TITLE 35:  ENVIRONMENTAL PROTECTION

SUBTITLE G:  WASTE DISPOSAL

CHAPTER I:  POLLUTION CONTROL BOARD

SUBCHAPTER c:  HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 728

LAND DISPOSAL RESTRICTIONS

SUBPART A:  GENERAL

Section

728.101 Purpose, Scope, and Applicability

728.102 Definitions

728.103 Dilution Prohibited as a Substitute for Treatment

728.104 Treatment Surface Impoundment Exemption

728.105 Procedures for Case-by-Case Extensions to an Effective Date

728.106 Petitions to Allow Land Disposal of a Waste Prohibited Pursuant to Subpart C

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

728.108 Landfill and Surface Impoundment Disposal Restrictions (Repealed)

728.109 Special Rules for Characteristic Wastes

SUBPART B:  SCHEDULE FOR LAND DISPOSAL PROHIBITION AND ESTABLISHMENT OF TREATMENT STANDARDS

Section

728.110 First Third (Repealed)

728.111 Second Third (Repealed)

728.112 Third Third (Repealed)

728.113 Newly Listed Wastes

728.114 Surface Impoundment Exemptions

SUBPART C:  PROHIBITION ON LAND DISPOSAL

Section

728.120 Waste-Specific Prohibitions: Dyes and Pigments Production Wastes

728.130 Waste-Specific Prohibitions: wood preserving Wastes

728.131 Waste-Specific Prohibitions: Dioxin-Containing Wastes

728.132 Waste-Specific Prohibitions: Soils Exhibiting the Toxicity Characteristic for Metals and Containing PCBs

728.133 Waste-specific prohibitions: Chlorinated Aliphatic Wastes

728.134 Waste-specific prohibitions: toxicity characteristic metal wastes

728.135 Waste-Specific Prohibitions: Petroleum Refining Wastes

728.136 Waste-Specific Prohibitions: Inorganic Chemical Wastes

728.137 Waste-Specific Prohibitions: Ignitable and Corrosive Characteristic Wastes Whose Treatment Standards Were Vacated

728.138 Waste-Specific Prohibitions:  Newly-Identified Organic Toxicity Characteristic Wastes and Newly-Listed Coke By-Product and Chlorotoluene Production Wastes

728.139 Waste-Specific Prohibitions:  Spent Aluminum Potliners and Carbamate Wastes

SUBPART D:  TREATMENT STANDARDS

Section

728.140 Applicability of Treatment Standards

728.141 Treatment Standards Expressed as Concentrations in Waste Extract

728.142 Treatment Standards Expressed as Specified Technologies

728.143 Treatment Standards Expressed as Waste Concentrations

728.144 USEPA Variance from a Treatment Standard

728.145 Treatment Standards for Hazardous Debris

728.146 Alternative Treatment Standards Based on HTMR

728.148 Universal Treatment Standards

728.149 Alternative LDR treatment standards for contaminated soil

SUBPART E:  PROHIBITIONS ON STORAGE

Section

728.150 Prohibitions on Storage of Restricted Wastes

728.APPENDIX A Toxicity Characteristic Leaching Procedure (TCLP) (Repealed)

728.APPENDIX B Treatment Standards (As concentrations in the Treatment Residual Extract) (Repealed)

728.APPENDIX C List of Halogenated Organic Compounds Regulated under Section 728.132

728.APPENDIX D Wastes Excluded from Lab Packs

728.APPENDIX E Organic Lab Packs (Repealed)

728.APPENDIX F Technologies to Achieve Deactivation of Characteristics

728.APPENDIX G Federal Effective Dates

728.APPENDIX H National Capacity LDR Variances for UIC Wastes

728.APPENDIX I EP Toxicity Test Method and Structural Integrity Test

728.APPENDIX J Recordkeeping, Notification, and Certification Requirements (Repealed)

728.APPENDIX K Metal-Bearing Wastes Prohibited from Dilution in a Combustion Unit According to Section 728.103(c)

728.TABLE A Constituent Concentrations in Waste Extract (CCWE)

728.TABLE B Constituent Concentrations in Wastes (CCW)

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

728.TABLE D Technology-Based Standards by USEPA Hazardous Waste Number

728.TABLE E Standards for Radioactive Mixed Waste

728.TABLE F Alternative Treatment Standards for Hazardous Debris

728.TABLE G Alternative Treatment Standards Based on HTMR

728.TABLE H Wastes Excluded from CCW Treatment Standards

728.TABLE I Generator Paperwork Requirements

728.TABLE T Treatment Standards for Hazardous Wastes

728.TABLE U Universal Treatment Standards (UTS)

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 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 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 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 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 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 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 R06-16/R06-17/R06-18 at 31 Ill. Reg. 1254, effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. 12840, effective July 14, 2008; amended in R09-3 at 33 Ill. Reg. 1186, effective December 30, 2008; amended in R11-2/R11-16 at 35 Ill. Reg. 18131, effective October 14, 2011; amended in R12-7 at 36 Ill. Reg. 8790, effective June 4, 2012; amended in R13-15 at 37 Ill. Reg. 17951, effective October 24, 2013; amended in R16-7 at 40 Ill. Reg. 12052, effective August 9, 2016; amended in R17-14/R17-15/R18-12/R18-31 at 42 Ill. Reg. 24924, effective November 19, 2018.

SUBPART A: GENERAL

**Section** **728.101 Purpose, Scope, and Applicability**

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

b) Except as specifically provided otherwise in this Part or 35 Ill. Adm. Code 721, the requirements of this Part apply to persons that generate or transport hazardous waste and to owners and operators of hazardous waste treatment, storage, and disposal facilities.

c) Restricted wastes may continue to be land disposed as follows:

1) Where a person has been granted an extension to the effective date of a prohibition pursuant to Subpart C or pursuant to Section 728.105, with respect to those wastes covered by the extension;

2) Where a person has been granted an exemption from a prohibition pursuant to a petition pursuant to Section 728.106, with respect to those wastes and units covered by the petition;

3) A waste that is hazardous only because it exhibits a characteristic of hazardous waste and which is otherwise prohibited pursuant to this Part is not prohibited if the following is true of the waste:

A) The waste is disposed into a non-hazardous or hazardous waste injection well, as defined in 35 Ill. Adm. Code 704.106(a); and

B) The waste does not exhibit any prohibited characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721 at the point of injection.

4) A waste that is hazardous only because it exhibits a characteristic of hazardous waste and which is otherwise prohibited pursuant to this Part is not prohibited if the waste meets any of the following criteria, unless the waste is subject to a specified method of treatment other than DEACT in Section 728.140 or is D003 reactive cyanide:

A) Any of the following is true of either treatment or management of the waste:

i) The waste is managed in a treatment system that subsequently discharges to waters of the United States pursuant to a permit issued pursuant to 35 Ill. Adm. Code 309;

ii) The waste is treated for purposes of the pretreatment requirements of 35 Ill. Adm. Code 307 and 310; or

iii) The waste is managed in a zero discharge system engaged in Clean Water Act (CWA)-equivalent treatment, as defined in Section 728.137(a); and

B) The waste no longer exhibits a prohibited characteristic of hazardous waste at the point of land disposal (i.e., placement in a surface impoundment).

d) This Part does not affect the availability of a waiver pursuant to Section 121(d)(4) of the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 USC 9621(d)(4)).

e) The following hazardous wastes are not subject to any provision of this Part:

1) Waste generated by a VSQG, as defined in 35 Ill. Adm. Code 720.110;

2) Waste pesticide that a farmer disposes of pursuant to 35 Ill. Adm. Code 722.170;

3) Waste identified or listed as hazardous after November 8, 1984, for which USEPA has not promulgated a land disposal prohibition or treatment standard; and

4) De minimis losses of waste that exhibits a characteristic of hazardous waste to wastewaters are not considered to be prohibited waste and are defined as losses from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers or leaks from pipes, valves, or other devices used to transfer materials); minor leaks of process equipment, storage tanks, or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; rinsate from empty containers or from containers that are rendered empty by that rinsing; and laboratory waste that does not exceed one percent of the total flow of wastewater into the facility’s headworks on an annual basis, or with a combined annualized average concentration not exceeding one part per million (ppm) in the headworks of the facility’s wastewater treatment or pretreatment facility.

f) A universal waste handler or universal waste transporter (as defined in 35 Ill. Adm. Code 720.110) is exempt from Sections 728.107 and 728.150 for the hazardous wastes listed below. Such a handler or transporter is subject to regulation pursuant to 35 Ill. Adm. Code 733.

1) Batteries, as described in 35 Ill. Adm. Code 733.102;

2) Pesticides, as described in 35 Ill. Adm. Code 733.103;

3) Mercury-containing equipment, as described in 35 Ill. Adm. Code 733.104; and

4) Lamps, as described in 35 Ill. Adm. Code 733.105.

g) This Part is cumulative with the land disposal restrictions of 35 Ill. Adm. Code 729. The Environmental Protection Agency (Agency) must not issue a wastestream authorization pursuant to 35 Ill. Adm. Code 709 or Section 22.6 or 39(h) of the Environmental Protection Act unless the waste meets the requirements of this Part as well as 35 Ill. Adm. Code 729.

h) Electronic Reporting. The filing of any document pursuant to any provision of this Part as an electronic document is subject to 35 Ill. Adm. Code 720.104.

BOARD NOTE: Subsection (h) is derived from 40 CFR 3, 271.10(b), 271.11(b), and 271.12(h) (2017).

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**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 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, 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 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

“Halogenated organic compounds” or “HOCs” means those compounds having a carbon-halogen bond that are listed under Appendix C.

“Hazardous constituent” or “hazardous 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.

“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 35 Ill. Adm. Code 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 35 Ill. Adm. Code 738.

BOARD NOTE: The Board added this definition based on the preamble discussions at 51 Fed. Reg. 40572, 40573-74 (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.

“Underlying hazardous constituent” means any constituent listed in Table U, “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 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.103 Dilution Prohibited as a Substitute for Treatment**

a) Except as provided in subsection (b), no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility must in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with Subpart D, to circumvent the effective date of a prohibition in Subpart C, to otherwise avoid a prohibition in Subpart C, or to circumvent a land disposal restriction imposed by RCRA section 3004 (42 USC 6924).

b) Dilution of waste that is hazardous only because it exhibits a characteristic of hazardous waste in a treatment system that treats wastes subsequently discharged to a water of the State pursuant to an NPDES permit issued under 35 Ill. Adm. Code 309, that treats wastes in a CWA-equivalent treatment system, or that treats wastes for purposes of pretreatment requirements under 35 Ill. Adm. Code 310 is not impermissible dilution for purposes of this Section, unless a method other than DEACT has been specified in Section 728.140 as the treatment standard or unless the waste is a D003 reactive cyanide wastewater or nonwastewater.

c) Combustion of waste designated by any of the USEPA hazardous waste numbers listed in Appendix J is prohibited, unless the waste can be demonstrated to comply with one or more of the following criteria at the point of generation or after any bona fide treatment, such as cyanide destruction prior to combustion (unless otherwise specifically prohibited from combustion):

1) The waste contains hazardous organic constituents or cyanide at levels exceeding the constituent-specific treatment standard found in Section 728.148;

2) The waste consists of organic, debris-like materials (e.g., wood, paper, plastic, or cloth) contaminated with an inorganic metal-bearing hazardous waste;

3) The waste has reasonable heating value, such as greater than or equal to 5,000 Btu per pound, at the point of generation;

4) The waste is co-generated with wastes for which combustion is a required method of treatment;

5) The waste is subject to any federal or state requirements necessitating reduction of organics (including biological agents); or

6) The waste contains greater than one percent Total Organic Carbon (TOC).

d) It is a form of impermissible dilution, and therefore prohibited, to add iron filings or other metallic forms of iron to lead-containing hazardous wastes in order to achieve any land disposal restriction treatment standard for lead.  Lead-containing wastes include D008 wastes (wastes exhibiting a characteristic due to the presence of lead), all characteristic wastes containing lead as an underlying hazardous constituent, listed wastes containing lead as a regulated constituent, and hazardous media containing any of the aforementioned lead-containing wastes.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**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; residues that do not meet the prohibition levels established under Subpart C 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 (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 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) 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 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.105 Procedures for Case-by-Case Extensions to an Effective Date**

Any person may apply to USEPA for an extension of an effective date pursuant to 40 CFR 268.5. Any extension that is granted by USEPA will be deemed an extension of the effective date of the derivative Board rule.

(Source: Amended at 30 Ill. Reg. 3800, effective February 23, 2006)

**Section** **728.106 Petitions to Allow Land Disposal of a Waste Prohibited Pursuant to Subpart C**

a) Any person seeking an exemption from a prohibition pursuant to Subpart C for the disposal of a restricted hazardous waste in a particular unit or units must submit a petition to the Board demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The demonstration must include the following components:

1) An identification of the specific waste and the specific unit for which the demonstration will be made;

2) A waste analysis to describe fully the chemical and physical characteristics of the subject waste;

3) A comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality;

4) A monitoring plan that detects migration at the earliest practical time;

5) Sufficient information to assure the Agency that the owner or operator of a land disposal unit receiving restricted wastes will comply with other applicable federal, State, and local laws;

6) Whether the facility is in interim status, or, if a RCRA permit has been issued, the term of the permit.

b) The demonstration referred to in subsection (a) must meet the following criteria:

1) All waste and environmental sampling, test and analysis data must be accurate and reproducible to the extent that state-of-the-art techniques allow;

2) All sampling, testing and estimation techniques for chemical and physical properties of the waste and all environmental parameters must conform with “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, USEPA publication number EPA-530/SW-846, and with “Generic Quality Assurance Project Plan for Land Disposal Restrictions Program”, USEPA publication number EPA-530/SW-87-011, each incorporated by reference in 35 Ill. Adm. Code 720.111.

3) Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements;

4) A quality assurance and quality control plan that addresses all aspects of the demonstration and conforms with “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, USEPA publication number EPA-530/SW-846, and with “Generic Quality Assurance Project Plan for Land Disposal Restrictions Program”, USEPA publication number EPA-530/SW-87-011; and

5) An analysis must be performed to identify and quantify any aspects of the demonstration that contribute significantly to uncertainty. This analysis must include an evaluation of the consequences of predictable future events, including, but not limited to, earthquakes, floods, severe storm events, droughts, or other natural phenomena.

c) Each petition referred to in subsection (a) must include the following:

1) A monitoring plan that describes the monitoring program installed at or around the unit to verify continued compliance with the conditions of the adjusted standard. This monitoring plan must provide information on the monitoring of the unit or the environment around the unit. The following specific information must be included in the plan:

A) The media monitored in the cases where monitoring of the environment around the unit is required;

B) The type of monitoring conducted at the unit, in the cases where monitoring of the unit is required;

C) The location of the monitoring stations;

D) The monitoring interval (frequency of monitoring at each station);

E) The specific hazardous constituents to be monitored;

F) The implementation schedule for the monitoring program;

G) The equipment used at the monitoring stations;

H) The sampling and analytical techniques employed; and

I) The data recording and reporting procedures.

2) Where applicable, the monitoring program described in subsection (c)(1) must be in place for a period of time specified by the Board, as part of its approval of the petition, prior to receipt of prohibited waste at the unit.

3) The monitoring data collected according to the monitoring plan specified pursuant to subsection (c)(1) must be sent to the Agency according to a format and schedule specified and approved in the monitoring plan.

4) A copy of the monitoring data collected under the monitoring plan specified pursuant to subsection (c)(1) must be kept on-site at the facility in the operating record.

5) The monitoring program specified pursuant to subsection (c)(1) must meet the following criteria:

A) All sampling, testing, and analytical data must be approved by the Board and must provide data that is accurate and reproducible;

B) All estimation and monitoring techniques must be approved by the Board; and

C) A quality assurance and quality control plan addressing all aspects of the monitoring program must be provided to and approved by the Board.

d) Each petition must be submitted to the Board as provided in Subpart D of 35 Ill. Adm. Code 104.

e) After a petition has been approved, the owner or operator must report any changes in conditions at the unit or the environment around the unit that significantly depart from the conditions described in the petition and affect the potential for migration of hazardous constituents from the units as follows:

1) If the owner or operator plans to make changes to the unit design, construction, or operation, the owner or operator must do the following at least 90 days prior to making the change:

A) File a petition for modification of or a new petition to amend an adjusted standard with the Board reflecting the changes; or

B) Demonstrate to the Agency that the change can be made consistent with the conditions of the existing adjusted standard.

2) If the owner or operator discovers that a condition at the site that was modeled or predicted in the petition does not occur as predicted, this change must be reported, in writing, to the Agency within 10 days after discovering the change. The Agency must determine whether the reported change from the terms of the petition requires further action, which may include termination of waste acceptance, a petition for modification of or a new petition for an adjusted standard.

f) If there is migration of hazardous constituents from the unit, as determined by the owner or operator, the owner or operator must do the following:

1) It must immediately suspend receipt of prohibited waste at the unit, and

2) It must notify the Agency, in writing, within 10 days after the determination that a release has occurred.

3) Following receipt of the notification, the Agency must do the following within 60 days after receiving notification:

A) It must determine whether the owner or operator can continue to receive prohibited waste in the unit under the conditions of the adjusted standard.

B) If modification or vacation of the adjusted standard is necessary, it must file a motion to modify or vacate the adjusted standard with the Board.

C) It must determine whether further examination of any migration is required pursuant to the applicable provisions of 35 Ill. Adm. Code 724 or 725.

g) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that 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.

h) After receiving a petition, the Board may request any additional information that may be required to evaluate the demonstration.

i) If approved, the petition will apply to land disposal of the specific restricted waste at the individual disposal unit described in the demonstration and will not apply to any other restricted waste at that disposal unit, or to that specific restricted waste at any other disposal unit.

j) The Board will give public notice and provide an opportunity for public comment, as provided in Subpart D of 35 Ill. Adm. Code 104. Notice of a final decision on a petition will be published in the Environmental Register.

k) The term of a petition granted pursuant to this Section will be no longer than the term of the RCRA permit if the disposal unit is operating pursuant to a RCRA permit, or up to a maximum of 10 years from the date of approval provided pursuant to subsection (g) if the unit is operating under interim status. In either case, the term of the granted petition expires upon the termination or denial of a RCRA permit, or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached.

l) Prior to the Board’s decision, the applicant must comply with all restrictions on land disposal pursuant to this Part once the effective date for the waste has been reached.

m) The petition granted by the Board does not relieve the petitioner of responsibilities in the management of hazardous waste pursuant to 35 Ill. Adm. Code 702, 703, 720 through 728, and 738.

n) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 500 ppm are not eligible for an adjusted standard pursuant to this Section.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**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).) 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, and are described in detail in Table C.  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.  (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.

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 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.

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.  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.  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 722.115, 722.116, and 722.117 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, 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) must comply with the notification requirements of subsection (a)(3).

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 in writing 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.

BOARD NOTE: Any Agency request for extended records retention under this subsection (a)(8) is subject to Board review pursuant to Section 40 of the Act.

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 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).

10) An SQG with tolling agreements pursuant to 35 Ill. Adm. Code 722.120(e) must comply with the applicable notification and certification requirements of subsection (a) 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 in writing by the Agency.

BOARD NOTE: Any Agency request for extended records retention under this subsection (a)(10) is subject to Board review pursuant to Section 40 of the Act.

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).

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 USEPA hazardous waste numbers 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(f) (i.e., debris treated by an extraction or destruction technology listed in Table F and debris that the Agency has determined does not contain hazardous waste) is subject to the notification and certification requirements of subsection (d) 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 (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 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) must, for the initial shipment of waste, prepare a one-time certification described in subsection (b)(4) and a notice that includes the information listed in subsection (b)(3) (except the manifest number).  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. 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).

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) to assure that the waste or treatment residue is in compliance with the applicable treatment standards set forth in Subpart D.  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) 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(f) (i.e., debris treated by an extraction or destruction technology provided by Table F, 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(f)(1), the technology from Table F 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 721.103(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 721.103(f)(1), the owner or operator of the treatment facility must document and certify compliance with the treatment standards of Table F, 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 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.108 Landfill and Surface Impoundment Disposal Restrictions (Repealed)**

(Source: Repealed at 15 Ill. Reg. 9462, effective June 17, 1991)

**Section** **728.109 Special Rules for Characteristic Wastes**

a) The initial generator of a solid waste must determine each USEPA hazardous waste number applicable to the waste in order to determine the applicable treatment standards under Subpart D.  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 USEPA hazardous waste number for any applicable listing under Subpart D of 35 Ill. Adm. Code 721.  In addition, the waste must carry one or more of the USEPA hazardous waste numbers 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).  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), 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 USEPA hazardous waste number listed in Subpart D of 35 Ill. Adm. Code 721 will operate in lieu of the standard for the USEPA hazardous waste number 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 USEPA hazardous waste numbers.

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.

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.  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.

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.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

SUBPART B: SCHEDULE FOR LAND DISPOSAL PROHIBITION AND ESTABLISHMENT OF TREATMENT STANDARDS

**Section 728.110 First Third (Repealed)**

(Source: Repealed at 22 Ill. Reg. 783, effective December 16, 1997)

**Section 728.111 Second Third (Repealed)**

(Source: Repealed at 22 Ill. Reg. 783, effective December 16, 1997)

**Section 728.112 Third Third (Repealed)**

(Source: Repealed at 22 Ill. Reg. 783, effective December 16, 1997)

**Section 728.113 Newly Listed Wastes**

In corresponding 40 CFR 268.13, USEPA stated that it would make a land disposal prohibition determination for any hazardous waste identified or listed after November 8, 1984 within six months after the date of identification or listing. This statement maintains structural consistency with the corresponding federal regulations.

(Source: Amended at 27 Ill. Reg. 13045, effective July 17, 2003)

**Section 728.114 Surface Impoundment Exemptions**

a) This Section defines additional circumstances under which an otherwise prohibited waste may continue to be placed in a surface impoundment.

b) Wastes that are newly identified or listed by USEPA persuant to Section 3001 of RCRA (42 USC 6921) after November 8, 1984 and which are stored in a surface impoundment that is newly subject to subtitle C of RCRA (42 USC 6921 et seq.) as a result of the additional identification or listing may continue to be stored in the surface impoundment for 48 months after the promulgation of the additional listing or characteristic, notwithstanding the fact that the waste is otherwise prohibited from land disposal, provided that the surface impoundment is in compliance with the requirements of Subpart F of 35 Ill. Adm. Code 725 within 12 months after promulgation of the new listing or characteristic.

c) Wastes that are newly identified or listed by USEPA under Section 3001 of RCRA (42 USC 6921) after November 8, 1984 and which are treated in a surface impoundment that is newly subject to Subtitle C of RCRA (42 USC 6921 et seq.) as a result of the additional identification or listing may continue to be treated in that surface impoundment, notwithstanding the fact that the waste is otherwise prohibited from land disposal, provided that the surface impoundment is in compliance with the requirements of Subpart F of 35 Ill. Adm. Code 725 within 12 months after the promulgation of the new listing or characteristic. In addition, if the surface impoundment continues to treat hazardous waste after 48 months from promulgation of the additional listing or characteristic, it must then be in compliance with Section 728.104.

(Source: Amended at 30 Ill. Reg. 3800, effective February 23, 2006)

SUBPART C:  PROHIBITION ON LAND DISPOSAL

**Section** **728.120 Waste-Specific Prohibitions: Dyes and Pigments Production Wastes**

a) The waste specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous waste number K181, soil and debris contaminated with this waste, radioactive wastes mixed with this waste, and soil and debris contaminated with radioactive wastes mixed with this waste are prohibited from land disposal.

b) The requirements of subsection (a) do not apply if any of the following conditions are fulfilled:

1) The wastes meet the applicable treatment standards specified in Subpart D;

2) A no-migration exemption has been granted from a prohibition pursuant to a petition under Section 728.106, in which case the requirements of subsection (a) do not apply with respect to those wastes and units covered by the petition;

3) The wastes meet the applicable treatment standards established pursuant to a petition granted under Section 728.144;

4) Hazardous debris has met the treatment standards in Section 728.140 or the alternative treatment standards in Section 728.145; or

5) USEPA has granted an extension to the effective date of a prohibition pursuant to 40 CFR 268.5, in which case the requirements of subsection (a) do not apply with respect to these wastes covered by the extension.

c) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract of the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable levels set forth in Subpart D, the waste is prohibited from land disposal, and all requirements of this Part apply, except as otherwise specified.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.130 Waste-Specific Prohibitions: wood preserving Wastes**

a) The following wastes are prohibited from land disposal:  the wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous waste numbers F032, F034, and F035.

b) The following wastes are prohibited from land disposal:  soil and debris contaminated with the wastes specified in 35 Ill. Adm. Code 721 as F032, F034, F035; and radioactive wastes mixed with USEPA hazardous waste numbers F032, F034, and F035.

c) This subsection (c) corresponds with 40 CFR 268.30(c), which expired by its own terms on May 12, 1999. This statement maintains structural consistency with the corresponding federal regulations.

d) The requirements of subsections (a) and (b) do not apply if any of the following conditions is fulfilled:

1) The wastes meet the applicable treatment standards specified in Subpart D;

2) A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;

3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section 728.144; or

4) A person has been granted an extension to the effective date of a prohibition by USEPA pursuant to federal 40 CFR 268.5 (see Section 728.105), with respect to those wastes covered by the extension.

e) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in Section 728.140 and Table T, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste.  If the waste contains constituents in excess of the applicable universal treatment standard levels of Section 728.148 and Table U, the waste is prohibited from land disposal and all requirements of part 728 are applicable, except as otherwise specified.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.131 Waste-Specific Prohibitions: Dioxin-Containing Wastes**

a) The dioxin-containing wastes specified in 35 Ill. Adm. Code 721.131 as USEPA Hazardous Waste Numbers F020, F021, F022, F023, F026, F027, and F028 are prohibited from land disposal, unless the following condition applies: the dioxin-containing waste is contaminated soil and debris resulting from a CERCLA response or a RCRA corrective action.

b) USEPA Hazardous Waste Numbers F020, F021, F022, F023, F026, F027, and F028, and dioxin-containing waste that is contaminated soil and debris resulting from a CERCLA response or a RCRA corrective action listed in subsection (a) are prohibited from land disposal.

c) This subsection (c) corresponds with 40 CFR 268.31(c), which expired by its own terms on November 8, 1990. This statement maintains structural consistency with the corresponding federal regulations.

d) The requirements of subsections (a) and (b) do not apply if any of the following conditions is fulfilled:

1) The wastes meet the standards of Subpart D; or

2) A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition; or

3) A person has been granted an extension from the effective date of a prohibition pursuant to Section 728.105, with respect to those wastes and units covered by the extension.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.132 Waste-Specific Prohibitions: Soils Exhibiting the Toxicity Characteristic for Metals and Containing PCBs**

a) The following wastes are prohibited from land disposal: any volumes of soil exhibiting the toxicity characteristic solely because of the presence of metals (USEPA hazardous waste numbers D004 through D011) and containing PCBs.

b) The requirements of subsection (a) do not apply if any of the following conditions is fulfilled:

1) Low-Halogenated Organics Waste Meeting the Treatment Standards of Subpart D

A) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and

B) The wastes meet the treatment standards specified in Subpart D for USEPA hazardous waste numbers D004 through D011, as applicable; or

2) Low-Halogenated Organics Waste Meeting Alternative Treatment Standards for Contaminated Soil

A) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and

B) The wastes meet the alternative treatment standards specified in Section 728.149 for contaminated soil; or

3) A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition; or

4) The wastes meet applicable alternative treatment standards established pursuant to a petition granted under Section 728.144.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.133 Waste-specific prohibitions: Chlorinated Aliphatic Wastes**

a) The wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous wastes numbers K174 and K175, soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.

b) The requirements of subsection (a) do not apply if any of the following conditions is fulfilled:

1) The wastes meet the applicable treatment standards specified in Subpart D;

2) A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;

3) The wastes meet the applicable treatment standards established pursuant to a petition granted under Section 728.144;

4) Hazardous debris has met the treatment standards in Section 728.140 or the alternative treatment standards in Section 728.145; or

5) A person has been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to those wastes covered by the extension.

c) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable levels of Subpart D, the waste is prohibited from land disposal, and all requirements of this Part 728 are applicable, except as otherwise specified.

d) Disposal of USEPA hazardous waste number K175 wastes that have complied with all applicable Section 728.140 treatment standards must also be macroencapsulated in accordance with Table F, unless the waste is placed in one of the following:

1) A RCRA Subtitle C monofill containing only K175 wastes that meet all applicable Section 728.140 treatment standards; or

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

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.134 Waste-specific prohibitions: toxicity characteristic metal wastes**

a) The following wastes are prohibited from land disposal:  the wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous waste numbers D004 through D011 that are newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure), and waste, soil, or debris from mineral processing operations that is identified as hazardous by the specifications at 35 Ill. Adm. Code 721.

b) The following waste is prohibited from land disposal: slag from secondary lead smelting that exhibits the characteristic of toxicity due to the presence of one or more metals.

c) The following wastes are prohibited from land disposal:  newly identified characteristic wastes from elemental phosphorus processing; radioactive wastes mixed with USEPA hazardous waste numbers D004 through D011 wastes that are newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure); or mixed with newly identified characteristic mineral processing wastes, soil, or debris.

d) This subsection (d) corresponds with 40 CFR 269.34(d), which expired by its own terms on May 26, 2000. This statement maintains structural consistency with the corresponding federal regulations.

e) The requirements of subsections (a) and (b) do not apply if any of the following applies to the waste:

1) The wastes meet the applicable treatment standards specified in Subpart D;

2) The Board has granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;

3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section 728.144; or

4) USEPA has granted an extension to the effective date of a prohibition pursuant to federal 40 CFR 268.5, with respect to those wastes covered by the extension.

f) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140 and Table T, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste.  If the waste contains constituents (including underlying hazardous constituents in characteristic wastes) in excess of the applicable universal treatment standard levels of Section 728.148 and Table U, the waste is prohibited from land disposal, and all requirements of this Part are applicable, except as otherwise specified.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.135 Waste-Specific Prohibitions: Petroleum Refining Wastes**

a) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous wastes numbers K169, K170, K171, and K172; soils and debris contaminated with these wastes; radioactive wastes mixed with these hazardous wastes; and soils and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

b) The requirements of subsection (a) do not apply if any of the following applies to the waste:

1) The wastes meet the applicable treatment standards specified in Subpart D;

2) The Board has granted an adjusted standard that exempts waste from a prohibition pursuant to Section 728.106, with respect to those wastes and units covered by the adjusted standard;

3) The wastes meet an adjusted standard from an applicable treatment standard granted under Section 728.144;

4) The waste is hazardous debris that has met the treatment standards set forth in Section 728.140 and Table T or the alternative treatment standards in Section 728.145; or

5) USEPA has granted an extension to the effective date of a prohibition pursuant to federal 40 CFR 268.5, with respect to these wastes covered by the extension.

c) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable universal treatment standard levels of Section 728.148 and Table U, the waste is prohibited from land disposal, and all requirements of this Part are applicable, except as otherwise specified.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.136 Waste-Specific Prohibitions: Inorganic Chemical Wastes**

a) The wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous wastes numbers K176, K177, and K178, and soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.

b) The requirements of subsection (a) do not apply if any of the following applies to the waste:

1) The wastes meet the applicable treatment standards specified in Subpart D;

2) A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;

3) The wastes meet the applicable treatment standards established pursuant to a petition granted under Section 728.144;

4) Hazardous debris has met the treatment standards in Section 728.140 and Table T or the alternative treatment standards in Section 728.145; or

5) A person has been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to these wastes covered by the extension.

c) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140 and Table T, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable levels of Subpart D, the waste is prohibited from land disposal, and all requirements of this part are applicable, except as otherwise specified.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.137 Waste-Specific Prohibitions: Ignitable and Corrosive Characteristic Wastes Whose Treatment Standards Were Vacated**

a) The wastes specified in 35 Ill. Adm. Code 721.121 as D001 (and is not in the High TOC Ignitable Liquids Subcategory), and specified in 35 Ill. Adm. Code 721.122 as D002, that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies.

b) The wastes specified in 35 Ill. Adm. Code 721.121 as D001 (and is not in the High TOC Ignitable Liquids Subcategory), and specified in 35 Ill. Adm. Code 721.122 as D002, that are managed in systems defined in 35 Ill. Adm. Code 704 and 730 as Class V injection wells, that do not engage in CWA-equivalent treatment before injection, are prohibited from land disposal.

