaldehyde from ethylene.

Chloroform 67-66-30.0466.0
K010

Distillation side cuts from the production of acetaldehyde from ethylene.

Chloroform 67-66-30.0466.0
K011

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

Acetonitrile 75-05-85.638 Acrylonitrile 107-13-10.2484 Acrylamide 79-06-
11923 Benzene 71-43-20.1410 Cyanide (Total) 57-12-51.2590
K013

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

Acetonitrile 75-05-85.638 Acrylonitrile 107-13-10.2484 Acrylamide 79-06-
11923 Benzene 71-43-20.1410 Cyanide (Total) 57-12-51.2590
K014

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

Acetonitrile 75-05-85.638 Acrylonitrile 107-13-10.2484 Acrylamide 79-06-
11923 Benzene 71-43-20.1410 Cyanide (Total) 57-12-51.2590
K015

Still bottoms from the distillation of benzyl chloride.

Anthracene 120-12-70.0593.4 Benzal chloride 98-87-30.0556.0 Benzo(b) fluoranthene
(difficult to distinguish from benzo(k) fluoranthene) 205-99-
20.116.8 Benzo(k) fluoranthene (difficult to distinguish from
benzo(b) fluoranthene) 207-08-90.116.8 Phenanthrene 85-01-80.0595.6 Toluene 108-88-
30.08010 Chromium (Total) 7440-47-32.770.60 mg/l TCLP Nickel 7440-02-03.9811 mg/l
TCLP
K016

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

Hexachlorobenzene118-74-10.05510Hexachlorobutadiene87-68-
30.0555.6Hexachlorocyclopentadiene77-47-40.0572.4Hexachloroethane67-72-
10.05530Tetrachloroethylene127-18-40.0566.0
K017

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

bis(2-Chloroethyl)ether111-44-40.0336.01,2-Dichloropropane78-87-50.85181,2,3-
Trichloropropane96-18-40.8530
K018

Heavy ends from the fractionation column in ethyl chloride production.

Chloroethane75-00-30.276.0Chloromethane74-87-30.19NA1,1-Dichloroethane75-34-
30.0596.01,2-Dichloroethane107-06-20.216.0Hexachlorobenzene118-74-
10.05510Hexachlorobutadiene87-68-30.0555.6Hexachloroethane67-72-
10.05530Pentachloroethane76-01-7NA6.01,1,1-Trichloroethane71-55-60.0546.0
K019

Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.

bis(2-Chloroethyl)ether111-44-40.0336.0Chlorobenzene108-90-
70.0576.0Chloroform67-66-30.0466.0p-Dichlorobenzene106-46-70.090NA1,2-
Dichloroethane107-06-20.216.0Fluorene86-73-70.059NAHexachloroethane67-72-
10.05530Naphthalene91-20-30.0595.6Phenanthrene85-01-80.0595.61,2,4,5-
Tetrachlorobenzene95-94-30.055NATetrachloroethylene127-18-40.0566.01,2,4-
Trichlorobenzene120-82-10.055191,1,1-Trichloroethane71-55-60.0546.0
K020

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

1,2-Dichloroethane107-06-20.216.01,1,2,2-Tetrachloroethane79-34-
60.0576.0Tetrachloroethylene127-18-40.0566.0
K021

Aqueous spent antimony catalyst waste from fluoromethanes production.

Carbon tetrachloride56-23-50.0576.0Chloroform67-66-30.0466.0Antimony7440-36-
01.91.15 mg/l TCLP
K022

Distillation bottom tars from the production of phenol or acetone from cumene.

Toluene108-88-30.08010Acetophenone96-86-20.0109.7Diphenylamine (difficult to
distinguish from diphenylnitrosamine)122-39-40.9213Diphenylnitrosamine
(difficult to distinguish from diphenylamine)86-30-60.9213Phenol108-95-
20.0396.2Chromium (Total)7440-47-32.770.60 mg/l TCLPNickel7440-02-03.9811 mg/l
TCLP
K023

Distillation light ends from the production of phthalic anhydride from naphthalene.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)100-21-00.05528
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)85-44-90.05528
K024

Distillation bottoms from the production of phthalic anhydride from naphthalene.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)100-21-00.05528
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)85-44-90.05528
K025

Distillation bottoms from the production of nitrobenzene by the nitration of benzene.

NANALLEXT fb SSTRP fb CARBN; or CMBSTCMBST
K026

Stripping still tails from the production of methyl ethyl pyridines.

NANACMBSTCMBST
K027

Centrifuge and distillation residues from toluene diisocyanate production.

NANACARBN; or CMBSTCMBST
K028

Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.

1,1-Dichloroethane75-34-30.0596.0
trans-1,2-Dichloroethylene156-60-50.05430
Hexachlorobutadiene87-68-30.0555.6
Hexachloroethane67-72-10.05530
Pentachloroethane76-01-7NA6.01,1,1,2-Tetrachloroethane630-20-60.0576.0
1,1,2,2-Tetrachloroethane79-34-60.0576.0
Tetrachloroethylene127-18-40.0566.0
1,1,1-Trichloroethane71-55-60.0546.0
1,1,2-Trichloroethane79-00-50.0546.0
Cadmium7440-43-90.69NA
Chromium (Total)7440-47-32.770.60 mg/l
TCLP
Lead7439-92-10.690.75 mg/l
TCLP
Nickel7440-02-03.9811 mg/l
TCLP
K029

Waste from the product steam stripper in the production of 1,1,1-trichloroethane.

Chloroform67-66-30.0466.0
1,2-Dichloroethane107-06-20.216.0
1,1-Dichloroethylene75-35-40.0256.0
1,1,1-Trichloroethane71-55-60.0546.0
Vinyl chloride75-01-40.276.0
K030

Column bodies or heavy ends from the combined production of trichloroethylene and perchloroethylene.

o-Dichlorobenzene95-50-10.088NA
p-Dichlorobenzene106-46-70.090NA
Hexachlorobutadiene87-68-30.0555.6
Hexachloroethane67-72-10.05530
Hexachloropropylene1888-71-7NA
30Pentachlorobenzene608-93-5NA
10Pentachloroethane76-01-7NA6.01,2,4,5-Tetrachlorobenzene95-94-30.05514
Tetrachloroethylene127-18-40.0566.0
1,2,4-Trichlorobenzene120-82-10.05519
K031

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

Arsenic7440-38-21.45.0 mg/l TCLP

K032

Wastewater treatment sludge from the production of chlordane.

Hexachlorocyclopentadiene77-47-40.0572.4Chlordane (and ? isomers)57-74-90.00330.26Heptachlor76-44-80.00120.066Heptachlor epoxide1024-57-30.0160.066
K033

Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.

Hexachlorocyclopentadiene77-47-40.0572.4

K034

Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.

Hexachlorocyclopentadiene77-47-40.0572.4

K035

Wastewater treatment sludges generated in the production of creosote.

Acenaphthene83-32-9NA3.4Anthracene120-12-7NA3.4Benz(a)anthracene56-55-30.0593.4Benzo(a)pyrene50-32-80.0613.4Chrysene218-01-90.0593.4o-Cresol95-48-70.115.6m-Cresol
(difficult to distinguish from p-cresol)108-39-40.775.6p-Cresol
(difficult to distinguish from m-cresol)106-44-50.775.6Dibenz(a,h)anthracene53-70-3NA8.2Fluoranthene206-44-00.0683.4Fluorene86-73-7NA3.4Indeno(1,2,3-cd)pyrene193-39-5NA3.4Naphthalene91-20-30.0595.6Phenanthrene85-01-80.0595.6Phenol108-95-20.0396.2Pyrene129-00-00.0678.2
K036

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

Disulfoton298-04-40.0176.2

K037

Wastewater treatment sludges from the production of disulfoton.

Disulfoton298-04-40.0176.2Toluene108-88-30.08010

K038

Wastewater from the washing and stripping of phorate production.

Phorate298-02-20.0214.6

K039

Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.

NANACARBN; or CMBSTCMBST

K040

Wastewater treatment sludge from the production of phorate.

Phorate298-02-20.0214.6
K041

Wastewater treatment sludge from the production of toxaphene.

Toxaphene8001-35-20.00952.6
K042

Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.

o-Dichlorobenzene95-50-10.0886.0p-Dichlorobenzene106-46-70.0906.0Pentachlorobenzene608-93-50.055101,2,4,5-Tetrachlorobenzene95-94-30.055141,2,4-Trichlorobenzene120-82-10.05519
K043

2,6-Dichlorophenol waste from the production of 2,4-D.

2,4-Dichlorophenol120-83-20.044142,6-Dichlorophenol187-65-00.044142,4,5-Trichlorophenol95-95-40.187.42,4,6-Trichlorophenol88-06-20.0357.42,3,4,6-Tetrachlorophenol58-90-20.0307.4Pentachlorophenol87-86-50.0897.4Tetrachloroethylene127-18-40.0566.0HxCDDs (All Hexachlorodibenzo-p-dioxins)NA0.0000630.001HxCDFs (All Hexachlorodibenzofurans)55684-94-10.0000630.001PeCDDs (All Pentachlorodibenzo-p-dioxins)36088-22-90.0000630.001PeCDFs (All Pentachlorodibenzofurans)30402-15-40.0000350.001TCDDs (All Tetrachlorodibenzo-p-dioxins)41903-57-50.0000630.001TCDFs (All Tetrachlorodibenzofurans)55722-27-50.0000630.001
K044

Wastewater treatment sludges from the manufacturing and processing of explosives.

NANAEACTDEACT
K045

Spent carbon from the treatment of wastewater containing explosives.

NANAEACTDEACT
K046

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

Lead7439-92-10.690.75 mg/l TCLP
K047

Pink or red water from TNT operations.

NANAEACTDEACT
K048

Dissolved air flotation (DAF) float from the petroleum refining industry.

Benzene71-43-20.1410Benzo(a)pyrene50-32-80.0613.4bis(2-Ethylhexyl) phthalate117-81-70.2828Chrysene218-01-90.0593.4Di-n-butyl phthalate84-74-20.05728Ethylbenzene100-41-40.05710Fluorene86-73-70.059NANaphthalene91-20-30.0595.6Phenanthrene85-01-80.0595.6Phenol108-95-20.0396.2Pyrene129-00-00.0678.2Toluene108-88-30.08010Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Chromium (Total)7440-47-32.770.60 mg/l TCLPCyanides (Total)757-12-51.2590Lead7439-92-10.69NANickel7440-02-0NA11 mg/l TCLP
K049

Slop oil emulsion solids from the petroleum refining industry.

Anthracene120-12-70.0593.4Benzene71-43-20.1410Benzo(a)pyrene50-32-80.0613.4bis(2-Ethylhexyl) phthalate117-81-70.2828Carbon disulfide75-15-03.8NACHrysene2218-01-90.0593.42,4-Dimethylphenol105-67-90.036NAEthylbenzene100-41-40.05710Naphthalene91-20-30.0595.6Phenanthrene85-01-80.0595.6Phenol108-95-20.0396.2Pyrene129-00-00.0678.2Toluene108-88-30.08010Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Cyanides (Total)757-12-51.2590Chromium (Total)7440-47-32.770.60 mg/l TCLPLead7439-92-10.69NANickel7440-02-0NA11 mg/l TCLP
K050

Heat exchanger bundle cleaning sludge from the petroleum refining industry.

Benzo(a)pyrene50-32-80.0613.4Phenol108-95-20.0396.2Cyanides (Total)757-12-51.2590Chromium (Total)7440-47-32.770.60 mg/l TCLPLead7439-92-10.69NANickel7440-02-0NA11 mg/l TCLP
K051

API separator sludge from the petroleum refining industry.