(Source: Amended at 27 Ill. Reg. 13045, effective July 17, 2003)

**Section** **728.138 Waste-Specific Prohibitions: Newly-Identified Organic Toxicity Characteristic Wastes and Newly-Listed Coke By-Product and Chlorotoluene Production Wastes**

a) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous waste numbers K141, K142, K143, K144, K145, K147, K148, K149, K150, and K151 are prohibited from land disposal. In addition, debris contaminated with USEPA hazardous waste numbers F037, F038, K107 through K112, K117, K118, K123 through K126, K131, K132, K136, U328, U353, U359 and soil and debris contaminated with D012 through D043, K141 through K145, and K147 through K151 are prohibited from land disposal. The following wastes that are specified in the table at 35 Ill. Adm. Code 721.124(b) as USEPA hazardous waste numbers D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, and D043 that are not radioactive, that are managed in systems other than those whose discharge is regulated under the federal Clean Water Act (CWA; 33 U.S.C. 1251 et seq.), that are zero dischargers that do not engage in CWA-equivalent treatment before ultimate land disposal, or that are injected in Class I deep wells regulated under the Safe Drinking Water Act (SDWA) are prohibited from land disposal. “CWA-equivalent treatment”, as used in this Section, means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation and sedimentation for metals, reduction for hexavalent chromium, or another treatment technology that can be demonstrated to perform equally to or better than these technologies.

b) Radioactive wastes that are mixed with any of USEPA hazardous waste numbers D018 through D043 waste that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), in systems that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or in systems that are zero dischargers that engage in CWA-equivalent treatment, as defined in subsection (a), before ultimate land disposal are prohibited from land disposal. Radioactive wastes mixed with any of USEPA hazardous waste numbers K141 through K145 and K147 through K151 are also prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

c) This subsection (c) corresponds with 40 CFR 268.38(c), which expired by its own terms on September 19, 1996. This statement maintains structural consistency with the corresponding federal regulations.

d) The requirements of subsections (a), (b), and (c) do not apply if any of the following applies to the waste:

1) The wastes meet the applicable treatment standards specified in Subpart D;

2) A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;

3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section 728.144;

4) A person has been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to these wastes covered by the extension.

e) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140 and Table T, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable levels of Subpart D, the waste is prohibited from land disposal and all requirements of this Part are applicable, except as otherwise specified.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.139 Waste-Specific Prohibitions: Spent Aluminum Potliners and Carbamate Wastes**

a) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous waste numbers K156-K159 and K161; and in 35 Ill. Adm. Code 721.133 as USEPA hazardous waste numbers P127, P128, P185, P188 through P192, P194, P196 through P199, P201 through P205, U271, U278 through U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409 through U411 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.

b) The wastes identified in 35 Ill. Adm. Code 721.123 as USEPA hazardous waste number D003 are prohibited from land disposal, other than those that are managed in a system whose discharge is regulated under 35 Ill. Adm. Code:Subtitle C, one that injects hazardous waste in Class I waste injection well regulated under 35 Ill. Adm. Code 702, 704, and 730, or one that is a zero discharger that engages in federal Clean Water Act (CWA)-equivalent treatment before ultimate land disposal. This prohibition does not apply to unexploded ordnance and other explosive devices that have been the subject of an emergency response. (Such D003 wastes are prohibited unless they meet the treatment standard of DEACT before land disposal (see Section 728.140)).

c) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous waste number K088 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.

d) Radioactive wastes mixed with waste designated by any of USEPA hazardous waste numbers K088, K156 through K159, K161, P127, P128, P185, P188 through P192, P194, P196 through P199, P201 through P205, U271, U278 through U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409 through U411 are prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

e) This subsection corresponds with 40 CFR 268.39(e), which expired by its own terms after April 8, 1998. This statement maintains structural consistency with the corresponding federal regulations.

f) The requirements of subsections (a), (b), (c), and (d) do not apply if any of the following applies to the waste:

1) The wastes meet the applicable treatment standards specified in Subpart D;

2) The person conducting the disposal has been granted an exemption from a prohibition under a petition pursuant to Section 728.106, with respect to those wastes and units covered by the petition;

3) The wastes meet the applicable alternative treatment standards established pursuant to a petition granted under Section 728.144; or

4) The person conducting the disposal has been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to those wastes covered by the extension.

g) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards set forth in Section 728.140, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or in the waste, or the generator may use knowledge of the waste. If a waste contains constituents in excess of the applicable levels of Subpart D, the waste is prohibited from land disposal and all requirements of this Part are applicable to the waste, except as otherwise specified.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

SUBPART D:  TREATMENT STANDARDS

**Section** **728.140 Applicability of Treatment Standards**

a) A prohibited waste identified in Table T, “Treatment Standards for Hazardous Wastes”, may be land disposed only if it meets the requirements found in that Table.  For each waste, Table T identifies one of three types of treatment standard requirements:

1) All hazardous constituents in the waste or in the treatment residue must be at or below the values found in Table T for that waste (total waste standards);

2) The hazardous constituents in the extract of the waste or in the extract of the treatment residue must be at or below the values found in Table T (waste extract standards); or

3) The waste must be treated using the technology specified in Table T (technology standard), which is described in detail in Table C, “Technology Codes and Description of Technology-Based Standards”.

b) For wastewaters, compliance with concentration level standards is based on maximums for any one day, except for D004 through D011 wastes for which the previously promulgated treatment standards based on grab samples remain in effect.  For all nonwastewaters, compliance with concentration level standards is based on grab sampling.  For wastes covered by the waste extract standards, the test Method 1311 (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), must be used to measure compliance.  An exception is made for D004 and D008, for which either of two test methods may be used:  Method 1311 or Method 1310B (Extraction Procedure Toxicity Test) in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, USEPA publication number EPA-530/SW-846. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the Agency pursuant to Section 728.142(b).

c) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern.

d) Notwithstanding the prohibitions specified in subsection (a), treatment and disposal facilities may demonstrate (and certify pursuant to Section 728.107(b)(5)) compliance with the treatment standards for organic constituents specified by a footnote in Table T, provided the following conditions are satisfied:

1) The treatment standards for the organic constituents were established based on incineration in units operated in accordance with the technical requirements of Subpart O of 35 Ill. Adm. Code 724, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements;

2) The treatment or disposal facility has used the methods referenced in subsection (d)(1) to treat the organic constituents; and

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

e) For a characteristic waste (USEPA hazardous waste number D001 through D043) that is subject to treatment standards set forth in Table T, “Treatment Standards for Hazardous Wastes”, and the waste is not managed in a wastewater treatment system that is either regulated under the Clean Water Act (CWA) or one that is CWA-equivalent or the waste is injected into a Class I non-hazardous deep injection well, all underlying hazardous constituents (as defined in Section 728.102) must meet the universal treatment standards, set forth in Table U prior to land disposal, as defined in Section 728.102.

f) The treatment standards for USEPA hazardous waste numbers F001 through F005 nonwastewater constituents carbon disulfide, cyclohexanone, or methanol apply to wastes that contain only one, two, or three of these constituents.  Compliance is measured for these constituents in the waste extract from test 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).  If the waste contains any of these three constituents along with any of the other 25 constituents found in USEPA hazardous waste numbers F001 through F005, then compliance with treatment standards for carbon disulfide, cyclohexanone, or methanol are not required.

g) This subsection (g) corresponds with 40 CFR 268.40(g), which expired by its own terms on March 4, 1999.  This statement maintains structural consistency with the corresponding federal rules.

h) Prohibited USEPA hazardous waste numbers D004 through D011, mixed radioactive wastes, and mixed radioactive listed wastes containing metal constituents that were previously treated by stabilization to the treatment standards in effect at that time and then put into storage do not have to be re-treated to meet treatment standards in this Section prior to land disposal.

i) This subsection (i) corresponds with 40 CFR 268.40(i), which USEPA has removed and marked “reserved”. This statement maintains structural consistency with the corresponding federal regulations.

j) The treatment standards for the wastes specified in 35 Ill. Adm. Code 721.133 as USEPA hazardous waste numbers P185, P191, P192, P197, U364, U394, and U395 may be satisfied by either meeting the constituent concentrations presented in Table T, “Treatment Standards for Hazardous Wastes”, or by treating the waste by the following technologies: combustion, as defined by the technology code CMBST at Table C, for nonwastewaters; biodegradation, as defined by the technology code BIODG; carbon adsorption, as defined by the technology code CARBN; chemical oxidation, as defined by the technology code CHOXD; or combustion, as defined as technology code CMBST at Table C, for wastewaters.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.141 Treatment Standards Expressed as Concentrations in Waste Extract**

For the requirements previously found in this Section and for treatment standards in Table A, “Table CCWE-Constituent Concentrations in Waste Extracts”, refer to Section 728.140 and Table T, “Treatment Standards for Hazardous Wastes”.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.142 Treatment Standards Expressed as Specified Technologies**

a) The following wastes listed in Table T, “Treatment Standards for Hazardous Wastes”, for which standards are expressed as a treatment method rather than as a concentration level, must be treated using the technology or technologies specified in Table C.

1) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70 (Incineration), incorporated by reference in 35 Ill. Adm. Code 720.111(b), or burned in high efficiency boilers in accordance with the technical requirements of 40 CFR 761.60 (Disposal Requirements), incorporated by reference in 35 Ill. Adm. Code 720.111(b).  Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70.  Thermal treatment in accordance with this Section must be in compliance with applicable regulations in 35 Ill. Adm. Code 724, 725, and 726.

2) Nonliquid hazardous wastes containing halogenated organic compounds (HOCs) in total concentrations greater than or equal to 1,000 mg/kg and liquid HOC-containing wastes that are prohibited pursuant to Section 728.132(e)(1) must be incinerated in accordance with the requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725.  These treatment standards do not apply where the waste is subject to a treatment standard codified in Subpart C for a specific HOC (such as a hazardous waste chlorinated solvent for which a treatment standard is established pursuant to Section 728.141(a)).

3) A mixture consisting of wastewater, the discharge of which is subject to regulation pursuant to 35 Ill. Adm. Code 309 or 310, and de minimis losses of materials from manufacturing operations in which these materials are used as raw materials or are produced as products in the manufacturing process that meet the criteria of the D001 ignitable liquids containing greater than 10 percent total organic constituents (TOC) subcategory are subject to the DEACT treatment standard described in Table C.  For purposes of this subsection (a)(3), “de minimis losses” include the following:

A) Those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, or leaks from pipes, valves, or other devices used to transfer materials);

B) Minor leaks from process equipment, storage tanks, or containers;

C) Leaks from well-maintained pump packings and seals;

D) Sample purgings; and

E) Relief device discharges.

b) Any person may submit an application to the Agency demonstrating that an alternative treatment method can achieve a level of performance equivalent to that achievable by methods specified in subsections (a), (c), and (d) for wastes or specified in Table F for hazardous debris.  The applicant must submit information demonstrating that the applicant’s treatment method is in compliance with federal and state requirements, including this Part; 35 Ill. Adm. Code 709, 724, 725, 726, and 729; and Sections 22.6 and 39(h) of the Environmental Protection Act and that the treatment method adequately protects human health and the environment.  On the basis of such information and any other available information, the Agency must approve the use of the alternative treatment method if the Agency finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in subsections (a), (c), and (d) and in Table F, for hazardous debris.  Any approval must be stated in writing and may contain such provisions and conditions as the Agency determines to be appropriate.  The person to whom such approval is issued must comply with all limitations contained in such determination.

c) As an alternative to the otherwise applicable treatment standards of Subpart D, lab packs are eligible for land disposal provided the following requirements are met:

1) The lab packs comply with the applicable provisions of 35 Ill. Adm. Code 724.416 and 725.416;

BOARD NOTE:  35 Ill. Adm. Code 729.301 and 729.312 include additional restrictions on the use of lab packs.

2) The lab pack does not contain any of the wastes listed in Appendix D;

3) The lab packs are incinerated in accordance with the requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725; and

4) Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 are treated in compliance with the applicable treatment standards specified for such wastes in Subpart D.

d) Radioactive hazardous mixed wastes are subject to the treatment standards in Section 728.140 and Table T.  Where treatment standards are specified for radioactive mixed wastes in Table T, “Table of Treatment Standards”, those treatment standards will govern.  Where there is no specific treatment standard for radioactive mixed waste, the treatment standard for the hazardous waste (as designated by USEPA hazardous waste number) applies.  Hazardous debris containing radioactive waste is subject to the treatment standards specified in Section 728.145.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.143 Treatment Standards Expressed as Waste Concentrations**

For the requirements previously found in this Section and for treatment standards in Table A, “CCW-Constituent Concentrations in Wastes”, refer to Section 728.140 and Table T, “Treatment Standards for Hazardous Wastes”.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.144 USEPA Variance from a Treatment Standard**

a) Based on a petition filed by a generator or treater of hazardous waste, USEPA has stated that it may approve a variance from an applicable treatment standard if the petitioner can demonstrate that either of the following applies to treatment of the waste:

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

2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible.  To show that this is the case, the petitioner must demonstrate that either of the following applies to treatment of the waste:

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

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

BOARD NOTE:  A variance from a treatment standard is available only from USEPA. USEPA has reserved to itself the authority to grant a variance from a treatment standard.

b) Each petition must be submitted in accordance with the procedures in 40 CFR 260.20.

c) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, 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.

d) After receiving a petition for an adjusted treatment standard, USEPA has stated that it may request any additional information or samples that are necessary to evaluate the petition. Additional copies of the complete petition may be requested as needed to send to affected states and Regional Offices.

e) USEPA has stated that it will give public notice in the Federal Register of the intent to approve or deny a petition and provide an opportunity for public comment.  USEPA has stated that the final decision on a variance from a treatment standard will be published in the Federal Register.

f) A generator, treatment facility or disposal facility that is managing a waste covered by an adjusted treatment standard must comply with the waste analysis requirements for restricted wastes found under Section 728.107.

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

h) Based on a petition filed by a generator or treater of hazardous waste, USEPA has stated that it may approve a site-specific variance from an applicable treatment standard if the petitioner can demonstrate that either of the following applies to treatment of the waste:

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

2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible.  To show that this is the case, the petitioner must demonstrate that either of the following applies to treatment of the waste:

A) Treatment to the specified level or by the specified method is technically inappropriate (for example, resulting in combustion of large amounts of mildly contaminated environmental media where the treatment standard is not based on combustion of such media); or

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

3) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below (i.e., lower than) the concentrations necessary to minimize short- and long-term threats to human health and the environment.  USEPA has stated that a treatment variance granted under 40 CFR 268.44(h)(3) will include the following features:

A) At a minimum, USEPA has stated that a treatment variance approved under 40 CFR 268.44(h)(3) will impose an alternative land disposal restriction treatment standard that will achieve the following, using a reasonable maximum exposure scenario:

i) For carcinogens, it will achieve constituent concentrations that result in the total excess risk to an individual exposed over a lifetime, generally falling within a range from 10‑4 to 10‑6; and

ii) For constituents with non-carcinogenic effects, it will achieve constituent concentrations that an individual could be exposed to on a daily basis without appreciable risk of deleterious effect during a lifetime.

B) USEPA has stated that a treatment variance approved under 40 CFR 268.44(h)(3) will not consider post-land-disposal controls.

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

5) USEPA has stated that public notice and a reasonable opportunity for public comment must be provided before granting or denying a petition.

i) Each petition for a site-specific variance from a treatment standard must include the information in 40 CFR 260.20(b)(1) through (b)(4).

j) After receiving an application for a site-specific variance from a treatment standard, USEPA may request any additional information or samples that USEPA determines are necessary to evaluate the petition.

k) A generator, treatment facility, or disposal facility that is managing a waste covered by a site-specific variance from a treatment standard must comply with the waste analysis requirements for restricted wastes in Section 728.107.

l) During the petition review process, the petitioner for a site-specific variance must comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached.

m) For any variance from a treatment standard, the petitioner must also demonstrate that compliance with the requested variance is sufficient to minimize threats to human health and the environment posed by land disposal of the waste.  In evaluating this demonstration, USEPA has stated that it will take into account whether the treatment variance should be granted if the subject waste is to be used in a manner constituting disposal pursuant to 40 CFR 266.20 through 266.23.

n) This subsection (n) corresponds with 40 CFR 268.44(n), marked “reserved” by USEPA. This statement maintains structural consistency with corresponding federal regulations.

o) The facilities listed in Table H are excluded from the treatment standards under Section 728.143(a) and Table B, and are subject to the constituent concentrations listed in Table H.

p) After USEPA grants a treatability exception by regulatory action pursuant to 40 CFR 268.44 and a person demonstrates that the treatability exception needs to be adopted as part of the Illinois RCRA program because the waste is generated or managed in Illinois, the Board will adopt the treatability exception by identical in substance rulemaking pursuant to Section 22.4(a) of the Environmental Protection Act.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.145 Treatment Standards for Hazardous Debris**

a) Treatment Standards.  Hazardous debris must be treated prior to land disposal as follows, unless the Agency has determined, under 35 Ill. Adm. Code 721.103(f)(2), that the debris is no longer contaminated with hazardous waste or the debris is treated to the waste-specific treatment standard provided in this Subpart D for the waste contaminating the debris:

1) General.  Hazardous debris must be treated for each “contaminant subject to treatment”, defined by subsection (b), using the technology or technologies identified in Table F.

2) Characteristic Debris.  Hazardous debris that exhibits the characteristic of ignitability, corrosivity, or reactivity identified under 35 Ill. Adm. Code 721.121, 721.122, or 721.123, respectively, must be deactivated by treatment using one of the technologies identified in Table F.

3) Mixtures of Debris Types.  The treatment standards of Table F must be achieved for each type of debris contained in a mixture of debris types.  If an immobilization technology is used in a treatment train, it must be the last treatment technology used.

4) Mixtures of Contaminant Types.  Debris that is contaminated with two or more contaminants subject to treatment identified under subsection (b) must be treated for each contaminant using one or more treatment technologies identified in Table F.  If an immobilization technology is used in a treatment train, it must be the last treatment technology used.

5) Waste PCBs.  Hazardous debris that is also a waste PCB under 40 CFR 761 (Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions), incorporated by reference in 35 Ill. Adm. Code 720.111(b), is subject to the requirements of either 40 CFR 761 or the requirements of this Section, whichever are more stringent.

b) Contaminants Subject to Treatment.  Hazardous debris must be treated for each “contaminant subject to treatment”.  The contaminants subject to treatment must be determined as follows:

1) Toxicity Characteristic Debris.  The contaminants subject to treatment for debris that exhibits the Toxicity Characteristic (TC) by 35 Ill. Adm. Code 721.124 are those EP constituents for which the debris exhibits the TC toxicity characteristic.

2) Debris Contaminated with Listed Waste.  The contaminants subject to treatment for debris that is contaminated with a prohibited listed hazardous waste are those constituents or wastes for which treatment standards are established for the waste under Section 728.140 and Table T.

3) Cyanide Reactive Debris.  Hazardous debris that is reactive because of cyanide must be treated for cyanide.

c) Conditioned Exclusion of Treated Debris.  Hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table F and that does not exhibit a characteristic of hazardous waste identified under Subpart C of 35 Ill. Adm. Code 721 after treatment is not a hazardous waste and need not be managed in a subtitle C facility.  Hazardous debris contaminated with a listed waste that is treated by an immobilization technology specified in Table F is a hazardous waste and must be managed in a RCRA Subtitle C treatment, storage, or disposal facility.

d) Treatment Residuals

1) General Requirements.  Except as provided by subsections (d)(2) and (d)(4):

A) Residue from the treatment of hazardous debris must be separated from the treated debris using simple physical or mechanical means; and

B) Residue from the treatment of hazardous debris is subject to the waste-specific treatment standards provided by Subpart D for the waste contaminating the debris.

2) Nontoxic Debris.  Residue from the deactivation of ignitable, corrosive, or reactive characteristic hazardous debris (other than cyanide-reactive) that is not contaminated with a contaminant subject to treatment defined by subsection (b), must be deactivated prior to land disposal and is not subject to the waste-specific treatment standards of Subpart D.

3) Cyanide-Reactive Debris.  Residue from the treatment of debris that is reactive because of cyanide must meet the standards for USEPA hazardous waste number D003 under Section 728.140 and Table T.

4) Ignitable Nonwastewater Residue.  Ignitable nonwastewater residue containing equal to or greater than 10 percent total organic carbon is subject to the technology specified in the treatment standard for USEPA hazardous waste number D001:  Ignitable Liquids.

5) Residue from Spalling.  Layers of debris removed by spalling are hazardous debris that remains subject to the treatment standards of this Section.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.146 Alternative Treatment Standards Based on HTMR**

For the treatment standards previously found in Table G, as formerly referenced in this Section, refer to Section 728.140 and Table T, “Treatment Standards for Hazardous Wastes”.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.148 Universal Treatment Standards**

Table U, “Universal Treatment Standards (UTS)”, identifies the hazardous constituents, along with the nonwastewater and wastewater treatment standard levels, that are used to regulate most prohibited hazardous wastes with numerical limits. For determining compliance with treatment standards for underlying hazardous constituents, as defined in Section 728.102(i), these treatment standards may not be exceeded. Compliance with these treatment standards is measured by an analysis of grab samples, unless otherwise noted in Table U.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.149 Alternative LDR treatment standards for contaminated soil**

a) Applicability.  An owner or operator must comply with LDRs prior to placing soil that exhibits a characteristic of hazardous waste or which exhibited a characteristic of hazardous waste at the time it was generated into a land disposal unit.  The following chart describes whether an owner or operator must comply with LDRs prior to placing soil contaminated by listed hazardous waste into a land disposal unit:

|  |  |  |  |
| --- | --- | --- | --- |
| If the LDRs | And if the LDRs | And if | Then the owner or operator |
| Applied to the listed waste when it contaminated the soil\*. | Apply to the listed waste now. | — | Must comply with LDRs. |
| Did not apply to the listed waste when it contamin­ated the soil\*. | Apply to the listed waste now. | The soil is deter­mined to contain the listed waste when the soil is first generated. | Must comply with LDRs. |
| Did not apply to the listed waste when it contamin­ated the soil\*. | Apply to the listed waste now. | The soil is deter­mined not to contain the listed waste when the soil is first generated. | Needs not comply with LDRs. |
| Did not apply to the listed waste when it contamin­ated the soil\*. | Do not apply to the listed waste now. | — | Needs not comply with LDRs. |

\* For dates of LDR applicability, see Appendix G.  To determine the date any given listed hazardous waste contaminated any given volume of soil, use the last date any given listed hazardous waste was placed into any given land disposal unit or, in the case of an accidental spill, the date of the spill.

b) Prior to land disposal, contaminated soil identified by subsection (a) as needing to comply with LDRs must be treated according to the applicable treatment standards specified in subsection (c) or according to the universal treatment standards specified in Section 728.148 and Table U applicable to the contaminating listed hazardous waste or the applicable characteristic of hazardous waste if the soil is characteristic.  The treatment standards specified in subsection (c) and the universal treatment standards may be modified through a treatment variance approved in accordance with Section 728.144.

c) Treatment Standards for Contaminated Soils.  Prior to land disposal, contaminated soil identified by subsection (a) as needing to comply with LDRs must be treated according to all the standards specified in this subsection (c) or according to the universal treatment standards specified in Section 728.148 and Table U.

1) All Soils.  Prior to land disposal, all constituents subject to treatment must be treated as follows:

A) For non-metals except carbon disulfide, cyclohexanone, and methanol, treatment must achieve 90 percent reduction in total constituent concentrations, except as provided by subsection (c)(1)(C).

B) For metals and carbon disulfide, cyclohexanone, and methanol, treatment must achieve 90 percent reduction in constituent concentrations as measured in leachate from the treated media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by subsection (c)(1)(C).

C) When treatment of any constituent subject to treatment to a 90 percent reduction standard would result in a concentration less than 10 times the universal treatment standard for that constituent, treatment to achieve constituent concentrations less than 10 times the universal treatment standard is not required.  The universal treatment standards are identified in Table U.

2) Soils That Exhibit the Characteristic of Ignitability, Corrosivity or Reactivity.  In addition to the treatment required by subsection (c)(1), prior to land disposal, soils that exhibit the characteristic of ignitability, corrosivity, or reactivity must be treated to eliminate these characteristics.

3) Soils That Contain Nonanalyzable Constituents.  In addition to the treatment requirements of subsections (c)(1) and (c)(2), prior to land disposal, the following treatment is required for soils that contain nonanalyzable constituents:

A) For soil that contains only analyzable and nonanalyzable organic constituents, treatment of the analyzable organic constituents to the levels specified in subsections (c)(1) and (c)(2); or

B) For soil that contains only nonanalyzable constituents, treatment by the methods specified in Section 728.142 for the waste contained in the soil.

d) Constituents Subject to Treatment.  When applying the soil treatment standards in subsection (c), constituents subject to treatment are any constituents listed in Table U, entitled “Universal Treatment Standards”, that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium, zinc, and that are present at concentrations greater than ten times the universal treatment standard. PCBs are not constituents subject to treatment in any given volume of soil that exhibits the toxicity characteristic solely because of the presence of metals.

e) Management of Treatment Residuals.  Treatment residuals from treating contaminated soil identified by subsection (a) as needing to comply with LDRs must be managed as follows:

1) Soil residuals are subject to the treatment standards of this Section;

2) Non-soil residuals are subject to the following requirements:

A) For soils contaminated by listed hazardous waste, the RCRA Subtitle C standards applicable to the listed hazardous waste; and

B) For soils that exhibit a characteristic of hazardous waste, if the non-soil residual also exhibits a characteristic of hazardous waste, the treatment standards applicable to the characteristic hazardous waste.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

SUBPART E: PROHIBITIONS ON STORAGE

**Section** **728.150 Prohibitions on Storage of Restricted Wastes**

a) Except as provided in this Section, the storage of hazardous wastes restricted from land disposal under Subpart C is prohibited, unless the following conditions are met:

1) A generator stores such wastes in tanks, containers, or containment buildings on-site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and the generator complies with the requirements in 35 Ill. Adm. Code 722.116 and 722.117 and 35 Ill. Adm. Code 724 and 725. (A generator that is in existence on the effective date of a regulation under this Part and which must store hazardous wastes for longer than 90 days due to the regulations under this Part becomes an owner or operator of a storage facility and must obtain a RCRA permit, as required by 35 Ill. Adm. Code 703. Such a facility may qualify for interim status upon compliance with the regulations governing interim status under 35 Ill. Adm. Code 703.153.)

2) An owner or operator of a hazardous waste treatment, storage, or disposal facility stores such wastes in tanks, containers, or containment buildings solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and each of the following conditions are fulfilled:

A) Each container is clearly marked with the following to identify:

i) The words “Hazardous Waste”;

ii) The applicable USEPA hazardous waste numbers in Subparts C and D of 35 Ill. Adm. Code 721; or use a nationally recognized electronic system, such as bar coding, to identify the USEPA hazardous waste numbers;

iii) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristics (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with subpart E (Labeling) or subpart F (Placarding) of 49 CFR 172, incorporated by reference in 35 Ill. Adm. Code 720.111; a hazard statement or pictogram consistent with 29 CFR 1910.1200, incorporated by reference in 35 Ill. Adm. Code 720.111; or a chemical hazard label consistent with NFPA 704, incorporated by reference in 35 Ill. Adm. Code 720.111); and

iv) The date each period of accumulation begins.

B) Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received and the date each period of accumulation begins, or such information is recorded and maintained in the operating record at the facility. Regardless of whether the tank itself is marked, the owner and operator must comply with the operating record requirements of 35 Ill. Adm. Code 724.173 or 725.173.

3) A transporter stores manifested shipments of such wastes at a transfer facility for 10 days or less.

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

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

d) If a generator’s waste is exempt from a prohibition on the type of land disposal utilized for the waste (for example, because of an approved case-by-case extension granted by USEPA pursuant to 40 CFR 268.5, an approved Section 728.106 petition or a national capacity variance granted by USEPA pursuant to subpart C of 40 CFR 268), the prohibition in subsection (a) does not apply during the period of such exemption.

e) The prohibition in subsection (a) does not apply to hazardous wastes that meet the treatment standards specified under Sections 728.141, 728.142, and 728.143 or the adjusted treatment standards specified under Section 728.144, or, where treatment standards have not been specified, the waste is in compliance with the applicable prohibitions specified in Section 728.132 or 728.139.

f) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm must be stored at a facility that meets the requirements of federal 40 CFR 761.65(b) (Storage for Disposal), incorporated by reference in 35 Ill. Adm. Code 720.111(b), and must be removed from storage and treated or disposed as required by the Part within one year of the date when such wastes are first placed into storage. The provisions of subsection (c) do not apply to such PCB wastes prohibited under Section 728.132.

g) The prohibition and requirements in this Section do not apply to hazardous remediation wastes stored in a staging pile approved pursuant to 35 Ill. Adm. Code 724.654.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.Appendix A Toxicity Characteristic Leaching Procedure (TCLP) (Repealed)**

(Source:  Repealed at 22 Ill. Reg. 17706, effective September 28, 1998)

**Section 728.Appendix B Treatment Standards (As concentrations in the Treatment Residual Extract) (Repealed)**

(Source:  Repealed at 22 Ill. Reg. 17706, effective September 28, 1998)

**Section 728.APPENDIX C List of Halogenated Organic Compounds Regulated under Section 728.132**

In determining the concentration of halogenated organic compounds (HOCs) in a hazardous waste for purposes of the Section 728.132 land disposal prohibition, USEPA has defined the HOCs that must be included in a calculation as any compounds having a carbon-halogen bond that are listed in this Appendix (see Section 728.102). This Appendix C to Part 728 consists of the following compounds:

I. Volatiles

1. Bromodichloromethane (CAS No. 75-27-4)

2. Bromomethane (CAS No. 74-83-9)

3. Carbon Tetrachloride (tetrachloromethane) (CAS No. 56-23-5)

4. Chlorobenzene (CAS No. 108-90-7)

5. 2-Chloro-1,3-butadiene (CAS No. 126-99-8)

6. Chlorodibromomethane (CAS No. 124-48-1)

7. Chloroethane (CAS No. 75-00-3)

8. 2-Chloroethyl vinyl ether ((2-chloroethoxy)ethene) (CAS No. 110-75-8)

9. Chloroform (trichloromethane) (CAS No. 67-66-3)

10. Chloromethane (CAS No. 74-87-3)

11. 3-Chloropropene (3-chloroprop-1-ene) (CAS No. 107-05-1)

12. 1,2-Dibromo-3-chloropropane (CAS No. 96-12-8)

13. 1,2-Dibromoethane (CAS No. 106-93-4)

14. Dibromomethane (CAS No. 74-95-3)

15. Trans-1,4-Dichloro-2-butene ((2E)-1,4-dichloro-2-butene) (CAS No. 110-57-6)

16. Dichlorodifluoromethane (CAS No. 75-71-8)

17. 1,1-Dichloroethane (CAS No. 75-34-3)

18. 1,2-Dichloroethane (CAS No. 107-06-2)

19. 1,1-Dichloroethylene (1,1-dichloroethene) (CAS No. 75-35-4)

20. Trans-1,2-Dichloroethene ((1E)-1,2-dichloroethene) (CAS No. 156-60-5)

21. 1,2-Dichloropropane (CAS No. 78-87-5)

22. Trans-1,3-Dichloropropene ((1E)-1,3-dichloroprop-1-ene) (CAS No. 10061-02-6)

23. cis-1,3-Dichloropropene ((1Z)-1,3-dichloroprop-1-ene) (CAS No. 10061-01-5)

24. Iodomethane (CAS No. 74-88-4)

25. Methylene chloride (dichloromethane) (CAS No. 75-09-2)

26. 1,1,1,2-Tetrachloroethane (CAS No. 630-20-6)

27. 1,1,2,2-Tetrachloroethane (CAS No. 79-34-5)

28. Tetrachloroethene (CAS No. 127-18-4)

29. Tribromomethane (CAS No. 75-25-2)

30. 1,1,1-Trichloroethane (CAS No. 71-55-6)

31. 1,1,2-Trichloroethane (CAS No. 79-00-5)

32. Trichloroethene (CAS No. 79-01-6)

33. Trichloromonofluoromethane (trichlorofluoromethane) (CAS No. 75-69-4)

34. 1,2,3-trichloropropane (CAS No. 96-18-4)

35. Vinyl Chloride (chloroethene) (CAS No. 75-01-4)

II. Semivolatiles

1. Bis(2-chloroethoxy)ethane (1,2-bis(2-chlorethoxy)ethane) (CAS No. 112-26-5)

2. Bis(2-chloroethyl) ether (1,1'-oxybis(2-chloroethane)) (CAS No. 111-44-4)

3. Bis(2-chloroisopropyl)ether (2,2'-oxybis(2-chloropropane)) (CAS No. 39638-32-9)

4. p-Chloroaniline (4-chlorobenzeneamine) (CAS No. 106-47-8)

5. Chlorobenzilate (ethyl 2,2-bis(4-chlorophenyl)-2-hydroxyacetate) (CAS No. 510-15-6)

6. p-Chloro-m-cresol (4-chloro-3-methylphenol) (CAS No. 59-50-7)

7. 2-Chloronaphthalene (CAS No. 91-58-7)

8. 2-Chlorophenol (CAS No. 95-57-8)

9. 3-Chloropropionitrile (3-chloropronanenitrile) (CAS No. 542-76-7)

10. m-Dichlorobenzene (1,3-dichlorobenzene) (CAS No. 541-73-1)

11. o-Dichlorobenzene (1,2-dichlorobenzene) (CAS No. 95-50-1)

12. p-Dichlorobenzene (1,4-dichlorobenzene) (CAS No. 106-46-7)

13. 3,3'-Dichlorobenzidine (4-(4-amino-3-chlorophenyl)-2-chloroaniline) (CAS No. 91-94-1)

14. 2,4-Dichlorophenol (CAS No. 120-83-2)

15. 2,6-Dichlorophenol (CAS No. 87-65-0)

16. Hexachlorobenzene (CAS No. 118-74-1)

17. Hexachlorobutadiene (hexachlorobuta-1,3-diene) (CAS No. 87-68-3)

18. Hexachlorocyclopentadiene (CAS No. 77-47-4)

19. Hexachloroethane (CAS No. 67-72-1)

20. Hexachlorophene (2,2'-methylenebis(3,4,6-trichlorophenol)) (CAS No. 70-30-4)

21. Hexachloropropene (CAS No. 1888-71-7)

22. 4,4'-Methylenebis(2-chloroanaline) (4-[(4-amino-3-chlorophenyl)methyl]-2-chloroaniline) (CAS No. 101-14-4)

23. Pentachlorobenzene (CAS No. 608-93-5)

24. Pentachloroethane (CAS No. 76-01-7)

25. Pentachloronitrobenzene (CAS No. 82-68-8)

26. Pentachlorophenol (CAS No. 87-86-5)

27. Pronamide (3,5-dichloro-N-(1,1-dimethylprop-2-ynyl)benzamide) (CAS No. 23950-58-5)

28. 1,2,4,5-Tetrachlorobenzene (CAS No. 95-94-3)

29. 2,3,4,6-Tetrachlorophenol (CAS No. 58-90-2)

30. 1,2,4-Trichlorobenzene (CAS No. 120-82-1)

31. 2,4,5-Trichlorophenol (CAS No. 95-95-4)

32. 2,4,6-Trichlorophenol (CAS No. 88-06-2)

33. Tris(2,3-dibromopropyl) phosphate (CAS No. 126-72-7)

III. Organochlorine Pesticides

1. Aldrin ((1R,4S,4aS,5S,8R,8aR)-1,2,3,4,10,10-hexachloro-1,2,4a,5,8,8a-hexahydro-1,4:5,8-dimethano­naphthlene) (CAS No. 309-00-2)

2. alpha-BHC (α-1,2,3,4,5,6-hexachlorocyclohexane) (CAS No. 319-84-6)

3. beta-BHC (β-1,2,3,4,5,6-hexachlorocyclohexane) (CAS No. 319-85-7)

4. delta-BHC (δ-1,2,3,4,5,6-hexachlorocyclohexane) (CAS No. 58-89-9)

5. gamma-BHC (γ-1,2,3,4,5,6-hexachlorocyclohexane) (CAS No. 319-86-8)

6. Chlordane (1,2,4,5,6,7,8,8-octachloro-3a,4,5,5a-tetrahydro-4,7-methanoindane) (CAS No. 57-74-9)

7. DDD (1,1-bis(4-chlorophenyl)-2,2-dichloroethane) (CAS No. 72-54-8)

8. DDE (1,1-bis(4-chlorophenyl)-2,2-dichloroethene) (CAS No. 72-55-9)

9. DDT (1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane) (CAS No. 50-29-3)

10. Dieldrin ((1a*R*,2*R*,2a*S*,3*S*,6*R*,7*S*,7a*S*)-3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-2,7:3,6-dimethanonaphtho[2,3-b]oxirene) (CAS No. 60-57-1)

11. Endosulfan I ((3α,5aβ,6α,9α,9aβ)-6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepine-3-oxide) (CAS No. 959-98-8)

12. Endosulfan II ((3α,5aβ,6β,9β,9aα)-6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepine-3-oxide) (CAS No. 33213-65-9)

13. Endrin (1aα,2β,2aβ,3aα,6α,6aβ,7β,7aα)-3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-2,7:3,6-dimethanonaphth(2,3-b)oxirene) (CAS No. 72-20-8)

14. Endrin aldehyde (1α,2β,2aβ,4β,4aβ,5β,6aβ,6bβ,7R\*)-2,2a,3,3,4,7-hexachlorodecahydro-1,2,4-methenocyclopenta(c,d)pentalene-5-carboxaldehyde) (CAS No. 7421-93-4)

15. Heptachlor (1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methano-1*H*-indene) (CAS No. 76-44-8)

16. Heptachlor epoxide ((1aR,1bS,2R,5S,5aR,6S,6aR)-2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-2,5-methano-2*H*-indeno(1,2b)oxirene) (CAS No. 1024-57-3)

17. Isodrin ((1R,4S,4aS,5R,8S,8aR)-rel-1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-dimethanonaphthalene) (CAS No. 465-73-6)

18. Kepone (1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-1,3,4-metheno-2H-cyclobuta(cd)pentalen-2-one) (CAS No. 143-50-0)

19. Methoxychlor (1,1'-(2,2,2-trichloroethylidene)bis(4-methoxybenzene)) (CAS No. 72-43-5)

20. Toxaphene (CAS No. 8001-35-2)

IV. Phenoxyacetic Acid Herbicides

1. 2,4-Dichlorophenoxyacetic acid (CAS No. 94-75-7)

2. Silvex (2-(2,4,5-trichlorophenoxy)propionic acid) (CAS No. 93-72-1)

3. 2,4,5-T (2,4,5-trichlorophenoxyacetic acid) (CAS No. 93-76-5)

V. PCBs

1. Aroclor 1016 (CAS No. 12674-11-2)

2. Aroclor 1221 (CAS No. 11104-28-2)

3. Aroclor 1232 (CAS No. 11141-16-5)

4. Aroclor 1242 (CAS No. 53469-21-9)

5. Aroclor 1248 (CAS No. 12672-29-6)

6. Aroclor 1254 (CAS No. 11097-69-1)

7. Aroclor 1260 (CAS No. 11096-82-5)

8. PCBs not otherwise specified (CAS No. 1336-36-3)

VI. Dioxins and Furans

1. Hexachlorodibenzo-p-dioxins (CAS No. 34465-46-8)

2. Hexachlorodibenzofuran (CAS No. 55684-94-1)

3. Pentachlorodibenzo-p-dioxins (CAS No. 36088-22-9)

4. Pentachlorodibenzofuran (CAS No. 30402-15-4)

5. Tetrachlorodibenzo-p-dioxins (CAS No. 41903-57-5)

6. Tetrachlorodibenzofuran (CAS No. 30402-14-3; 55722-27-5)

7. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-tetrachlorodibenzo[b,e][1,4]dioxin) (CAS No. 1746-01-6)

BOARD NOTE: Derived from appendix III to 40 CFR 268 (2015).

(Source: Amended at 40 Ill. Reg. 12052, effective August 9, 2016)

**Section** **728.APPENDIX D Wastes Excluded from Lab Packs**

Hazardous waste with the following USEPA hazardous waste numbers may not be placed in lab packs under the alternative lab pack treatment standards of Section 728.142(c): D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, and U151.

BOARD NOTE: 35 Ill. Adm. Code 729.301 and 729.312 include additional limitations on the use of lab packs.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.Appendix E Organic Lab Packs (Repealed)**

(Source: Repealed at 19 Ill. Reg. 9660, effective June 27, 1995)

**Section** **728.APPENDIX F Technologies to Achieve Deactivation of Characteristics**

The treatment standard for many characteristic wastes is stated in Table T, entitled “Treatment Standards for Hazardous Wastes”, as “DEACT and meet Section 728.148 standards”.  USEPA has determined that many technologies, when used alone or in combination, can achieve the deactivation portion of the treatment standard.  Characteristic wastes that are not managed in a facility regulated by the CWA or in a CWA-equivalent facility, and that also contain underlying hazardous constituents (see Section 728.102(i)) must be treated not only by a “deactivating” technology to remove the characteristic, but also to achieve the universal treatment standards (UTS) for underlying hazardous constituents.  This Appendix F presents a partial list of technologies, utilizing the five letter technology codes established in Table C, that may be useful in meeting the treatment standard.  Use of these specific technologies is not mandatory and does not preclude direct reuse, recovery or the use of other pretreatment technologies, provided deactivation is achieved and underlying hazardous constituents are treated to achieve the UTS.

|  |  |  |
| --- | --- | --- |
| USEPA hazardous waste number/subcategory | Nonwastewaters | Wastewaters |
| D001 Ignitable Liquids based on 35 Ill. Adm. Code 721.121(a)(1)—Low TOC Nonwastewater Subcategory (containing one percent to <10 percent TOC) | RORGS  WETOX  INCIN  CHOXD  BIODG | n.a. |
| D001 Ignitable Liquids based on 35 Ill. Adm. Code 721.121(a)(1)—Ignitable Wastewater Subcategory (containing <one percent TOC) | n.a. | WETOX  RORGS  INCIN  CHOXD  BIODG |
| D001 Compressed Gases based on 35 Ill. Adm. Code 721.121(a)(3) | RCGAS  FSUBS  INCIN  ADGAS fb.  INCIN  ADGAS fb.  (CHOXD; or  CHRED) | n.a. |
| D001 Ignitable Reactives based on 35 Ill. Adm. Code 721.121(a)(2) | WTRRX  CHOXD  CHRED  STABL  INCIN | n.a. |
| D001 Ignitable Oxidizers based on 35 Ill. Adm. Code 721.121(a)(4) | CHRED  INCIN | CHRED  INCIN |
| D002 Acid Subcategory based on 35 Ill. Adm. Code 721.122(a)(1) with pH less than or equal to two | RCORR  NEUTR  INCIN | NEUTR  INCIN |
| D002 Alkaline Subcategory based on 35 Ill. Adm. Code 721.122(a)(1) with pH greater than or equal to 12.5 | NEUTR  INCIN | NEUTR  INCIN |
| D002 Other Corrosives based on 35 Ill. Adm. Code 721.122(a)(2) | CHOXD  CHRED  INCIN  STABL | CHOXD  CHRED  INCIN |
| D003 Water Reactives based on 35 Ill. Adm. Code 721.123(a)(2), (a)(3), and (a)(4) | INCIN  WTRRX  CHOXD  CHRED | n.a. |
| D003 Reactive Sulfides based on 35 Ill. Adm. Code 721.123(a)(5) | CHOXD  CHRED  INCIN  STABL | CHOXD  CHRED  BIODG  INCIN |
| D003 Explosives based on 35 Ill. Adm. Code 721.123(a)(6), (a)(7), and (a)(8) | INCIN  CHOXD  CHRED | INCIN  CHOXD  CHRED  BIODG  CARBN |
| D003 Other Reactives based on 35 Ill. Adm. Code 721.123(a)(1) | INCIN  CHOXD  CHRED | INCIN  CHOXD  CHRED  BIODG  CARBN |
| K044 Wastewater treatment sludges from the manufacturing and processing of explosives | CHOXD  CHRED  INCIN | CHOXD  CHRED  BIODG  CARBN  INCIN |
| K045 Spent carbon from the treatment of wastewaters containing explosives | CHOXD  CHRED  INCIN | CHOXD  CHRED  BIODG  CARBN  INCIN |
| K047 Pink/red water from TNT operations | CHOXD  CHRED  INCIN | CHOXD  CHRED  BIODG  CARBN  INCIN |

Note:  “n.a.” stands for “not applicable”.

“fb.” stands for “followed by”.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.APPENDIX G Federal Effective Dates**

The following are the effective dates for the USEPA rules in 40 CFR 268.  These generally became effective as Illinois rules at a later date.

TABLE 1

EFFECTIVE DATES OF SURFACE DISPOSED WASTES (NON-SOIL AND DEBRIS) REGULATED IN THE LDRSa—COMPREHENSIVE LIST

|  |  |  |
| --- | --- | --- |
| Waste code | Waste category | Effective date |
| D001c | All (except High TOC Ignitable Liquids) | August 9, 1993 |
| D001 | High TOC Ignitable Liquids | August 8, 1990 |
| D002c | All | August 9, 1993 |
| D003e | Newly identified surface-disposed elemental phosphorus processing wastes | May 26, 2000 |
| D004 | Newly identified D004 and mineral processing wastes | August 24, 1998 |
| D004 | Mixed radioactive/newly identified D004 or mineral processing wastes | May 26, 2000 |
| D005 | Newly identified D005 and mineral processing wastes | August 24, 1998 |
| D005 | Mixed radioactive/newly identified D005 or mineral processing wastes | May 26, 2000 |
| D006 | Newly identified D006 and mineral processing wastes | August 24, 1998 |
| D006 | Mixed radioactive/newly identified D006 or mineral processing wastes | May 26, 2000 |
| D007 | Newly identified D007 and mineral processing wastes | August 24, 1998 |
| D007 | Mixed radioactive/newly identified D007or mineral processing wastes | May 26, 2000 |
| D008 | Newly identified D008 and mineral processing waste | August 24, 1998 |
| D008 | Mixed radioactive/newly identified D008 or mineral processing wastes | May 26, 2000 |
| D009 | Newly identified D009 and mineral processing waste | August 24, 1998 |
| D009 | Mixed radioactive/newly identified D009or mineral processing wastes | May 26, 2000 |
| D010 | Newly identified D010 and mineral processing wastes | August 24, 1998 |
| D010 | Mixed radioactive/newly identified D010 or mineral processing wastes | May 26, 2000 |
| D011 | Newly identified D011 and mineral processing wastes | August 24, 1998 |
| D011 | Mixed radioactive/newly identified D011or mineral processing wastes | May 26, 2000 |
| D012 (that ex­hibit the toxic­i­ty charac­ter­is­tic based on the TCLP)d | All | December 14, 1994 |
| D013 (that ex­hibit the toxic­i­ty charac­ter­is­tic based on the TCLP)d | All | December 14, 1994 |
| D014 (that ex­hibit the toxic­i­ty charac­ter­is­tic based on the TCLP)d | All | December 14, 1994 |
| D015 (that ex­hibit the toxic­i­ty charac­ter­is­tic based on the TCLP)d | All | December 14, 1994 |
| D016 (that ex­hibit the toxic­i­ty charac­ter­is­tic based on the TCLP)d | All | December 14, 1994 |
| D017 (that ex­hibit the toxic­i­ty charac­ter­is­tic based on the TCLP)d | All | December 14, 1994 |
| D018 | Mixed with radioactive wastes | September 19, 1996 |
| D018 | All others | December 19, 1994 |
| D019 | Mixed with radioactive wastes | September 19, 1996 |
| D019 | All others | December 19, 1994 |
| D020 | Mixed with radioactive wastes | September 19, 1996 |
| D020 | All others | December 19, 1994 |
| D021 | Mixed with radioactive wastes | September 19, 1996 |
| D021 | All others | December 19, 1994 |
| D022 | Mixed with radioactive wastes | September 19, 1996 |
| D022 | All others | December 19, 1994 |
| D023 | Mixed with radioactive wastes | September 19, 1996 |
| D023 | All others | December 19, 1994 |
| D024 | Mixed with radioactive wastes | September 19, 1996 |
| D024 | All others | December 19, 1994 |
| D025 | Mixed with radioactive wastes | September 19, 1996 |
| D025 | All others | December 19, 1994 |
| D026 | Mixed with radioactive wastes | September 19, 1996 |
| D026 | All others | December 19, 1994 |
| D027 | Mixed with radioactive wastes | September 19, 1996 |
| D027 | All others | December 19, 1994 |
| D028 | Mixed with radioactive wastes | September 19, 1996 |
| D028 | All others | December 19, 1994 |
| D029 | Mixed with radioactive wastes | September 19, 1996 |
| D029 | All others | December 19, 1994 |
| D030 | Mixed with radioactive wastes | September 19, 1996 |
| D030 | All others | December 19, 1994 |
| D031 | Mixed with radioactive wastes | September 19, 1996 |
| D031 | All others | December 19, 1994 |
| D032 | Mixed with radioactive wastes | September 19, 1996 |
| D032 | All others | December 19, 1994 |
| D033 | Mixed with radioactive wastes | September 19, 1996 |
| D033 | All others | December 19, 1994 |
| D034 | Mixed with radioactive wastes | September 19, 1996 |
| D034 | All others | December 19, 1994 |
| D035 | Mixed with radioactive wastes | September 19, 1996 |
| D035 | All others | December 19, 1994 |
| D036 | Mixed with radioactive wastes | September 19, 1996 |
| D036 | All others | December 19, 1994 |
| D037 | Mixed with radioactive wastes | September 19, 1996 |
| D037 | All others | December 19, 1994 |
| D038 | Mixed with radioactive wastes | September 19, 1996 |
| D038 | All others | December 19, 1994 |
| D039 | Mixed with radioactive wastes | September 19, 1996 |
| D039 | All others | December 19, 1994 |
| D040 | Mixed with radioactive wastes | September 19, 1996 |
| D040 | All others | December 19, 1994 |
| D041 | Mixed with radioactive wastes | September 19, 1996 |
| D041 | All others | December 19, 1994 |
| D042 | Mixed with radioactive wastes | September 19, 1996 |
| D042 | All others | December 19, 1994 |
| D043 | Mixed with radioactive wastes | September 19, 1996 |
| D043 | All others | December 19, 1994 |
| F001 | Small quantity generators, CERCLA response/RCRA corrective action, initial generator’s solvent-water mixtures, solvent-containing sludges and solids | November 8, 1988 |
| F001 | All others | November 8, 1986 |
| F002 (1,1,2-trichloro­ethane) | Wastewater and Nonwastewater | August 8, 1990 |
| F002 | Small quantity generators, CERCLA response/RCRA corrective action, initial generator’s solvent-water mixtures, solvent-containing sludges and solids | November 8, 1988 |
| F002 | All others | November 8, 1986 |
| F003 | Small quantity generators, CERCLA response/RCRA corrective action, initial generator’s solvent-water mixtures, solvent-containing sludges and solids | November 8, 1988 |
| F003 | All others | November 8, 1986 |
| F004 | Small quantity generators, CERCLA response/RCRA corrective action, initial generator’s solvent-water mixtures, solvent-containing sludges and solids | November 8, 1988 |
| F004 | All others | November 8, 1986 |
| F005 (benzene, 2-ethoxy ethanol, 2-nitropropane) | Wastewater and Nonwastewater | August 8, 1990 |
| F005 | Small quantity generators, CERCLA response/RCRA corrective action, initial generator’s solvent-water mixtures, solvent-containing sludges and solids | November 8, 1988 |
| F005 | All others | November 8, 1986 |
| F006 | Wastewater | August 8, 1990 |
| F006 | Nonwastewater | August 8, 1988 |
| F006 (cyanides) | Nonwastewater | July 8, 1989 |
| F007 | All | July 8, 1989 |
| F008 | All | July 8, 1989 |
| F009 | All | July 8, 1989 |
| F010 | All | June 8, 1989 |
| F011 (cyanides) | Nonwastewater | December 8, 1989 |
| F011 | All others | July 8, 1989 |
| F012 (cyanides) | Nonwastewater | December 8, 1989 |
| F012 | All others | July 8, 1989 |
| F019 | All | August 8, 1990 |
| F020 | All | November 8, 1988 |
| F021 | All | November 8, 1988 |
| F025 | All | August 8, 1990 |
| F026 | All | November 8, 1988 |
| F027 | All | November 8, 1988 |
| F028 | All | November 8, 1988 |
| F032 | Mixed with radioactive wastes | May 12, 1999 |
| F032 | All others | August 12, 1997 |
| F034 | Mixed with radioactive wastes | May 12, 1999 |
| F034 | All others | August 12, 1997 |
| F035 | Mixed with radioactive wastes | May 12, 1999 |
| F035 | All others | August 12, 1997 |
| F037 | Not generated from surface impoundment cleanouts or closures | June 30, 1993 |
| F037 | Generated from surface impoundment cleanouts or closures | June 30, 1994 |
| F037 | Mixed with radioactive wastes | June 30, 1994 |
| F038 | Not generated from surface impoundment cleanouts or closures | June 30, 1993 |
| F038 | Generated from surface impoundment cleanouts or closures | June 30, 1994 |
| F038 | Mixed with radioactive wastes | June 30, 1994 |
| F039 | Wastewater | August 8, 1990 |
| F039 | Nonwastewater | May 8, 1992 |
| K001 (organics)b | All | August 8, 1988 |
| K001 | All others | August 8, 1988 |
| K002 | All | August 8, 1990 |
| K003 | All | August 8, 1990 |
| K004 | Wastewater | August 8, 1990 |
| K004 | Nonwastewater | August 8, 1988 |
| K005 | Wastewater | August 8, 1990 |
| K005 | Nonwastewater | June 8, 1989 |
| K006 | All | August 8, 1990 |
| K007 | Wastewater | August 8, 1990 |
| K007 | Nonwastewater | June 8, 1989 |
| K008 | Wastewater | August 8, 1990 |
| K008 | Nonwastewater | August 8, 1988 |
| K009 | All | June 8, 1989 |
| K010 | All | June 8, 1989 |
| K011 | Wastewater | August 8, 1990 |
| K011 | Nonwastewater | June 8, 1989 |
| K013 | Wastewater | August 8, 1990 |
| K013 | Nonwastewater | June 8, 1989 |
| K014 | Wastewater | August 8, 1990 |
| K014 | Nonwastewater | June 8, 1989 |
| K015 | Wastewater | August 8, 1988 |
| K015 | Nonwastewater | August 8, 1990 |
| K016 | All | August 8, 1988 |
| K017 | All | August 8, 1990 |
| K018 | All | August 8, 1988 |
| K019 | All | August 8, 1988 |
| K020 | All | August 8, 1988 |
| K021 | Wastewater | August 8, 1990 |
| K021 | Nonwastewater | August 8, 1988 |
| K022 | Wastewater | August 8, 1990 |
| K022 | Nonwastewater | August 8, 1988 |
| K023 | All | June 8, 1989 |
| K024 | All | August 8, 1988 |
| K025 | Wastewater | August 8, 1990 |
| K025 | Nonwastewater | August 8, 1988 |
| K026 | All | August 8, 1990 |
| K027 | All | June 8, 1989 |
| K028 (metals) | Nonwastewater | August 8, 1990 |
| K028 | All others | June 8, 1989 |
| K029 | Wastewater | August 8, 1990 |
| K029 | Nonwastewater | June 8, 1989 |
| K030 | All | August 8, 1988 |
| K031 | Wastewater | August 8, 1990 |
| K031 | Nonwastewater | May 8, 1992 |
| K032 | All | August 8, 1990 |
| K033 | All | August 8, 1990 |
| K034 | All | August 8, 1990 |
| K035 | All | August 8, 1990 |
| K036 | Wastewater | June 8, 1989 |
| K036 | Nonwastewater | August 8, 1988 |
| K037b | Wastewater | August 8, 1988 |
| K037 | Nonwastewater | August 8, 1988 |
| K038 | All | June 8, 1989 |
| K039 | All | June 8, 1989 |
| K040 | All | June 8, 1989 |
| K041 | All | August 8, 1990 |
| K042 | All | August 8, 1990 |
| K043 | All | June 8, 1989 |
| K044 | All | August 8, 1988 |
| K045 | All | August 8, 1988 |
| K046 (Nonreactive) | Nonwastewater | August 8, 1988 |
| K046 | All others | August 8, 1990 |
| K047 | All | August 8, 1988 |
| K048 | Wastewater | August 8, 1990 |
| K048 | Nonwastewater | November 8, 1990 |
| K049 | Wastewater | August 8, 1990 |
| K049 | Nonwastewater | November 8, 1990 |
| K050 | Wastewater | August 8, 1990 |
| K050 | Nonwastewater | November 8, 1990 |
| K051 | Wastewater | August 8, 1990 |
| K051 | Nonwastewater | November 8, 1990 |
| K052 | Wastewater | August 8, 1990 |
| K052 | Nonwastewater | November 8, 1990 |
| K060 | Wastewater | August 8, 1990 |
| K060 | Nonwastewater | August 8, 1988 |
| K061 | Wastewater | August 8, 1990 |
| K061 | Nonwastewater | June 30, 1992 |
| K062 | All | August 8, 1988 |
| K069 (non-calcium sulfate) | Nonwastewater | August 8, 1988 |
| K069 | All others | August 8, 1990 |
| K071 | All | August 8, 1990 |
| K073 | All | August 8, 1990 |
| K083 | All | August 8, 1990 |
| K084 | Wastewater | August 8, 1990 |
| K084 | Nonwastewater | May 8, 1992 |
| K085 | All | August 8, 1990 |
| K086 (organics)b | All | August 8, 1988 |
| K086 | All others | August 8, 1988 |
| K087 | All | August 8, 1988 |
| K088 | All others | October 8, 1997 |
| K088 | All others | January 8, 1997 |
| K093 | All | June 8, 1989 |
| K094 | All | June 8, 1989 |
| K095 | Wastewater | August 8, 1990 |
| K095 | Nonwastewater | June 8, 1989 |
| K096 | Wastewater | August 8, 1990 |
| K096 | Nonwastewater | June 8, 1989 |
| K097 | All | August 8, 1990 |
| K098 | All | August 8, 1990 |
| K099 | All | August 8, 1988 |
| K100 | Wastewater | August 8, 1990 |
| K100 | Nonwastewater | August 8, 1988 |
| K101 (organics) | Wastewater | August 8, 1988 |
| K101 (metals) | Wastewater | August 8, 1990 |
| K101 (organics) | Nonwastewater | August 8, 1988 |
| K101 (metals) | Nonwastewater | May 8, 1992 |
| K102 (organics) | Wastewater | August 8, 1988 |
| K102 (metals) | Wastewater | August 8, 1990 |
| K102 (organics) | Nonwastewater | August 8, 1988 |
| K102 (metals) | Nonwastewater | May 8, 1992 |
| K103 | All | August 8, 1988 |
| K104 | All | August 8, 1988 |
| K105 | All | August 8, 1990 |
| K106 | Wastewater | August 8, 1990 |
| K106 | Nonwastewater | May 8, 1992 |
| K107 | Mixed with radioactive wastes | June 30, 1994 |
| K107 | All others | November 9, 1992 |
| K108 | Mixed with radioactive wastes | June 30, 1994 |
| K108 | All others | November 9, 1992 |
| K109 | Mixed with radioactive wastes | June 30, 1994 |
| K109 | All others | November 9, 1992 |
| K110 | Mixed with radioactive wastes | June 30, 1994 |
| K110 | All others | November 9, 1992 |
| K111 | Mixed with radioactive wastes | June 30, 1994 |
| K111 | All others | November 9, 1992 |
| K112 | Mixed with radioactive wastes | June 30, 1994 |
| K112 | All others | November 9, 1992 |
| K113 | All | June 8, 1989 |
| K114 | All | June 8, 1989 |
| K115 | All | June 8, 1989 |
| K116 | All | June 8, 1989 |
| K117 | Mixed with radioactive wastes | June 30, 1994 |
| K117 | All others | November 9, 1992 |
| K118 | Mixed with radioactive wastes | June 30, 1994 |
| K118 | All others | November 9, 1992 |
| K123 | Mixed with radioactive wastes | June 30, 1994 |
| K123 | All others | November 9, 1992 |
| K124 | Mixed with radioactive wastes | June 30, 1994 |
| K124 | All others | November 9, 1992 |
| K125 | Mixed with radioactive wastes | June 30, 1994 |
| K125 | All others | November 9, 1992 |
| K126 | Mixed with radioactive wastes | June 30, 1994 |
| K126 | All others | November 9, 1992 |
| K131 | Mixed with radioactive wastes | June 30, 1994 |
| K131 | All others | November 9, 1992 |
| K132 | Mixed with radioactive wastes | June 30, 1994 |
| K132 | All others | November 9, 1992 |
| K136 | Mixed with radioactive wastes | June 30, 1994 |
| K136 | All others | November 9, 1992 |
| K141 | Mixed with radioactive wastes | September 19, 1996 |
| K141 | All others | December 19, 1994 |
| K142 | Mixed with radioactive wastes | September 19, 1996 |
| K142 | All others | December 19, 1994 |
| K143 | Mixed with radioactive wastes | September 19, 1996 |
| K143 | All others | December 19, 1994 |
| K144 | Mixed with radioactive wastes | September 19, 1996 |
| K144 | All others | December 19, 1994 |
| K145 | Mixed with radioactive wastes | September 19, 1996 |
| K145 | All others | December 19, 1994 |
| K147 | Mixed with radioactive wastes | September 19, 1996 |
| K147 | All others | December 19, 1994 |
| K148 | Mixed with radioactive wastes | September 19, 1996 |
| K148 | All others | December 19, 1994 |
| K149 | Mixed with radioactive wastes | September 19, 1996 |
| K149 | All others | December 19, 1994 |
| K150 | Mixed with radioactive wastes | September 19, 1996 |
| K150 | All others | December 19, 1994 |
| K151 | Mixed with radioactive wastes | September 19, 1996 |
| K151 | All others | December 19, 1994 |
| K156 | Mixed with radioactive wastes | April 8, 1998 |
| K156 | All others | July 8, 1996 |
| K157 | Mixed with radioactive wastes | April 8, 1998 |
| K157 | All others | July 8, 1996 |
| K158 | Mixed with radioactive wastes | April 8, 1998 |
| K158 | All others | July 8, 1996 |
| K159 | Mixed with radioactive wastes | April 8, 1998 |
| K159 | All others | July 8, 1996 |
| K160 | Mixed with radioactive wastes | April 8, 1998 |
| K160 | All others | July 8, 1996 |
| K161 | Mixed with radioactive wastes | April 8, 1998 |
| K161 | All others | July 8, 1996 |
| K169 | All | February 8, 1999 |
| K170 | All | February 8, 1999 |
| K171 | All | February 8, 1999 |
| K172 | All | February 8, 1999 |
| K174 | All | May 7, 2001 |
| K175 | All | May 7, 2001 |
| K176 | All | May 20, 2002 |
| K177 | All | May 20, 2002 |
| K178 | All | May 20, 2002 |
| K181 | All | August 23, 2005 |
| P001 | All | August 8, 1990 |
| P002 | All | August 8, 1990 |
| P003 | All | August 8, 1990 |
| P004 | All | August 8, 1990 |
| P005 | All | August 8, 1990 |
| P006 | All | August 8, 1990 |
| P007 | All | August 8, 1990 |
| P008 | All | August 8, 1990 |
| P009 | All | August 8, 1990 |
| P010 | Wastewater | August 8, 1990 |
| P010 | Nonwastewater | May 8, 1992 |
| P011 | Wastewater | August 8, 1990 |
| P011 | Nonwastewater | May 8, 1992 |
| P012 | Wastewater | August 8, 1990 |
| P012 | Nonwastewater | May 8, 1992 |
| P013 (barium) | Nonwastewater | August 8, 1990 |
| P013 | All others | June 8, 1989 |
| P014 | All | August 8, 1990 |
| P015 | All | August 8, 1990 |
| P016 | All | August 8, 1990 |
| P017 | All | August 8, 1990 |
| P018 | All | August 8, 1990 |
| P020 | All | August 8, 1990 |
| P021 | All | June 8, 1989 |
| P022 | All | August 8, 1990 |
| P023 | All | August 8, 1990 |
| P024 | All | August 8, 1990 |
| P026 | All | August 8, 1990 |
| P027 | All | August 8, 1990 |
| P028 | All | August 8, 1990 |
| P029 | All | June 8, 1989 |
| P030 | All | June 8, 1989 |
| P031 | All | August 8, 1990 |
| P033 | All | August 8, 1990 |
| P034 | All | August 8, 1990 |
| P036 | Wastewater | August 8, 1990 |
| P036 | Nonwastewater | May 8, 1992 |
| P037 | All | August 8, 1990 |
| P038 | Wastewater | August 8, 1990 |
| P038 | Nonwastewater | May 8, 1992 |
| P039 | All | June 8, 1989 |
| P040 | All | June 8, 1989 |
| P041 | All | June 8, 1989 |
| P042 | All | August 8, 1990 |
| P043 | All | June 8, 1989 |
| P044 | All | June 8, 1989 |
| P045 | All | August 8, 1990 |
| P046 | All | August 8, 1990 |
| P047 | All | August 8, 1990 |
| P048 | All | August 8, 1990 |
| P049 | All | August 8, 1990 |
| P050 | All | August 8, 1990 |
| P051 | All | August 8, 1990 |
| P054 | All | August 8, 1990 |
| P056 | All | August 8, 1990 |
| P057 | All | August 8, 1990 |
| P058 | All | August 8, 1990 |
| P059 | All | August 8, 1990 |
| P060 | All | August 8, 1990 |
| P062 | All | June 8, 1989 |
| P063 | All | June 8, 1989 |
| P064 | All | August 8, 1990 |
| P065 | Wastewater | August 8, 1990 |
| P065 | Nonwastewater | May 8, 1992 |
| P066 | All | August 8, 1990 |
| P067 | All | August 8, 1990 |
| P068 | All | August 8, 1990 |
| P069 | All | August 8, 1990 |
| P070 | All | August 8, 1990 |
| P071 | All | June 8, 1989 |
| P072 | All | August 8, 1990 |
| P073 | All | August 8, 1990 |
| P074 | All | June 8, 1989 |
| P075 | All | August 8, 1990 |
| P076 | All | August 8, 1990 |
| P077 | All | August 8, 1990 |
| P078 | All | August 8, 1990 |
| P081 | All | August 8, 1990 |
| P082 | All | August 8, 1990 |
| P084 | All | August 8, 1990 |
| P085 | All | June 8, 1989 |
| P087 | All | May 8, 1992 |
| P088 | All | August 8, 1990 |
| P089 | All | June 8, 1989 |
| P092 | Wastewater | August 8, 1990 |
| P092 | Nonwastewater | May 8, 1992 |
| P093 | All | August 8, 1990 |
| P094 | All | June 8, 1989 |
| P095 | All | August 8, 1990 |
| P096 | All | August 8, 1990 |
| P097 | All | June 8, 1989 |
| P098 | All | June 8, 1989 |
| P099 (silver) | Wastewater | August 8, 1990 |
| P099 | All others | June 8, 1989 |
| P101 | All | August 8, 1990 |
| P102 | All | August 8, 1990 |
| P103 | All | August 8, 1990 |
| P104 (silver) | Wastewater | August 8, 1990 |
| P104 | All others | June 8, 1989 |
| P105 | All | August 8, 1990 |
| P106 | All | June 8, 1989 |
| P108 | All | August 8, 1990 |
| P109 | All | June 8, 1989 |
| P110 | All | August 8, 1990 |
| P111 | All | June 8, 1989 |
| P112 | All | August 8, 1990 |
| P113 | All | August 8, 1990 |
| P114 | All | August 8, 1990 |
| P115 | All | August 8, 1990 |
| P116 | All | August 8, 1990 |
| P118 | All | August 8, 1990 |
| P119 | All | August 8, 1990 |
| P120 | All | August 8, 1990 |
| P121 | All | June 8, 1989 |
| P122 | All | August 8, 1990 |
| P123 | All | August 8, 1990 |
| P127 | Mixed with radioactive wastes | April 8, 1998 |
| P127 | All others | July 8, 1996 |
| P128 | Mixed with radioactive wastes | April 8, 1998 |
| P128 | All others | July 8, 1996 |
| P185 | Mixed with radioactive wastes | April 8, 1998 |
| P185 | All others | July 8, 1996 |
| P188 | Mixed with radioactive wastes | April 8, 1998 |
| P188 | All others | July 8, 1996 |
| P189 | Mixed with radioactive wastes | April 8, 1998 |
| P189 | All others | July 8, 1996 |
| P190 | Mixed with radioactive wastes | April 8, 1998 |
| P190 | All others | July 8, 1996 |
| P191 | Mixed with radioactive wastes | April 8, 1998 |
| P191 | All others | July 8, 1996 |
| P192 | Mixed with radioactive wastes | April 8, 1998 |
| P192 | All others | July 8, 1996 |
| P194 | Mixed with radioactive wastes | April 8, 1998 |
| P194 | All others | July 8, 1996 |
| P196 | Mixed with radioactive wastes | April 8, 1998 |
| P196 | All others | July 8, 1996 |
| P197 | Mixed with radioactive wastes | April 8, 1998 |
| P197 | All others | July 8, 1996 |
| P198 | Mixed with radioactive wastes | April 8, 1998 |
| P198 | All others | July 8, 1996 |
| P199 | Mixed with radioactive wastes | April 8, 1998 |
| P199 | All others | July 8, 1996 |
| P201 | Mixed with radioactive wastes | April 8, 1998 |
| P201 | All others | July 8, 1996 |
| P202 | Mixed with radioactive wastes | April 8, 1998 |
| P202 | All others | July 8, 1996 |
| P203 | Mixed with radioactive wastes | April 8, 1998 |
| P203 | All others | July 8, 1996 |
| P204 | Mixed with radioactive wastes | April 8, 1998 |
| P204 | All others | July 8, 1996 |
| P205 | Mixed with radioactive wastes | April 8, 1998 |
| P205 | All others | July 8, 1996 |
| U001 | All | August 8, 1990 |
| U002 | All | August 8, 1990 |
| U003 | All | August 8, 1990 |
| U004 | All | August 8, 1990 |
| U005 | All | August 8, 1990 |
| U006 | All | August 8, 1990 |
| U007 | All | August 8, 1990 |
| U008 | All | August 8, 1990 |
| U009 | All | August 8, 1990 |
| U010 | All | August 8, 1990 |
| U011 | All | August 8, 1990 |
| U012 | All | August 8, 1990 |
| U014 | All | August 8, 1990 |
| U015 | All | August 8, 1990 |
| U016 | All | August 8, 1990 |
| U017 | All | August 8, 1990 |
| U018 | All | August 8, 1990 |
| U019 | All | August 8, 1990 |
| U020 | All | August 8, 1990 |
| U021 | All | August 8, 1990 |
| U022 | All | August 8, 1990 |
| U023 | All | August 8, 1990 |
| U024 | All | August 8, 1990 |
| U025 | All | August 8, 1990 |
| U026 | All | August 8, 1990 |
| U027 | All | August 8, 1990 |
| U028 | All | June 8, 1989 |
| U029 | All | August 8, 1990 |
| U030 | All | August 8, 1990 |
| U031 | All | August 8, 1990 |
| U032 | All | August 8, 1990 |
| U033 | All | August 8, 1990 |
| U034 | All | August 8, 1990 |
| U035 | All | August 8, 1990 |
| U036 | All | August 8, 1990 |
| U037 | All | August 8, 1990 |
| U038 | All | August 8, 1990 |
| U039 | All | August 8, 1990 |
| U041 | All | August 8, 1990 |
| U042 | All | August 8, 1990 |
| U043 | All | August 8, 1990 |
| U044 | All | August 8, 1990 |
| U045 | All | August 8, 1990 |
| U046 | All | August 8, 1990 |
| U047 | All | August 8, 1990 |
| U048 | All | August 8, 1990 |
| U049 | All | August 8, 1990 |
| U050 | All | August 8, 1990 |
| U051 | All | August 8, 1990 |
| U052 | All | August 8, 1990 |
| U053 | All | August 8, 1990 |
| U055 | All | August 8, 1990 |
| U056 | All | August 8, 1990 |
| U057 | All | August 8, 1990 |
| U058 | All | June 8, 1989 |
| U059 | All | August 8, 1990 |
| U060 | All | August 8, 1990 |
| U061 | All | August 8, 1990 |
| U062 | All | August 8, 1990 |
| U063 | All | August 8, 1990 |
| U064 | All | August 8, 1990 |
| U066 | All | August 8, 1990 |
| U067 | All | August 8, 1990 |
| U068 | All | August 8, 1990 |
| U069 | All | June 30, 1992 |
| U070 | All | August 8, 1990 |
| U071 | All | August 8, 1990 |
| U072 | All | August 8, 1990 |
| U073 | All | August 8, 1990 |
| U074 | All | August 8, 1990 |
| U075 | All | August 8, 1990 |
| U076 | All | August 8, 1990 |
| U077 | All | August 8, 1990 |
| U078 | All | August 8, 1990 |
| U079 | All | August 8, 1990 |
| U080 | All | August 8, 1990 |
| U081 | All | August 8, 1990 |
| U082 | All | August 8, 1990 |
| U083 | All | August 8, 1990 |
| U084 | All | August 8, 1990 |
| U085 | All | August 8, 1990 |
| U086 | All | August 8, 1990 |
| U087 | All | June 8, 1989 |
| U088 | All | June 8, 1989 |
| U089 | All | August 8, 1990 |
| U090 | All | August 8, 1990 |
| U091 | All | August 8, 1990 |
| U092 | All | August 8, 1990 |
| U093 | All | August 8, 1990 |
| U094 | All | August 8, 1990 |
| U095 | All | August 8, 1990 |
| U096 | All | August 8, 1990 |
| U097 | All | August 8, 1990 |
| U098 | All | August 8, 1990 |
| U099 | All | August 8, 1990 |
| U101 | All | August 8, 1990 |
| U102 | All | June 8, 1989 |
| U103 | All | August 8, 1990 |
| U105 | All | August 8, 1990 |
| U106 | All | August 8, 1990 |
| U107 | All | June 8, 1989 |
| U108 | All | August 8, 1990 |
| U109 | All | August 8, 1990 |
| U110 | All | August 8, 1990 |
| U111 | All | August 8, 1990 |
| U112 | All | August 8, 1990 |
| U113 | All | August 8, 1990 |
| U114 | All | August 8, 1990 |
| U115 | All | August 8, 1990 |
| U116 | All | August 8, 1990 |
| U117 | All | August 8, 1990 |
| U118 | All | August 8, 1990 |
| U119 | All | August 8, 1990 |
| U120 | All | August 8, 1990 |
| U121 | All | August 8, 1990 |
| U122 | All | August 8, 1990 |
| U123 | All | August 8, 1990 |
| U124 | All | August 8, 1990 |
| U125 | All | August 8, 1990 |
| U126 | All | August 8, 1990 |
| U127 | All | August 8, 1990 |
| U128 | All | August 8, 1990 |
| U129 | All | August 8, 1990 |
| U130 | All | August 8, 1990 |
| U131 | All | August 8, 1990 |
| U132 | All | August 8, 1990 |
| U133 | All | August 8, 1990 |
| U134 | All | August 8, 1990 |
| U135 | All | August 8, 1990 |
| U136 | Wastewater | August 8, 1990 |
| U136 | Nonwastewater | May 8, 1992 |
| U137 | All | August 8, 1990 |
| U138 | All | August 8, 1990 |
| U140 | All | August 8, 1990 |
| U141 | All | August 8, 1990 |
| U142 | All | August 8, 1990 |
| U143 | All | August 8, 1990 |
| U144 | All | August 8, 1990 |
| U145 | All | August 8, 1990 |
| U146 | All | August 8, 1990 |
| U147 | All | August 8, 1990 |
| U148 | All | August 8, 1990 |
| U149 | All | August 8, 1990 |
| U150 | All | August 8, 1990 |
| U151 | Wastewater | August 8, 1990 |
| U151 | Nonwastewater | May 8, 1992 |
| U152 | All | August 8, 1990 |
| U153 | All | August 8, 1990 |
| U154 | All | August 8, 1990 |
| U155 | All | August 8, 1990 |
| U156 | All | August 8, 1990 |
| U157 | All | August 8, 1990 |
| U158 | All | August 8, 1990 |
| U159 | All | August 8, 1990 |
| U160 | All | August 8, 1990 |
| U161 | All | August 8, 1990 |
| U162 | All | August 8, 1990 |
| U163 | All | August 8, 1990 |
| U164 | All | August 8, 1990 |
| U165 | All | August 8, 1990 |
| U166 | All | August 8, 1990 |
| U167 | All | August 8, 1990 |
| U168 | All | August 8, 1990 |
| U169 | All | August 8, 1990 |
| U170 | All | August 8, 1990 |
| U171 | All | August 8, 1990 |
| U172 | All | August 8, 1990 |
| U173 | All | August 8, 1990 |
| U174 | All | August 8, 1990 |
| U176 | All | August 8, 1990 |
| U177 | All | August 8, 1990 |
| U178 | All | August 8, 1990 |
| U179 | All | August 8, 1990 |
| U180 | All | August 8, 1990 |
| U181 | All | August 8, 1990 |
| U182 | All | August 8, 1990 |
| U183 | All | August 8, 1990 |
| U184 | All | August 8, 1990 |
| U185 | All | August 8, 1990 |
| U186 | All | August 8, 1990 |
| U187 | All | August 8, 1990 |
| U188 | All | August 8, 1990 |
| U189 | All | August 8, 1990 |
| U190 | All | June 8, 1989 |
| U191 | All | August 8, 1990 |
| U192 | All | August 8, 1990 |
| U193 | All | August 8, 1990 |
| U194 | All | June 8, 1989 |
| U196 | All | August 8, 1990 |
| U197 | All | August 8, 1990 |
| U200 | All | August 8, 1990 |
| U201 | All | August 8, 1990 |
| U203 | All | August 8, 1990 |
| U204 | All | August 8, 1990 |
| U205 | All | August 8, 1990 |
| U206 | All | August 8, 1990 |
| U207 | All | August 8, 1990 |
| U208 | All | August 8, 1990 |
| U209 | All | August 8, 1990 |
| U210 | All | August 8, 1990 |
| U211 | All | August 8, 1990 |
| U213 | All | August 8, 1990 |
| U214 | All | August 8, 1990 |
| U215 | All | August 8, 1990 |
| U216 | All | August 8, 1990 |
| U217 | All | August 8, 1990 |
| U218 | All | August 8, 1990 |
| U219 | All | August 8, 1990 |
| U220 | All | August 8, 1990 |
| U221 | All | June 8, 1989 |
| U222 | All | August 8, 1990 |
| U223 | All | June 8, 1989 |
| U225 | All | August 8, 1990 |
| U226 | All | August 8, 1990 |
| U227 | All | August 8, 1990 |
| U228 | All | August 8, 1990 |
| U234 | All | August 8, 1990 |
| U235 | All | June 8, 1989 |
| U236 | All | August 8, 1990 |
| U237 | All | August 8, 1990 |
| U238 | All | August 8, 1990 |
| U239 | All | August 8, 1990 |
| U240 | All | August 8, 1990 |
| U243 | All | August 8, 1990 |
| U244 | All | August 8, 1990 |
| U246 | All | August 8, 1990 |
| U247 | All | August 8, 1990 |
| U248 | All | August 8, 1990 |
| U249 | All | August 8, 1990 |
| U271 | Mixed with radioactive wastes | April 8, 1998 |
| U271 | All others | July 8, 1996 |
| U277 | Mixed with radioactive wastes | April 8, 1998 |
| U277 | All others | July 8, 1996 |
| U278 | Mixed with radioactive wastes | April 8, 1998 |
| U278 | All others | July 8, 1996 |
| U279 | Mixed with radioactive wastes | April 8, 1998 |
| U279 | All others | July 8, 1996 |
| U280 | Mixed with radioactive wastes | April 8, 1998 |
| U280 | All others | July 8, 1996 |
| U328 | Mixed with radioactive wastes | June 30, 1994 |
| U328 | All others | November 9, 1992 |
| U353 | Mixed with radioactive wastes | June 30, 1994 |
| U353 | All others | November 9, 1992 |
| U359 | Mixed with radioactive wastes | June 30, 1994 |
| U359 | All others | November 9, 1992 |
| U364 | Mixed with radioactive wastes | April 8, 1998 |
| U364 | All others | July 8, 1996 |
| U365 | Mixed with radioactive wastes | April 8, 1998 |
| U365 | All others | July 8, 1996 |
| U366 | Mixed with radioactive wastes | April 8, 1998 |
| U366 | All others | July 8, 1996 |
| U367 | Mixed with radioactive wastes | April 8, 1998 |
| U367 | All others | July 8, 1996 |
| U372 | Mixed with radioactive wastes | April 8, 1998 |
| U372 | All others | July 8, 1996 |
| U373 | Mixed with radioactive wastes | April 8, 1998 |
| U373 | All others | July 8, 1996 |
| U375 | Mixed with radioactive wastes | April 8, 1998 |
| U375 | All others | July 8, 1996 |
| U376 | Mixed with radioactive wastes | April 8, 1998 |
| U376 | All others | July 8, 1996 |
| U377 | Mixed with radioactive wastes | April 8, 1998 |
| U377 | All others | July 8, 1996 |
| U378 | Mixed with radioactive wastes | April 8, 1998 |
| U378 | All others | July 8, 1996 |
| U379 | Mixed with radioactive wastes | April 8, 1998 |
| U379 | All others | July 8, 1996 |
| U381 | Mixed with radioactive wastes | April 8, 1998 |
| U381 | All others | July 8, 1996 |
| U382 | Mixed with radioactive wastes | April 8, 1998 |
| U382 | All others | July 8, 1996 |
| U383 | Mixed with radioactive wastes | April 8, 1998 |
| U383 | All others | July 8, 1996 |
| U384 | Mixed with radioactive wastes | April 8, 1998 |
| U384 | All others | July 8, 1996 |
| U385 | Mixed with radioactive wastes | April 8, 1998 |
| U385 | All others | July 8, 1996 |
| U386 | Mixed with radioactive wastes | April 8, 1998 |
| U386 | All others | July 8, 1996 |
| U387 | Mixed with radioactive wastes | April 8, 1998 |
| U387 | All others | July 8, 1996 |
| U389 | Mixed with radioactive wastes | April 8, 1998 |
| U389 | All others | July 8, 1996 |
| U390 | Mixed with radioactive wastes | April 8, 1998 |
| U390 | All others | July 8, 1996 |
| U391 | Mixed with radioactive wastes | April 8, 1998 |
| U391 | All others | July 8, 1996 |
| U392 | Mixed with radioactive wastes | April 8, 1998 |
| U392 | All others | July 8, 1996 |
| U393 | Mixed with radioactive wastes | April 8, 1998 |
| U393 | All others | July 8, 1996 |
| U394 | Mixed with radioactive wastes | April 8, 1998 |
| U394 | All others | July 8, 1996 |
| U395 | Mixed with radioactive wastes | April 8, 1998 |
| U395 | All others | July 8, 1996 |
| U396 | Mixed with radioactive wastes | April 8, 1998 |
| U396 | All others | July 8, 1996 |
| U400 | Mixed with radioactive wastes | April 8, 1998 |
| U400 | All others | July 8, 1996 |
| U401 | Mixed with radioactive wastes | April 8, 1998 |
| U401 | All others | July 8, 1996 |
| U402 | Mixed with radioactive wastes | April 8, 1998 |
| U402 | All others | July 8, 1996 |
| U403 | Mixed with radioactive wastes | April 8, 1998 |
| U403 | All others | July 8, 1996 |
| U404 | Mixed with radioactive wastes | April 8, 1998 |
| U404 | All others | July 8, 1996 |
| U407 | Mixed with radioactive wastes | April 8, 1998 |
| U407 | All others | July 8, 1996 |
| U409 | Mixed with radioactive wastes | April 8, 1998 |
| U409 | All others | July 8, 1996 |
| U410 | Mixed with radioactive wastes | April 8, 1998 |
| U410 | All others | July 8, 1996 |
| U411 | Mixed with radioactive wastes | April 8, 1998 |
| U411 | All others | July 8, 1996 |