Acenaphthene83-32-90.059NAAnthracene120-12-70.0593.4Benz(a)anthracene56-55-30.0593.4Benzene71-43-20.1410Benzo(a)pyrene50-32-80.0613.4bis(2-Ethylhexyl) phthalate117-81-70.2828Chrysene2218-01-90.0593.4Di-n-butyl phthalate105-67-90.05728Ethylbenzene100-41-40.05710Fluorene86-73-70.059NANaphthalene91-20-30.0595.6Phenanthrene85-01-80.0595.6Phenol108-95-20.0396.2Pyrene129-00-00.0678.2Toluene108-88-30.0810Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Cyanides (Total)757-12-51.2590Chromium (Total)7440-47-32.770.60 mg/l TCLPLead7439-92-10.69NANickel7440-02-0NA11 mg/l TCLP
K052

Tank bottoms (leaded) from the petroleum refining industry.

Benzene71-43-20.1410Benzo(a)pyrene50-32-80.0613.4o-Cresol95-48-70.115.6m-Cresol (difficult to distinguish from p-cresol)108-39-40.775.6p-Cresol (difficult to distinguish from m-cresol)106-44-50.775.62,4-Dimethylphenol105-67-90.036NAEthylbenzene100-41-40.05710Naphthalene91-20-30.0595.6Phenanthrene85-01-80.0595.6Phenol108-95-20.0396.2Toluene108-88-30.0810Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Chromium (Total)7440-47-32.770.60 mg/l TCLPCyanides (Total)757-12-51.2590Lead7439-92-10.69NANickel7440-02-0NA11 mg/l TCLP
K060

Ammonia still lime sludge from coking operations.

Benzene71-43-20.1410Benzo(a)pyrene50-32-80.0613.4Naphthalene91-20-
30.0595.6Phenol108-95-20.0396.2Cyanides (Total)757-12-51.2590
K061

Emission control dust or sludge from the primary production of steel in electric furnaces.

Antimony7440-36-0NA1.15 mg/l TCLPArsenic7440-38-2NA5.0 mg/l TCLPBarium7440-39-
3NA21 mg/l TCLPBeryllium7440-41-7NA1.22 mg/l TCLPCadmium7440-43-90.690.11 mg/l
TCLPChromium (Total)7440-47-32.770.60 mg/l TCLPLead7439-92-10.690.75 mg/l
TCLPMercury7439-97-6NA0.025 mg/l TCLPNickel7440-02-03.9811 mg/l
TCLPSelenium7782-49-2NA5.7 mg/l TCLPSilver7440-22-4NA0.14 mg/l TCLPThallium7440-
28-0NA0.20 mg/l TCLPZinc7440-66-6NA4.3 mg/l TCLP
K062

Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).

Chromium (Total)7440-47-32.770.60 mg/l TCLPLead7439-92-10.690.75 mg/l
TCLPNickel7440-02-03.98NA
K069

Emission control dust or sludge from secondary lead smelting - Calcium sulfate (Low Lead) Subcategory.

Cadmium7440-43-90.690.11 mg/l TCLPLead7439-92-10.690.75 mg/l TCLP
K069

Emission control dust or sludge from secondary lead smelting - Non-Calcium sulfate (High Lead) Subcategory.

NANANARLEAD
K071

K071 (Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used) nonwastewaters that are residues from RMERC.

Mercury7439-97-6NA0.20 mg/l TCLP
K071

K071 (Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used) nonwastewaters that are not residues from RMERC.

Mercury7439-97-6NA0.025 mg/l TCLP
K071

All K071 wastewaters.

Mercury7439-97-60.15NA
K073

Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.

Carbon tetrachloride56-23-50.0576.0Chloroform67-66-30.0466.0Hexachloroethane67-72-10.05530Tetrachloroethylene127-18-40.0566.01,1,1-Trichloroethane71-55-60.0546.0
K083

Distillation bottoms from aniline production.

Aniline62-53-30.8114Benzene71-43-20.1410Cyclohexanone108-94-10.36NADiphenylamine (difficult to distinguish from diphenylnitrosamine)122-39-40.9213Diphenylnitrosamine (difficult to distinguish from diphenylamine)86-30-60.9213Nitrobenzene98-95-30.06814Phenol108-95-20.0396.2Nickel7440-02-03.9811 mg/l TCLP
K084

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

Arsenic7440-38-21.45.0 mg/l TCLP
K085

Distillation or fractionation column bottoms from the production of chlorobenzenes.

Benzene71-43-20.1410Chlorobenzene108-90-70.0576.0m-Dichlorobenzene541-73-10.0366.0o-Dichlorobenzene95-50-10.0886.0p-Dichlorobenzene106-46-70.0906.0Hexachlorobenzene118-74-10.05510Total PCBs (sum of all PCB isomers, or all Aroclors)1336-36-30.1010Pentachlorobenzene608-93-50.055101,2,4,5-Tetrachlorobenzene95-94-30.055141,2,4-Trichlorobenzene120-82-10.05519
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.

Acetone67-64-10.28160Acetophenone96-86-20.0109.7bis(2-Ethylhexyl) phthalate117-81-70.2828n-Butyl alcohol71-36-35.62.6Butylbenzyl phthalate85-68-70.01728Cyclohexanone108-94-10.36NAo-Dichlorobenzene95-50-10.0886.0Diethyl phthalate84-66-20.2028Dimethyl phthalate131-11-30.04728Di-n-butyl phthalate84-74-20.05728Di-n-octyl phthalate117-84-00.01728Ethyl acetate141-78-60.3433Ethylbenzene100-41-40.05710Methanol67-56-15.6NAMethyl ethyl ketone78-93-30.2836Methyl isobutyl ketone108-10-10.1433Methylene chloride75-09-20.08930Naphthalene91-20-30.0595.6Nitrobenzene98-95-30.06814Toluene108-88-30.080101,1,1-Trichloroethane71-55-60.0546.0Trichloroethylene79-01-60.0546.0Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Chromium (Total)7440-47-32.770.60 mg/l TCLPCyanides (Total)757-12-51.2590Lead7439-92-10.690.75 mg/l TCLP
K087

Decanter tank tar sludge from coking operations.

Acenaphthylene208-96-80.0593.4Benzene71-43-20.1410Chrysene218-01-90.0593.4Fluoranthene206-44-00.0683.4Indeno(1,2,3-cd)pyrene193-39-50.00553.4Naphthalene91-20-30.0595.6Phenanthrene85-01-80.0595.6Toluene108-88-30.08010Xylenes-mixed isomers

(sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Lead7439-92-10.690.75
mg/l TCLP
K088

Spent potliners from primary aluminum reduction.

Acenaphthene83-32-90.0593.4Anthracene120-12-70.0593.4Benz(a)anthracene56-55-
30.0593.4Benzo(a)pyrene50-32-80.0613.4Benzo(b)fluoranthene205-99-
20.116.8Benzo(k)fluoranthene207-08-90.116.8Benzo(g,h,i)perylene191-24-
20.00551.8Chrysene218-01-90.0593.4Dibenz(a,h)anthracene53-70-
30.0558.2Fluoranthene206-44-00.0683.4Indeno(1,2,3-c,d)pyreneIndeno(1,2,3-l,2,3-
cd)pyrene
193-39-50.00553.4Phenanthrene85-01-80.0595.6Pyrene129-00-00.0678.2Antimony7440-
36-01.91.15 mg/l TCLPArsenic7440-38-21.426.1 mg/lBarium7440-39-31.221 mg/l
TCLPBeryllium7440-41-70.821.22 mg/l TCLPCadmium7440-43-90.690.11 mg/l
TCLPChromium (Total)7440-47-32.770.60 mg/l TCLPLead7439-92-10.690.75 mg/l
TCLPMercury7439-97-60.150.025 mg/l TCLPNickel7440-02-03.9811 mg/l
TCLPSelenium7782-49-20.825.7 mg/l TCLPSilver7440-22-40.430.14 mg/l TCLPCyanide
(Total)757-12-51.2590Cyanide (Amenable)757-12-50.8630Fluoridel6984-48-835NA
K093

Distillation light ends from the production of phthalic anhydride from ortho-
xylene.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)100-21-
00.05528Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)85-
44-90.05528
K094

Distillation bottoms from the production of phthalic anhydride from ortho-
xylene.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)100-21-
00.05528Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)85-
44-90.05528
K095

Distillation bottoms from the production of 1,1,1-trichloroethane.

Hexachloroethane67-72-10.05530Pentachloroethane76-01-70.0556.01,1,1,2-
Tetrachloroethane630-20-60.0576.01,1,2,2-Tetrachloroethane79-34-
60.0576.0Tetrachloroethylene127-18-40.0566.01,1,2-Trichloroethane79-00-
50.0546.0Trichloroethylene79-01-60.0546.0
K096

Heavy ends from the heavy ends column from the production of 1,1,1-
trichloroethane.

m-Dichlorobenzene541-73-10.0366.0Pentachloroethane76-01-70.0556.01,1,1,2-
Tetrachloroethane630-20-60.0576.01,1,2,2-Tetrachloroethane79-34-
60.0576.0Tetrachloroethylene127-18-40.0566.01,2,4-Trichlorobenzene120-82-
10.055191,1,2-Trichloroethane79-00-50.0546.0Trichloroethylene79-01-60.0546.0
K097

Vacuum stripper discharge from the chlordane chlorinator in the production of
chlordane.

Chlordane (and isomers)57-74-90.00330.26Heptachlor76-44-80.00120.066Heptachlor
epoxide1024-57-30.0160.066Hexachlorocyclopentadiene77-47-40.0572.4
K098

Untreated process wastewater from the production of toxaphene.

Toxaphene8001-35-20.00952.6
K099

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

2,4-Dichlorophenoxyacetic acid94-75-70.7210HxCDDs (All Hexachlorodibenzo-p-
dioxins)NA0.0000630.001HxCDFs (All Hexachlorodibenzofurans)55684-94-
10.0000630.001PeCDDs (All Pentachlorodibenzo-p-dioxins)36088-22-
90.0000630.001PeCDFs (All Pentachlorodibenzofurans)30402-15-40.0000350.001TCDDs
(All Tetrachlorodibenzo-p-dioxins)41903-57-50.0000630.001TCDFs (All
Tetrachlorodibenzofurans)55722-27-50.0000630.001
K100

Waste leaching solution from acid leaching of emission control dust or sludge
from secondary lead smelting.

Cadmium7440-43-90.690.11 mg/l TCLPChromium (Total)7440-47-32.770.60 mg/l
TCLPLead7439-92-10.690.75 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-Nitroaniline88-74-40.2714Arsenic7440-38-21.45.0 mg/l TCLPCadmium7440-43-
90.69NALead7439-92-10.69NAMercury7439-97-60.15NA
K102

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

o-Nitrophenol88-75-50.02813Arsenic7440-38-21.45.0 mg/l TCLPCadmium7440-43-
90.69NALead7439-92-10.69NAMercury7439-97-60.15NA
K103

Process residues from aniline extraction from the production of aniline.

Aniline62-53-30.8114Benzene71-43-20.14102,4-Dinitrophenol51-28-
50.12160Nitrobenzene98-95-30.06814Phenol108-95-20.0396.2
K104

Combined wastewater streams generated from nitrobenzene or aniline production.

Aniline62-53-30.8114Benzene71-43-20.14102,4-Dinitrophenol51-28-
50.12160Nitrobenzene98-95-30.06814Phenol108-95-20.0396.2Cyanides (Total)757-12-
51.2590
K105

Separated aqueous stream from the reactor product washing step in the production
of chlorobenzenes.

Benzene71-43-20.1410Chlorobenzene108-90-70.0576.02-Chlorophenol95-57-80.0445.7o-Dichlorobenzene95-50-10.0886.0p-Dichlorobenzene106-46-70.0906.0Phenol108-95-20.0396.22,4,5-Trichlorophenol95-95-40.187.42,4,6-Trichlorophenol88-06-20.0357.4
K106

K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain greater than or equal to 260 mg/kg total mercury.

Mercury7439-97-6NARMERC
K106

K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain less than 260 mg/kg total mercury that are residues from RMERC.