a This table also does not include contaminated soil and debris wastes.

b The standard was revised in the Third Third Final Rule (adopted by USEPA at 55 Fed. Reg. 22520 (June 1, 1990), which the Board adopted in docket R90-11 at 15 Ill. Reg. 9462, effective June 17, 1991.

c USEPA amended the standard in the Third Third Emergency Rule (at 58 Fed. Reg. 29860 (May 24, 1993), which the Board adopted in docket R93-16 at 18 Ill. Reg. 6799, effective April 26, 1994); the original effective date was August 8, 1990.

d The standard was revised in the Phase II Final Rule (that USEPA adopted at 59 Fed. Reg. 47982 (September 19, 1994), which the Board adopted in docket R95-6 at 19 Ill. Reg. 9660, effective June 27, 1995); the original effective date was August 8, 1990.

e The standards for selected reactive wastes was revised in the Phase III Final Rule (that USEPA adopted at 61 Fed. Reg. 15566 (April 8, 1996), which the Board adopted in docket R96-10/R97-3/R97-5 (consolidated) at 22 Ill. Reg. 783, effective December 16, 1997); the original effective date was August 8, 1990.

TABLE 2

SUMMARY OF EFFECTIVE DATES OF LAND DISPOSAL RESTRICTIONS FOR CONTAMINATED SOIL AND DEBRIS (CSD)

|  |  |
| --- | --- |
| Restricted hazardous waste in CSD | Effective date |
| 1. Solvent- (F001-F005) and dioxin- (F020-F023 and F026-F028) containing soil and debris from CERCLA response or RCRA corrective actions. | November 8, 1990 |
| 2. Soil and debris not from CERCLA response or RCRA corrective actions contaminated with less than one percent total solvents (F001-F005) or dioxins (F020-F023 and F026-F028). | November 8, 1988 |
| 3. All soil and debris contaminated with First Third wastes for which treatment standards are based on incineration. | August 8, 1990 |
| 4. All soil and debris contaminated with Second Third wastes for which treatment standards are based on incineration. | June 8, 1991 |
| 5. All soil and debris contaminated with Third Third wastes or, First or Second Third “soft hammer” wastes that had treatment standards promulgated in the Third Third rule, for which treatment standards are based on incineration, vitrification, or mercury retorting, acid leaching followed by chemical precipitation, or thermal recovery of metals, as well as all inorganic solids debris contaminated with D004-D011 wastes, and all soil and debris contaminated with mixed RCRA/radioactive wastes. | May 8, 1992 |
| 6. Soil and debris contaminated with D012-D043, K141-K145, and K147-151 wastes. | December 19, 1994 |
| 7. Debris (only) contaminated with F037, F038, K107-K112, K117, K118, K123-K126, K131, K132, K136, U328, U353, U359. | December 19, 1994 |
| 8. Soil and debris contaminated with K156- K161, P127, P128, P188-P192, P194, P196- P199, P201-P205, U271, U277-U280, U364-U367, U372, U373, U375-U379, U381-U387, U389-U396, U400-U404, U407, and U409-U411 wastes. | July 8, 1996 |
| 9. Soil and debris contaminated with K088 wastes. | October 8, 1997 |
| 10. Soil and debris contaminated with radioactive wastes mixed with K088, K156-K161, P127, P128, P188-P192, P194, P196-P199, P201-P205, U271, U277-U280, U364-U367, U372, U373, U375-U379, U381-U387, U389-U396, U400-U404, U407, and U409-U411 wastes. | April 8, 1998 |
| 11. Soil and debris contaminated with F032, F034, and F035. | May 12, 1997 |
| 12. Soil and debris contaminated with newly identified D004-D011 toxicity characteristic wastes and mineral processing wastes. | August 24, 1998 |
| 13. Soil and debris contaminated with mixed radioactive newly identified D011 characteristic wastes and mineral processing wastes. | May 26, 2000 |

BOARD NOTE:  These tables are provided for the convenience of the reader.

(Source: Amended at 40 Ill. Reg. 12052, effective August 9, 2016)

**Section** **728.APPENDIX H National Capacity LDR Variances for UIC Wastes**

See Notea

|  |  |  |
| --- | --- | --- |
| USEPA Hazardous Waste Number | Waste Category | Effective Date |
| D001 (except High TOC Ignitable Liquids Subcategory)c | All | February 10, 1994 |
| D001 (High TOC Ignitable Characteristic Liquids Subcategory) | Nonwastewater | September 19, 1995 |
| D002b | All | May 8, 1992 |
| D002c | All | February 10, 1994 |
| D003 (cyanides) | All | May 8, 1992 |
| D003 (sulfides) | All | May 8, 1992 |
| D003 (explosives, reactives) | All | May 8, 1992 |
| D007 | All | May 8, 1992 |
| D009 | Nonwastewater | May 8, 1992 |
| D012 | All | September 19, 1995 |
| D013 | All | September 19, 1995 |
| D014 | All | September 19, 1995 |
| D015 | All | September 19, 1995 |
| D016 | All | September 19, 1995 |
| D017 | All | September 19, 1995 |
| D018 | All, including mixed with radioactive wastes | April 8, 1998 |
| D019 | All, including mixed with radioactive wastes | April 8, 1998 |
| D020 | All, including mixed with radioactive wastes | April 8, 1998 |
| D021 | All, including mixed with radioactive wastes | April 8, 1998 |
| D022 | All, including mixed with radioactive wastes | April 8, 1998 |
| D023 | All, including mixed with radioactive wastes | April 8, 1998 |
| D024 | All, including mixed with radioactive wastes | April 8, 1998 |
| D025 | All, including mixed with radioactive wastes | April 8, 1998 |
| D026 | All, including mixed with radioactive wastes | April 8, 1998 |
| D027 | All, including mixed with radioactive wastes | April 8, 1998 |
| D028 | All, including mixed with radioactive wastes | April 8, 1998 |
| D029 | All, including mixed with radioactive wastes | April 8, 1998 |
| D030 | All, including mixed with radioactive wastes | April 8, 1998 |
| D031 | All, including mixed with radioactive wastes | April 8, 1998 |
| D032 | All, including mixed with radioactive wastes | April 8, 1998 |
| D033 | All, including mixed with radioactive wastes | April 8, 1998 |
| D034 | All, including mixed with radioactive wastes | April 8, 1998 |
| D035 | All, including mixed with radioactive wastes | April 8, 1998 |
| D036 | All, including mixed with radioactive wastes | April 8, 1998 |
| D037 | All, including mixed with radioactive wastes | April 8, 1998 |
| D038 | All, including mixed with radioactive wastes | April 8, 1998 |
| D039 | All, including mixed with radioactive wastes | April 8, 1998 |
| D040 | All, including mixed with radioactive wastes | April 8, 1998 |
| D041 | All, including mixed with radioactive wastes | April 8, 1998 |
| D042 | All, including mixed with radioactive wastes | April 8, 1998 |
| D043 | All, including mixed with radioactive wastes | April 8, 1998 |
| F001-F005 | All spent F001-F005 solvent containing less than 1 percent total F001-F005 solvent constituents | August 8, 1990 |
| F007 | All | June 8, 1991 |
| F032 | All, including mixed with radioactive wastes | May 12, 1999 |
| F034 | All, including mixed with radioactive wastes | May 12,1999 |
| F035 | All, including mixed with radioactive wastes | May 12, 1999 |
| F037 | All | November 8, 1992 |
| F038 | All | November 8, 1992 |
| F039 | Wastewater | May 8, 1992 |
| K009 | Wastewater | June 8, 1991 |
| K011 | Nonwastewater | June 8, 1991 |
| K011 | Wastewater | May 8, 1992 |
| K013 | Nonwastewater | June 8, 1991 |
| K013 | Wastewater | May 8, 1992 |
| K014 | All | May 8, 1992 |
| K016 (dilute) | All | June 8, 1991 |
| K049 | All | August 8, 1990 |
| K050 | All | August 8, 1990 |
| K051 | All | August 8, 1990 |
| K052 | All | August 8, 1990 |
| K062 | All | August 8, 1990 |
| K071 | All | August 8, 1990 |
| K088 | All | January 8, 1997 |
| K104 | All | August 8, 1990 |
| K107 | All | November 8, 1992 |
| K108 | All | November 9, 1992 |
| K109 | All | November 9, 1992 |
| K110 | All | November 9, 1992 |
| K111 | All | November 9, 1992 |
| K112 | All | November 9, 1992 |
| K117 | All | June 30, 1995 |
| K118 | All | June 30, 1995 |
| K123 | All | November 9, 1992 |
| K124 | All | November 9, 1992 |
| K125 | All | November 9, 1992 |
| K126 | All | November 9, 1992 |
| K131 | All | June 30, 1995 |
| K132 | All | June 30, 1995 |
| K136 | All | November 9, 1992 |
| K141 | All | December 19, 1994 |
| K142 | All | December 19, 1994 |
| K143 | All | December 19, 1994 |
| K144 | All | December 19, 1994 |
| K145 | All | December 19, 1994 |
| K147 | All | December 19, 1994 |
| K148 | All | December 19, 1994 |
| K149 | All | December 19, 1994 |
| K150 | All | December 19, 1994 |
| K151 | All | December 19, 1994 |
| K156 | All | July 8, 1996 |
| K157 | All | July 8, 1996 |
| K158 | All | July 8, 1996 |
| K159 | All | July 8, 1996 |
| K160 | All | July 8, 1996 |
| K161 | All | July 8, 1996 |
| NA | Newly identified mineral processing wastes from titanium dioxide production and mixed radioactive/newly identified D004-D011 characteristic wastes and mineral processing wastes | May 26, 2000 |
| P127 | All | July 8, 1996 |
| P128 | All | July 8, 1996 |
| P185 | All | July 8, 1996 |
| P188 | All | July 8, 1996 |
| P189 | All | July 8, 1996 |
| P190 | All | July 8, 1996 |
| P191 | All | July 8, 1996 |
| P192 | All | July 8, 1996 |
| P194 | All | July 8, 1996 |
| P196 | All | July 8, 1996 |
| P197 | All | July 8, 1996 |
| P198 | All | July 8, 1996 |
| P199 | All | July 8, 1996 |
| P201 | All | July 8, 1996 |
| P202 | All | July 8, 1996 |
| P203 | All | July 8, 1996 |
| P204 | All | July 8, 1996 |
| P205 | All | July 8, 1996 |
| U271 | All | July 8, 1996 |
| U277 | All | July 8, 1996 |
| U278 | All | July 8, 1996 |
| U279 | All | July 8, 1996 |
| U280 | All | July 8, 1996 |
| U328 | All | November 9, 1992 |
| U353 | All | November 9, 1992 |
| U359 | All | November 9, 1992 |
| U364 | All | July 8, 1996 |
| U365 | All | July 8, 1996 |
| U366 | All | July 8, 1996 |
| U367 | All | July 8, 1996 |
| U372 | All | July 8, 1996 |
| U373 | All | July 8, 1996 |
| U375 | All | July 8, 1996 |
| U376 | All | July 8, 1996 |
| U377 | All | July 8, 1996 |
| U378 | All | July 8, 1996 |
| U379 | All | July 8, 1996 |
| U381 | All | July 8, 1996 |
| U382 | All | July 8, 1996 |
| U383 | All | July 8, 1996 |
| U384 | All | July 8, 1996 |
| U385 | All | July 8, 1996 |
| U386 | All | July 8, 1996 |
| U387 | All | July 8, 1996 |
| U389 | All | July 8, 1996 |
| U390 | All | July 8, 1996 |
| U391 | All | July 8, 1996 |
| U392 | All | July 8, 1996 |
| U395 | All | July 8, 1996 |
| U396 | All | July 8, 1996 |
| U400 | All | July 8, 1996 |
| U401 | All | July 8, 1996 |
| U402 | All | July 8, 1996 |
| U403 | All | July 8, 1996 |
| U404 | All | July 8, 1996 |
| U407 | All | July 8, 1996 |
| U409 | All | July 8, 1996 |
| U410 | All | July 8, 1996 |
| U411 | All | July 8, 1996 |

a Wastes that are deep well disposed on-site receive a six-month variance, with restrictions, effective in November 1990.

b Deep well injected D002 liquids with a pH less than two must meet the California List treatment standards on August 8, 1990.

c Managed in systems defined in 35 Ill. Adm. Code 730.105(e) as Class V injection wells that do not engage in CWA-equivalent treatment before injection.

BOARD NOTE:  This table is provided for the convenience of the reader.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.APPENDIX I EP Toxicity Test Method and Structural Integrity Test**

BOARD NOTE: Method 1310B (Extraction Procedure Toxicity Test) is published 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).

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.Appendix J Recordkeeping, Notification, and Certification Requirements (Repealed)**

(Source:  Repealed at 22 Ill. Reg. 17706, effective September 28, 1998)

**Section** **728.APPENDIX K Metal-Bearing Wastes Prohibited from Dilution in a Combustion Unit According to Section 728.103(c)**

BOARD NOTE: A combustion unit is defined as any thermal technology subject to 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.

|  |  |
| --- | --- |
| USEPA Hazardous Waste Number | Waste Description |
| D004 | Toxicity Characteristic for Arsenic. |
| D005 | Toxicity Characteristic for Barium. |
| D006 | Toxicity Characteristic for Cadmium. |
| D007 | Toxicity Characteristic for Chromium. |
| D008 | Toxicity Characteristic for Lead. |
| D009 | Toxicity Characteristic for Mercury. |
| D010 | Toxicity Characteristic for Selenium. |
| D011 | Toxicity Characteristic for Silver. |
| F006 | Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating carbon steel; (3) zinc plating basis on carbon steel; (4) aluminum or zinc-plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. |
| F007 | Spent cyanide plating bath solutions from electroplating operations. |
| F008 | Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process. |
| F009 | Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process. |
| F010 | Quenching bath residues from oil baths from metal treating operations where cyanides are used in the process. |
| F011 | Spent cyanide solutions from salt bath pot cleaning from metal heat-treating operations. |
| F012 | Quenching waste water treatment sludges from metal heat-treating operations where cyanides are used in the process. |
| F019 | Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum car washing when such phosphating is an exclusive conversion coating process. |
| K002 | Wastewater treatment sludge from the production of chrome yellow and orange pigments. |
| K003 | Wastewater treatment sludge from the production of molybdate orange pigments. |
| K004 | Wastewater treatment sludge from the production of zinc yellow pigments. |
| K005 | Wastewater treatment sludge from the production of chrome green pigments. |
| K006 | Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated). |
| K007 | Wastewater treatment sludge from the production of iron blue pigments. |
| K008 | Oven residue from the production of chrome oxide green pigments. |
| K061 | Emission control dust/sludge from the primary production of steel in electric furnaces. |
| K069 | Emission control dust/sludge from secondary lead smelting. |
| K071 | Brine purification muds from the mercury cell processes in chlorine production, where separately prepurified brine is not used. |
| K100 | Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. |
| K106 | Sludges from the mercury cell processes for making chlorine. |
| P010 | Arsenic acid H3AsO4. |
| P011 | Arsenic oxide As2O5. |
| P012 | Arsenic trioxide. |
| P013 | Barium cyanide. |
| P015 | Beryllium. |
| P029 | Copper (I) cyanide Cu(CN). |
| P074 | Nickel (II) cyanide Ni(CN)2. |
| P087 | Osmium (VIII) tetroxide OsO4. |
| P099 | Potassium silver cyanide KAg(CN)2. |
| P104 | Silver cyanide AgCN. |
| P113 | Thallic (III) oxide Tl2O3. |
| P114 | Thallium (I) selenite Tl2SeO3. |
| P115 | Thallium (I) sulfate Tl2SO4. |
| P119 | Ammonium (V) vanadate NH3VO3. |
| P120 | Vanadium (V) oxide V2O5. |
| P121 | Zinc cyanide ZnCN. |
| U032 | Calcium chromate CaCrO4. |
| U145 | Lead phosphate. |
| U151 | Mercury. |
| U204 | Selenous acid H2SeO3. |
| U205 | Selenium (IV) disulfide SeS2. |
| U216 | Thallium (I) chloride TlCl. |
| U217 | Thallium (I) nitrate TlNO3. |

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.TABLE A Constituent Concentrations in Waste Extract (CCWE)**

For the requirements previously found in this Section and Section 728.141, refer to Section 728.140 and Table T, “Treatment Standards for Hazardous Wastes”.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.TABLE B Constituent Concentrations in Wastes (CCW)**

For the requirements previously found in this Section and for treatment standards in Section 728.143, “Constituent Concentrations in Wastes (CCW)”, refer to Section 728.140 and Table T, “Treatment Standards for Hazardous Wastes”.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.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 or 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 USEPA hazardous waste number 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 USEPA hazardous waste number 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 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 1 in 40 CFR 268.42 (2017).

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.TABLE D Technology-Based Standards by USEPA Hazardous Waste Number**

BOARD NOTE: For the requirements previously found in this Section, refer to Section 728.140 and Table T.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.TABLE E Standards for Radioactive Mixed Waste**

BOARD NOTE: For the requirements previously found in this Section, refer to Section 728.140 and Table T.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.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” 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) 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 |  |  |
| a. 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. |
| b. Scarification, Grinding, and Planing: Process utilizing striking piston heads, saws, or rotating grinding wheels such that contaminated debris surface layers are removed. | Same as above | Same as above |
| c. Spalling: Drilling or chipping holes at appropriate locations and depth in the contaminated debris surface and applying a tool 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 |
| d. 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 |
| e. High Pressure Steam and Water Sprays: Application of water or steam sprays of sufficient temperature, pressure, residence time, agitation, surfactants, and detergents to remove hazardous contaminants from debris surfaces or to remove contaminated debris surface layers | Same as above | Same as above. |
| 2. Chemical Extraction |  |  |
| a. Water Washing and Spraying: Application of water sprays or water baths of sufficient temperature, pressure, residence time, agitation, surfactants, acids, bases, and detergents to remove hazardous contaminants from debris surfaces and surface pores or to remove contaminated debris surface layers. | All Debris: Treatment to a clean debris surface; Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Debris must be no more than 1.2 cm (½ inch) in one dimension (i.e., thickness limit,2 except that this thickness limit may be waived under an “Equivalent Technology” approval pursuant to 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 pursuant to Section 728.142(b) must be obtained.4 |
| b. 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.1 | Same as above | Brick, 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.1 | Same 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 Extraction |  |  |
| a. High Temperature Metals Recovery: Application of sufficient heat, residence time, mixing, fluxing agents, or carbon in a smelting, melting, or refining furnace to separate metals from debris. | For refining furnaces, treated debris 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 pursuant to Section 728.142(b).4 |
| b. Thermal Desorption: Heating in an enclosed chamber under either oxidizing or nonoxidizing atmospheres at sufficient temperature and residence time to vaporize hazardous contaminants from contaminated surfaces and surface pores and to remove the contaminants from the heating chamber in a gaseous exhaust gas.3 | All Debris: Obtain an “Equivalent Technology” approval pursuant 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” approval | All Debris: Metals other than mercury. |
| B. Destruction Technologies |  |  |
| 1. Biological Destruction (Biodegradation): Removal of hazardous contaminants from debris surfaces and surface pores in an aqueous solution and 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 pursuant 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 (½ 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. |
| 2. Chemical Destruction |  |  |
| a. 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 pursuant 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 (½ 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 pursuant 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 (2017).

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.TABLE G Alternative Treatment Standards Based on HTMR**

For the treatment standards previously found in this Section and Section 728.146, refer to Section 728.140 and Table T, “Treatment Standards for Hazardous Wastes”.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.TABLE H Wastes Excluded from CCW Treatment Standards**

The following facilities are excluded from the treatment standard under Section 728.143(a) and Table B, and are subject to the following constituent concentrations.  These facilities have received a treatability exception by regulatory action from USEPA pursuant to 40 CFR 268.44, and have demonstrated that the Board needs to adopt the treatability exception as part of the Illinois RCRA program.  The Board may also grant an “adjusted treatment standard” pursuant to Section 728.144.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Facility Name and Address | USEPA HazardousWaste Number | See Also | Regulated Hazardous Constituent | Wastewaters  Concentra­tion (mg/ℓ) | Notes | Nonwaste­waters  Concentra­tion (mg/kg) | Notes |
| Craftsman Plating and Tinning Corp., Chicago, IL | F006 | Section 728.140 | Cyanides (Total) | 1.2 | B | 1,800 | D |
|  |  |  | Cyanides (amenable) | 0.86 | B and C | 30 | D |
|  |  |  | Cadmium | 1.6 |  | NA |  |
|  |  |  | Chromium | 0.32 |  | NA |  |
|  |  |  | Lead | 0.40 |  | NA |  |
|  |  |  | Nickel | 0.44 |  | NA |  |
| Northwestern Plating Works, Inc., Chicago, IL | F006 | Section 728.140 | Cyanides (Total) | 1.2 | B | 970 | D |
|  |  |  | Cyanides (amenable) | 0.86 | B and C | 30 | D |
|  |  |  | Cadmium | 1.6 |  | NA |  |
|  |  |  | Chromium | 0.32 |  | NA |  |
|  |  |  | Lead | 0.40 |  | NA |  |
|  |  |  | Nickel | 0.44 |  | NA |  |

Notes:

A An owner or operator may certify compliance with these treatment standards according to the provisions of Section 728.107.

B Cyanide wastewater standards for F006 are based on analysis of composite samples.

C These owners and operators must comply with 0.86 mg/ℓ for amenable cyanides in the wastewater exiting the alkaline chlorination system.  These owners and operators must also comply with Section 728.107(a)(4) for appropriate monitoring frequency consistent with the facilities’ waste analysis plan.

D Cyanide nonwastewaters are analyzed using Method 9010C (Total and Amenable Cyanide: Distillation) or 9012B (Total and Amenable Cyanide (Automated Colorimetric, with Off-Line Distillation)) 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(b), with a sample size 10 g, distillation time one hour and fifteen minutes.

NA Not applicable.

BOARD NOTE: Derived from table to 40 CFR 268.44(o) (2017).

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.TABLE I Generator Paperwork Requirements**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Subsection of Section 728.107 under Which the Paperwork is Required: | | | |
| Required Information | (a)(2) | (a)(3) | (a)(4) | (a)(9) |
| 1. USEPA hazardous waste numbers and manifest number of first shipment | ✓ | ✓ | ✓ | ✓ |
| 2. Statement:  this waste is not prohibited from land disposal |  |  | ✓ |  |
| 3. The waste is subject to the LDRs.  The constituents of concern for USEPA hazardous waste numbers F001 through F005 and F039 waste, and underlying hazardous constituents in characteristic waste, unless the waste will be treated and monitored for all constituents.  If all constituents will be treated and monitored, there is no need to put them all on the LDR notice | ✓ | ✓ |  |  |
| 4. The notice must include the applicable wastewater/ nonwastewater category (see Section 728.102(d) and (f)) and subdivisions made within a USEPA hazardous waste number based on waste-specific criteria (such as D003 reactive cyanide) | ✓ | ✓ |  |  |
| 5. Waste analysis data (when available) | ✓ | ✓ | ✓ |  |
| 6. Date the waste is subject to the prohibition |  |  | ✓ |  |
| 7. For hazardous debris, when treating with the alternative treatment technologies provided by Section 728.145:  the contaminants subject to treatment, as described in Section 728.145(b); and an indication that these contaminants are being treated to comply with Section 728.145 | ✓ |  | ✓ |  |
| 8. 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) or the universal treatment standards | ✓ | ✓ |  |  |
| 9. A certification is needed (see applicable subsection for exact wording) |  | ✓ |  | ✓ |

BOARD NOTE: Derived from Table 1 to 40 CFR 268.7(a)(4) (2017).

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section** **728.TABLE T Treatment Standards for Hazardous Wastes**

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

USEPA Hazardous Waste Number

Waste Description and Treatment or Regulatory Subcategory1

|  |  |  |  |
| --- | --- | --- | --- |
| Regulated Hazardous Constituent | | Wastewaters | Nonwastewaters |
| Common Name | CAS2 Number | Concentration3 in mg/ℓ; or Techno­logy Code4 | Concentration5 in mg/kg 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.

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | DEACT and meet Section 728.148 standards8; or RORGS; or CMBST | DEACT 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.)

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | NA | RORGS; CMBST; or POLYM |

D0029

Corrosive Characteristic Wastes.

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | DEACT and meet Section 728.148 standards8 | DEACT 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) | NA | NA | HLVIT |
| Arsenic | 7440-38-2 | NA | HLVIT |
| Barium | 7440-39-3 | NA | HLVIT |
| Cadmium | 7440-43-9 | NA | HLVIT |
| Chromium (Total) | 7440-47-3 | NA | HLVIT |
| Lead | 7439-92-1 | NA | HLVIT |
| Mercury | 7439-97-6 | NA | HLVIT |
| Selenium | 7782-49-2 | NA | HLVIT |
| Silver | 7440-22-4 | NA | HLVIT |

D0039

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | DEACT | DEACT |

D0039

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | DEACT and meet Section 728.148 standards8 | DEACT and meet Section 728.148 standards8 |

D0039

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | DEACT | DEACT |

D0039

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | DEACT and meet Section 728.148 standards8 | DEACT and meet Section 728.148 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.)

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | NA | DEACT and meet Section 728.148 standards8 |

D0039

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

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanides (Total)7 | 57-12-5 | — | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |

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).

|  |  |  |  |
| --- | --- | --- | --- |
| Arsenic | 7440-38-2 | 1.4 and meet Section 728.148 standards8 | 5.0 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).

|  |  |  |  |
| --- | --- | --- | --- |
| Barium | 7440-39-3 | 1.2 and meet Section 728.148 standards8 | 21 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).

|  |  |  |  |
| --- | --- | --- | --- |
| Cadmium | 7440-43-9 | 0.69 and meet Section 728.148 standards8 | 0.11 mg/ℓ TCLP and meet Section 728.148 standards8 |

D0069

Cadmium-Containing Batteries Subcategory.

(Note:  This subcategory consists of nonwastewaters only.)

|  |  |  |  |
| --- | --- | --- | --- |
| Cadmium | 7440-43-9 | NA | RTHRM |

D0069

Radioactively contaminated cadmium-containing batteries.

(Note:  This subcategory consists of nonwastewaters only.)

|  |  |  |  |
| --- | --- | --- | --- |
| Cadmium | 7440-43-9 | NA | Macroencapsula­tion 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) | 7440-47-3 | 2.77 and meet Section 728.148 standards8 | 0.60 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).

|  |  |  |  |
| --- | --- | --- | --- |
| Lead | 7439-92-1 | 0.69 and meet Section 728.148 standards8 | 0.75 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.)

|  |  |  |  |
| --- | --- | --- | --- |
| Lead | 7439-92-1 | NA | RLEAD |

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.)

|  |  |  |  |
| --- | --- | --- | --- |
| Lead | 7439-92-1 | NA | MACRO |

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)

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | IMERC; 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)

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | 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 less than 260 mg/kg total mercury.  (Low Mercury Subcategory)

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | 0.20 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)

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | 0.025 mg/ℓ TCLP and meet Section 728.148 standards8 |

D0099

All D009 wastewaters.

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | 0.15 and meet Section 728.148 standards8 | NA |

D0099

Elemental mercury contaminated with radioactive materials.

(Note:  This subcategory consists of nonwastewaters only.)

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | AMLGM |

D0099

Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory.

(Note:  This subcategory consists of nonwastewaters only.)

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | IMERC |

D0099

Radioactively contaminated mercury-containing batteries.

(Note:  This subcategory consists of nonwastewaters only.)

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | Macroencapsula­tion 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).

|  |  |  |  |
| --- | --- | --- | --- |
| Selenium | 7782-49-2 | 0.82 and meet Section 728.148 standards8 | 5.7 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).

|  |  |  |  |
| --- | --- | --- | --- |
| Silver | 7440-22-4 | 0.43 | 0.14 mg/ℓ TCLP and meet Section 728.148 standards8 |

D0119

Radioactively contaminated silver-containing batteries.

(Note:  This subcategory consists of nonwastewaters only.)

|  |  |  |  |
| --- | --- | --- | --- |
| Silver | 7440-22-4 | NA | Macroencapsula­tion 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).

|  |  |  |  |
| --- | --- | --- | --- |
| Endrin | 72-20-8 | BIODG; or CMBST | 0.13 and meet Section 728.148 standards8 |
| Endrin aldehyde | 7421-93-4 | BIODG; or CMBST | 0.13 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).

|  |  |  |  |
| --- | --- | --- | --- |
| a-BHC | 319-84-6 | CARBN; or CMBST | 0.066 and meet Section 728.148 standards8 |
| b-BHC | 319-85-7 | CARBN; or CMBST | 0.066 and meet Section 728.148 standards8 |
| d-BHC | 319-86-8 | CARBN; or CMBST | 0.066 and meet Section 728.148 standards8 |
| γ-BHC (Lindane) | 58-89-9 | CARBN; or CMBST | 0.066 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).

|  |  |  |  |
| --- | --- | --- | --- |
| Methoxychlor | 72-43-5 | WETOX or CMBST | 0.18 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 standards8 |

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 standards8 |

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 standards8 |

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 | 71-43-2 | 0.14 and meet Section 728.148 standards8 | 10 and meet Section 728.148 standards8 |

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 | 56-23-5 | 0.057 and meet Section 728.148 standards8 | 6.0 and meet Section 728.148 standards8 |

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 (a and c isomers) | 57-74-9 | 0.0033 and meet Section 728.148 standards8 | 0.26 and meet Section 728.148 standards8 |

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 | 108-90-7 | 0.057 and meet Section 728.148 standards8 | 6.0 and meet Section 728.148 standards8 |

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 | 67-66-3 | 0.046 and meet Section 728.148 standards8 | 6.0 and meet Section 728.148 standards8 |

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 | 95-48-7 | 0.11 and meet Section 728.148 standards8 | 5.6 and meet Section 728.148 standards8 |

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) | 108-39-4 | 0.77 and meet Section 728.148 standards8 | 5.6 and meet Section 728.148 standards8 |

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) | 106-44-5 | 0.77 and meet Section 728.148 standards8 | 5.6 and meet Section 728.148 standards8 |

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) | 1319-77-3 | 0.88 and meet Section 728.148 standards8 | 11.2 and meet Section 728.148 standards8 |

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) | 106-46-7 | 0.090 and meet Section 728.148 standards8 | 6.0 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-Dichloroethane | 107-06-2 | 0.21 and meet Section 728.148 standards8 | 6.0 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-Dichloroethylene | 75-35-4 | 0.025 and meet Section 728.148 standards8 | 6.0 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-Dinitrotoluene | 121-14-2 | 0.32 and meet Section 728.148 standards8 | 140 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).

|  |  |  |  |
| --- | --- | --- | --- |
| Heptachlor | 76-44-8 | 0.0012 and meet Section 728.148 standards8 | 0.066 and meet Section 728.148 standards8 |
| Heptachlor epoxide | 1024-57-3 | 0.016 and meet Section 728.148 standards8 | 0.066 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).

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachlorobenzene | 118-74-1 | 0.055 and meet Section 728.148 standards8 | 10 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).

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachlorobutadiene | 87-68-3 | 0.055 and meet Section 728.148 standards8 | 5.6 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 | 67-72-1 | 0.055 and meet Section 728.148 standards8 | 30 and meet Section 728.148 standards8 |

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 | 78-93-3 | 0.28 and meet Section 728.148 standards8 | 36 and meet Section 728.148 standards8 |

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 | 98-95-3 | 0.068 and meet Section 728.148 standards8 | 14 and meet Section 728.148 standards8 |

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 | 87-86-5 | 0.089 and meet Section 728.148 standards8 | 7.4 and meet Section 728.148 standards8 |

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 | 110-86-1 | 0.014 and meet Section 728.148 standards8 | 16 and meet Section 728.148 standards8 |

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 | 127-18-4 | 0.056 and meet Section 728.148 standards8 | 6.0 and meet Section 728.148 standards8 |

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 | 79-01-6 | 0.054 and meet Section 728.148 standards8 | 6.0 and meet Section 728.148 standards8 |

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 | 95-95-4 | 0.18 and meet Section 728.148 standards8 | 7.4 and meet Section 728.148 standards8 |

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 | 88-06-2 | 0.035 and meet Section 728.148 standards8 | 7.4 and meet Section 728.148 standards8 |

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 | 75-01-4 | 0.27 and meet Section 728.148 standards8 | 6.0 and meet Section 728.148 standards8 |

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 | 67-64-1 | 0.28 | 160 |
| Benzene | 71-43-2 | 0.14 | 10 |
| n-Butyl alcohol | 71-36-3 | 5.6 | 2.6 |
| Carbon disulfide | 75-15-0 | 3.8 | NA |
| Carbon tetrachloride | 56-23-5 | 0.057 | 6.0 |
| Chlorobenzene | 108-90-7 | 0.057 | 6.0 |
| o-Cresol | 95-48-7 | 0.11 | 5.6 |
| m-Cresol  (difficult to distinguish from p-cresol) | 108-39-4 | 0.77 | 5.6 |
| p-Cresol  (difficult to distinguish from m-cresol) | 106-44-5 | 0.77 | 5.6 |
| Cresol-mixed isomers (Cresylic acid)  (sum of o-, m-, and p-cresol concentrations) | 1319-77-3 | 0.88 | 11.2 |
| Cyclohexanone | 108-94-1 | 0.36 | NA |
| o-Dichlorobenzene | 95-50-1 | 0.088 | 6.0 |
| Ethyl acetate | 141-78-6 | 0.34 | 33 |
| Ethyl benzene | 100-41-4 | 0.057 | 10 |
| Ethyl ether | 60-29-7 | 0.12 | 160 |
| Isobutyl alcohol | 78-83-1 | 5.6 | 170 |
| Methanol | 67-56-1 | 5.6 | NA |
| Methylene chloride | 75-9-2 | 0.089 | 30 |
| Methyl ethyl ketone | 78-93-3 | 0.28 | 36 |
| Methyl isobutyl ketone | 108-10-1 | 0.14 | 33 |
| Nitrobenzene | 98-95-3 | 0.068 | 14 |
| Pyridine | 110-86-1 | 0.014 | 16 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| Toluene | 108-88-3 | 0.080 | 10 |
| 1,1,1-Trichloroethane | 71-55-6 | 0.054 | 6.0 |
| 1,1,2-Trichloroethane | 79-00-5 | 0.054 | 6.0 |
| 1,1,2-Trichloro-1,2,2-trifluoro­ethane | 76-13-1 | 0.057 | 30 |
| Trichloroethylene | 79-01-6 | 0.054 | 6.0 |
| Trichloromonofluoromethane | 75-69-4 | 0.020 | 30 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |

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 disulfide | 75-15-0 | 3.8 | 4.8 mg/ℓ TCLP |
| Cyclohexanone | 108-94-1 | 0.36 | 0.75 mg/ℓ TCLP |
| Methanol | 67-56-1 | 5.6 | 0.75 mg/ℓ TCLP |

F001, F002, F003, F004 & F005

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

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Nitropropane | 79-46-9 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

F001, F002, F003, F004 & F005

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

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Ethoxyethanol | 110-80-5 | BIODG; or CMBST | CMBST |

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.

|  |  |  |  |
| --- | --- | --- | --- |
| Cadmium | 7440-43-9 | 0.69 | 0.11 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |
| Silver | 7440-22-4 | NA | 0.14 mg/ℓ TCLP |

F007

Spent cyanide plating bath solutions from electroplating operations.

|  |  |  |  |
| --- | --- | --- | --- |
| Cadmium | 7440-43-9 | NA | 0.11 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |
| Silver | 7440-22-4 | NA | 0.14 mg/ℓ TCLP |

F008

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

|  |  |  |  |
| --- | --- | --- | --- |
| Cadmium | 7440-43-9 | NA | 0.11 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |
| Silver | 7440-22-4 | NA | 0.14 mg/ℓ TCLP |

F009

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

|  |  |  |  |
| --- | --- | --- | --- |
| Cadmium | 7440-43-9 | NA | 0.11 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |
| Silver | 7440-22-4 | NA | 0.14 mg/ℓ TCLP |

F010

Quenching bath residues from oil baths from metal heat-treating operations where cyanides are used in the process.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | NA |

F011

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

|  |  |  |  |
| --- | --- | --- | --- |
| Cadmium | 7440-43-9 | NA | 0.11 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |
| Silver | 7440-22-4 | NA | 0.14 mg/ℓ TCLP |

F012

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

|  |  |  |  |
| --- | --- | --- | --- |
| Cadmium | 7440-43-9 | NA | 0.11 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |
| Silver | 7440-22-4 | NA | 0.14 mg/ℓ TCLP |

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) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |

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) | NA | 0.000063 | 0.001 |
| HxCDFs (All Hexachloro­dibenzofurans) | 55684-94-1 | 0.000063 | 0.001 |
| PeCDDs (All Pentachloro­dibenzo-p-dioxins) | 36088-22-9 | 0.000063 | 0.001 |
| PeCDFs (All Pentachloro­dibenzofurans) | 30402-15-4 | 0.000035 | 0.001 |
| Pentachlorophenol | 87-86-5 | 0.089 | 7.4 |
| TCDDs (All Tetrachloro­dibenzo-p-dioxins) | 41903-57-5 | 0.000063 | 0.001 |
| TCDFs (All Tetrachloro­dibenzofurans) | 55722-27-5 | 0.000063 | 0.001 |
| 2,4,5-Trichlorophenol | 95-95-4 | 0.18 | 7.4 |
| 2,4,6-Trichlorophenol | 88-06-2 | 0.035 | 7.4 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | 0.030 | 7.4 |

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 wastes | NA | CMBST11 | CMBST11 |
| 2-Chloro-1,3-butadiene | 126-99-8 | 0.057 | 0.28 |
| 3-Chloropropylene | 107-05-1 | 0.036 | 30 |
| 1,1-Dichloroethane | 75-34-3 | 0.059 | 6.0 |
| 1,2-Dichloroethane | 107-06-2 | 0.21 | 6.0 |
| 1,2-Dichloropropane | 78-87-5 | 0.85 | 18 |
| cis-1,3-Dichloropropylene | 10061-01-5 | 0.036 | 18 |
| trans-1,3-Dichloropropylene | 10061-02-6 | 0.036 | 18 |
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 0.28 | 28 |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 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 tetrachloride | 56-23-5 | 0.057 | 6.0 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| 1,2-Dichloroethane | 107-06-2 | 0.21 | 6.0 |
| 1,1-Dichloroethylene | 75-35-4 | 0.025 | 6.0 |
| Methylene chloride | 75-9-2 | 0.089 | 30 |
| 1,1,2-Trichloroethane | 79-00-5 | 0.054 | 6.0 |
| Trichloroethylene | 79-01-6 | 0.054 | 6.0 |
| Vinyl chloride | 75-01-4 | 0.27 | 6.0 |

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 tetrachloride | 56-23-5 | 0.057 | 6.0 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| Hexachlorobenzene | 118-74-1 | 0.055 | 10 |
| Hexachlorobutadiene | 87-68-3 | 0.055 | 5.6 |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |
| Methylene chloride | 75-9-2 | 0.089 | 30 |
| 1,1,2-Trichloroethane | 79-00-5 | 0.054 | 6.0 |
| Trichloroethylene | 79-01-6 | 0.054 | 6.0 |
| Vinyl chloride | 75-01-4 | 0.27 | 6.0 |

F027

Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols.  (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichloro­phenol as the sole component.)

|  |  |  |  |
| --- | --- | --- | --- |
| HxCDDs (All Hexachloro­dibenzo-p-dioxins) | NA | 0.000063 | 0.001 |
| HxCDFs (All Hexachloro­dibenzofurans) | 55684-94-1 | 0.000063 | 0.001 |
| PeCDDs (All Pentachloro­dibenzo-p-dioxins) | 36088-22-9 | 0.000063 | 0.001 |
| PeCDFs (All Pentachloro­dibenzofurans) | 30402-15-4 | 0.000035 | 0.001 |
| Pentachlorophenol | 87-86-5 | 0.089 | 7.4 |
| TCDDs (All Tetrachloro­dibenzo-p-dioxins) | 41903-57-5 | 0.000063 | 0.001 |
| TCDFs (All Tetrachloro­dibenzofurans) | 55722-27-5 | 0.000063 | 0.001 |
| 2,4,5-Trichlorophenol | 95-95-4 | 0.18 | 7.4 |
| 2,4,6-Trichlorophenol | 88-06-2 | 0.035 | 7.4 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | 0.030 | 7.4 |

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) | NA | 0.000063 | 0.001 |
| HxCDFs (All Hexachloro­dibenzofurans) | 55684-94-1 | 0.000063 | 0.001 |
| PeCDDs (All Pentachloro­dibenzo-p-dioxins) | 36088-22-9 | 0.000063 | 0.001 |
| PeCDFs (All Pentachloro­dibenzofurans) | 30402-15-4 | 0.000035 | 0.001 |
| Pentachlorophenol | 87-86-5 | 0.089 | 7.4 |
| TCDDs (All Tetrachloro­dibenzo-p-dioxins) | 41903-57-5 | 0.000063 | 0.001 |
| TCDFs (All Tetrachloro­dibenzofurans) | 55722-27-5 | 0.000063 | 0.001 |
| 2,4,5-Trichlorophenol | 95-95-4 | 0.18 | 7.4 |
| 2,4,6-Trichlorophenol | 88-06-2 | 0.035 | 7.4 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | 0.030 | 7.4 |

F032

Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 USEPA hazardous waste number 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.

|  |  |  |  |
| --- | --- | --- | --- |
| Acenaphthene | 83-32-9 | 0.059 | 3.4 |
| Anthracene | 120-12-7 | 0.059 | 3.4 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(b)fluoranthene (difficult to distinguish from benzo(k) fluoranthene) | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene (difficult to distinguish from benzo(b) fluoranthene) | 207-08-9 | 0.11 | 6.8 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |
| 2-4-Dimethyl phenol | 105-67-9 | 0.036 | 14 |
| Fluorene | 86-73-7 | 0.059 | 3.4 |
| Hexachlorodibenzo-p-dioxins | NA | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| Hexachlorodibenzofurans | NA | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| Indeno (1,2,3-c,d) pyrene | 193-39-5 | 0.0055 | 3.4 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Pentachlorodibenzo-p-dioxins | NA | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| Pentachlorodibenzofurans | NA | 0.000035 or CMBST11 | 0.001 or CMBST11 |
| Pentachlorophenol | 87-86-5 | 0.089 | 7.4 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Tetrachlorodibenzo-p-dioxins | NA | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| Tetrachlorodibenzofurans | NA | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | 0.030 | 7.4 |
| 2,4,6-Trichlorophenol | 88-06-2 | 0.035 | 7.4 |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 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.

|  |  |  |  |
| --- | --- | --- | --- |
| Acenaphthene | 83-32-9 | 0.059 | 3.4 |
| Anthracene | 120-12-7 | 0.059 | 3.4 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene) | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene) | 207-08-9 | 0.11 | 6.8 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |
| Fluorene | 86-73-7 | 0.059 | 3.4 |
| Indeno (1,2,3-c,d) pyrene | 193-39-5 | 0.0055 | 3.4 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 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.

|  |  |  |  |
| --- | --- | --- | --- |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 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.

|  |  |  |  |
| --- | --- | --- | --- |
| Acenaphthene | 83-32-9 | 0.059 | NA |
| Anthracene | 120-12-7 | 0.059 | 3.4 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 0.28 | 28 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Di-n-butyl phthalate | 84-74-2 | 0.057 | 28 |
| Ethylbenzene | 100-41-4 | 0.057 | 10 |
| Fluorene | 86-73-7 | 0.059 | NA |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Toluene | 108-88-3 | 0.080 | 10 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Lead | 7439-92-1 | 0.69 | NA |
| Nickel | 7440-02-0 | NA | 11 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.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 0.28 | 28 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Di-n-butyl phthalate | 84-74-2 | 0.057 | 28 |
| Ethylbenzene | 100-41-4 | 0.057 | 10 |
| Fluorene | 86-73-7 | 0.059 | NA |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Toluene | 108-88-3 | 0.080 | 10 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Lead | 7439-92-1 | 0.69 | NA |
| Nickel | 7440-02-0 | NA | 11 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.  (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.).