Mercury7439-97-6NA0.20 mg/l TCLP
K106

Other K106 nonwastewaters that contain less than 260 mg/kg total mercury and are not residues from RMERC.

Mercury7439-97-6NA0.025 mg/l TCLP
K106

All K106 wastewaters.

Mercury7439-97-60.15NA
K107

Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NANACMBST; or CHOXD fb CARBN; or BIODG fb CARBNCMBST
K108

Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NANACMBST; or CHOXD fb CARBN; or BIODG fb CARBNCMBST
K109

Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NANACMBST; or CHOXD fb CARBN; or BIODG fb CARBNCMBST
K110

Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NANACMBST; or CHOXD fb CARBN; or BIODG fb CARBNCMBST
K111

Product washwaters from the production of dinitrotoluene via nitration of toluene.

2,4-Dinitrotoluene~~121-1-1121-14-20-321402,62~~
0.321402,6-Dinitrotoluene606-20-20.5528
K112

Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.

NANACMBST; or CHOXD fb CARBN; or BIODG fb CARBNCMBST
K113

Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

NANACARBN; or CMBSTCMBST
K114

Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

NANACARBN; or CMBSTCMBST
K115

Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

Nickel17440-02-03.9811 mg/l TCLPNANACARBN; or CMBSTCMBST
K116

Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.

NANACARBN; or CMBSTCMBST
K117

Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromomethane)74-83-90.1115Chloroform67-66-30.0466.0Ethylene dibromide (1,2-Dibromoethane)106-93-40.02815
K118

Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromomethane)74-83-90.1115Chloroform67-66-30.0466.0Ethylene dibromide (1,2-Dibromoethane)106-93-40.02815
K123

Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.

NANACMBST; or CHOXD fb (BIODG or CARBN)CMBST
K124

Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.

NANACMBST; or CHOXD fb (BIODG or CARBN)CMBST
K125

Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.

NANACMBST; or CHOXD fb (BIODG or CARBN)CMBST
K126

Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.

NANACMBST; or CHOXD fb (BIODG or CARBN)CMBST
K131

Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.

Methyl bromide (Bromomethane)74-83-90.1115
K132

Spent absorbent and wastewater separator solids from the production of methyl bromide.

Methyl bromide (Bromomethane)74-83-90.1115
K136

Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromomethane)74-83-90.1115Chloroform67-66-30.0466.0Ethylene dibromide (1,2-Dibromoethane)106-93-40.02815
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 (decanter tank tar sludge from coking operations).

Benzene71-43-20.1410Benz(a)anthracene56-55-30.0593.4Benzo(a)pyrene50-2-80.0613.4Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)205-99-20.116.8Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)207-08-90.116.8Chrysene218-01-90.0593.4Dibenz(a,h)anthracene53-70-30.0558.2Indeno(1,2,3-cd)pyrene193-39-50.00553.4
K142

Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.

Benzene71-43-20.1410Benz(a)anthracene56-55-30.0593.4Benzo(a)pyrene50-32-80.0613.4Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)205-99-20.116.8Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)207-08-90.116.8Chrysene218-01-90.0593.4Dibenz(a,h)anthracene53-70-30.0558.2Indeno(1,2,3-cd)pyrene193-39-50.00553.4

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.

Benzene71-43-20.1410Benz(a)anthracene56-55-30.0593.4Benzo(a)pyrene50-32-80.0613.4Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)205-99-20.116.8Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)207-08-90.116.8Chrysene218-01-90.0593.4
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.

Benzene71-43-20.1410Benz(a)anthracene56-55-30.0593.4Benzo(a)pyrene50-32-80.0613.4Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)205-99-20.116.8Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)207-08-90.116.8Chrysene218-01-90.0593.4Dibenz(a,h)anthracene53-70-30.0558.2
K145

Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.

Benzene71-43-20.1410Benz(a)anthracene56-55-30.0593.4Benzo(a)pyrene50-32-80.0613.4Chrysene218-01-90.0593.4Dibenz(a,h)anthracene53-70-30.0558.2Naphthalene91-20-30.0595.6
K147

Tar storage tank residues from coal tar refining.

Benzene71-43-20.1410Benz(a)anthracene56-55-30.0593.4Benzo(a)pyrene50-32-80.0613.4Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)205-99-20.116.8Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)207-08-90.116.8Chrysene218-01-90.0593.4Dibenz(a,h)anthracene53-70-30.0558.2Indeno(1,2,3-cd)pyrene193-39-50.00553.4
K148

Residues from coal tar distillation, including, but not limited to, still bottoms.

Benz(a)anthracene56-55-30.0593.4Benzo(a)pyrene50-32-80.0613.4Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)205-99-20.116.8Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)207-08-90.116.8Chrysene218-01-90.0593.4Dibenz(a,h)anthracene53-70-30.0558.2Indeno(1,2,3-cd)pyrene193-39-50.00553.4
K149

Distillation bottoms from the production of - (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillations of benzyl chloride.)

Chlorobenzene108-90-70.0576.0Chloroform67-66-30.0466.0Chloromethane74-87-30.1930p-Dichlorobenzene106-46-70.0906.0Hexachlorobenzene118-74-10.05510Pentachlorobenzene608-93-50.055101,2,4,5-Tetrachlorobenzene95-94-30.05514Toluene108-88-30.08010

K150

Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of - (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

Carbon tetrachloride56-23-50.0576.0Chloroform67-66-30.0466.0Chloromethane74-87-30.1930p-Dichlorobenzene106-46-70.0906.0Hexachlorobenzene118-74-10.05510Pentachlorobenzene608-93-50.055101,2,4,5-Tetrachlorobenzene95-94-30.055141,1,2,2-Tetrachloroethane79-34-50.0576.0Tetrachloroethylene127-18-40.0566.01,2,4-Trichlorobenzene120-82-10.05519

K151

Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of - (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

Benzene71-43-20.1410Carbon tetrachloride56-23-50.0576.0Chloroform67-66-30.0466.0Hexachlorobenzene118-74-10.05510Pentachlorobenzene608-93-50.055101,2,4,5-Tetrachlorobenzene95-94-30.05514Tetrachloroethylene127-18-40.0566.0Toluene108-88-30.08010

K156

Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes.10

Acetonitrile75-05-85.61.8Acetophenone~~9698~~-86-2
~~98-86-20-0109-70.0109.7~~Aniline62-53-30.8114Benomyl17804-35-20.0561.4Benzene71-43-20.1410Carbaryl63-25-210.0060.14Carbenzadim10605-21-70.0561.4Carbofuran1563-66-20.0060.14Carbosulfan55285-14-80.0281.4Chlorobenzene108-90-70.0576.0Chloroform67-66-30.0466.0o-Dichlorobenzene95-50-10.0886.0Methomyl16752-77-50.0280.14Methylene chloride75-09-20.08930Methyl ethyl ketone78-93-30.2836Naphthalene91-20-30.0595.6Phenol108-95-20.0396.2Pyridine110-86-10.01416Toluene108-88-30.08010Triethylamine121-44-80.0811.5

K157

Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes.

Carbon tetrachloride56-23-50.0576.0Chloroform67-66-30.0466.0Chloromethane74-87-30.1930Methomyl16752-77-50.0280.14Methylene chloride75-09-20.08930Methyl ethyl ketone78-93-30.2836Pyridine110-86-10.01416Triethylamine121-44-80.0811.5

K158

Baghouse dusts and filter/separation solids from the production of carbamates and carbamoyl oximes.

Benomyl17804-35-20.0561.4Benzene71-43-20.1410Carbenzadim10605-21-70.0561.4Carbofuran1563-66-20.0060.14Carbosulfan55285-14-80.0281.4Chloroform67-66-30.0466.0Methylene chloride75-09-20.08930Phenol108-95-20.0396.2

K159

Organics from the treatment of thiocarbamate wastes.10

Benzene71-43-20.1410Butylate2008-41-50.0421.4EPTC (Eptam)759-94-40.0421.4Molinate2212-67-10.0421.4Pebulate1114-71-20.0421.4Vernolate1929-77-70.0421.4

K161

Purification solids (including filtration, evaporation, and centrifugation solids), baghouse dust and floor sweepings from the production of dithiocarbamate acids and their salts.

Antimony7440-36-01.91.1511Arsenic7440-38-21.45.011Carbon disulfide75-15-03.84.811Dithiocarbamates (total)137-30-40.02828Lead7439-92-10.690.7511Nickel7440-02-03.9811111Selenium7782-49-20.825.711

K169

Crude oil tank sediment from petroleum refining operations.

Benz(a)anthracene56-55-30.0593.4Benzene71-43-20.1410Benzo(g,h,i)perylene191-24-20.00551.8Chrysene218-01-90.0593.4Ethyl benzene100-41-40.05710Fluorene86-73-70.0593.4Naphthalene91-20-30.0595.6Phenanthrene81-05-80.0595.6Pyrene129-00-00.0678.2Toluene (Methyl Benzene)108-88-30.08010Xylenes (Total)1330-20-70.3230

K170

Clarified slurry oil sediment from petroleum refining operations.

Benz(a)anthracene56-55-30.0593.4Benzene71-43-20.1410Benzo(g,h,i)perylene191-24-20.00551.8Chrysene218-01-90.0593.4Dibenz(a,h)anthracene53-70-30.0558.2Ethyl benzene100-41-40.05710Fluorene86-73-70.0593.4Indeno(1,2,3,-cd)pyrene193-39-50.00553.4Naphthalene91-20-30.0595.6Phenanthrene81-05-80.0595.6Pyrene129-00-00.0678.2Toluene (Methyl Benzene)108-88-30.08010Xylenes (Total)1330-20-70.3230

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 media.)

Benz(a)anthracene56-55-30.0593.4Benzene71-43-20.1410Chrysene218-01-90.0593.4Ethyl benzene100-41-40.05710Naphthalene91-20-30.0595.6Phenanthrene81-05-80.0595.6Pyrene129-00-00.0678.2Toluene (Methyl Benzene)108-88-30.08010Xylenes (Total)1330-20-70.3230Arsenic7740-38-21.45 mg/l TCLPNickel7440-02-03.9811.0 mg/l TCLPVanadium7440-62-24.31.6 mg/l TCLPReactive sulfidesNADEACTDEACT

K172

Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors. (This listing does not include inert support media.)

Benzene71-43-20.1410Ethyl benzene100-41-40.05710Toluene (Methyl Benzene)108-88-30.08010Xylenes (Total)1330-20-70.3230Antimony7740-36-01.91.15 mg/l TCLPArsenic7740-38-21.45 mg/l TCLPNickel7440-02-03.9811.0 mg/l TCLPVanadium7440-62-24.31.6 mg/l TCLPReactive SulfidesNADEACTDEACT

K174

Wastewater treatment sludge from the production of ethylene dichloride or vinyl chloride monomer.

1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD) 35822-46-90.000035 or CMBST110.0025 or CMBST111,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF) 67562-39-40.000035 or CMBST110.0025 or CMBST111,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF) 55673-89-70.000035 or CMBST110.0025 or CMBST11All hexachlorodibenzo-p-dioxins (HxCDDs) 34465-46-80.000063 or CMBST110.001 or CMBST11All hexachlorodibenzofurans (HxCDFs) 55684-94-10.000063 or CMBST110.001 or CMBST111,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD) 3268-87-90.000063 or CMBST110.005 or CMBST111,2,3,4,6,7,8,9-Octachlorodibenzofuran (1,2,3,4,6,7,8,9-OCDF) 39001-02-00.000063 or CMBST110.005 or CMBST11All pentachlorodibenzo-p-dioxins (PeCDDs) 36088-22-90.000063 or CMBST110.001 or CMBST11All pentachlorodibenzofurans (PeCDFs) 30402-15-40.000035 or CMBST110.001 or CMBST11All tetrachlorodibenzo-p-dioxins (TCDDs) 41903-57-50.000063 or CMBST110.001 or CMBST11All tetrachlorodibenzofurans (TCDFs) 55722-27-50.000063 or CMBST110.001 or CMBST11Arsenic7440-36-01.45.0 mg/l TCLP
K175

Wastewater treatment sludge from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process.