|  |  |  |  |
| --- | --- | --- | --- |
| Acenaphthylene | 208-96-8 | 0.059 | 3.4 |
| Acenaphthene | 83-32-9 | 0.059 | 3.4 |
| Acetone | 67-64-1 | 0.28 | 160 |
| Acetonitrile | 75-05-8 | 5.6 | NA |
| Acetophenone | 96-86-2 | 0.010 | 9.7 |
| 2-Acetylaminofluorene | 53-96-3 | 0.059 | 140 |
| Acrolein | 107-02-8 | 0.29 | NA |
| Acrylonitrile | 107-13-1 | 0.24 | 84 |
| Aldrin | 309-00-2 | 0.021 | 0.066 |
| 4-Aminobiphenyl | 92-67-1 | 0.13 | NA |
| Aniline | 62-53-3 | 0.81 | 14 |
| o-Anisidine (2-methoxyaniline) | 90-04-0 | 0.010 | 0.66 |
| Anthracene | 120-12-7 | 0.059 | 3.4 |
| Aramite | 140-57-8 | 0.36 | NA |
| a-BHC | 319-84-6 | 0.00014 | 0.066 |
| b-BHC | 319-85-7 | 0.00014 | 0.066 |
| d-BHC | 319-86-8 | 0.023 | 0.066 |
| γ-BHC | 58-89-9 | 0.0017 | 0.066 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(b)fluoranthene (difficult to distinguish from benzo(k)­fluoranthene) | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene (difficult to distinguish from benzo(b)­fluoranthene) | 207-08-9 | 0.11 | 6.8 |
| Benzo(g,h,i)perylene | 191-24-2 | 0.0055 | 1.8 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Bromodichloromethane | 75-27-4 | 0.35 | 15 |
| Methyl bromide (Bromo­methane) | 74-83-9 | 0.11 | 15 |
| 4-Bromophenyl phenyl ether | 101-55-3 | 0.055 | 15 |
| n-Butyl alcohol | 71-36-3 | 5.6 | 2.6 |
| Butyl benzyl phthalate | 85-68-7 | 0.017 | 28 |
| 2-sec-Butyl-4,6-dinitrophenol (Dinoseb) | 88-85-7 | 0.066 | 2.5 |
| Carbon disulfide | 75-15-0 | 3.8 | NA |
| Carbon tetrachloride | 56-23-5 | 0.057 | 6.0 |
| Chlordane (a and c isomers) | 57-74-9 | 0.0033 | 0.26 |
| p-Chloroaniline | 106-47-8 | 0.46 | 16 |
| Chlorobenzene | 108-90-7 | 0.057 | 6.0 |
| Chlorobenzilate | 510-15-6 | 0.10 | NA |
| 2-Chloro-1,3-butadiene | 126-99-8 | 0.057 | NA |
| Chlorodibromomethane | 124-48-1 | 0.057 | 15 |
| Chloroethane | 75-00-3 | 0.27 | 6.0 |
| bis(2-Chloroethoxy)methane | 111-91-1 | 0.036 | 7.2 |
| bis(2-Chloroethyl) ether | 111-44-4 | 0.033 | 6.0 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| bis(2-Chloroisopropyl) ether | 39638-32-9 | 0.055 | 7.2 |
| p-Chloro-m-cresol | 59-50-7 | 0.018 | 14 |
| Chloromethane (Methyl chloride) | 74-87-3 | 0.19 | 30 |
| 2-Chloronaphthalene | 91-58-7 | 0.055 | 5.6 |
| 2-Chlorophenol | 95-57-8 | 0.044 | 5.7 |
| 3-Chloropropylene | 107-05-1 | 0.036 | 30 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| p-Cresidine | 120-71-8 | 0.010 | 0.66 |
| o-Cresol | 95-48-7 | 0.11 | 5.6 |
| m-Cresol  (difficult to distinguish from p-cresol) | 108-39-4 | 0.77 | 5.6 |
| p-Cresol  (difficult to distinguish from m-cresol) | 106-44-5 | 0.77 | 5.6 |
| Cyclohexanone | 108-94-1 | 0.36 | NA |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 0.11 | 15 |
| Ethylene dibromide (1,2-Dibromoethane) | 106-93-4 | 0.028 | 15 |
| Dibromomethane | 74-95-3 | 0.11 | 15 |
| 2,4-D (2,4-Dichlorophenoxy­acetic acid) | 94-75-7 | 0.72 | 10 |
| o,p'-DDD | 53-19-0 | 0.023 | 0.087 |
| p,p'-DDD | 72-54-8 | 0.023 | 0.087 |
| o,p'-DDE | 3424-82-6 | 0.031 | 0.087 |
| p,p'-DDE | 72-55-9 | 0.031 | 0.087 |
| o,p'-DDT | 789-02-6 | 0.0039 | 0.087 |
| p,p'-DDT | 50-29-3 | 0.0039 | 0.087 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |
| Dibenz(a,e)pyrene | 192-65-4 | 0.061 | NA |
| m-Dichlorobenzene | 541-73-1 | 0.036 | 6.0 |
| o-Dichlorobenzene | 95-50-1 | 0.088 | 6.0 |
| p-Dichlorobenzene | 106-46-7 | 0.090 | 6.0 |
| Dichlorodifluoromethane | 75-71-8 | 0.23 | 7.2 |
| 1,1-Dichloroethane | 75-34-3 | 0.059 | 6.0 |
| 1,2-Dichloroethane | 107-06-2 | 0.21 | 6.0 |
| 1,1-Dichloroethylene | 75-35-4 | 0.025 | 6.0 |
| trans-1,2-Dichloroethylene | 156-60-5 | 0.054 | 30 |
| 2,4-Dichlorophenol | 120-83-2 | 0.044 | 14 |
| 2,6-Dichlorophenol | 87-65-0 | 0.044 | 14 |
| 1,2-Dichloropropane | 78-87-5 | 0.85 | 18 |
| cis-1,3-Dichloropropylene | 10061-01-5 | 0.036 | 18 |
| trans-1,3-Dichloropropylene | 10061-02-6 | 0.036 | 18 |
| Dieldrin | 60-57-1 | 0.017 | 0.13 |
| 2,4-Dimethylaniline (2,4-xylidine) | 95-68-1 | 0.010 | 0.66 |
| Diethyl phthalate | 84-66-2 | 0.20 | 28 |
| 2-4-Dimethyl phenol | 105-67-9 | 0.036 | 14 |
| Dimethyl phthalate | 131-11-3 | 0.047 | 28 |
| Di-n-butyl phthalate | 84-74-2 | 0.057 | 28 |
| 1,4-Dinitrobenzene | 100-25-4 | 0.32 | 2.3 |
| 4,6-Dinitro-o-cresol | 534-52-1 | 0.28 | 160 |
| 2,4-Dinitrophenol | 51-28-5 | 0.12 | 160 |
| 2,4-Dinitrotoluene | 121-14-2 | 0.32 | 140 |
| 2,6-Dinitrotoluene | 606-20-2 | 0.55 | 28 |
| Di-n-octyl phthalate | 117-84-0 | 0.017 | 28 |
| Di-n-propylnitrosamine | 621-64-7 | 0.40 | 14 |
| 1,4-Dioxane | 123-91-1 | 12.0 | 170 |
| Diphenylamine (difficult to distinguish from diphenylnitros­amine) | 122-39-4 | 0.92 | NA |
| Diphenylnitrosamine (difficult to distinguish from diphenyl­amine) | 86-30-6 | 0.92 | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | 0.087 | NA |
| Disulfoton | 298-04-4 | 0.017 | 6.2 |
| Endosulfan I | 939-98-8 | 0.023 | 0.066 |
| Endosulfan II | 33213-6-5 | 0.029 | 0.13 |
| Endosulfan sulfate | 1031-07-8 | 0.029 | 0.13 |
| Endrin | 72-20-8 | 0.0028 | 0.13 |
| Endrin aldehyde | 7421-93-4 | 0.025 | 0.13 |
| Ethyl acetate | 141-78-6 | 0.34 | 33 |
| Ethyl cyanide (Propanenitrile) | 107-12-0 | 0.24 | 360 |
| Ethyl benzene | 100-41-4 | 0.057 | 10 |
| Ethyl ether | 60-29-7 | 0.12 | 160 |
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 0.28 | 28 |
| Ethyl methacrylate | 97-63-2 | 0.14 | 160 |
| Ethylene oxide | 75-21-8 | 0.12 | NA |
| Famphur | 52-85-7 | 0.017 | 15 |
| Fluoranthene | 206-44-0 | 0.068 | 3.4 |
| Fluorene | 86-73-7 | 0.059 | 3.4 |
| Heptachlor | 76-44-8 | 0.0012 | 0.066 |
| 1,2,3,4,6,7,8-Heptachloro­dibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD) | 35822-46-9 | 0.000035 | 0.0025 |
| 1,2,3,4,6,7,8-Heptachloro­dibenzofuran (1,2,3,4,6,7,8-HpCDF) | 67562-39-4 | 0.000035 | 0.0025 |
| 1,2,3,4,7,8,9-Heptachloro­dibenzofuran (1,2,3,4,7,8,9-HpCDF) | 55673-89-7 | 0.000035 | 0.0025 |
| Heptachlor epoxide | 1024-57-3 | 0.016 | 0.066 |
| Hexachlorobenzene | 118-74-1 | 0.055 | 10 |
| Hexachlorobutadiene | 87-68-3 | 0.055 | 5.6 |
| Hexachlorocyclopentadiene | 77-47-4 | 0.057 | 2.4 |
| HxCDDs (All Hexachloro­dibenzo-p-dioxins) | NA | 0.000063 | 0.001 |
| HxCDFs (All Hexachloro­dibenzofurans) | 55684-94-1 | 0.000063 | 0.001 |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |
| Hexachloropropylene | 1888-71-7 | 0.035 | 30 |
| Indeno (1,2,3-c,d) pyrene | 193-39-5 | 0.0055 | 3.4 |
| Iodomethane | 74-88-4 | 0.19 | 65 |
| Isobutyl alcohol | 78-83-1 | 5.6 | 170 |
| Isodrin | 465-73-6 | 0.021 | 0.066 |
| Isosafrole | 120-58-1 | 0.081 | 2.6 |
| Kepone | 143-50-8 | 0.0011 | 0.13 |
| Methacrylonitrile | 126-98-7 | 0.24 | 84 |
| Methanol | 67-56-1 | 5.6 | NA |
| Methapyrilene | 91-80-5 | 0.081 | 1.5 |
| Methoxychlor | 72-43-5 | 0.25 | 0.18 |
| 3-Methylcholanthrene | 56-49-5 | 0.0055 | 15 |
| 4,4-Methylene bis(2-chloro­aniline) | 101-14-4 | 0.50 | 30 |
| Methylene chloride | 75-09-2 | 0.089 | 30 |
| Methyl ethyl ketone | 78-93-3 | 0.28 | 36 |
| Methyl isobutyl ketone | 108-10-1 | 0.14 | 33 |
| Methyl methacrylate | 80-62-6 | 0.14 | 160 |
| Methyl methansulfonate | 66-27-3 | 0.018 | NA |
| Methyl parathion | 298-00-0 | 0.014 | 4.6 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| 2-Naphthylamine | 91-59-8 | 0.52 | NA |
| p-Nitroaniline | 100-01-6 | 0.028 | 28 |
| Nitrobenzene | 98-95-3 | 0.068 | 14 |
| 5-Nitro-o-toluidine | 99-55-8 | 0.32 | 28 |
| p-Nitrophenol | 100-02-7 | 0.12 | 29 |
| N-Nitrosodiethylamine | 55-18-5 | 0.40 | 28 |
| N-Nitrosodimethylamine | 62-75-9 | 0.40 | NA |
| N-Nitroso-di-n-butylamine | 924-16-3 | 0.40 | 17 |
| N-Nitrosomethylethylamine | 10595-95-6 | 0.40 | 2.3 |
| N-Nitrosomorpholine | 59-89-2 | 0.40 | 2.3 |
| N-Nitrosopiperidine | 100-75-4 | 0.013 | 35 |
| N-Nitrosopyrrolidine | 930-55-2 | 0.013 | 35 |
| 1,2,3,4,6,7,8,9-Octachloro­dibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD) | 3268-87-9 | 0.000063 | 0.0025 |
| 1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF) | 39001-02-0 | 0.000063 | 0.005 |
| Parathion | 56-38-2 | 0.014 | 4.6 |
| Total PCBs  (sum of all PCB isomers, or all Aroclors) | 1336-36-3 | 0.10 | 10 |
| Pentachlorobenzene | 608-93-5 | 0.055 | 10 |
| PeCDDs (All Pentachloro­dibenzo-p-dioxins) | 36088-22-9 | 0.000063 | 0.001 |
| PeCDFs (All Pentachloro­dibenzofurans) | 30402-15-4 | 0.000035 | 0.001 |
| Pentachloronitrobenzene | 82-68-8 | 0.055 | 4.8 |
| Pentachlorophenol | 87-86-5 | 0.089 | 7.4 |
| Phenacetin | 62-44-2 | 0.081 | 16 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| 1,3-Phenylenediamine | 108-45-2 | 0.010 | 0.66 |
| Phorate | 298-02-2 | 0.021 | 4.6 |
| Phthalic anhydride | 85-44-9 | 0.055 | NA |
| Pronamide | 23950-58-5 | 0.093 | 1.5 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Pyridine | 110-86-1 | 0.014 | 16 |
| Safrole | 94-59-7 | 0.081 | 22 |
| Silvex (2,4,5-TP) | 93-72-1 | 0.72 | 7.9 |
| 2,4,5-T | 93-76-5 | 0.72 | 7.9 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | 14 |
| TCDDs (All Tetrachloro­dibenzo-p-dioxins) | 41903-57-5 | 0.000063 | 0.001 |
| TCDFs (All Tetrachloro­dibenzofurans) | 55722-27-5 | 0.000063 | 0.001 |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.057 | 6.0 |
| 1,1,2,2-Tetrachloroethane | 79-34-6 | 0.057 | 6.0 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | 0.030 | 7.4 |
| Toluene | 108-88-3 | 0.080 | 10 |
| Toxaphene | 8001-35-2 | 0.0095 | 2.6 |
| Bromoform (Tribromomethane) | 75-25-2 | 0.63 | 15 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | 19 |
| 1,1,1-Trichloroethane | 71-55-6 | 0.054 | 6.0 |
| 1,1,2-Trichloroethane | 79-00-5 | 0.054 | 6.0 |
| Trichloroethylene | 79-01-6 | 0.054 | 6.0 |
| Trichloromonofluoromethane | 75-69-4 | 0.020 | 30 |
| 2,4,5-Trichlorophenol | 95-95-4 | 0.18 | 7.4 |
| 2,4,6-Trichlorophenol | 88-06-2 | 0.035 | 7.4 |
| 1,2,3-Trichloropropane | 96-18-4 | 0.85 | 30 |
| 1,1,2-Trichloro-1,2,2-trifluoro­ethane | 76-13-1 | 0.057 | 30 |
| tris(2,3-Dibromopropyl) phosphate | 126-72-7 | 0.11 | NA |
| Vinyl chloride | 75-01-4 | 0.27 | 6.0 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Antimony | 7440-36-0 | 1.9 | 1.15 mg/ℓ TCLP |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |
| Barium | 7440-39-3 | 1.2 | 21 mg/ℓ TCLP |
| Beryllium | 7440-41-7 | 0.82 | NA |
| Cadmium | 7440-43-9 | 0.69 | 0.11 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | NA |
| Fluoride | 16964-48-8 | 35 | NA |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Mercury | 7439-97-6 | 0.15 | 0.025 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |
| Selenium | 7782-49-2 | 0.82 | 5.7 mg/ℓ TCLP |
| Silver | 7440-22-4 | 0.43 | 0.14 mg/ℓ TCLP |
| Sulfide | 8496-25-8 | 14 | NA |
| Thallium | 7440-28-0 | 1.4 | NA |
| Vanadium | 7440-62-2 | 4.3 | NA |

K001

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

|  |  |  |  |
| --- | --- | --- | --- |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Pentachlorophenol | 87-86-5 | 0.089 | 7.4 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Toluene | 108-88-3 | 0.080 | 10 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K002

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

|  |  |  |  |
| --- | --- | --- | --- |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K003

Wastewater treatment sludge from the production of molybdate orange pigments.

|  |  |  |  |
| --- | --- | --- | --- |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K004

Wastewater treatment sludge from the production of zinc yellow pigments.

|  |  |  |  |
| --- | --- | --- | --- |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K005

Wastewater treatment sludge from the production of chrome green pigments.

|  |  |  |  |
| --- | --- | --- | --- |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |

K006

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

|  |  |  |  |
| --- | --- | --- | --- |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K006

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

|  |  |  |  |
| --- | --- | --- | --- |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | NA |

K007

Wastewater treatment sludge from the production of iron blue pigments.

|  |  |  |  |
| --- | --- | --- | --- |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |

K008

Oven residue from the production of chrome oxide green pigments.

|  |  |  |  |
| --- | --- | --- | --- |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K009

Distillation bottoms from the production of acetaldehyde from ethylene.

|  |  |  |  |
| --- | --- | --- | --- |
| Chloroform | 67-66-3 | 0.046 | 6.0 |

K010

Distillation side cuts from the production of acetaldehyde from ethylene.

|  |  |  |  |
| --- | --- | --- | --- |
| Chloroform | 67-66-3 | 0.046 | 6.0 |

K011

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

|  |  |  |  |
| --- | --- | --- | --- |
| Acetonitrile | 75-05-8 | 5.6 | 38 |
| Acrylonitrile | 107-13-1 | 0.24 | 84 |
| Acrylamide | 79-06-1 | 19 | 23 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Cyanide (Total) | 57-12-5 | 1.2 | 590 |

K013

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

|  |  |  |  |
| --- | --- | --- | --- |
| Acetonitrile | 75-05-8 | 5.6 | 38 |
| Acrylonitrile | 107-13-1 | 0.24 | 84 |
| Acrylamide | 79-06-1 | 19 | 23 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Cyanide (Total) | 57-12-5 | 1.2 | 590 |

K014

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

|  |  |  |  |
| --- | --- | --- | --- |
| Acetonitrile | 75-05-8 | 5.6 | 38 |
| Acrylonitrile | 107-13-1 | 0.24 | 84 |
| Acrylamide | 79-06-1 | 19 | 23 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Cyanide (Total) | 57-12-5 | 1.2 | 590 |

K015

Still bottoms from the distillation of benzyl chloride.

|  |  |  |  |
| --- | --- | --- | --- |
| Anthracene | 120-12-7 | 0.059 | 3.4 |
| Benzal chloride | 98-87-3 | 0.055 | 6.0 |
| Benzo(b)fluoranthene (difficult to distinguish from benzo(k)­fluoranthene) | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene (difficult to distinguish from benzo(b)­fluoranthene) | 207-08-9 | 0.11 | 6.8 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Toluene | 108-88-3 | 0.080 | 10 |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |

K016

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

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachlorobenzene | 118-74-1 | 0.055 | 10 |
| Hexachlorobutadiene | 87-68-3 | 0.055 | 5.6 |
| Hexachlorocyclopentadiene | 77-47-4 | 0.057 | 2.4 |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |

K017

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

|  |  |  |  |
| --- | --- | --- | --- |
| bis(2-Chloroethyl) ether | 111-44-4 | 0.033 | 6.0 |
| 1,2-Dichloropropane | 78-87-5 | 0.85 | 18 |
| 1,2,3-Trichloropropane | 96-18-4 | 0.85 | 30 |

K018

Heavy ends from the fractionation column in ethyl chloride production.

|  |  |  |  |
| --- | --- | --- | --- |
| Chloroethane | 75-00-3 | 0.27 | 6.0 |
| Chloromethane | 74-87-3 | 0.19 | NA |
| 1,1-Dichloroethane | 75-34-3 | 0.059 | 6.0 |
| 1,2-Dichloroethane | 107-06-2 | 0.21 | 6.0 |
| Hexachlorobenzene | 118-74-1 | 0.055 | 10 |
| Hexachlorobutadiene | 87-68-3 | 0.055 | 5.6 |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |
| Pentachloroethane | 76-01-7 | NA | 6.0 |
| 1,1,1-Trichloroethane | 71-55-6 | 0.054 | 6.0 |

K019

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

|  |  |  |  |
| --- | --- | --- | --- |
| bis(2-Chloroethyl) ether | 111-44-4 | 0.033 | 6.0 |
| Chlorobenzene | 108-90-7 | 0.057 | 6.0 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| p-Dichlorobenzene | 106-46-7 | 0.090 | NA |
| 1,2-Dichloroethane | 107-06-2 | 0.21 | 6.0 |
| Fluorene | 86-73-7 | 0.059 | NA |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | NA |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | 19 |
| 1,1,1-Trichloroethane | 71-55-6 | 0.054 | 6.0 |

K020

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

|  |  |  |  |
| --- | --- | --- | --- |
| 1,2-Dichloroethane | 107-06-2 | 0.21 | 6.0 |
| 1,1,2,2-Tetrachloroethane | 79-34-6 | 0.057 | 6.0 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |

K021

Aqueous spent antimony catalyst waste from fluoromethanes production.

|  |  |  |  |
| --- | --- | --- | --- |
| Carbon tetrachloride | 56-23-5 | 0.057 | 6.0 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| Antimony | 7440-36-0 | 1.9 | 1.15 mg/ℓ TCLP |

K022

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

|  |  |  |  |
| --- | --- | --- | --- |
| Toluene | 108-88-3 | 0.080 | 10 |
| Acetophenone | 96-86-2 | 0.010 | 9.7 |
| Diphenylamine (difficult to distinguish from diphenylnitros­amine) | 122-39-4 | 0.92 | 13 |
| Diphenylnitrosamine (difficult to distinguish from diphenyl­amine) | 86-30-6 | 0.92 | 13 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |

K023

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

|  |  |  |  |
| --- | --- | --- | --- |
| Phthalic anhydride (measured as Phthalic acid or Terephthalic acid) | 100-21-0 | 0.055 | 28 |
| Phthalic anhydride (measured as Phthalic acid or Terephthalic acid) | 85-44-9 | 0.055 | 28 |

K024

Distillation bottoms from the production of phthalic anhydride from naphthalene.

|  |  |  |  |
| --- | --- | --- | --- |
| Phthalic anhydride (measured as Phthalic acid or Terephthalic acid) | 100-21-0 | 0.055 | 28 |
| Phthalic anhydride (measured as Phthalic acid or Terephthalic acid) | 85-44-9 | 0.055 | 28 |

K025

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | LLEXT fb SSTRP fb CARBN; or CMBST | CMBST |

K026

Stripping still tails from the production of methyl ethyl pyridines.

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CMBST | CMBST |

K027

Centrifuge and distillation residues from toluene diisocyanate production.

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CARBN; or CMBST | CMBST |

K028

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

|  |  |  |  |
| --- | --- | --- | --- |
| 1,1-Dichloroethane | 75-34-3 | 0.059 | 6.0 |
| trans-1,2-Dichloroethylene | 156-60-5 | 0.054 | 30 |
| Hexachlorobutadiene | 87-68-3 | 0.055 | 5.6 |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |
| Pentachloroethane | 76-01-7 | NA | 6.0 |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.057 | 6.0 |
| 1,1,2,2-Tetrachloroethane | 79-34-6 | 0.057 | 6.0 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| 1,1,1-Trichloroethane | 71-55-6 | 0.054 | 6.0 |
| 1,1,2-Trichloroethane | 79-00-5 | 0.054 | 6.0 |
| Cadmium | 7440-43-9 | 0.69 | NA |
| Chromium(Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |

K029

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

|  |  |  |  |
| --- | --- | --- | --- |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| 1,2-Dichloroethane | 107-06-2 | 0.21 | 6.0 |
| 1,1-Dichloroethylene | 75-35-4 | 0.025 | 6.0 |
| 1,1,1-Trichloroethane | 71-55-6 | 0.054 | 6.0 |
| Vinyl chloride | 75-01-4 | 0.27 | 6.0 |

K030

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

|  |  |  |  |
| --- | --- | --- | --- |
| o-Dichlorobenzene | 95-50-1 | 0.088 | NA |
| p-Dichlorobenzene | 106-46-7 | 0.090 | NA |
| Hexachlorobutadiene | 87-68-3 | 0.055 | 5.6 |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |
| Hexachloropropylene | 1888-71-7 | NA | 30 |
| Pentachlorobenzene | 608-93-5 | NA | 10 |
| Pentachloroethane | 76-01-7 | NA | 6.0 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | 14 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | 19 |

K031

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

|  |  |  |  |
| --- | --- | --- | --- |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |

K032

Wastewater treatment sludge from the production of chlordane.

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachlorocyclopentadiene | 77-47-4 | 0.057 | 2.4 |
| Chlordane (a and γ isomers) | 57-74-9 | 0.0033 | 0.26 |
| Heptachlor | 76-44-8 | 0.0012 | 0.066 |
| Heptachlor epoxide | 1024-57-3 | 0.016 | 0.066 |

K033

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

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachlorocyclopentadiene | 77-47-4 | 0.057 | 2.4 |

K034

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

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachlorocyclopentadiene | 77-47-4 | 0.057 | 2.4 |

K035

Wastewater treatment sludges generated in the production of creosote.

|  |  |  |  |
| --- | --- | --- | --- |
| Acenaphthene | 83-32-9 | NA | 3.4 |
| Anthracene | 120-12-7 | NA | 3.4 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| o-Cresol | 95-48-7 | 0.11 | 5.6 |
| m-Cresol  (difficult to distinguish from p-cresol) | 108-39-4 | 0.77 | 5.6 |
| p-Cresol  (difficult to distinguish from m-cresol) | 106-44-5 | 0.77 | 5.6 |
| Dibenz(a,h)anthracene | 53-70-3 | NA | 8.2 |
| Fluoranthene | 206-44-0 | 0.068 | 3.4 |
| Fluorene | 86-73-7 | NA | 3.4 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | NA | 3.4 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |

K036

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

|  |  |  |  |
| --- | --- | --- | --- |
| Disulfoton | 298-04-4 | 0.017 | 6.2 |

K037

Wastewater treatment sludges from the production of disulfoton.

|  |  |  |  |
| --- | --- | --- | --- |
| Disulfoton | 298-04-4 | 0.017 | 6.2 |
| Toluene | 108-88-3 | 0.080 | 10 |

K038

Wastewater from the washing and stripping of phorate production.

|  |  |  |  |
| --- | --- | --- | --- |
| Phorate | 298-02-2 | 0.021 | 4.6 |

K039

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CARBN; or CMBST | CMBST |

K040

Wastewater treatment sludge from the production of phorate.

|  |  |  |  |
| --- | --- | --- | --- |
| Phorate | 298-02-2 | 0.021 | 4.6 |

K041

Wastewater treatment sludge from the production of toxaphene.

|  |  |  |  |
| --- | --- | --- | --- |
| Toxaphene | 8001-35-2 | 0.0095 | 2.6 |

K042

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

|  |  |  |  |
| --- | --- | --- | --- |
| o-Dichlorobenzene | 95-50-1 | 0.088 | 6.0 |
| p-Dichlorobenzene | 106-46-7 | 0.090 | 6.0 |
| Pentachlorobenzene | 608-93-5 | 0.055 | 10 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | 14 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | 19 |

K043

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

|  |  |  |  |
| --- | --- | --- | --- |
| 2,4-Dichlorophenol | 120-83-2 | 0.044 | 14 |
| 2,6-Dichlorophenol | 187-65-0 | 0.044 | 14 |
| 2,4,5-Trichlorophenol | 95-95-4 | 0.18 | 7.4 |
| 2,4,6-Trichlorophenol | 88-06-2 | 0.035 | 7.4 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | 0.030 | 7.4 |
| Pentachlorophenol | 87-86-5 | 0.089 | 7.4 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| HxCDDs (All Hexachlorodibenzo-p-dioxins) | NA | 0.000063 | 0.001 |
| HxCDFs (All Hexachlorodibenzofurans) | 55684-94-1 | 0.000063 | 0.001 |
| PeCDDs (All Pentachlorodibenzo-p-dioxins) | 36088-22-9 | 0.000063 | 0.001 |
| PeCDFs (All Pentachlorodibenzofurans) | 30402-15-4 | 0.000035 | 0.001 |
| TCDDs (All Tetrachlorodibenzo-p-dioxins) | 41903-57-5 | 0.000063 | 0.001 |
| TCDFs (All Tetrachloro­dibenzofurans) | 55722-27-5 | 0.000063 | 0.001 |

K044

Wastewater treatment sludges from the manufacturing and processing of explosives.

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | DEACT | DEACT |

K045

Spent carbon from the treatment of wastewater containing explosives.

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | DEACT | DEACT |

K046

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

|  |  |  |  |
| --- | --- | --- | --- |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K047

Pink or red water from TNT operations.

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | DEACT | DEACT |

K048

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

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 0.28 | 28 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Di-n-butyl phthalate | 84-74-2 | 0.057 | 28 |
| Ethylbenzene | 100-41-4 | 0.057 | 10 |
| Fluorene | 86-73-7 | 0.059 | NA |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Toluene | 108-88-33 | 0.080 | 10 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Lead | 7439-92-1 | 0.69 | NA |
| Nickel | 7440-02-0 | NA | 11 mg/ℓ TCLP |

K049

Slop oil emulsion solids from the petroleum refining industry.

|  |  |  |  |
| --- | --- | --- | --- |
| Anthracene | 120-12-7 | 0.059 | 3.4 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 0.28 | 28 |
| Carbon disulfide | 75-15-0 | 3.8 | NA |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| 2,4-Dimethylphenol | 105-67-9 | 0.036 | NA |
| Ethylbenzene | 100-41-4 | 0.057 | 10 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Toluene | 108-88-3 | 0.080 | 10 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | NA |
| Nickel | 7440-02-0 | NA | 11 mg/ℓ TCLP |

K050

Heat exchanger bundle cleaning sludge from the petroleum refining industry.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | NA |
| Nickel | 7440-02-0 | NA | 11 mg/ℓ TCLP |

K051

API separator sludge from the petroleum refining industry.

|  |  |  |  |
| --- | --- | --- | --- |
| Acenaphthene | 83-32-9 | 0.059 | NA |
| Anthracene | 120-12-7 | 0.059 | 3.4 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 0.28 | 28 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Di-n-butyl phthalate | 105-67-9 | 0.057 | 28 |
| Ethylbenzene | 100-41-4 | 0.057 | 10 |
| Fluorene | 86-73-7 | 0.059 | NA |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Toluene | 108-88-3 | 0.08 | 10 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | NA |
| Nickel | 7440-02-0 | NA | 11 mg/ℓ TCLP |

K052

Tank bottoms (leaded) from the petroleum refining industry.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| o-Cresol | 95-48-7 | 0.11 | 5.6 |
| m-Cresol  (difficult to distinguish from p-cresol) | 108-39-4 | 0.77 | 5.6 |
| p-Cresol  (difficult to distinguish from m-cresol) | 106-44-5 | 0.77 | 5.6 |
| 2,4-Dimethylphenol | 105-67-9 | 0.036 | NA |
| Ethylbenzene | 100-41-4 | 0.057 | 10 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Toluene | 108-88-3 | 0.08 | 10 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Lead | 7439-92-1 | 0.69 | NA |
| Nickel | 7440-02-0 | NA | 11 mg/ℓ TCLP |

K060

Ammonia still lime sludge from coking operations.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |

K061

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

|  |  |  |  |
| --- | --- | --- | --- |
| Antimony | 7440-36-0 | NA | 1.15 mg/ℓ TCLP |
| Arsenic | 7440-38-2 | NA | 5.0 mg/ℓ TCLP |
| Barium | 7440-39-3 | NA | 21 mg/ℓ TCLP |
| Beryllium | 7440-41-7 | NA | 1.22 mg/ℓ TCLP |
| Cadmium | 7440-43-9 | 0.69 | 0.11 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Mercury | 7439-97-6 | NA | 0.025 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |
| Selenium | 7782-49-2 | NA | 5.7 mg/ℓ TCLP |
| Silver | 7440-22-4 | NA | 0.14 mg/ℓ TCLP |
| Thallium | 7440-28-0 | NA | 0.20 mg/ℓ TCLP |
| Zinc | 7440-66-6 | NA | 4.3 mg/ℓ TCLP |

K062

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

|  |  |  |  |
| --- | --- | --- | --- |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | NA |

K069

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

|  |  |  |  |
| --- | --- | --- | --- |
| Cadmium | 7440-43-9 | 0.69 | 0.11 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K069

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | NA | RLEAD |

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.

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | 0.20 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.

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | 0.025 mg/ℓ TCLP |

K071

All K071 wastewaters.

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | 0.15 | NA |

K073

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

|  |  |  |  |
| --- | --- | --- | --- |
| Carbon tetrachloride | 56-23-5 | 0.057 | 6.0 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| 1,1,1-Trichloroethane | 71-55-6 | 0.054 | 6.0 |

K083

Distillation bottoms from aniline production.

|  |  |  |  |
| --- | --- | --- | --- |
| Aniline | 62-53-3 | 0.81 | 14 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Cyclohexanone | 108-94-1 | 0.36 | NA |
| Diphenylamine  (difficult to distinguish from diphenylnitrosamine) | 122-39-4 | 0.92 | 13 |
| Diphenylnitrosamine (difficult to distinguish from diphenyl­amine) | 86-30-6 | 0.92 | 13 |
| Nitrobenzene | 98-95-3 | 0.068 | 14 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |

K084

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

|  |  |  |  |
| --- | --- | --- | --- |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |

K085

Distillation or fractionation column bottoms from the production of chlorobenzenes.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Chlorobenzene | 108-90-7 | 0.057 | 6.0 |
| m-Dichlorobenzene | 541-73-1 | 0.036 | 6.0 |
| o-Dichlorobenzene | 95-50-1 | 0.088 | 6.0 |
| p-Dichlorobenzene | 106-46-7 | 0.090 | 6.0 |
| Hexachlorobenzene | 118-74-1 | 0.055 | 10 |
| Total PCBs  (sum of all PCB isomers, or all Aroclors) | 1336-36-3 | 0.10 | 10 |
| Pentachlorobenzene | 608-93-5 | 0.055 | 10 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | 14 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | 19 |

K086

Solvent wastes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.

|  |  |  |  |
| --- | --- | --- | --- |
| Acetone | 67-64-1 | 0.28 | 160 |
| Acetophenone | 96-86-2 | 0.010 | 9.7 |
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 0.28 | 28 |
| n-Butyl alcohol | 71-36-3 | 5.6 | 2.6 |
| Butylbenzyl phthalate | 85-68-7 | 0.017 | 28 |
| Cyclohexanone | 108-94-1 | 0.36 | NA |
| o-Dichlorobenzene | 95-50-1 | 0.088 | 6.0 |
| Diethyl phthalate | 84-66-2 | 0.20 | 28 |
| Dimethyl phthalate | 131-11-3 | 0.047 | 28 |
| Di-n-butyl phthalate | 84-74-2 | 0.057 | 28 |
| Di-n-octyl phthalate | 117-84-0 | 0.017 | 28 |
| Ethyl acetate | 141-78-6 | 0.34 | 33 |
| Ethylbenzene | 100-41-4 | 0.057 | 10 |
| Methanol | 67-56-1 | 5.6 | NA |
| Methyl ethyl ketone | 78-93-3 | 0.28 | 36 |
| Methyl isobutyl ketone | 108-10-1 | 0.14 | 33 |
| Methylene chloride | 75-09-2 | 0.089 | 30 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Nitrobenzene | 98-95-3 | 0.068 | 14 |
| Toluene | 108-88-3 | 0.080 | 10 |
| 1,1,1-Trichloroethane | 71-55-6 | 0.054 | 6.0 |
| Trichloroethylene | 79-01-6 | 0.054 | 6.0 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K087

Decanter tank tar sludge from coking operations.

|  |  |  |  |
| --- | --- | --- | --- |
| Acenaphthylene | 208-96-8 | 0.059 | 3.4 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Fluoranthene | 206-44-0 | 0.068 | 3.4 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 0.0055 | 3.4 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Toluene | 108-88-3 | 0.080 | 10 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K088

Spent potliners from primary aluminum reduction.

|  |  |  |  |
| --- | --- | --- | --- |
| Acenaphthene | 83-32-9 | 0.059 | 3.4 |
| Anthracene | 120-12-7 | 0.059 | 3.4 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Benzo(b)fluoranthene | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene | 207-08-9 | 0.11 | 6.8 |
| Benzo(g,h,i)perylene | 191-24-2 | 0.0055 | 1.8 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |
| Fluoranthene | 206-44-0 | 0.068 | 3.4 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 0.0055 | 3.4 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Antimony | 7440-36-0 | 1.9 | 1.15 mg/ℓ TCLP |
| Arsenic | 7440-38-2 | 1.4 | 26.1 mg/ℓ |
| Barium | 7440-39-3 | 1.2 | 21 mg/ℓ TCLP |
| Beryllium | 7440-41-7 | 0.82 | 1.22 mg/ℓ TCLP |
| Cadmium | 7440-43-9 | 0.69 | 0.11 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Mercury | 7439-97-6 | 0.15 | 0.025 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |
| Selenium | 7782-49-2 | 0.82 | 5.7 mg/ℓ TCLP |
| Silver | 7440-22-4 | 0.43 | 0.14 mg/ℓ TCLP |
| Cyanide (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanide (Amenable)7 | 57-12-5 | 0.86 | 30 |
| Fluoride | 16984-48-8 | 35 | NA |

K093

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

|  |  |  |  |
| --- | --- | --- | --- |
| Phthalic anhydride (measured as Phthalic acid or Terephthalic acid) | 100-21-0 | 0.055 | 28 |
| Phthalic anhydride (measured as Phthalic acid or Terephthalic acid) | 85-44-9 | 0.055 | 28 |

K094

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

|  |  |  |  |
| --- | --- | --- | --- |
| Phthalic anhydride (measured as Phthalic acid or Terephthalic acid) | 100-21-0 | 0.055 | 28 |
| Phthalic anhydride (measured as Phthalic acid or Terephthalic acid) | 85-44-9 | 0.055 | 28 |

K095

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

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |
| Pentachloroethane | 76-01-7 | 0.055 | 6.0 |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.057 | 6.0 |
| 1,1,2,2-Tetrachloroethane | 79-34-6 | 0.057 | 6.0 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| 1,1,2-Trichloroethane | 79-00-5 | 0.054 | 6.0 |
| Trichloroethylene | 79-01-6 | 0.054 | 6.0 |

K096

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

|  |  |  |  |
| --- | --- | --- | --- |
| m-Dichlorobenzene | 541-73-1 | 0.036 | 6.0 |
| Pentachloroethane | 76-01-7 | 0.055 | 6.0 |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.057 | 6.0 |
| 1,1,2,2-Tetrachloroethane | 79-34-6 | 0.057 | 6.0 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | 19 |
| 1,1,2-Trichloroethane | 79-00-5 | 0.054 | 6.0 |
| Trichloroethylene | 79-01-6 | 0.054 | 6.0 |

K097

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

|  |  |  |  |
| --- | --- | --- | --- |
| Chlordane (a and c isomers) | 57-74-9 | 0.0033 | 0.26 |
| Heptachlor | 76-44-8 | 0.0012 | 0.066 |
| Heptachlor epoxide | 1024-57-3 | 0.016 | 0.066 |
| Hexachlorocyclopentadiene | 77-47-4 | 0.057 | 2.4 |

K098

Untreated process wastewater from the production of toxaphene.

|  |  |  |  |
| --- | --- | --- | --- |
| Toxaphene | 8001-35-2 | 0.0095 | 2.6 |

K099

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

|  |  |  |  |
| --- | --- | --- | --- |
| 2,4-Dichlorophenoxyacetic acid | 94-75-7 | 0.72 | 10 |
| HxCDDs (All Hexachloro­dibenzo-p-dioxins) | NA | 0.000063 | 0.001 |
| HxCDFs (All Hexachloro­dibenzofurans) | 55684-94-1 | 0.000063 | 0.001 |
| PeCDDs (All Pentachloro­dibenzo-p-dioxins) | 36088-22-9 | 0.000063 | 0.001 |
| PeCDFs (All Pentachloro­dibenzofurans) | 30402-15-4 | 0.000035 | 0.001 |
| TCDDs (All Tetrachloro­dibenzo-p-dioxins) | 41903-57-5 | 0.000063 | 0.001 |
| TCDFs (All Tetrachloro­dibenzofurans) | 55722-27-5 | 0.000063 | 0.001 |

K100

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

|  |  |  |  |
| --- | --- | --- | --- |
| Cadmium | 7440-43-9 | 0.69 | 0.11 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K101

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

|  |  |  |  |
| --- | --- | --- | --- |
| o-Nitroaniline | 88-74-4 | 0.27 | 14 |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |
| Cadmium | 7440-43-9 | 0.69 | NA |
| Lead | 7439-92-1 | 0.69 | NA |
| Mercury | 7439-97-6 | 0.15 | NA |

K102

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

|  |  |  |  |
| --- | --- | --- | --- |
| o-Nitrophenol | 88-75-5 | 0.028 | 13 |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |
| Cadmium | 7440-43-9 | 0.69 | NA |
| Lead | 7439-92-1 | 0.69 | NA |
| Mercury | 7439-97-6 | 0.15 | NA |

K103

Process residues from aniline extraction from the production of aniline.

|  |  |  |  |
| --- | --- | --- | --- |
| Aniline | 62-53-3 | 0.81 | 14 |
| Benzene | 71-43-2 | 0.14 | 10 |
| 2,4-Dinitrophenol | 51-28-5 | 0.12 | 160 |
| Nitrobenzene | 98-95-3 | 0.068 | 14 |
| Phenol | 108-95-2 | 0.039 | 6.2 |

K104

Combined wastewater streams generated from nitrobenzene or aniline production.

|  |  |  |  |
| --- | --- | --- | --- |
| Aniline | 62-53-3 | 0.81 | 14 |
| Benzene | 71-43-2 | 0.14 | 10 |
| 2,4-Dinitrophenol | 51-28-5 | 0.12 | 160 |
| Nitrobenzene | 98-95-3 | 0.068 | 14 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |

K105

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

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Chlorobenzene | 108-90-7 | 0.057 | 6.0 |
| 2-Chlorophenol | 95-57-8 | 0.044 | 5.7 |
| o-Dichlorobenzene | 95-50-1 | 0.088 | 6.0 |
| p-Dichlorobenzene | 106-46-7 | 0.090 | 6.0 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| 2,4,5-Trichlorophenol | 95-95-4 | 0.18 | 7.4 |
| 2,4,6-Trichlorophenol | 88-06-2 | 0.035 | 7.4 |

K106

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

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | RMERC |

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.

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | 0.20 mg/ℓ TCLP |

K106

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

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | 0.025 mg/ℓ TCLP |

K106

All K106 wastewaters.

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | 0.15 | NA |

K107

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CMBST; or CHOXD fb CARBN; or BIODG fb CARBN | CMBST |

K108

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CMBST; or CHOXD fb CARBN; or BIODG fb CARBN | CMBST |

K109

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CMBST; or CHOXD fb CARBN; or BIODG fb CARBN | CMBST |

K110

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CMBST; or CHOXD fb CARBN; or BIODG fb CARBN | CMBST |

K111

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

|  |  |  |  |
| --- | --- | --- | --- |
| 2,4-Dinitrotoluene | 121-14-2 | 0.32 | 140 |
| 2,6-Dinitrotoluene | 606-20-2 | 0.55 | 28 |

K112

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CMBST; or CHOXD fb CARBN; or BIODG fb CARBN | CMBST |

K113

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CARBN; or CMBST | CMBST |

K114

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CARBN; or CMBST | CMBST |

K115

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

|  |  |  |  |
| --- | --- | --- | --- |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |
| NA | NA | CARBN; or CMBST | CMBST |

K116

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CARBN; or CMBST | CMBST |

K117

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

|  |  |  |  |
| --- | --- | --- | --- |
| Methyl bromide (Bromo­methane) | 74-83-9 | 0.11 | 15 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| Ethylene dibromide (1,2-Dibromoethane) | 106-93-4 | 0.028 | 15 |

K118

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

|  |  |  |  |
| --- | --- | --- | --- |
| Methyl bromide (Bromo­methane) | 74-83-9 | 0.11 | 15 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| Ethylene dibromide (1,2-Dibromoethane) | 106-93-4 | 0.028 | 15 |

K123

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CMBST; or CHOXD fb (BIODG or CARBN) | CMBST |

K124

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CMBST; or CHOXD fb (BIODG or CARBN) | CMBST |

K125

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

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CMBST; 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.

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | CMBST; 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) | 74-83-9 | 0.11 | 15 |

K132

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

|  |  |  |  |
| --- | --- | --- | --- |
| Methyl bromide (Bromo­methane) | 74-83-9 | 0.11 | 15 |

K136

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

|  |  |  |  |
| --- | --- | --- | --- |
| Methyl bromide (Bromo­methane) | 74-83-9 | 0.11 | 15 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| Ethylene dibromide (1,2-Dibromoethane) | 106-93-4 | 0.028 | 15 |

K141

Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke or the recovery of coke by-products produced from coal.  This listing does not include K087 (decanter tank tar sludge from coking operations).

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(a)pyrene | 50-2-8 | 0.061 | 3.4 |
| Benzo(b)fluoranthene (difficult to distinguish from benzo(k)­fluoranthene) | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene (difficult to distinguish from benzo(b)­fluoranthene) | 207-08-9 | 0.11 | 6.8 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 0.0055 | 3.4 |

K142

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

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Benzo(b)fluoranthene (difficult to distinguish from benzo(k)­fluoranthene) | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene (difficult to distinguish from benzo(b)­fluoranthene) | 207-08-9 | 0.11 | 6.8 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 0.0055 | 3.4 |

K143

Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Benzo(b)fluoranthene (difficult to distinguish from benzo(k)­fluoranthene) | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene (difficult to distinguish from benzo(b)­fluoranthene) | 207-08-9 | 0.11 | 6.8 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |

K144

Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Benzo(b)fluoranthene (difficult to distinguish from benzo(k)­fluoranthene) | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene (difficult to distinguish from benzo(b)­fluoranthene) | 207-08-9 | 0.11 | 6.8 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |

K145

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

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |

K147

Tar storage tank residues from coal tar refining.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Benzo(b)fluoranthene (difficult to distinguish from benzo(k)­fluoranthene) | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene (difficult to distinguish from benzo(b)­fluoranthene) | 207-08-9 | 0.11 | 6.8 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 0.0055 | 3.4 |

K148

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

|  |  |  |  |
| --- | --- | --- | --- |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Benzo(b)fluoranthene (difficult to distinguish from benzo(k)­fluoranthene) | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene (difficult to distinguish from benzo(b)­fluoranthene) | 207-08-9 | 0.11 | 6.8 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 0.0055 | 3.4 |

K149

Distillation bottoms from the production of a- (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.)

|  |  |  |  |
| --- | --- | --- | --- |
| Chlorobenzene | 108-90-7 | 0.057 | 6.0 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| Chloromethane | 74-87-3 | 0.19 | 30 |
| p-Dichlorobenzene | 106-46-7 | 0.090 | 6.0 |
| Hexachlorobenzene | 118-74-1 | 0.055 | 10 |
| Pentachlorobenzene | 608-93-5 | 0.055 | 10 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | 14 |
| Toluene | 108-88-3 | 0.080 | 10 |

K150

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

|  |  |  |  |
| --- | --- | --- | --- |
| Carbon tetrachloride | 56-23-5 | 0.057 | 6.0 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| Chloromethane | 74-87-3 | 0.19 | 30 |
| p-Dichlorobenzene | 106-46-7 | 0.090 | 6.0 |
| Hexachlorobenzene | 118-74-1 | 0.055 | 10 |
| Pentachlorobenzene | 608-93-5 | 0.055 | 10 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | 14 |
| 1,1,2,2- Tetrachloroethane | 79-34-5 | 0.057 | 6.0 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | 19 |

K151

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

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Carbon tetrachloride | 56-23-5 | 0.057 | 6.0 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| Hexachlorobenzene | 118-74-1 | 0.055 | 10 |
| Pentachlorobenzene | 608-93-5 | 0.055 | 10 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | 14 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| Toluene | 108-88-3 | 0.080 | 10 |

K156

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

|  |  |  |  |
| --- | --- | --- | --- |
| Acetonitrile | 75-05-8 | 5.6 | 1.8 |
| Acetophenone | 98-86-2 | 0.010 | 9.7 |
| Aniline | 62-53-3 | 0.81 | 14 |
| Benomyl10 | 17804-35-2 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |
| Benzene | 71-43-2 | 0.14 | 10 |
| Carbaryl10 | 63-25-2 | 0.006; or CMBST, CHOXD, BIODG or CARBN | 0.14; or CMBST |
| Carbenzadim10 | 10605-21-7 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |
| Carbofuran10 | 1563-66-2 | 0.006; or CMBST, CHOXD, BIODG or CARBN | 0.14; or CMBST |
| Carbosulfan10 | 55285-14-8 | 0.028; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |
| Chlorobenzene | 108-90-7 | 0.057 | 6.0 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| o-Dichlorobenzene | 95-50-1 | 0.088 | 6.0 |
| Methomyl10 | 16752-77-5 | 0.028; or CMBST, CHOXD, BIODG or CARBN | 0.14; or CMBST |
| Methylene chloride | 75-09-2 | 0.089 | 30 |
| Methyl ethyl ketone | 78-93-3 | 0.28 | 36 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| Pyridine | 110-86-1 | 0.014 | 16 |
| Toluene | 108-88-3 | 0.080 | 10 |
| Triethylamine | 121-44-8 | 0.081; or CMBST, CHOXD, BIODG or CARBN | 1.5; or CMBST |

K157

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

|  |  |  |  |
| --- | --- | --- | --- |
| Carbon tetrachloride | 56-23-5 | 0.057 | 6.0 |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| Chloromethane | 74-87-3 | 0.19 | 30 |
| Methomyl10 | 16752-77-5 | 0.028; or CMBST, CHOXD, BIODG or CARBN | 0.14; or CMBST |
| Methylene chloride | 75-09-2 | 0.089 | 30 |
| Methyl ethyl ketone | 78-93-3 | 0.28 | 36 |
| Pyridine | 110-86-1 | 0.014 | 16 |
| Triethylamine | 121-44-8 | 0.081; or CMBST, CHOXD, BIODG or CARBN | 1.5; or CMBST |

K158

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

|  |  |  |  |
| --- | --- | --- | --- |
| Benomyl10 | 17804-35-2 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBSTP |
| Benzene | 71-43-2 | 0.14 | 10 |
| Carbenzadim10 | 10605-21-7 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |
| Carbofuran10 | 1563-66-2 | 0.006; or CMBST, CHOXD, BIODG or CARBN | 0.14; or CMBST |
| Carbosulfan10 | 55285-14-8 | 0.028; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| Methylene chloride | 75-09-2 | 0.089 | 30 |
| Phenol | 108-95-2 | 0.039 | 6.2 |

K159

Organics from the treatment of thiocarbamate wastes.10

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Butylate10 | 2008-41-5 | 0.042; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |
| EPTC (Eptam)10 | 759-94-4 | 0.042; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |
| Molinate10 | 2212-67-1 | 0.042; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |
| Pebulate10 | 1114-71-2 | 0.042; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |
| Vernolate10 | 1929-77-7 | 0.042; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

K161

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

|  |  |  |  |
| --- | --- | --- | --- |
| Antimony | 7440-36-0 | 1.9 | 1.1511 |
| Arsenic | 7440-38-2 | 1.4 | 5.011 |
| Carbon disulfide | 75-15-0 | 3.8 | 4.811 |
| Dithiocarbamates (total)10 | 137-30-4 | 0.028; or CMBST, CHOXD, BIODG or CARBN | 28; or CMBST |
| Lead | 7439-92-1 | 0.69 | 0.7511 |
| Nickel | 7440-02-0 | 3.98 | 1111 |
| Selenium | 7782-49-2 | 0.82 | 5.711 |

K169

Crude oil tank sediment from petroleum refining operations.

|  |  |  |  |
| --- | --- | --- | --- |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benzo(g,h,i)perylene | 191-24-2 | 0.0055 | 1.8 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Ethyl benzene | 100-41-4 | 0.057 | 10 |
| Fluorene | 86-73-7 | 0.059 | 3.4 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 81-05-8 | 0.059 | 5.6 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Toluene (Methyl Benzene) | 108-88-3 | 0.080 | 10 |
| Xylenes (Total) | 1330-20-7 | 0.32 | 30 |

K170

Clarified slurry oil sediment from petroleum refining operations.

|  |  |  |  |
| --- | --- | --- | --- |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benzo(g,h,i)perylene | 191-24-2 | 0.0055 | 1.8 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |
| Ethyl benzene | 100-41-4 | 0.057 | 10 |
| Fluorene | 86-73-7 | 0.059 | 3.4 |
| Indeno(1,2,3,-cd)pyrene | 193-39-5 | 0.0055 | 3.4 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 81-05-8 | 0.059 | 5.6 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Toluene (Methyl Benzene) | 108-88-3 | 0.080 | 10 |
| Xylenes (Total | 1330-20-7 | 0.32 | 30 |

K171

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

|  |  |  |  |
| --- | --- | --- | --- |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| Ethyl benzene | 100-41-4 | 0.057 | 10 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Phenanthrene | 81-05-8 | 0.059 | 5.6 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Toluene (Methyl Benzene) | 108-88-3 | 0.080 | 10 |
| Xylenes (Total) | 1330-20-7 | 0.32 | 30 |
| Arsenic | 7740-38-2 | 1.4 | 5 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11.0 mg/ℓ TCLP |
| Vanadium | 7440-62-2 | 4.3 | 1.6 mg/ℓ TCLP |
| Reactive sulfides | NA | DEACT | DEACT |

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.)

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |
| Ethyl benzene | 100-41-4 | 0.057 | 10 |
| Toluene (Methyl Benzene) | 108-88-3 | 0.080 | 10 |
| Xylenes (Total) | 1330-20-7 | 0.32 | 30 |
| Antimony | 7740-36-0 | 1.9 | 1.15 mg/ℓ TCLP |
| Arsenic | 7740-38-2 | 1.4 | 5 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11.0 mg/ℓ TCLP |
| Vanadium | 7440-62-2 | 4.3 | 1.6 mg/ℓ TCLP |
| Reactive Sulfides | NA | DEACT | DEACT |

K174

Wastewater treatment sludge from the production of ethylene dicholoride or vinyl choloride monomer.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,2,3,4,6,7,8-Heptachloro­dibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD) | 35822-46-9 | 0.000035 or CMBST11 | 0.0025 or CMBST11 |
| 1,2,3,4,6,7,8-Heptachloro­dibenzofuran (1,2,3,4,6,7,8-HpCDF) | 67562-39-4 | 0.000035 or CMBST11 | 0.0025 or CMBST11 |
| 1,2,3,4,7,8,9-Heptachloro­dibenzofuran (1,2,3,4,7,8,9-HpCDF) | 55673-89-7 | 0.000035 or CMBST11 | 0.0025 or CMBST11 |
| All hexachlorodibenzo-p-dioxins (HxCDDs) | 34465-46-8 | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| All hexachlorodibenzofurans (HxCDFs) | 55684-94-1 | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| 1,2,3,4,6,7,8,9-Octachloro­dibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD) | 3268-87-9 | 0.000063 or CMBST11 | 0.005 or CMBST11 |
| 1,2,3,4,6,7,8,9-Octachloro­dibenzofuran (1,2,3,4,6,7,8,9-OCDF) | 39001-02-0 | 0.000063 or CMBST11 | 0.005 or CMBST11 |
| All pentachlorodibenzo-p-dioxins (PeCDDs) | 36088-22-9 | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| All pentachlorodibenzofurans (PeCDFs) | 30402-15-4 | 0.000035 or CMBST11 | 0.001 or CMBST11 |
| All tetrachlorodibenzo-p-dioxins (TCDDs) | 41903-57-5 | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| All tetrachlorodibenzofurans (TCDFs) | 55722-27-5 | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| Arsenic | 7440-36-0 | 1.4 | 5.0 mg/ℓ TCLP |

K175

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

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury12 | 7439-97-6 | NA | 0.025 mg/ℓ TCLP |
| PH12 |  | NA | pH≤6.0 |

K175

All K175 wastewaters.

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | 0.15 | NA |

K176

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

|  |  |  |  |
| --- | --- | --- | --- |
| Antimony | 7440-36-0 | 1.9 | 1.15 mg/ℓ TCLP |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |
| Cadmium | 7440-43-9 | 0.69 | 0.11 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Mercury | 7439-97-6 | 0.15 | 0.025 mg/ℓ TCLP |

K177

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

|  |  |  |  |
| --- | --- | --- | --- |
| Antimony | 7440-36-0 | 1.9 | 1.15 mg/ℓ TCLP |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

K178

Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,2,3,4,6,7,8-Heptachloro­dibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD) | 35822-46-9 | 0.000035 or CMBST11 | 0.0025 or CMBST11 |
| 1,2,3,4,6,7,8-Heptachloro­dibenzofuran (1,2,3,4,6,7,8-HpCDF) | 67562-39-4 | 0.000035 or CMBST11 | 0.0025 or CMBST11 |
| 1,2,3,4,7,8,9-Heptachloro­dibenzofuran (1,2,3,4,7,8,9-HpCDF) | 55673-89-7 | 0.000035 or CMBST11 | 0.0025 or CMBST11 |
| HxCDDs (All Hexachloro­dibenzo-p-dioxins) | 34465-46-8 | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| HxCDFs (All Hexachloro­dibenzofurans) | 55684-94-1 | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| 1,2,3,4,6,7,8,9-Octachloro­dibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD) | 3268-87-9 | 0.000063 or CMBST11 | 0.005 or CMBST11 |
| 1,2,3,4,6,7,8,9-Octachloro­dibenzofuran (OCDF) | 39001-02-0 | 0.000063 or CMBST11 | 0.005 or CMBST11 |
| PeCDDs (All Pentachloro­dibenzo-p-dioxins) | 36088-22-9 | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| PeCDFs (All Pentachloro­dibenzofurans) | 30402-15-4 | 0.000035 or CMBST11 | 0.001 or CMBST11 |
| TCDDs (All Tetrachloro­dibenzo-p-dioxins) | 41903-57-5 | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| TCDFs (All Tetrachloro­dibenzofurans) | 55722-27-5 | 0.000063 or CMBST11 | 0.001 or CMBST11 |
| Thallium | 7440-28-0 | 1.4 | 0.20 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.

|  |  |  |  |
| --- | --- | --- | --- |
| Aniline | 62-53-3 | 0.81 | 14 |
| o-Anisidine (2-methoxyaniline) | 90-04-0 | 0.010 | 0.66 |
| 4-Chloroaniline | 106-47-8 | 0.46 | 16 |
| p-Cresidine | 120-71-8 | 0.010 | 0.66 |
| 2,4-Dimethylaniline (2,4-xylidine) | 95-68-1 | 0.010 | 0.66 |
| 1,2-Phenylenediamine | 95-54-5 | CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN | CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN |
| 1,3-Phenylenediamine | 108-45-2 | 0.010 | 0.66 |

P001

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

|  |  |  |  |
| --- | --- | --- | --- |
| Warfarin | 81-81-2 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P002

1-Acetyl-2-thiourea.

|  |  |  |  |
| --- | --- | --- | --- |
| 1-Acetyl-2-thiourea | 591-08-2 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P003

Acrolein.

|  |  |  |  |
| --- | --- | --- | --- |
| Acrolein | 107-02-8 | 0.29 | CMBST |

P004

Aldrin.

|  |  |  |  |
| --- | --- | --- | --- |
| Aldrin | 309-00-2 | 0.021 | 0.066 |

P005

Allyl alcohol.

|  |  |  |  |
| --- | --- | --- | --- |
| Allyl alcohol | 107-18-6 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P006

Aluminum phosphide.

|  |  |  |  |
| --- | --- | --- | --- |
| Aluminum phosphide | 20859-73-8 | CHOXD; CHRED; or CMBST | CHOXD; CHRED; or CMBST |

P007

5-Aminomethyl-3-isoxazolol.

|  |  |  |  |
| --- | --- | --- | --- |
| 5-Aminomethyl-3-isoxazolol | 2763-96-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P008

4-Aminopyridine.

|  |  |  |  |
| --- | --- | --- | --- |
| 4-Aminopyridine | 504-24-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P009

Ammonium picrate.

|  |  |  |  |
| --- | --- | --- | --- |
| Ammonium picrate | 131-74-8 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |

P010

Arsenic acid.

|  |  |  |  |
| --- | --- | --- | --- |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |

P011

Arsenic pentoxide.

|  |  |  |  |
| --- | --- | --- | --- |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |

P012

Arsenic trioxide.

|  |  |  |  |
| --- | --- | --- | --- |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |

P013

Barium cyanide.

|  |  |  |  |
| --- | --- | --- | --- |
| Barium | 7440-39-3 | NA | 21 mg/ℓ TCLP |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |

P014

Thiophenol (Benzene thiol).

|  |  |  |  |
| --- | --- | --- | --- |
| Thiophenol (Benzene thiol) | 108-98-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P015

Beryllium dust.

|  |  |  |  |
| --- | --- | --- | --- |
| Beryllium | 7440-41-7 | RMETL;or RTHRM | RMETL; or RTHRM |

P016

Dichloromethyl ether (Bis(chloromethyl) ether).

|  |  |  |  |
| --- | --- | --- | --- |
| Dichloromethyl ether | 542-88-1 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P017

Bromoacetone.

|  |  |  |  |
| --- | --- | --- | --- |
| Bromoacetone | 598-31-2 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P018

Brucine.

|  |  |  |  |
| --- | --- | --- | --- |
| Brucine | 357-57-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P020

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

|  |  |  |  |
| --- | --- | --- | --- |
| 2-sec-Butyl-4,6-dinitrophenol (Dinoseb) | 88-85-7 | 0.066 | 2.5 |

P021

Calcium cyanide.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |

P022

Carbon disulfide.

|  |  |  |  |
| --- | --- | --- | --- |
| Carbon disulfide | 75-15-0 | 3.8 | CMBST |
| Carbon disulfide; alternate6 standard for nonwastewaters only | 75-15-0 | NA | 4.8 mg/ℓ TCLP |

P023

Chloroacetaldehyde.

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

P024

p-Chloroaniline.

|  |  |  |  |
| --- | --- | --- | --- |
| p-Chloroaniline | 106-47-8 | 0.46 | 16 |

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)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |

P030

Cyanides (soluble salts and complexes).

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |

P031

Cyanogen.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanogen | 460-19-5 | CHOXD; WETOX; or CMBST | CHOXD; WETOX; or CMBST |

P033

Cyanogen chloride.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanogen chloride | 506-77-4 | CHOXD; WETOX; or CMBST | CHOXD; WETOX; or CMBST |

P034

2-Cyclohexyl-4,6-dinitrophenol.

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

P036

Dichlorophenylarsine.

|  |  |  |  |
| --- | --- | --- | --- |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |

P037

Dieldrin.

|  |  |  |  |
| --- | --- | --- | --- |
| Dieldrin | 60-57-1 | 0.017 | 0.13 |

P038

Diethylarsine.

|  |  |  |  |
| --- | --- | --- | --- |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |

P039

Disulfoton.

|  |  |  |  |
| --- | --- | --- | --- |
| Disulfoton | 298-04-4 | 0.017 | 6.2 |

P040

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

|  |  |  |  |
| --- | --- | --- | --- |
| O,O-Diethyl-O-pyrazinyl­phosphorothioate | 297-97-2 | CARBN; or CMBST | CMBST |

P041

Diethyl-p-nitrophenyl phosphate.

|  |  |  |  |
| --- | --- | --- | --- |
| Diethyl-p-nitrophenyl phosphate | 311-45-5 | CARBN; or CMBST | CMBST |

P042

Epinephrine.

|  |  |  |  |
| --- | --- | --- | --- |
| Epinephrine | 51-43-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P043

Diisopropylfluorophosphate (DFP).

|  |  |  |  |
| --- | --- | --- | --- |
| Diisopropylfluorophosphate (DFP) | 55-91-4 | CARBN; or CMBST | CMBST |

P044

Dimethoate.

|  |  |  |  |
| --- | --- | --- | --- |
| Dimethoate | 60-51-5 | CARBN; or CMBST | CMBST |

P045

Thiofanox.

|  |  |  |  |
| --- | --- | --- | --- |
| Thiofanox | 39196-18-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P046

a,a-Dimethylphenethylamine.

|  |  |  |  |
| --- | --- | --- | --- |
| a,a-Dimethylphenethylamine | 122-09-8 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P047

4,6-Dinitro-o-cresol.

|  |  |  |  |
| --- | --- | --- | --- |
| 4,6-Dinitro-o-cresol | 543-52-1 | 0.28 | 160 |

P047

4,6-Dinitro-o-cresol salts.

|  |  |  |  |
| --- | --- | --- | --- |
| NA | NA | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P048

2,4-Dinitrophenol.

|  |  |  |  |
| --- | --- | --- | --- |
| 2,4-Dinitrophenol | 51-28-5 | 0.12 | 160 |

P049

Dithiobiuret.

|  |  |  |  |
| --- | --- | --- | --- |
| Dithiobiuret | 541-53-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P050

Endosulfan.

|  |  |  |  |
| --- | --- | --- | --- |
| Endosulfan I | 939-98-8 | 0.023 | 0.066 |
| Endosulfan II | 33213-6-5 | 0.029 | 0.13 |
| Endosulfan sulfate | 1031-07-8 | 0.029 | 0.13 |

P051

Endrin.

|  |  |  |  |
| --- | --- | --- | --- |
| Endrin | 72-20-8 | 0.0028 | 0.13 |
| Endrin aldehyde | 7421-93-4 | 0.025 | 0.13 |

P054

Aziridine.

|  |  |  |  |
| --- | --- | --- | --- |
| Aziridine | 151-56-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P056

Fluorine.

|  |  |  |  |
| --- | --- | --- | --- |
| Fluoride (measured in wastewaters only) | 16984-48-8 | 35 | ADGAS fb NEUTR |

P057

Fluoroacetamide.

|  |  |  |  |
| --- | --- | --- | --- |
| Fluoroacetamide | 640-19-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P058

Fluoroacetic acid, sodium salt.

|  |  |  |  |
| --- | --- | --- | --- |
| Fluoroacetic acid, sodium salt | 62-74-8 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P059

Heptachlor.

|  |  |  |  |
| --- | --- | --- | --- |
| Heptachlor | 76-44-8 | 0.0012 | 0.066 |
| Heptachlor epoxide | 1024-57-3 | 0.016 | 0.066 |

P060

Isodrin.

|  |  |  |  |
| --- | --- | --- | --- |
| Isodrin | 465-73-6 | 0.021 | 0.066 |

P062

Hexaethyl tetraphosphate.

|  |  |  |  |
| --- | --- | --- | --- |
| Hexaethyl tetraphosphate | 757-58-4 | CARBN; or CMBST | CMBST |

P063

Hydrogen cyanide.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |

P064

Isocyanic acid, ethyl ester.

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

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 | NA | IMERC |

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 | NA | RMERC |

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 | 7439-97-6 | 0.15 | NA |

P066

Methomyl.

|  |  |  |  |
| --- | --- | --- | --- |
| Methomyl | 16752-77-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P067

2-Methyl-aziridine.

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Methyl-aziridine | 75-55-8 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P068

Methyl hydrazine.

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

P069

2-Methyllactonitrile.

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Methyllactonitrile | 75-86-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P070

Aldicarb.

|  |  |  |  |
| --- | --- | --- | --- |
| Aldicarb | 116-06-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P071

Methyl parathion.

|  |  |  |  |
| --- | --- | --- | --- |
| Methyl parathion | 298-00-0 | 0.014 | 4.6 |

P072

1-Naphthyl-2-thiourea.

|  |  |  |  |
| --- | --- | --- | --- |
| 1-Naphthyl-2-thiourea | 86-88-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P073

Nickel carbonyl.

|  |  |  |  |
| --- | --- | --- | --- |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |

P074

Nickel cyanide.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |

P075

Nicotine and salts.

|  |  |  |  |
| --- | --- | --- | --- |
| Nicotine and salts | 54-11-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P076

Nitric oxide.

|  |  |  |  |
| --- | --- | --- | --- |
| Nitric oxide | 10102-43-9 | ADGAS | ADGAS |

P077

p-Nitroaniline.

|  |  |  |  |
| --- | --- | --- | --- |
| p-Nitroaniline | 100-01-6 | 0.028 | 28 |

P078

Nitrogen dioxide.

|  |  |  |  |
| --- | --- | --- | --- |
| Nitrogen dioxide | 10102-44-0 | ADGAS | ADGAS |

P081

Nitroglycerin.

|  |  |  |  |
| --- | --- | --- | --- |
| Nitroglycerin | 55-63-0 | CHOXD; CHRED; CARBN; BIODG or CMBST | CHOXD; CHRED; or CMBST |

P082

N-Nitrosodimethylamine.

|  |  |  |  |
| --- | --- | --- | --- |
| N-Nitrosodimethylamine | 62-75-9 | 0.40 | 2.3 |

P084

N-Nitrosomethylvinylamine.

|  |  |  |  |
| --- | --- | --- | --- |
| N-Nitrosomethylvinylamine | 4549-40-0 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P085

Octamethylpyrophosphoramide.

|  |  |  |  |
| --- | --- | --- | --- |
| Octamethylpyrophosphoramide | 152-16-9 | CARBN; or CMBST | CMBST |

P087

Osmium tetroxide.

|  |  |  |  |
| --- | --- | --- | --- |
| Osmium tetroxide | 20816-12-0 | RMETL; or RTHRM | RMETL; or RTHRM |

P088

Endothall.

|  |  |  |  |
| --- | --- | --- | --- |
| Endothall | 145-73-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P089

Parathion.

|  |  |  |  |
| --- | --- | --- | --- |
| Parathion | 56-38-2 | 0.014 | 4.6 |

P092

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

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | IMERC; or RMERC |

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.

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | RMERC |

P092

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

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | 0.20 mg/ℓ TCLP |

P092

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

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | 0.025 mg/ℓ TCLP |

P092

All P092 (phenyl mercuric acetate) wastewaters.