Mercury127439-97-6NA0.025 mg/l TCLPPH12NpH ? 6.0
K175

All K175 wastewaters.

Mercury7439-97-60.15NA
K176

Baghouse filters from the production of antimony oxide, including filters from the production of intermediates e.g., antimony metal or crude antimony oxide).

Antimony7440-36-01.91.15 mg/l TCLPArsenic7440-38-21.45.0 mg/l TCLPCadmium7440-43-90.690.11 mg/l TCLPLead7439-92-10.690.75 mg/l TCLPMercury7439-97-60.150.025 mg/l TCLP
K177

Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide).

Antimony7440-36-01.91.15 mg/l TCLPArsenic7440-38-21.45.0 mg/l TCLPLead7439-92-10.690.75 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 (1,2,3,4,6,7,8-HpCDD) 35822-46-90.000035 or CMBST110.0025 or CMBST111,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF) 67562-39-40.000035 or CMBST110.0025 or CMBST111,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF) 55673-89-70.000035 or CMBST110.0025 or CMBST11HxCDDs (All Hexachlorodibenzo-p-dioxins) 34465-46-80.000063 or CMBST110.001 or CMBST11HxCDFs (All

Hexachlorodibenzofurans)55684-94-10.000063 or CMBST110.001 or
CMBST111,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD)3268-87-
90.000063 or CMBST110.005 or CMBST111,2,3,4,6,7,8,9-Octachlorodibenzofuran
(OCDF)39001-02-00.000063 or CMBST110.005 or CMBST11PeCDDs (All
Pentachlorodibenzo-p-dioxins)36088-22-90.000063 or CMBST110.001 or CMBST11PeCDFs
(All Pentachlorodibenzofurans)30402-15-40.000035 or CMBST110.001 or CMBST11TCDDs
(All Tetrachlorodibenzo-p-dioxins)41903-57-50.000063 or CMBST110.001 or
CMBST11TCDFs (All Tetrachlorodibenzofurans)55722-27-50.000063 or CMBST110.001 or
CMBST11Thallium7440-28-01.40.20 mg/l TCLP
K181

Nonwastewaters from the production of dyes or pigments (including nonwastewaters
commingled at the point of generation with nonwastewaters from other processes)
that, at the point of generation, contain mass loadings of any of the
constituents identified in Section 721.132(c) which are equal to or greater than
the corresponding Section 721.132(c) levels, as determined on a calendar-year
basis.

Aniline62-53-30.8114o-Anisidine (2-methoxyaniline)90-04-00.0100.664-
Chloroaniline106-47-80.4616p-Cresidine120-71-80.0100.662,4-Dimethylaniline (2,4-
xylidine)95-68-10.0100.661,2-Phenylenediamine95-54-5CMBST; or CHOXD fb (BIODG or
CARBN); or BIODG fb CARBNCMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb
CARBN1,3-Phenylenediamine108-45-20.0100.66
P001

Warfarin, & salts, when present at concentrations greater than 0.3 percent.

Warfarin81-81-2(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P002

1-Acetyl-2-thiourea.
1-Acetyl-2-thiourea591-08-2(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P003

Acrolein.

Acrolein107-02-80.29CMBST
P004

Aldrin.

Aldrin309-00-20.0210.066
P005

Allyl alcohol.

Allyl alcohol107-18-6(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P006

Aluminum phosphide.

Aluminum phosphide20859-73-8CHOXD; CHRED; or CMBSTCHOXD; CHRED; or CMBST
P007

5-Aminomethyl-3-isoxazolol.

5-Aminomethyl-3-isoxazolol2763-96-4(WETOX or CHOXD) fb CARBN; or CMBSTCMBST

P008

4-Aminopyridine.

4-Aminopyridine504-24-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P009

Ammonium picrate.

Ammonium picrate131-74-8CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD; CHRED; or
CMBST
P010

Arsenic acid.

Arsenic7440-38-21.45.0 mg/l TCLP
P011

Arsenic pentoxide.

Arsenic7440-38-21.45.0 mg/l TCLP
P012

Arsenic trioxide.

Arsenic7440-38-21.45.0 mg/l TCLP
P013

Barium cyanide.

Barium7440-39-3NA21 mg/l TCLPCyanides (Total)757-12-51.2590Cyanides
(Amenable)757-12-50.8630
P014

Thiophenol (Benzene thiol).

Thiophenol (Benzene thiol)108-98-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P015

Beryllium dust.

Beryllium7440-41-7RMETL; or RTHRMRMETL; or RTHRM
P016

Dichloromethyl ether (Bis(chloromethyl)ether).

Dichloromethyl ether542-88-1(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P017

Bromoacetone.

Bromoacetone598-31-2(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P018

Brucine.

Brucine357-57-3(WETOX or CHOXD) fb CARBN; or CMBSTCMBST

P020

2-sec-Butyl-4,6-dinitrophenol (Dinoseb).

2-sec-Butyl-4,6-dinitrophenol (Dinoseb) 88-85-70.0662.5

P021

Calcium cyanide.

Cyanides (Total) 757-12-51.2590 Cyanides (Amenable) 757-12-50.8630

P022

Carbon disulfide.

Carbon disulfide 75-15-03.8 CMBST Carbon disulfide; alternate 6 standard for nonwastewaters only 75-15-0NA 4.8 mg/l TCLP

P023

Chloroacetaldehyde.

Chloroacetaldehyde 107-20-0 (WETOX or CHOXD) fb CARBN; or CMBST CMBST

P024

p-Chloroaniline.

p-Chloroaniline 106-47-80.4616

P026

1-(o-Chlorophenyl)thiourea.

1-(o-Chlorophenyl)thiourea 5344-82-1 (WETOX or CHOXD) fb CARBN; or CMBST CMBST

P027

3-Chloropropionitrile.

3-Chloropropionitrile 542-76-7 (WETOX or CHOXD) fb CARBN; or CMBST CMBST

P028

Benzyl chloride.

Benzyl chloride 100-44-7 (WETOX or CHOXD) fb CARBN; or CMBST CMBST

P029

Copper cyanide.

Cyanides (Total) 757-12-51.2590 Cyanides (Amenable) 757-12-50.8630

P030

Cyanides (soluble salts and complexes).

Cyanides (Total) 757-12-51.2590 Cyanides (Amenable) 757-12-50.8630

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 CMBSTCHOXD; WETOX; or CMBST
P034

2-Cyclohexyl-4,6-dinitrophenol.

2-Cyclohexyl-4,6-dinitrophenol 131-89-5 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P036

Dichlorophenylarsine.

Arsenic 7440-38-21.45.0 mg/l TCLP
P037

Dieldrin.

Dieldrin 60-57-10.0170.13
P038

Diethylarsine.

Arsenic 7440-38-21.45.0 mg/l TCLP
P039

Disulfoton.

Disulfoton 298-04-40.0176.2
P040

O,O-Diethyl-O-pyrazinyl-phosphorothioate.

O,O-Diethyl-O-pyrazinylphosphorothioate 297-97-2 CARBN; or CMBSTCMBST
P041

Diethyl-p-nitrophenyl phosphate.

Diethyl-p-nitrophenyl phosphate 311-45-5 CARBN; or CMBSTCMBST
P042

Epinephrine.

Epinephrine 51-43-4 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P043

Diisopropylfluorophosphate (DFP).

Diisopropylfluorophosphate (DFP) 55-91-4 CARBN; or CMBSTCMBST
P044

Dimethoate.

Dimethoate 60-51-5 CARBN; or CMBSTCMBST
P045

Thiofanox.

Thiofanox39196-18-4 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P046

, -Dimethylphenethylamine.

, -Dimethylphenethylamine122-09-8 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P047

4,6-Dinitro-o-cresol.

4,6-Dinitro-o-cresol543-52-10.28160
P047

4,6-Dinitro-o-cresol salts.

NANA (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P048

2,4-Dinitrophenol.

2,4-Dinitrophenol51-28-50.12160
P049

Dithiobiuret.

Dithiobiuret541-53-7 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P050

Endosulfan.

Endosulfan I939-98-80.0230.066Endosulfan II33213-6-50.0290.13Endosulfan
sulfate1031-07-80.0290.13
P051

Endrin.

Endrin72-20-80.00280.13Endrin aldehyde7421-93-40.0250.13
P054

Aziridine.

Aziridine151-56-4 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P056

Fluorine.

Fluoride (measured in wastewaters only)16964-48-835ADGAS fb NEUTR
P057

Fluoroacetamide.

Fluoroacetamide640-19-7 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P058

Fluoroacetic acid, sodium salt.

Fluoroacetic acid, sodium salt62-74-8 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST

P059

Heptachlor.

Heptachlor 76-44-80.00120.066 Heptachlor epoxide 1024-57-30.0160.066
P060

Isodrin.

Isodrin 465-73-60.0210.066
P062

Hexaethyl tetraphosphate.

Hexaethyl tetraphosphate 757-58-4 CARBN; or CMBSTCMBST
P063

Hydrogen cyanide.

Cyanides (Total) 757-12-51.2590 Cyanides (Amenable) 757-12-50.8630
P064

Isocyanic acid, ethyl ester.

Isocyanic acid, ethyl ester 624-83-9 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P065

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 NAIMERC
P065

P065 (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 7339-97-6 NARMERC
P065

P065 (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
P065

P065 (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
P065

All P065 (mercury fulminate) wastewaters.

Mercury 7439-97-60.15 NA
P066

Methomyl.

Methomyl16752-77-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P067

2-Methyl-aziridine.

2-Methyl-aziridine75-55-8(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P068

Methyl hydrazine.

Methyl hydrazine
60-34-4CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD; CHRED, or CMBST
P069

2-Methylactonitrile.

2-Methylactonitrile
75-86-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P070

Aldicarb.

Aldicarb116-06-3(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P071

Methyl parathion.

Methyl parathion298-00-00.0144.6
P072

1-Naphthyl-2-thiourea.

1-Naphthyl-2-thiourea86-88-4(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P073

Nickel carbonyl.

Nickel7440-02-03.9811 mg/l TCLP
P074

Nickel cyanide.

Cyanides (Total)757-12-51.2590Cyanides (Amenable)757-12-50.8630Nickel7440-02-
03.9811 mg/l TCLP
P075

Nicotine and salts.

Nicotine and salts54-11-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P076

Nitric oxide.

Nitric oxide10102-43-9ADGASADGAS
P077

p-Nitroaniline.

p-Nitroaniline100-01-60.02828
P078

Nitrogen dioxide.

Nitrogen dioxide10102-44-0ADGASADGAS
P081

Nitroglycerin.

Nitroglycerin55-63-0CHOXD; CHRED; CARBN; BIODG or CMBSTCHOXD; CHRED; or CMBST
P082

N-Nitrosodimethylamine.

N-Nitrosodimethylamine62-75-90.402.3
P084

N-Nitrosomethylvinylamine.

N-Nitrosomethylvinylamine4549-40-0(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P085

Octamethylpyrophosphoramidate.

Octamethylpyrophosphoramidate152-16-9CARBN; or CMBSTCMBST
P087

Osmium tetroxide.

Osmium tetroxide20816-12-0RMETL; or RTHRMRMETL; or RTHRM
P088

Endothall.

Endothall145-73-3(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P089

Parathion.

Parathion56-38-20.0144.6
P092

P092 (phenyl mercuric acetate) nonwastewaters, regardless of their total mercury content, that are not incinerator residues or are not residues from RMERC.

Mercury7439-97-6NAIMERC; or RMERC
P092

P092 (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.

Mercury7439-97-6NARMERC

P092

P092 (phenyl mercuric acetate) nonwastewaters that are residues from RMERC and contain less than 260 mg/kg total mercury.

Mercury7439-97-6NA0.20 mg/l TCLP
P092

P092 (phenyl mercuric acetate) nonwastewaters that are incinerator residues and contain less than 260 mg/kg total mercury.

Mercury7439-97-6NA0.025 mg/l TCLP
P092

All P092 (phenyl mercuric acetate) wastewaters.

Mercury7439-97-60.15NA
P093

Phenylthiourea.

Phenylthiourea103-85-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P094

Phorate.

Phorate298-02-20.0214.6
P095

Phosgene.

Phosgene75-44-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P096

Phosphine.

Phosphine7803-51-2CHOXD; CHRED; or CMBSTCHOXD; CHRED; or CMBST
P097

Famphur.

Famphur52-85-70.01715
P098

Potassium cyanide.

Cyanides (Total)757-12-51.2590Cyanides (Amenable)757-12-50.8630
P099

Potassium silver cyanide.

Cyanides (Total)757-12-51.2590Cyanides (Amenable)757-12-50.8630Silver7440-22-
40.430.14 mg/l TCLP
P101

Ethyl cyanide (Propanenitrile).

Ethyl cyanide (Propanenitrile)107-12-00.24360
P102

Propargyl alcohol.

Propargyl alcohol107-19-7(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P103

Selenourea.

Selenium7782-49-20.825.7 mg/l TCLP
P104

Silver cyanide.

Cyanides (Total)757-12-51.2590Cyanides (Amenable)757-12-50.8630Silver7440-22-
40.430.14 mg/l TCLP
P105

Sodium azide.

Sodium azide26628-22-8CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD; CHRED; or CMBST
P106

Sodium cyanide.

Cyanides (Total)757-12-51.2590Cyanides (Amenable)757-12-50.8630
P108

Strychnine and salts.

Strychnine and salts57-24-9(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P109

Tetraethyldithiopyrophosphate.

Tetraethyldithiopyrophosphate3689-24-5CARBN; or CMBSTCMBST
P110

Tetraethyl lead.

Lead7439-92-10.690.75 mg/l TCLP
P111

Tetraethylpyrophosphate.

Tetraethylpyrophosphate107-49-3CARBN; or CMBSTCMBST
P112

Tetranitromethane.

Tetranitromethane509-14-8CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD; CHRED; or
CMBST
P113

Thallic oxide.

Thallium (measured in wastewaters only) 7440-28-01.4RTHRM; or STABL
P114

Thallium selenite.

Selenium 7782-49-20.825.7 mg/l TCLP
P115

Thallium (I) sulfate.

Thallium (measured in wastewaters only) 7440-28-01.4RTHRM; or STABL
P116

Thiosemicarbazide.

Thiosemicarbazide 79-19-6 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P118

Trichloromethanethiol.

Trichloromethanethiol 75-70-7 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
P119

Ammonium vanadate.

Vanadium (measured in wastewaters only) 7440-62-24.3STABL
P120

Vanadium pentoxide.

Vanadium (measured in wastewaters only) 7440-62-24.3STABL
P121

Zinc cyanide.

Cyanides (Total) 757-12-51.2590 Cyanides (Amenable) 757-12-50.8630
P122

Zinc phosphide Zn₃P₂, when present at concentrations greater than 10 percent.

Zinc Phosphide 1314-84-7 CHOXD; CHRED; or CMBSTCHOXD; CHRED; or CMBST
P123

Toxaphene.

Toxaphene 8001-35-20.00952.6
P127

Carbofuran.

Carbofuran 1563-66-20.0060.14
P128

Mexacarbate.

Mexacarbate 315-18-40.0561.4
P185

Tirpate.10

Tirpate26419-73-80.0560.28
P188

Physostigimine salicylate.

Physostigimine salicylate57-64-70.0561.4
P189

Carbosulfan.

Carbosulfan55285-14-80.0281.4
P190

Metolcarb.

Metolcarb1129-41-50.0561.4
P191

Dimetilan.10

Dimetilan644-64-40.0561.4
P192

Isolan.10

Isolan119-38-00.0561.4
P194

Oxamyl.

Oxamyl23135-22-00.0560.28
P196

Manganese dimethyldithiocarbamates (total).

Dithiocarbamates (total)NA0.02828
P197

Formparanate.10

Formparanate17702-57-70.0561.4
P198

Formetanate hydrochloride.

Formetanate hydrochloride23422-53-90.0561.4
P199

Methiocarb.

Methiocarb2032-65-70.0561.4
P201

Promecarb.

Promecarb2631-37-00.0561.4
P202

m-Cumenyl methylcarbamate.

m-Cumenyl methylcarbamate64-00-60.0561.4
P203

Aldicarb sulfone.

Aldicarb sulfone1646-88-40.0560.28
P204

Physostigmine.

Physostigmine57-47-60.0561.4
P205

Ziram.

Dithiocarbamates (total)NA0.02828
U001

Acetaldehyde.

Acetaldehyde75-07-0(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U002

Acetone.

Acetone67-64-10.28160
U003

Acetonitrile.

Acetonitrile75-05-85.6CMBSTAcetonitrile; alternate6 standard for nonwastewaters
only75-05-8NA38
U004

Acetophenone.

Acetophenone98-86-20.0109.7
U005

2-Acetylaminofluorene.

2-Acetylaminofluorene53-96-30.059140
U006

Acetyl chloride.

Acetyl chloride75-36-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U007

Acrylamide.

Acrylamide79-06-1(WETOX or CHOXD) fb CARBN; or CMBSTCMBST

U008

Acrylic acid.

Acrylic acid79-10-7(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U009

Acrylonitrile.

Acrylonitrile107-13-10.2484
U010

Mitomycin C.

Mitomycin C50-07-7(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U011

Amitrole.

Amitrole61-82-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U012

Aniline.

Aniline62-53-30.8114
U014

Auramine.

Auramine492-80-8(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U015

Azaserine.

Azaserine115-02-6(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U016

Benz(c)acridine.

Benz(c)acridine225-51-4(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U017

Benzal chloride.

Benzal chloride98-87-3(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U018

Benz(a)anthracene.

Benz(a)anthracene56-55-30.0593.4
U019

Benzene.

Benzene71-43-20.1410
U020

Benzenesulfonyl chloride.

Benzenesulfonyl chloride98-09-9(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U021

Benzidine.

Benzidine92-87-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U022

Benzo(a)pyrene.

Benzo(a)pyrene50-32-80.0613.4
U023

Benzotrichloride.

Benzotrichloride98-07-7CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD; CHRED; or
CMBST
U024

bis(2-Chloroethoxy)methane.

bis(2-Chloroethoxy)methane111-91-10.0367.2
U025

bis(2-Chloroethyl)ether.

bis(2-Chloroethyl)ether111-44-40.0336.0
U026

Chlornaphazine.

Chlornaphazine494-03-1(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U027

bis(2-Chloroisopropyl)ether.

bis(2-Chloroisopropyl)ether39638-32-90.0557.2
U028

bis(2-Ethylhexyl)phthalate.

bis(2-Ethylhexyl)phthalate117-81-70.2828
U029

Methyl bromide (Bromomethane).

Methyl bromide (Bromomethane)74-83-90.1115
U030

4-Bromophenyl phenyl ether.

4-Bromophenyl phenyl ether101-55-30.05515
U031

n-Butyl alcohol.

n-Butyl alcohol 71-36-35.62.6
U032

Calcium chromate.

Chromium (Total) 7440-47-32.770.60 mg/l TCLP
U033

Carbon oxyfluoride.

Carbon oxyfluoride 353-50-4 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U034

Trichloroacetaldehyde (Chloral).

Trichloroacetaldehyde (Chloral) 75-87-6 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U035

Chlorambucil.

Chlorambucil 305-03-3 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U036

Chlordane.

Chlordane (and isomers) 57-74-90.00330.26
U037

Chlorobenzene.

Chlorobenzene 108-90-70.0576.0
U038

Chlorobenzilate.

Chlorobenzilate 510-15-60.10 CMBST
U039

p-Chloro-m-cresol.

p-Chloro-m-cresol 59-50-70.01814
U041

Epichlorohydrin (1-Chloro-2,3-epoxypropane).

Epichlorohydrin (1-Chloro-2,3-epoxypropane) 106-89-8 (WETOX or CHOXD) fb CARBN; or
CMBSTCMBST
U042

2-Chloroethyl vinyl ether.

2-Chloroethyl vinyl ether 110-75-80.062 CMBST
U043

Vinyl chloride.

Vinyl chloride75-01-40.276.0

U044

Chloroform.

Chloroform67-66-30.0466.0

U045

Chloromethane (Methyl chloride).

Chloromethane (Methyl chloride)74-87-30.1930

U046

Chloromethyl methyl ether.

Chloromethyl methyl ether107-30-2 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST

U047

2-Chloronaphthalene.

2-Chloronaphthalene91-58-70.0555.6

U048

2-Chlorophenol.

2-Chlorophenol95-57-80.0445.7

U049

4-Chloro-o-toluidine hydrochloride.

4-Chloro-o-toluidine hydrochloride3165-93-3 (WETOX or CHOXD) fb CARBN; or

CMBSTCMBST

U050

Chrysene.

Chrysene218-01-90.0593.4

U051

Creosote.

Naphthalene91-20-30.0595.6Pentachlorophenol187-86-50.0897.4Phenanthrene85-01-

80.0595.6Pyrene129-00-00.0678.2Toluene108-88-30.08010Xylenes-mixed isomers

(sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Lead7439-92-10.690.75

mg/l TCLP

U052

Cresols (Cresylic acid).

o-Cresol95-48-70.115.6m-Cresol (difficult to distinguish from p-cresol)108-39-

40.775.6p-Cresol (difficult to distinguish from m-cresol)106-44-50.775.6Cresol-

mixed isomers (Cresylic acid)

(sum of o-, m-, and p-cresol concentrations)1319-77-30.8811.2

U053

Crotonaldehyde.

Crotonaldehyde4170-30-3 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U055

Cumene.

Cumene98-82-8 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U056

Cyclohexane.

Cyclohexane110-82-7 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U057

Cyclohexanone.

Cyclohexanone108-94-10.36CMBSTCyclohexanone; alternate6 standard for
nonwastewaters only108-94-1NA0.75 mg/l TCLP
U058

Cyclophosphamide.

Cyclophosphamide50-18-0CARBN; or CMBSTCMBST
U059

Daunomycin.

Daunomycin20830-81-3 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U060

DDD.

o,p'-DDD53-19-00.0230.087p,p'-DDD72-54-80.0230.087
U061

DDT.

o,p'-DDT789-02-60.00390.087p,p'-DDT50-29-30.00390.087o,p'-DDD53-19-
00.0230.087p,p'-DDD72-54-80.0230.087o,p'-DDE3424-82-60.0310.087p,p'-DDE72-55-
90.0310.087
U062

Diallate.

Diallate2303-16-4 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U063

Dibenz(a,h)anthracene.

Dibenz(a,h)anthracene53-70-30.0558.2
U064

Dibenz(a,i)pyrene.

Dibenz(a,i)pyrene189-55-9 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U066

1,2-Dibromo-3-chloropropane.

1,2-Dibromo-3-chloropropane96-12-80.1115
U067

Ethylene dibromide (1,2-Dibromoethane).

Ethylene dibromide (1,2-Dibromoethane)106-93-40.02815
U068

Dibromomethane.

Dibromomethane74-95-30.1115
U069

Di-n-butyl phthalate.

Di-n-butyl phthalate84-74-20.05728
U070

o-Dichlorobenzene.

o-Dichlorobenzene95-50-10.0886.0
U071

m-Dichlorobenzene.

m-Dichlorobenzene541-73-10.0366.0
U072

p-Dichlorobenzene.

p-Dichlorobenzene106-46-70.0906.0
U073

3,3'-Dichlorobenzidine.

3,3'-Dichlorobenzidine91-94-1(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U074

1,4-Dichloro-2-butene.

cis-1,4-Dichloro-2-butene1476-11-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBSTtrans-
1,4-Dichloro-2-butene764-41-0(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U075

Dichlorodifluoromethane.

Dichlorodifluoromethane75-71-80.237.2
U076

1,1-Dichloroethane.

1,1-Dichloroethane75-34-30.0596.0
U077

1,2-Dichloroethane.

1,2-Dichloroethane107-06-20.216.0
U078

1,1-Dichloroethylene.

1,1-Dichloroethylene75-35-40.0256.0
U079

1,2-Dichloroethylene.

trans-1,2-Dichloroethylene156-60-50.05430
U080

Methylene chloride.

Methylene chloride75-09-20.08930
U081

2,4-Dichlorophenol.

2,4-Dichlorophenol120-83-20.04414
U082

2,6-Dichlorophenol.

2,6-Dichlorophenol87-65-00.04414
U083

1,2-Dichloropropane.

1,2-Dichloropropane78-87-50.8518
U084

1,3-Dichloropropylene.

cis-1,3-Dichloropropylene10061-01-50.03618trans-1,3-Dichloropropylene10061-02-
60.03618
U085

1,2:3,4-Diepoxybutane.

1,2:3,4-Diepoxybutane1464-53-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U086

N,N'-Diethylhydrazine.

N,N'-Diethylhydrazine1615-80-1CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD; CHRED;
or CMBST
U087

O,O-Diethyl-S-methyldithiophosphate.

O,O-Diethyl-S-methyldithiophosphate3288-58-2CARBN; or CMBSTCMBST
U088

Diethyl phthalate.

Diethyl phthalate84-66-20.2028
U089

Diethyl stilbestrol.

Diethyl stilbestrol56-53-1(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U090

Dihydrosafrole.

Dihydrosafrole94-58-6(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U091

3,3'-Dimethoxybenzidine.

3,3'-Dimethoxybenzidine119-90-4(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U092

Dimethylamine.

Dimethylamine124-40-3(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U093

p-Dimethylaminoazobenzene.

p-Dimethylaminoazobenzene60-11-70.13CMBST
U094

7,12-Dimethylbenz(a)anthracene.

7,12-Dimethylbenz(a)anthracene57-97-6(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U095

3,3'-Dimethylbenzidine.

3,3'-Dimethylbenzidine119-93-7(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U096

, -Dimethyl benzyl hydroperoxide.

, -Dimethyl benzyl hydroperoxide80-15-9CHOXD; CHRED; CARBN; BIODG; or
CMBSTCHOXD; CHRED; or CMBST
U097

Dimethylcarbamoyl chloride.

Dimethylcarbamoyl chloride79-44-7(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U098

1,1-Dimethylhydrazine.

1,1-Dimethylhydrazine57-14-7CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD; CHRED; or
CMBST
U099

1,2-Dimethylhydrazine.

1,2-Dimethylhydrazine540-73-8CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD; CHRED;
or CMBST
U101

2,4-Dimethylphenol.

2,4-Dimethylphenol105-67-90.03614
U102

Dimethyl phthalate.

Dimethyl phthalate131-11-30.04728
U103

Dimethyl sulfate.

Dimethyl sulfate77-78-1CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD; CHRED; or
CMBST
U105

2,4-Dinitrotoluene.

2,4-Dinitrotoluene121-14-20.32140
U106

2,6-Dinitrotoluene.

2,6-Dinitrotoluene606-20-20.5528
U107

Di-n-octyl phthalate.

Di-n-octyl phthalate117-84-00.01728
U108

1,4-Dioxane.

1,4-Dioxane123-91-1(WETOX or CHOXD) fb CARBN; or CMBSTCMBST1,4-Dioxane;
alternate6 standard for nonwastewaters only123-91-112.0170
U109

1,2-Diphenylhydrazine.

1,2-Diphenylhydrazine122-66-7CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD; CHRED;
or CMBST1,2-Diphenylhydrazine; alternate6 standard for wastewaters only122-66-
70.087NA
U110

Dipropylamine.

Dipropylamine142-84-7(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U111

Di-n-propylnitrosamine.

Di-n-propylnitrosamine621-64-70.4014
U112

Ethyl acetate.

Ethyl acetate141-78-60.3433
U113

Ethyl acrylate.

Ethyl acrylate140-88-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U114

Ethylenebisdithiocarbamic acid salts and esters.

Ethylenebisdithiocarbamic acid111-54-6(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U115

Ethylene oxide.

Ethylene oxide75-21-8(WETOX or CHOXD) fb CARBN; or CMBSTCHOXD; or CMBSTethylene
oxide; alternate6 standard for wastewaters only75-21-80.12NA
U116

Ethylene thiourea.

Ethylene thiourea96-45-7(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U117

Ethyl ether.

Ethyl ether60-29-70.12160
U118

Ethyl methacrylate.

Ethyl methacrylate97-63-20.14160
U119

Ethyl methane sulfonate.

Ethyl methane sulfonate62-50-0(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U120

Fluoranthene.

Fluoranthene206-44-00.0683.4
U121

Trichloromonofluoromethane.

Trichloromonofluoromethane75-69-40.02030
U122

Formaldehyde.

Formaldehyde50-00-0(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U123

Formic acid.

Formic acid64-18-6(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U124

Furan.

Furan110-00-9(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U125

Furfural.

Furfural98-01-1(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U126

Glycidylaldehyde.

Glycidylaldehyde765-34-4(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U127

Hexachlorobenzene.

Hexachlorobenzene118-74-10.05510
U128

Hexachlorobutadiene.

Hexachlorobutadiene87-68-30.0555.6
U129

Lindane.

-BHC319-84-60.000140.066-BHC319-85-70.000140.066-BHC319-86-80.0230.066?-BHC
(Lindane)58-89-90.00170.066
U130

Hexachlorocyclopentadiene.

Hexachlorocyclopentadiene77-47-40.0572.4
U131

Hexachloroethane.

Hexachloroethane67-72-10.05530
U132

Hexachlorophene.

Hexachlorophene70-30-4(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U133

Hydrazine.

Hydrazine302-01-2CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD; CHRED; or CMBST
U134

Hydrogen fluoride.

Fluoride (measured in wastewaters only) ~~16964-48-8~~ 7664-39-3353
35ADGAS fb NEUTR; or NEUTR
U135

Hydrogen sulfide.

Hydrogen sulfide 7783-06-4 CHOXD; CHRED; or CMBSTCHOXD; CHRED; or CMBST
U136

Cacodylic acid.

Arsenic 7440-38-21.45.0 mg/l TCLP
U137

~~Indeno(1,2,3-c,d)pyrene.~~

~~Indeno~~ Indenol (1,2,3-cd) pyrene.

~~Indeno~~ Indenol (1,2,3-c,d) pyrene

~~Indeno(1,2,3-c,d)pyrene~~ 193-39-50.00553.4
U138

Iodomethane.

Iodomethane 74-88-40.1965
U140

Isobutyl alcohol.

Isobutyl alcohol 78-83-15.6170
U141

Isosafrole.

Isosafrole 120-58-10.0812.6
U142

Kepone.

Kepone 143-50-80.00110.13
U143

Lasiocarpine.

Lasiocarpine 303-34-4 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U144

Lead acetate.

Lead 7439-92-10.690.75 mg/l TCLP
U145

Lead phosphate.

Lead 7439-92-10.690.75 mg/l TCLP
U146

Lead subacetate.

Lead7439-92-10.690.75 mg/l TCLP
U147

Maleic anhydride.

Maleic anhydride108-31-6 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U148

Maleic hydrazide.

Maleic hydrazide123-33-1 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U149

Malononitrile.

Malononitrile109-77-3 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U150

Melphalan.

Melphalan148-82-3 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U151

U151 (mercury) nonwastewaters that contain greater than or equal to 260 mg/kg total mercury.

Mercury7439-97-6NARMERC
U151

U151 (mercury) nonwastewaters that contain less than 260 mg/kg total mercury and that are residues from RMERC only.

Mercury7439-97-6NA0.20 mg/l TCLP
U151

U151 (mercury) nonwastewaters that contain less than 260 mg/kg total mercury and that are not residues from RMERC only.

Mercury7439-97-6NA0.025 mg/l TCLP
U151

All U151 (mercury) wastewater.

Mercury7439-97-60.15NA
U151

Elemental Mercury Contaminated with Radioactive Materials.

Mercury7439-97-6NAAMLGM
U152

Methacrylonitrile.

Methacrylonitrile126-98-70.2484

U153

Methanethiol.

Methanethiol74-93-1(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U154

Methanol.

Methanol67-56-1(WETOX or CHOXD) fb CARBN; or CMBSTCMBSTMethanol; alternate6 set
of standards for both wastewaters and nonwastewaters67-56-15.60.75 mg/l TCLP
U155

Methapyrilene.

Methapyrilene91-80-50.0811.5
U156

Methyl chlorocarbonate.

Methyl chlorocarbonate79-22-1(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U157

3-Methylcholanthrene.

3-Methylcholanthrene56-49-50.005515
U158

4,4'-Methylene bis(2-chloroaniline).

4,4'-Methylene bis(2-chloroaniline)101-14-40.5030
U159

Methyl ethyl ketone.

Methyl ethyl ketone78-93-30.2836
U160

Methyl ethyl ketone peroxide.

Methyl ethyl ketone peroxide1338-23-4CHOXD; CHRED; CARBN; BIODG; or CMBSTCHOXD;
CHRED; or CMBST
U161

Methyl isobutyl ketone.

Methyl isobutyl ketone108-10-10.1433
U162

Methyl methacrylate.

Methyl methacrylate80-62-60.14160
U163

N-Methyl-N'-nitro-N-nitrosoguanidine.

N-Methyl-N'-nitro-N-nitrosoguanidine70-25-7(WETOX or CHOXD) fb CARBN; or
CMBSTCMBST
U164

Methylthiouracil.

Methylthiouracil56-04-2(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U165

Naphthalene.

Naphthalene91-20-30.0595.6
U166

1,4-Naphthoquinone.

1,4-Naphthoquinone130-15-4(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U167

1-Naphthylamine.

1-Naphthylamine134-32-7(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U168

2-Naphthylamine.

2-Naphthylamine91-59-80.52CMBST
U169

Nitrobenzene.

Nitrobenzene98-95-30.06814
U170

p-Nitrophenol.

p-Nitrophenol100-02-70.1229
U171

2-Nitropropane.

2-Nitropropane79-46-9(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U172

N-Nitrosodi-n-butylamine.

N-Nitrosodi-n-butylamine924-16-30.4017
U173

N-Nitrosodiethanolamine.

N-Nitrosodiethanolamine1116-54-7(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U174

N-Nitrosodiethylamine.

N-Nitrosodiethylamine55-18-50.4028

U176

N-Nitroso-N-ethylurea.

N-Nitroso-N-ethylurea759-73-9(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U177

N-Nitroso-N-methylurea.

N-Nitroso-N-methylurea684-93-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U178

N-Nitroso-N-methylurethane.

N-Nitroso-N-methylurethane615-53-2(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U179

N-Nitrosopiperidine.

N-Nitrosopiperidine100-75-40.01335
U180

N-Nitrosopyrrolidine.

N-Nitrosopyrrolidine930-55-20.01335
U181

5-Nitro-o-toluidine.

5-Nitro-o-toluidine99-55-80.3228
U182

Paraldehyde.

Paraldehyde123-63-7(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U183

Pentachlorobenzene.

Pentachlorobenzene608-93-50.05510
U184

Pentachloroethane.

Pentachloroethane76-01-7(WETOX or CHOXD) fb CARBN; or
CMBSTCMBSTPentachloroethane; alternate6 standards for both wastewaters and
nonwastewaters76-01-70.0556.0
U185

Pentachloronitrobenzene.

Pentachloronitrobenzene82-68-80.0554.8
U186

1,3-Pentadiene.

1,3-Pentadiene504-60-9(WETOX or CHOXD) fb CARBN; or CMBSTCMBST

U187

Phenacetin.

Phenacetin62-44-20.08116
U188

Phenol.

Phenol108-95-20.0396.2
U189

Phosphorus sulfide.

Phosphorus sulfide1314-80-3CHOXD; CHRED; or CMBSTCHOXD; CHRED; or CMBST
U190

Phthalic anhydride.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)100-21-
00.05528Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)85-
44-90.05528
U191

2-Picoline.

2-Picoline109-06-8(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U192

Pronamide.

Pronamide23950-58-50.0931.5
U193

1,3-Propane sultone.

1,3-Propane sultone1120-71-4(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U194

n-Propylamine.

n-Propylamine107-10-8(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U196

Pyridine.

Pyridine110-86-10.01416
U197

p-Benzoquinone.

p-Benzoquinone
106-51-4(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U200

Reserpine.

Reserpine50-55-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U201

Resorcinol

Resorcinol.108-46-3(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U202

Saccharin and salts.

Saccharin81-07-2(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U203

Safrole.

Safrole94-59-70.08122
U204

Selenium dioxide.

Selenium7782-49-20.825.7 mg/l TCLP
U205

Selenium sulfide.

Selenium7782-49-20.825.7 mg/l TCLP
U206

Streptozotocin.

Streptozotocin18883-66-4(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U207

1,2,4,5-Tetrachlorobenzene.

1,2,4,5-Tetrachlorobenzene95-94-30.05514
U208

1,1,1,2-
Tetrachloroethane.

1,1,1,2-Tetrachloroethane630-20-60.0576.0
U209

1,1,2,2-Tetrachloroethane.

1,1,2,2-Tetrachloroethane79-34-50.0576.0
U210

Tetrachloroethylene.

Tetrachloroethylene127-18-40.0566.0
U211

Carbon tetrachloride.

Carbon tetrachloride56-23-50.0576.0
U213

Tetrahydrofuran.

Tetrahydrofuran109-99-9(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U214

Thallium (I) acetate.

Thallium (measured in wastewaters only)7440-28-01.4RTHRM; or STABL
U215

Thallium (I) carbonate.

Thallium (measured in wastewaters only)7440-28-01.4RTHRM; or STABL
U216

Thallium (I) chloride.

Thallium (measured in wastewaters only)7440-28-01.4RTHRM; or STABL
U217

Thallium (I) nitrate.

Thallium (measured in wastewaters only)7440-28-01.4RTHRM; or STABL
U218

Thioacetamide.

Thioacetamide62-55-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U219

Thiourea.

Thiourea62-56-6(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U220

Toluene.

Toluene108-88-30.08010
U221

Toluenediamine.

Toluenediamine25376-45-8CARBN; or CMBSTCMBST
U222

o-Toluidine hydrochloride.

o-Toluidine hydrochloride636-21-5(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U223

Toluene diisocyanate.

Toluene diisocyanate26471-62-5CARBN; or CMBSTCMBST
U225

Bromoform (Tribromomethane).

Bromoform (Tribromomethane) 75-25-20.6315

U226

1,1,1-Trichloroethane.

1,1,1-Trichloroethane 71-55-60.0546.0

U227

1,1,2-Trichloroethane.

1,1,2-Trichloroethane 79-00-50.0546.0

U228

Trichloroethylene.

Trichloroethylene 79-01-60.0546.0

U234

1,3,5-Trinitrobenzene.

1,3,5-Trinitrobenzene 99-35-4 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST

U235

tris-(2,3-Dibromopropyl)-phosphate.

tris-(2,3-Dibromopropyl)-phosphate 126-72-70.110.10

U236

Trypan Blue.

Trypan Blue 72-57-1 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST

U237

Uracil mustard.

Uracil mustard 66-75-1 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST

U238

Urethane (Ethyl carbamate).

Urethane (Ethyl carbamate) 51-79-6 (WETOX or CHOXD) fb CARBN; or CMBSTCMBST

U239

Xylenes.

Xylenes-mixed isomers

(sum of o-, m-, and p-xylene concentrations) 1330-20-70.3230

U240

2,4-D (2,4-Dichlorophenoxyacetic acid).

2,4-D (2,4-Dichlorophenoxyacetic acid) 94-75-70.72102,4-D (2,4-Dichlorophenoxyacetic acid) salts and esters NA (WETOX or CHOXD) fb CARBN; or CMBSTCMBST

U243

Hexachloropropylene.

Hexachloropropylene1888-71-70.03530
U244

Thiram.

Thiram137-26-8(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U246

Cyanogen bromide.

Cyanogen bromide506-68-3CHOXD; WETOX; or CMBSTCHOXD; WETOX; or CMBST
U247

Methoxychlor.

Methoxychlor72-43-50.250.18
U248

Warfarin, & salts, when present at concentrations of 0.3 percent or less.

Warfarin81-81-2(WETOX or CHOXD) fb CARBN; or CMBSTCMBST
U249

Zinc phosphide, Zn₃P₂, when present at concentrations of 10 percent or less.

Zinc Phosphide1314-84-7CHOXD; CHRED; or CMBSTCHOXD; CHRED; or CMBST
U271

Benomyl.

Benomyl17804-35-20.0561.4
U278

Bendiocarb.

Bendiocarb22781-23-30.0561.4
U279

Carbaryl.

Carbaryl63-25-20.0060.14
U280

Barban.

Barban101-27-90.0561.4
U328

o-Toluidine.

o-Toluidine95-53-4CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBNCMBST
U353

p-Toluidine.

p-Toluidine106-49-0CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBNCMBST
U359

2-Ethoxyethanol.

2-Ethoxyethanol110-80-5CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb
CARBNCMBST
U364

Bendiocarb phenol.10

Bendiocarb phenol22961-82-60.0561.4
U367

Carbofuran phenol.

Carbofuran phenol
1563-38-80.0561.4
U372
Carbendazim.

Carbendazim10605-21-70.0561.4
U373

Propham.

Propham122-42-90.0561.4
U387

Prosulfocarb.

Prosulfocarb52888-80-90.0421.4
U389

Triallate.

Triallate2303-17-50.0421.4
U394

A2213.10

A221330558-43-10.0421.4
U395

Diethylene glycol, dicarbamate.10

Diethylene glycol, dicarbamate5952-26-10.0561.4
U404

Triethylamine.

Triethylamine101-44-80.0811.5
U409

Thiophanate-methyl.

Thiophanate-methyl23564-05-80.0561.4
U410

Thiodicarb.

Thiodicarb59669-26-00.0191.4
U411

Propoxur.

Propoxur114-26-10.0561.4

Notes:

1 The waste descriptions provided in this table do not replace waste descriptions in 35 Ill. Adm. Code 721. Descriptions of Treatment or Regulatory Subcategories are provided, as needed, to distinguish between applicability of different standards.

2 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.

3 Concentration standards for wastewaters are expressed in mg/l and are based on analysis of composite samples.

4 All treatment standards expressed as a Technology Code or combination of Technology Codes are explained in detail in Table C of this Part, "Technology Codes and Descriptions of Technology-Based Standards." "fb" inserted between waste codes denotes "followed by," so that the first-listed treatment is followed by the second-listed treatment. A semicolon (;) separates alternative treatment schemes.

5 Except for Metals (EP or TCLP) and Cyanides (Total and Amenable), the nonwastewater treatment standards expressed as a concentration were established, in part, based on incineration in units operated in accordance with the technical requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725 or based on combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in Section 728.140(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

6 Where an alternate treatment standard or set of alternate standards has been indicated, a facility may comply with this alternate standard, but only for the Treatment or Regulatory Subcategory or physical form (i.e., wastewater or nonwastewater) specified for that alternate standard.

7 Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010C or 9012B, in "Test Methods for Evaluating Solid Waste, Physical or Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

8 These wastes, when rendered non-hazardous and then subsequently managed in CWA or CWA-equivalent systems, are not subject to treatment standards. (See Section 728.101(c)(3) and (c)(4).)

9 These wastes, when rendered non-hazardous and then subsequently injected in a Class I SDWA well, are not subject to treatment standards. (See 35 Ill. Adm. Code 738.101(d).)

10 The treatment standard for this waste may be satisfied by either meeting the constituent concentrations in the table in this Section or by treating the waste by the specified technologies: combustion, as defined by the technology code CMBST at Table C, 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 Table C, for wastewaters.

11 For these wastes, the definition of CMBST is limited to any of the following that have obtained a determination of equivalent treatment under Section 728.142(b): (1) combustion units operating under 35 Ill. Adm. Code 726, (2) combustion units permitted under Subpart O of 35 Ill. Adm. Code 724, or (3) combustion units operating under Subpart O of 35 Ill. Adm. Code 725.

12 Disposal of USEPA hazardous waste number K175 waste that has complied with all applicable Section 728.140 treatment standards must also be macroencapsulated in accordance with Table F of this Part, unless the waste is placed in either of the following types of facilities:

a) A RCRA Subtitle C monofill containing only K175 wastes that meet all applicable 40 CFR 268.40 treatment standards; or

b) A dedicated RCRA Subtitle C landfill cell in which all other wastes being co-disposed are at pH \geq 6.0.

BOARD NOTE: Derived from table to 40 CFR 268.40 ~~(2005)~~ (2007).

NA means not applicable.

(Source: Amended at 32 Ill. Reg. _____, effective _____)

Section 728. ~~Table~~ TABLE U Universal Treatment Standards (UTS)

Regulated Constituent-Common Name	CAS1 No.	Wastewater Standard Concentration2 (in mg/l 2)	Nonwastewater Standard Concentration3 (in mg/kg 3 unless noted as "mg/l TCLP")	
Acenaphthylene	208-96-80.0593.4	Acenaphthene	83-32-90.0593.4	
Acetone	67-64-10.28160	Acetonitrile	75-05-85.638	
Acetophenone	96-86-20.0109.72-	Acetylamino	fluorene53-96-30.059140	
Acrolein	107-02-80.29	NA	Acrylamide79-06-11923	
Acrylonitrile	107-13-10.2484	Aldicarb sulfone	61646-88-40.0560.28	
Aldrin	309-00-20.0210.0664	Aminobiphenyl	92-67-10.13	
NA	Aniline62-53-30.8114	o-Anisidine (2-methoxyaniline)	90-04-00.0100.66	
Anthracene	120-12-70.0593.4	Aramite	140-57-80.36	
NA	BHC319-84-60.000140.066	BHC319-85-70.000140.066	BHC319-86-80.0230.066?	
BHC58-89-90.00170.066	Barban	6101-27-90.0561.4	Bendiocarb	622781-23-30.0561.4
Benomyl	617804-35-20.0561.4	Benz(a)anthracene	56-55-30.0593.4	
Benzal chloride	98-87-30.0556.0	Benzene	71-43-20.1410	
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-20.116.8	Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-90.116.8	
Benzo(g,h,i)perylene	191-24-20.00551.8	Benzo(a)pyrene	50-32-80.0613.4	
Bromodichloromethane	75-27-40.3515	Methyl bromide (Bromomethane)	74-83-90.11154	
Bromophenyl phenyl ether	101-55-30.05515	n-Butyl alcohol	71-36-35.62.6	
Butylate	62008-41-50.0421.4	Butyl benzyl phthalate	85-68-70.017282	
sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-70.0662.5	Carbaryl	663-25-20.0060.14	
Carbenzadim	610605-21-70.0561.4	Carbofuran	61563-66-20.0060.14	
Carbofuran phenol	61563-38-80.0561.4	Carbon disulfide	75-15-03.84.8 mg/l TCLP	
Carbon tetrachloride	56-23-50.0576.0	Carbosulfan	655285-14-80.0281.4	
Chlordane (? and ? isomers)	57-74-90.00330.26p	Chloroaniline	106-47-80.4616	
Chlorobenzene	108-90-70.0576.0	Chlorobenzilate	510-15-60.10	
NA	2-Chloro-1,3-butadiene	126-99-80.0570.28p		

Chloro-m-cresol59-50-70.01814Chlorodibromomethane124-48-10.05715Chloroethane75-00-30.276.0bis(2-Chloroethoxy)methane111-91-10.0367.2bis(2-Chloroethyl)ether111-44-40.0336.02-Chloroethyl vinyl ether110-75-80.062NACHloroform67-66-30.0466.0bis(2-Chloroisopropyl)ether39638-32-90.0557.2Chloromethane (Methyl chloride)74-87-30.19302-Chloronaphthalene91-58-70.0555.62-Chlorophenol95-57-80.0445.73-Chloropropylene107-05-10.03630Chrysene218-01-90.0593.4p-Cresidine120-71-80.0100.66o-Cresol95-48-70.115.6m-Cresol (difficult to distinguish from p-cresol)108-39-40.775.6p-Cresol (difficult to distinguish from m-cresol)106-44-50.775.6m-Cumenyl methylcarbamate664-00-60.0561.4Cyclohexanone108-94-10.360.75 mg/l TCLPo,p'-DDD53-19-00.0230.087p,p'-DDD72-54-80.0230.087o,p'-DDE3424-82-60.0310.087p,p'-DDE72-55-90.0310.087o,p'-DDT789-02-60.00390.087p,p'-DDT50-29-30.00390.087Dibenz(a,h)anthracene53-70-30.0558.2Dibenz(a,e)pyrene192-65-40.061NA1,2-Dibromo-3-chloropropane96-12-80.11151,2-Dibromoethane/Ethylene dibromide106-93-40.02815Dibromomethane74-95-30.1115m-Dichlorobenzene541-73-10.0366.0o-Dichlorobenzene95-50-10.0886.0p-Dichlorobenzene106-46-70.0906.0Dichlorodifluoromethane75-71-80.237.21,1-Dichloroethane75-34-30.0596.01,2-Dichloroethane107-06-20.216.01,1-Dichloroethylene75-35-40.0256.0trans-1,2-Dichloroethylene156-60-50.054302,4-Dichlorophenol120-83-20.044142,6-Dichlorophenol87-65-00.044142,4-Dichlorophenoxyacetic acid/2,4-D94-75-70.72101,2-Dichloropropane78-87-50.8518cis-1,3-Dichloropropylene10061-01-50.03618trans-1,3-Dichloropropylene10061-02-60.03618Dioldrin60-57-10.0170.13Diethyl phthalate84-66-20.2028p-Dimethylaminoazobenzene60-11-70.13NA2,4-Dimethylaniline (2,4-xylydine)95-68-10.0100.662,4-Dimethyl phenol105-67-90.03614Dimethyl phthalate131-11-30.04728Di-n-butyl phthalate84-74-20.057281,4-Dinitrobenzene100-25-40.322.34,6-Dinitro-o-cresol534-52-10.281602,4-Dinitrophenol51-28-50.121602,4-Dinitrotoluene121-14-20.321402,6-Dinitrotoluene606-20-20.5528Di-n-octyl phthalate117-84-00.01728Di-n-propylnitrosamine621-64-70.40141,4-Dioxane123-91-112.0170Diphenylamine (difficult to distinguish from diphenylnitrosamine)122-39-40.9213Diphenylnitrosamine (difficult to distinguish from diphenylamine)86-30-60.92131,2-Diphenylhydrazine122-66-70.087NADisulfoton298-04-40.0176.2Dithiocarbamates (total)6137-30-40.02828Endosulfan I959-98-80.0230.066Endosulfan II33213-65-90.0290.13Endosulfan sulfate1031-07-80.0290.13Endrin72-20-80.00280.13Endrin aldehyde7421-93-40.0250.13EPTC6759-94-40.0421.4Ethyl acetate141-78-60.3433Ethyl benzene100-41-40.05710Ethyl cyanide (Propanenitrile)107-12-00.24360Ethylene oxide75-21-80.12NAEthyl ether60-29-70.12160bis(2-Ethylhexyl) phthalate117-81-70.2828Ethyl methacrylate97-63-20.14160Famphur52-85-70.01715Fluoranthene206-44-00.0683.4Fluorene86-73-70.0593.4Formetanate hydrochloride623422-53-90.0561.4Heptachlor76-44-80.00120.0661,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)35822-46-90.0000350.00251,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)67562-39-40.0000350.00251,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)55673-89-70.0000350.0025Heptachlor epoxide1024-57-30.0160.066Hexachlorobenzene118-74-10.05510Hexachlorobutadiene87-68-30.0555.6Hexachlorocyclopentadiene77-47-40.0572.4HxCDDs (All Hexachlorodibenzo-p-dioxins)NA0.0000630.001HxCDFs (All Hexachlorodibenzofurans)55684-94-10.0000630.001Hexachloroethane67-72-10.05530Hexachloropropylene1888-71-70.03530Indeno (1,2,3-c,d) pyrene193-39-50.00553.4Iodomethane74-88-40.1965Isobutyl alcohol78-83-15.6170Isodrin465-73-60.0210.066Isosafrole120-58-10.0812.6Kepone143-50-00.00110.13Methacrylonitrile126-98-70.2484Methanol67-56-15.60.75 mg/l TCLPMethapyrilene91-80-50.0811.5Methiocarb62032-65-70.0561.4Methomyl616752-77-50.0280.14Methoxychlor72-43-50.250.183-Methylcholanthrene56-49-50.0055154,4-Methylene bis(2-chloroaniline)101-14-40.5030Methylene chloride75-09-20.08930Methyl ethyl ketone78-93-30.2836Methyl isobutyl ketone108-10-10.1433Methyl methacrylate80-62-60.14160Methyl methansulfonate66-27-30.018NAMethyl parathion298-00-00.0144.6Metolcarb61129-41-

50.0561.4Mexacarbate6315-18-40.0561.4Molinolate62212-67-10.0421.4Naphthalene91-20-30.0595.62-Naphthylamine91-59-80.52NAo-Nitroaniline88-74-40.2714p-Nitroaniline100-01-60.02828Nitrobenzene98-95-30.068145-Nitro-o-toluidine99-55-80.3228o-Nitrophenol88-75-50.02813p-Nitrophenol100-02-70.1229N-Nitrosodiethylamine55-18-50.4028N-Nitrosodimethylamine62-75-90.402.3N-Nitrosodi-n-butylamine924-16-30.4017N-Nitrosomethylethylamine10595-95-60.402.3N-Nitrosomorpholine59-89-20.402.3N-Nitrosopiperidine100-75-40.01335N-Nitrosopyrrolidine930-55-20.013351,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD)3268-87-90.0000630.0051,2,3,4,6,7,8,9-Octachlorodibenzofuran (1,2,3,4,6,7,8,9-OCDF)39001-02-00.0000630.005Oxamyl623135-22-00.0560.28Parathion56-38-20.0144.6Total PCBs (sum of all PCB isomers, or all Aroclors)81336-36-30.1010Pebulate61114-71-20.0421.4Pentachlorobenzene608-93-50.05510PeCDDs (All Pentachlorodibenzo-p-dioxins)36088-22-90.0000630.001PeCDFs (All Pentachlorodibenzofurans)30402-15-40.0000350.001Pentachloroethane76-01-70.0556.0Pentachloronitrobenzene82-68-80.0554.8Pentachlorophenol87-86-50.0897.4Phenacetin62-44-20.08116Phenanthrene85-01-80.0595.6Phenol108-95-20.0396.21,3-Phenylenediamine108-45-20.0100.66Phorate298-02-20.0214.6Phthalic acid100-21-00.05528Phthalic anhydride85-44-90.05528Physostigmine657-47-60.0561.4Physostigmine salicylate657-64-70.0561.4Promecarb62631-37-00.0561.4Pronamide23950-58-50.0931.5Propam6122-42-90.0561.4Propoxur6114-26-10.0561.4Prosulfocarb652888-80-90.0421.4Pyrene129-00-00.0678.2Pyridine110-86-10.01416Safrole94-59-70.08122Silvex (2,4,5-TP)93-72-10.727.91,2,4,5-Tetrachlorobenzene95-94-30.05514TCDDs (All Tetrachlorodibenzo-p-dioxins)41903-57-50.0000630.001TCDFs (All Tetrachlorodibenzofurans)55722-27-50.0000630.0011,1,2-Tetrachloroethane630-20-60.0576.01,1,2,2-Tetrachloroethane79-34-50.0576.0Tetrachloroethylene127-18-40.0566.02,3,4,6-Tetrachlorophenol58-90-20.0307.4Thiodicarb659669-26-00.0191.4Thiophanate-methyl623564-05-80.0561.4Toluene108-88-30.08010Toxaphene8001-35-20.00952.6Triallate62303-17-50.0421.4Tribromomethane (Bromoform)75-25-20.63151,2,4-Trichlorobenzene120-82-10.055191,1,1-Trichloroethane71-55-60.0546.01,1,2-Trichloroethane79-00-50.0546.0Trichloroethylene79-01-60.0546.0Trichloromonofluoromethane75-69-40.020302,4,5-Trichlorophenol95-95-40.187.42,4,6-Trichlorophenol88-06-20.0357.42,4,5-Trichlorophenoxyacetic acid/2,4,5-T93-76-50.727.91,2,3-Trichloropropane96-18-40.85301,1,2-Trichloro-1,2,2-trifluoroethane76-13-10.05730Triethylamine6101-44-80.0811.5tris-(2,3-Dibromopropyl) phosphate126-72-70.110.10Vernolate61929-77-70.0421.4Vinyl chloride75-01-40.276.0Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)1330-20-70.3230Antimony7440-36-01.91.15 mg/l TCLPArsenic7440-38-21.45.0 mg/l TCLPBarium7440-39-31.221 mg/l TCLPBeryllium7440-41-70.821.22 mg/l TCLPCadmium7440-43-90.690.11 mg/l TCLPChromium (Total)7440-47-32.770.60 mg/l TCLPCyanides (Total)457-12-51.2590Cyanides (Amenable)457-12-50.8630Fluoride516984-48-835NALead7439-92-10.690.75 mg/l TCLPMercury-Nonwastewater from Retort7439-97-6NA0.20 mg/l TCLPMercury-All Others7439-97-60.150.025 mg/l TCLPNickel7440-02-03.9811 mg/l TCLPSelenium77782-49-20.825.7 mg/l TCLPSilver7440-22-40.430.14 mg/l TCLPSulfide18496-25-814NATHallium7440-28-01.40.20 mg/l TCLPVanadium57440-62-24.31.6 mg/l TCLPZinc57440-66-62.614.3 mg/l TCLP

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 are based on analysis of composite samples.

3 Except for metals (EP or TCLP) and cyanides (total and amenable), the nonwastewater treatment standards expressed as a concentration were established, in part, based on incineration in units operated in accordance with the

technical requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725 or on combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in Section 728.140(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

4 Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010C or 9012B, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/ SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

5 These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at Section 728.102(i).

6 This footnote corresponds with footnote 6 to the table to 40 CFR 268.48(a), which has already expired by its own terms. This statement maintains structural consistency with the corresponding federal regulations.

7 This constituent is not an underlying hazardous constituent, as defined at Section 728.102(i), because its UTS level is greater than its TC level. Thus, a treated selenium waste would always be characteristically ~~hazardous~~hazardous unless it is treated to below its characteristic level.

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

Note: NA means not applicable.

BOARD NOTE: Derived from table to 40 CFR 268.48(a) ~~---(2005)~~ (2007).

(Source: Amended at 32 Ill. Reg. _____, effective _____)
~~ILLINOIS REGISTER~~

JCAR350728-0805697r01

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

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