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | 0.15 | NA |

P093

Phenylthiourea.

|  |  |  |  |
| --- | --- | --- | --- |
| Phenylthiourea | 103-85-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P094

Phorate.

|  |  |  |  |
| --- | --- | --- | --- |
| Phorate | 298-02-2 | 0.021 | 4.6 |

P095

Phosgene.

|  |  |  |  |
| --- | --- | --- | --- |
| Phosgene | 75-44-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P096

Phosphine.

|  |  |  |  |
| --- | --- | --- | --- |
| Phosphine | 7803-51-2 | CHOXD; CHRED; or CMBST | CHOXD; CHRED; or CMBST |

P097

Famphur.

|  |  |  |  |
| --- | --- | --- | --- |
| Famphur | 52-85-7 | 0.017 | 15 |

P098

Potassium cyanide.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |

P099

Potassium silver cyanide.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |
| Silver | 7440-22-4 | 0.43 | 0.14 mg/ℓ TCLP |

P101

Ethyl cyanide (Propanenitrile).

|  |  |  |  |
| --- | --- | --- | --- |
| Ethyl cyanide (Propanenitrile) | 107-12-0 | 0.24 | 360 |

P102

Propargyl alcohol.

|  |  |  |  |
| --- | --- | --- | --- |
| Propargyl alcohol | 107-19-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P103

Selenourea.

|  |  |  |  |
| --- | --- | --- | --- |
| Selenium | 7782-49-2 | 0.82 | 5.7 mg/ℓ TCLP |

P104

Silver cyanide.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |
| Silver | 7440-22-4 | 0.43 | 0.14 mg/ℓ TCLP |

P105

Sodium azide.

|  |  |  |  |
| --- | --- | --- | --- |
| Sodium azide | 26628-22-8 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |

P106

Sodium cyanide.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |

P108

Strychnine and salts.

|  |  |  |  |
| --- | --- | --- | --- |
| Strychnine and salts | 57-24-9 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P109

Tetraethyldithiopyrophosphate.

|  |  |  |  |
| --- | --- | --- | --- |
| Tetraethyldithiopyrophosphate | 3689-24-5 | CARBN; or CMBST | CMBST |

P110

Tetraethyl lead.

|  |  |  |  |
| --- | --- | --- | --- |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

P111

Tetraethylpyrophosphate.

|  |  |  |  |
| --- | --- | --- | --- |
| Tetraethylpyrophosphate | 107-49-3 | CARBN; or CMBST | CMBST |

P112

Tetranitromethane.

|  |  |  |  |
| --- | --- | --- | --- |
| Tetranitromethane | 509-14-8 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |

P113

Thallic oxide.

|  |  |  |  |
| --- | --- | --- | --- |
| Thallium (measured in wastewaters only) | 7440-28-0 | 1.4 | RTHRM; or STABL |

P114

Thallium selenite.

|  |  |  |  |
| --- | --- | --- | --- |
| Selenium | 7782-49-2 | 0.82 | 5.7 mg/ℓ TCLP |

P115

Thallium (I) sulfate.

|  |  |  |  |
| --- | --- | --- | --- |
| Thallium (measured in wastewaters only) | 7440-28-0 | 1.4 | RTHRM; or STABL |

P116

Thiosemicarbazide.

|  |  |  |  |
| --- | --- | --- | --- |
| Thiosemicarbazide | 79-19-6 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P118

Trichloromethanethiol.

|  |  |  |  |
| --- | --- | --- | --- |
| Trichloromethanethiol | 75-70-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

P119

Ammonium vanadate.

|  |  |  |  |
| --- | --- | --- | --- |
| Vanadium (measured in wastewaters only) | 7440-62-2 | 4.3 | STABL |

P120

Vanadium pentoxide.

|  |  |  |  |
| --- | --- | --- | --- |
| Vanadium (measured in wastewaters only) | 7440-62-2 | 4.3 | STABL |

P121

Zinc cyanide.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanides (Total)7 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)7 | 57-12-5 | 0.86 | 30 |

P122

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

|  |  |  |  |
| --- | --- | --- | --- |
| Zinc Phosphide | 1314-84-7 | CHOXD; CHRED; or CMBST | CHOXD; CHRED; or CMBST |

P123

Toxaphene.

|  |  |  |  |
| --- | --- | --- | --- |
| Toxaphene | 8001-35-2 | 0.0095 | 2.6 |

P127

Carbofuran.10

|  |  |  |  |
| --- | --- | --- | --- |
| Carbofuran | 1563-66-2 | 0.006; or CMBST, CHOXD, BIODG or CARBN | 0.14; or CMBST |

P128

Mexacarbate.10

|  |  |  |  |
| --- | --- | --- | --- |
| Mexacarbate | 315-18-4 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P185

Tirpate.10

|  |  |  |  |
| --- | --- | --- | --- |
| Tirpate | 26419-73-8 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 0.28; or CMBST |

P188

Physostigimine salicylate.10

|  |  |  |  |
| --- | --- | --- | --- |
| Physostigmine salicylate | 57-64-7 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P189

Carbosulfan.10

|  |  |  |  |
| --- | --- | --- | --- |
| Carbosulfan | 55285-14-8 | 0.028; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P190

Metolcarb.10

|  |  |  |  |
| --- | --- | --- | --- |
| Metolcarb | 1129-41-5 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P191

Dimetilan.10

|  |  |  |  |
| --- | --- | --- | --- |
| Dimetilan | 644-64-4 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P192

Isolan.10

|  |  |  |  |
| --- | --- | --- | --- |
| Isolan | 119-38-0 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P194

Oxamyl.10

|  |  |  |  |
| --- | --- | --- | --- |
| Oxamyl | 23135-22-0 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 0.28; or CMBST |

P196

Manganese dimethyldithiocarbamates (total).10

|  |  |  |  |
| --- | --- | --- | --- |
| Dithiocarbamates (total) | NA | 0.028; or CMBST, CHOXD, BIODG or CARBN | 28; or CMBST |

P197

Formparanate.10

|  |  |  |  |
| --- | --- | --- | --- |
| Formparanate | 17702-57-7 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P198

Formetanate hydrochloride.10

|  |  |  |  |
| --- | --- | --- | --- |
| Formetanate hydrochloride | 23422-53-9 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P199

Methiocarb.10

|  |  |  |  |
| --- | --- | --- | --- |
| Methiocarb | 2032-65-7 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P201

Promecarb.10

|  |  |  |  |
| --- | --- | --- | --- |
| Promecarb | 2631-37-0 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P202

m-Cumenyl methylcarbamate.10

|  |  |  |  |
| --- | --- | --- | --- |
| m-Cumenyl methylcarbamate | 64-00-6 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P203

Aldicarb sulfone.10

|  |  |  |  |
| --- | --- | --- | --- |
| Aldicarb sulfone | 1646-88-4 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 0.28; or CMBST |

P204

Physostigmine.10

|  |  |  |  |
| --- | --- | --- | --- |
| Physostigmine | 57-47-6 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

P205

Ziram.10

|  |  |  |  |
| --- | --- | --- | --- |
| Dithiocarbamates (total) | NA | 0.028; or CMBST, CHOXD, BIODG or CARBN | 28; or CMBST |

U001

Acetaldehyde.

|  |  |  |  |
| --- | --- | --- | --- |
| Acetaldehyde | 75-07-0 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U002

Acetone.

|  |  |  |  |
| --- | --- | --- | --- |
| Acetone | 67-64-1 | 0.28 | 160 |

U003

Acetonitrile.

|  |  |  |  |
| --- | --- | --- | --- |
| Acetonitrile | 75-05-8 | 5.6 | CMBST |
| Acetonitrile; alternate6 standard for nonwastewaters only | 75-05-8 | NA | 38 |

U004

Acetophenone.

|  |  |  |  |
| --- | --- | --- | --- |
| Acetophenone | 98-86-2 | 0.010 | 9.7 |

U005

2-Acetylaminofluorene.

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Acetylaminofluorene | 53-96-3 | 0.059 | 140 |

U006

Acetyl chloride.

|  |  |  |  |
| --- | --- | --- | --- |
| Acetyl chloride | 75-36-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U007

Acrylamide.

|  |  |  |  |
| --- | --- | --- | --- |
| Acrylamide | 79-06-1 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U008

Acrylic acid.

|  |  |  |  |
| --- | --- | --- | --- |
| Acrylic acid | 79-10-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U009

Acrylonitrile.

|  |  |  |  |
| --- | --- | --- | --- |
| Acrylonitrile | 107-13-1 | 0.24 | 84 |

U010

Mitomycin C.

|  |  |  |  |
| --- | --- | --- | --- |
| Mitomycin C | 50-07-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U011

Amitrole.

|  |  |  |  |
| --- | --- | --- | --- |
| Amitrole | 61-82-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U012

Aniline.

|  |  |  |  |
| --- | --- | --- | --- |
| Aniline | 62-53-3 | 0.81 | 14 |

U014

Auramine.

|  |  |  |  |
| --- | --- | --- | --- |
| Auramine | 492-80-8 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U015

Azaserine.

|  |  |  |  |
| --- | --- | --- | --- |
| Azaserine | 115-02-6 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U016

Benz(c)acridine.

|  |  |  |  |
| --- | --- | --- | --- |
| Benz(c)acridine | 225-51-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U017

Benzal chloride.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzal chloride | 98-87-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U018

Benz(a)anthracene.

|  |  |  |  |
| --- | --- | --- | --- |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |

U019

Benzene.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzene | 71-43-2 | 0.14 | 10 |

U020

Benzenesulfonyl chloride.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzenesulfonyl chloride | 98-09-9 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U021

Benzidine.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzidine | 92-87-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U022

Benzo(a)pyrene.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |

U023

Benzotrichloride.

|  |  |  |  |
| --- | --- | --- | --- |
| Benzotrichloride | 98-07-7 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |

U024

bis(2-Chloroethoxy)methane.

|  |  |  |  |
| --- | --- | --- | --- |
| bis(2-Chloroethoxy)methane | 111-91-1 | 0.036 | 7.2 |

U025

bis(2-Chloroethyl) ether.

|  |  |  |  |
| --- | --- | --- | --- |
| bis(2-Chloroethyl) ether | 111-44-4 | 0.033 | 6.0 |

U026

Chlornaphazine.

|  |  |  |  |
| --- | --- | --- | --- |
| Chlornaphazine | 494-03-1 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U027

bis(2-Chloroisopropyl) ether.

|  |  |  |  |
| --- | --- | --- | --- |
| bis(2-Chloroisopropyl) ether | 39638-32-9 | 0.055 | 7.2 |

U028

bis(2-Ethylhexyl) phthalate.

|  |  |  |  |
| --- | --- | --- | --- |
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 0.28 | 28 |

U029

Methyl bromide (Bromomethane).

|  |  |  |  |
| --- | --- | --- | --- |
| Methyl bromide (Bromo­methane) | 74-83-9 | 0.11 | 15 |

U030

4-Bromophenyl phenyl ether.

|  |  |  |  |
| --- | --- | --- | --- |
| 4-Bromophenyl phenyl ether | 101-55-3 | 0.055 | 15 |

U031

n-Butyl alcohol.

|  |  |  |  |
| --- | --- | --- | --- |
| n-Butyl alcohol | 71-36-3 | 5.6 | 2.6 |

U032

Calcium chromate.

|  |  |  |  |
| --- | --- | --- | --- |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |

U033

Carbon oxyfluoride.

|  |  |  |  |
| --- | --- | --- | --- |
| Carbon oxyfluoride | 353-50-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U034

Trichloroacetaldehyde (Chloral).

|  |  |  |  |
| --- | --- | --- | --- |
| Trichloroacetaldehyde (Chloral) | 75-87-6 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U035

Chlorambucil.

|  |  |  |  |
| --- | --- | --- | --- |
| Chlorambucil | 305-03-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U036

Chlordane.

|  |  |  |  |
| --- | --- | --- | --- |
| Chlordane (a and c isomers) | 57-74-9 | 0.0033 | 0.26 |

U037

Chlorobenzene.

|  |  |  |  |
| --- | --- | --- | --- |
| Chlorobenzene | 108-90-7 | 0.057 | 6.0 |

U038

Chlorobenzilate.

|  |  |  |  |
| --- | --- | --- | --- |
| Chlorobenzilate | 510-15-6 | 0.10 | CMBST |

U039

p-Chloro-m-cresol.

|  |  |  |  |
| --- | --- | --- | --- |
| p-Chloro-m-cresol | 59-50-7 | 0.018 | 14 |

U041

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

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

U042

2-Chloroethyl vinyl ether.

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Chloroethyl vinyl ether | 110-75-8 | 0.062 | CMBST |

U043

Vinyl chloride.

|  |  |  |  |
| --- | --- | --- | --- |
| Vinyl chloride | 75-01-4 | 0.27 | 6.0 |

U044

Chloroform.

|  |  |  |  |
| --- | --- | --- | --- |
| Chloroform | 67-66-3 | 0.046 | 6.0 |

U045

Chloromethane (Methyl chloride).

|  |  |  |  |
| --- | --- | --- | --- |
| Chloromethane (Methyl chloride) | 74-87-3 | 0.19 | 30 |

U046

Chloromethyl methyl ether.

|  |  |  |  |
| --- | --- | --- | --- |
| Chloromethyl methyl ether | 107-30-2 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U047

2-Chloronaphthalene.

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Chloronaphthalene | 91-58-7 | 0.055 | 5.6 |

U048

2-Chlorophenol.

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Chlorophenol | 95-57-8 | 0.044 | 5.7 |

U049

4-Chloro-o-toluidine hydrochloride.

|  |  |  |  |
| --- | --- | --- | --- |
| 4-Chloro-o-toluidine hydro­chloride | 3165-93-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U050

Chrysene.

|  |  |  |  |
| --- | --- | --- | --- |
| Chrysene | 218-01-9 | 0.059 | 3.4 |

U051

Creosote.

|  |  |  |  |
| --- | --- | --- | --- |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| Pentachlorophenol | 87-86-5 | 0.089 | 7.4 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Toluene | 108-88-3 | 0.080 | 10 |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

U052

Cresols (Cresylic acid).

|  |  |  |  |
| --- | --- | --- | --- |
| o-Cresol | 95-48-7 | 0.11 | 5.6 |
| m-Cresol (difficult to distinguish from p-cresol) | 108-39-4 | 0.77 | 5.6 |
| p-Cresol (difficult to distinguish from m-cresol) | 106-44-5 | 0.77 | 5.6 |
| Cresol-mixed isomers (Cresylic acid)  (sum of o-, m-, and p-cresol concentrations) | 1319-77-3 | 0.88 | 11.2 |

U053

Crotonaldehyde.

|  |  |  |  |
| --- | --- | --- | --- |
| Crotonaldehyde | 4170-30-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U055

Cumene.

|  |  |  |  |
| --- | --- | --- | --- |
| Cumene | 98-82-8 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U056

Cyclohexane.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyclohexane | 110-82-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U057

Cyclohexanone.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyclohexanone | 108-94-1 | 0.36 | CMBST |
| Cyclohexanone; alternate6 standard for nonwastewaters only | 108-94-1 | NA | 0.75 mg/ℓ TCLP |

U058

Cyclophosphamide.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyclophosphamide | 50-18-0 | CARBN; or CMBST | CMBST |

U059

Daunomycin.

|  |  |  |  |
| --- | --- | --- | --- |
| Daunomycin | 20830-81-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U060

DDD.

|  |  |  |  |
| --- | --- | --- | --- |
| o,p'-DDD | 53-19-0 | 0.023 | 0.087 |
| p,p'-DDD | 72-54-8 | 0.023 | 0.087 |

U061

DDT.

|  |  |  |  |
| --- | --- | --- | --- |
| o,p'-DDT | 789-02-6 | 0.0039 | 0.087 |
| p,p'-DDT | 50-29-3 | 0.0039 | 0.087 |
| o,p'-DDD | 53-19-0 | 0.023 | 0.087 |
| p,p'-DDD | 72-54-8 | 0.023 | 0.087 |
| o,p'-DDE | 3424-82-6 | 0.031 | 0.087 |
| p,p'-DDE | 72-55-9 | 0.031 | 0.087 |

U062

Diallate.

|  |  |  |  |
| --- | --- | --- | --- |
| Diallate | 2303-16-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U063

Dibenz(a,h)anthracene.

|  |  |  |  |
| --- | --- | --- | --- |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |

U064

Dibenz(a,i)pyrene.

|  |  |  |  |
| --- | --- | --- | --- |
| Dibenz(a,i)pyrene | 189-55-9 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U066

1,2-Dibromo-3-chloropropane.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 0.11 | 15 |

U067

Ethylene dibromide (1,2-Dibromoethane).

|  |  |  |  |
| --- | --- | --- | --- |
| Ethylene dibromide (1,2-Dibromoethane) | 106-93-4 | 0.028 | 15 |

U068

Dibromomethane.

|  |  |  |  |
| --- | --- | --- | --- |
| Dibromomethane | 74-95-3 | 0.11 | 15 |

U069

Di-n-butyl phthalate.

|  |  |  |  |
| --- | --- | --- | --- |
| Di-n-butyl phthalate | 84-74-2 | 0.057 | 28 |

U070

o-Dichlorobenzene.

|  |  |  |  |
| --- | --- | --- | --- |
| o-Dichlorobenzene | 95-50-1 | 0.088 | 6.0 |

U071

m-Dichlorobenzene.

|  |  |  |  |
| --- | --- | --- | --- |
| m-Dichlorobenzene | 541-73-1 | 0.036 | 6.0 |

U072

p-Dichlorobenzene.

|  |  |  |  |
| --- | --- | --- | --- |
| p-Dichlorobenzene | 106-46-7 | 0.090 | 6.0 |

U073

3,3'-Dichlorobenzidine.

|  |  |  |  |
| --- | --- | --- | --- |
| 3,3'-Dichlorobenzidine | 91-94-1 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U074

1,4-Dichloro-2-butene.

|  |  |  |  |
| --- | --- | --- | --- |
| cis-1,4-Dichloro-2-butene | 1476-11-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |
| trans-1,4-Dichloro-2-butene | 764-41-0 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U075

Dichlorodifluoromethane.

|  |  |  |  |
| --- | --- | --- | --- |
| Dichlorodifluoromethane | 75-71-8 | 0.23 | 7.2 |

U076

1,1-Dichloroethane.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,1-Dichloroethane | 75-34-3 | 0.059 | 6.0 |

U077

1,2-Dichloroethane.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,2-Dichloroethane | 107-06-2 | 0.21 | 6.0 |

U078

1,1-Dichloroethylene.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,1-Dichloroethylene | 75-35-4 | 0.025 | 6.0 |

U079

1,2-Dichloroethylene.

|  |  |  |  |
| --- | --- | --- | --- |
| trans-1,2-Dichloroethylene | 156-60-5 | 0.054 | 30 |

U080

Methylene chloride.

|  |  |  |  |
| --- | --- | --- | --- |
| Methylene chloride | 75-09-2 | 0.089 | 30 |

U081

2,4-Dichlorophenol.

|  |  |  |  |
| --- | --- | --- | --- |
| 2,4-Dichlorophenol | 120-83-2 | 0.044 | 14 |

U082

2,6-Dichlorophenol.

|  |  |  |  |
| --- | --- | --- | --- |
| 2,6-Dichlorophenol | 87-65-0 | 0.044 | 14 |

U083

1,2-Dichloropropane.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,2-Dichloropropane | 78-87-5 | 0.85 | 18 |

U084

1,3-Dichloropropylene.

|  |  |  |  |
| --- | --- | --- | --- |
| cis-1,3-Dichloropropylene | 10061-01-5 | 0.036 | 18 |
| trans-1,3-Dichloropropylene | 10061-02-6 | 0.036 | 18 |

U085

1,2,3,4-Diepoxybutane

|  |  |  |  |
| --- | --- | --- | --- |
| 1,2,3,4-Diepoxybutane | 1464-53-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U086

N,N'-Diethylhydrazine.

|  |  |  |  |
| --- | --- | --- | --- |
| N,N'-Diethylhydrazine | 1615-80-1 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |

U087

O,O-Diethyl-S-methyldithiophosphate.

|  |  |  |  |
| --- | --- | --- | --- |
| O,O-Diethyl-S-methyldithio­phosphate | 3288-58-2 | CARBN; or CMBST | CMBST |

U088

Diethyl phthalate.

|  |  |  |  |
| --- | --- | --- | --- |
| Diethyl phthalate | 84-66-2 | 0.20 | 28 |

U089

Diethyl stilbestrol.

|  |  |  |  |
| --- | --- | --- | --- |
| Diethyl stilbestrol | 56-53-1 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U090

Dihydrosafrole.

|  |  |  |  |
| --- | --- | --- | --- |
| Dihydrosafrole | 94-58-6 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U091

3,3'-Dimethoxybenzidine.

|  |  |  |  |
| --- | --- | --- | --- |
| 3,3'-Dimethoxybenzidine | 119-90-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U092

Dimethylamine.

|  |  |  |  |
| --- | --- | --- | --- |
| Dimethylamine | 124-40-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U093

p-Dimethylaminoazobenzene.

|  |  |  |  |
| --- | --- | --- | --- |
| p-Dimethylaminoazobenzene | 60-11-7 | 0.13 | CMBST |

U094

7,12-Dimethylbenz(a)anthracene.

|  |  |  |  |
| --- | --- | --- | --- |
| 7,12-Dimethylbenz(a)anthracene | 57-97-6 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U095

3,3'-Dimethylbenzidine.

|  |  |  |  |
| --- | --- | --- | --- |
| 3,3'-Dimethylbenzidine | 119-93-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U096

a, a-Dimethyl benzyl hydroperoxide.

|  |  |  |  |
| --- | --- | --- | --- |
| a, a-Dimethyl benzyl hydro­peroxide | 80-15-9 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |

U097

Dimethylcarbamoyl chloride.

|  |  |  |  |
| --- | --- | --- | --- |
| Dimethylcarbamoyl chloride | 79-44-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U098

1,1-Dimethylhydrazine.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,1-Dimethylhydrazine | 57-14-7 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |

U099

1,2-Dimethylhydrazine.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,2-Dimethylhydrazine | 540-73-8 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |

U101

2,4-Dimethylphenol.

|  |  |  |  |
| --- | --- | --- | --- |
| 2,4-Dimethylphenol | 105-67-9 | 0.036 | 14 |

U102

Dimethyl phthalate.

|  |  |  |  |
| --- | --- | --- | --- |
| Dimethyl phthalate | 131-11-3 | 0.047 | 28 |

U103

Dimethyl sulfate.

|  |  |  |  |
| --- | --- | --- | --- |
| Dimethyl sulfate | 77-78-1 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |

U105

2,4-Dinitrotoluene.

|  |  |  |  |
| --- | --- | --- | --- |
| 2,4-Dinitrotoluene | 121-14-2 | 0.32 | 140 |

U106

2,6-Dinitrotoluene.

|  |  |  |  |
| --- | --- | --- | --- |
| 2,6-Dinitrotoluene | 606-20-2 | 0.55 | 28 |

U107

Di-n-octyl phthalate.

|  |  |  |  |
| --- | --- | --- | --- |
| Di-n-octyl phthalate | 117-84-0 | 0.017 | 28 |

U108

1,4-Dioxane.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,4-Dioxane | 123-91-1 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |
| 1,4-Dioxane; alternate6 standard for nonwastewaters only | 123-91-1 | 12.0 | 170 |

U109

1,2-Diphenylhydrazine.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,2-Diphenylhydrazine | 122-66-7 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |
| 1,2-Diphenylhydrazine; alternate6 standard for wastewaters only | 122-66-7 | 0.087 | NA |

U110

Dipropylamine.

|  |  |  |  |
| --- | --- | --- | --- |
| Dipropylamine | 142-84-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U111

Di-n-propylnitrosamine.

|  |  |  |  |
| --- | --- | --- | --- |
| Di-n-propylnitrosamine | 621-64-7 | 0.40 | 14 |

U112

Ethyl acetate.

|  |  |  |  |
| --- | --- | --- | --- |
| Ethyl acetate | 141-78-6 | 0.34 | 33 |

U113

Ethyl acrylate.

|  |  |  |  |
| --- | --- | --- | --- |
| Ethyl acrylate | 140-88-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U114

Ethylenebisdithiocarbamic acid salts and esters.

|  |  |  |  |
| --- | --- | --- | --- |
| Ethylenebisdithiocarbamic acid | 111-54-6 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U115

Ethylene oxide.

|  |  |  |  |
| --- | --- | --- | --- |
| Ethylene oxide | 75-21-8 | (WETOX or CHOXD) fb CARBN; or CMBST | CHOXD; or CMBST |
| Ethylene oxide; alternate6 standard for wastewaters only | 75-21-8 | 0.12 | NA |

U116

Ethylene thiourea.

|  |  |  |  |
| --- | --- | --- | --- |
| Ethylene thiourea | 96-45-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U117

Ethyl ether.

|  |  |  |  |
| --- | --- | --- | --- |
| Ethyl ether | 60-29-7 | 0.12 | 160 |

U118

Ethyl methacrylate.

|  |  |  |  |
| --- | --- | --- | --- |
| Ethyl methacrylate | 97-63-2 | 0.14 | 160 |

U119

Ethyl methane sulfonate.

|  |  |  |  |
| --- | --- | --- | --- |
| Ethyl methane sulfonate | 62-50-0 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U120

Fluoranthene.

|  |  |  |  |
| --- | --- | --- | --- |
| Fluoranthene | 206-44-0 | 0.068 | 3.4 |

U121

Trichloromonofluoromethane.

|  |  |  |  |
| --- | --- | --- | --- |
| Trichloromonofluoromethane | 75-69-4 | 0.020 | 30 |

U122

Formaldehyde.

|  |  |  |  |
| --- | --- | --- | --- |
| Formaldehyde | 50-00-0 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U123

Formic acid.

|  |  |  |  |
| --- | --- | --- | --- |
| Formic acid | 64-18-6 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U124

Furan.

|  |  |  |  |
| --- | --- | --- | --- |
| Furan | 110-00-9 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U125

Furfural.

|  |  |  |  |
| --- | --- | --- | --- |
| Furfural | 98-01-1 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U126

Glycidylaldehyde.

|  |  |  |  |
| --- | --- | --- | --- |
| Glycidylaldehyde | 765-34-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U127

Hexachlorobenzene.

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachlorobenzene | 118-74-1 | 0.055 | 10 |

U128

Hexachlorobutadiene.

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachlorobutadiene | 87-68-3 | 0.055 | 5.6 |

U129

Lindane.

|  |  |  |  |
| --- | --- | --- | --- |
| a-BHC | 319-84-6 | 0.00014 | 0.066 |
| b-BHC | 319-85-7 | 0.00014 | 0.066 |
| d-BHC | 319-86-8 | 0.023 | 0.066 |
| γ-BHC (Lindane) | 58-89-9 | 0.0017 | 0.066 |

U130

Hexachlorocyclopentadiene.

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachlorocyclopentadiene | 77-47-4 | 0.057 | 2.4 |

U131

Hexachloroethane.

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |

U132

Hexachlorophene.

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachlorophene | 70-30-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U133

Hydrazine.

|  |  |  |  |
| --- | --- | --- | --- |
| Hydrazine | 302-01-2 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |

U134

Hydrogen fluoride.

|  |  |  |  |
| --- | --- | --- | --- |
| Fluoride (measured in wastewaters only) | 7664-39-3 | 35 | ADGAS fb NEUTR; or NEUTR |

U135

Hydrogen sulfide.

|  |  |  |  |
| --- | --- | --- | --- |
| Hydrogen sulfide | 7783-06-4 | CHOXD; CHRED; or CMBST | CHOXD; CHRED; or CMBST |

U136

Cacodylic acid.

|  |  |  |  |
| --- | --- | --- | --- |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |

U137

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

|  |  |  |  |
| --- | --- | --- | --- |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 0.0055 | 3.4 |

U138

Iodomethane.

|  |  |  |  |
| --- | --- | --- | --- |
| Iodomethane | 74-88-4 | 0.19 | 65 |

U140

Isobutyl alcohol.

|  |  |  |  |
| --- | --- | --- | --- |
| Isobutyl alcohol | 78-83-1 | 5.6 | 170 |

U141

Isosafrole.

|  |  |  |  |
| --- | --- | --- | --- |
| Isosafrole | 120-58-1 | 0.081 | 2.6 |

U142

Kepone.

|  |  |  |  |
| --- | --- | --- | --- |
| Kepone | 143-50-8 | 0.0011 | 0.13 |

U143

Lasiocarpine.

|  |  |  |  |
| --- | --- | --- | --- |
| Lasiocarpine | 303-34-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U144

Lead acetate.

|  |  |  |  |
| --- | --- | --- | --- |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

U145

Lead phosphate.

|  |  |  |  |
| --- | --- | --- | --- |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

U146

Lead subacetate.

|  |  |  |  |
| --- | --- | --- | --- |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |

U147

Maleic anhydride.

|  |  |  |  |
| --- | --- | --- | --- |
| Maleic anhydride | 108-31-6 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U148

Maleic hydrazide.

|  |  |  |  |
| --- | --- | --- | --- |
| Maleic hydrazide | 123-33-1 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U149

Malononitrile.

|  |  |  |  |
| --- | --- | --- | --- |
| Malononitrile | 109-77-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U150

Melphalan.

|  |  |  |  |
| --- | --- | --- | --- |
| Melphalan | 148-82-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U151

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

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | RMERC |

U151

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

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | 0.20 mg/ℓ TCLP |

U151

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

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | 0.025 mg/ℓ TCLP |

U151

All U151 (mercury) wastewater.

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | 0.15 | NA |

U151

Elemental Mercury Contaminated with Radioactive Materials.

|  |  |  |  |
| --- | --- | --- | --- |
| Mercury | 7439-97-6 | NA | AMLGM |

U152

Methacrylonitrile.

|  |  |  |  |
| --- | --- | --- | --- |
| Methacrylonitrile | 126-98-7 | 0.24 | 84 |

U153

Methanethiol.

|  |  |  |  |
| --- | --- | --- | --- |
| Methanethiol | 74-93-1 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U154

Methanol.

|  |  |  |  |
| --- | --- | --- | --- |
| Methanol | 67-56-1 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |
| Methanol; alternate6 set of standards for both wastewaters and nonwastewaters | 67-56-1 | 5.6 | 0.75 mg/ℓ TCLP |

U155

Methapyrilene.

|  |  |  |  |
| --- | --- | --- | --- |
| Methapyrilene | 91-80-5 | 0.081 | 1.5 |

U156

Methyl chlorocarbonate.

|  |  |  |  |
| --- | --- | --- | --- |
| Methyl chlorocarbonate | 79-22-1 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U157

3-Methylcholanthrene.

|  |  |  |  |
| --- | --- | --- | --- |
| 3-Methylcholanthrene | 56-49-5 | 0.0055 | 15 |

U158

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

|  |  |  |  |
| --- | --- | --- | --- |
| 4,4'-Methylene bis(2-chloro­aniline) | 101-14-4 | 0.50 | 30 |

U159

Methyl ethyl ketone.

|  |  |  |  |
| --- | --- | --- | --- |
| Methyl ethyl ketone | 78-93-3 | 0.28 | 36 |

U160

Methyl ethyl ketone peroxide.

|  |  |  |  |
| --- | --- | --- | --- |
| Methyl ethyl ketone peroxide | 1338-23-4 | CHOXD; CHRED; CARBN; BIODG; or CMBST | CHOXD; CHRED; or CMBST |

U161

Methyl isobutyl ketone.

|  |  |  |  |
| --- | --- | --- | --- |
| Methyl isobutyl ketone | 108-10-1 | 0.14 | 33 |

U162

Methyl methacrylate.

|  |  |  |  |
| --- | --- | --- | --- |
| Methyl methacrylate | 80-62-6 | 0.14 | 160 |

U163

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

|  |  |  |  |
| --- | --- | --- | --- |
| N-Methyl-N'-nitro-N-nitroso­guanidine | 70-25-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U164

Methylthiouracil.

|  |  |  |  |
| --- | --- | --- | --- |
| Methylthiouracil | 56-04-2 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U165

Naphthalene.

|  |  |  |  |
| --- | --- | --- | --- |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |

U166

1,4-Naphthoquinone.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,4-Naphthoquinone | 130-15-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U167

1-Naphthylamine.

|  |  |  |  |
| --- | --- | --- | --- |
| 1-Naphthylamine | 134-32-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U168

2-Naphthylamine.

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Naphthylamine | 91-59-8 | 0.52 | CMBST |

U169

Nitrobenzene.

|  |  |  |  |
| --- | --- | --- | --- |
| Nitrobenzene | 98-95-3 | 0.068 | 14 |

U170

p-Nitrophenol.

|  |  |  |  |
| --- | --- | --- | --- |
| p-Nitrophenol | 100-02-7 | 0.12 | 29 |

U171

2-Nitropropane.

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Nitropropane | 79-46-9 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U172

N-Nitrosodi-n-butylamine.

|  |  |  |  |
| --- | --- | --- | --- |
| N-Nitrosodi-n-butylamine | 924-16-3 | 0.40 | 17 |

U173

N-Nitrosodiethanolamine.

|  |  |  |  |
| --- | --- | --- | --- |
| N-Nitrosodiethanolamine | 1116-54-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U174

N-Nitrosodiethylamine.

|  |  |  |  |
| --- | --- | --- | --- |
| N-Nitrosodiethylamine | 55-18-5 | 0.40 | 28 |

U176

N-Nitroso-N-ethylurea.

|  |  |  |  |
| --- | --- | --- | --- |
| N-Nitroso-N-ethylurea | 759-73-9 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U177

N-Nitroso-N-methylurea.

|  |  |  |  |
| --- | --- | --- | --- |
| N-Nitroso-N-methylurea | 684-93-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U178

N-Nitroso-N-methylurethane.

|  |  |  |  |
| --- | --- | --- | --- |
| N-Nitroso-N-methylurethane | 615-53-2 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U179

N-Nitrosopiperidine.

|  |  |  |  |
| --- | --- | --- | --- |
| N-Nitrosopiperidine | 100-75-4 | 0.013 | 35 |

U180

N-Nitrosopyrrolidine.

|  |  |  |  |
| --- | --- | --- | --- |
| N-Nitrosopyrrolidine | 930-55-2 | 0.013 | 35 |

U181

5-Nitro-o-toluidine.

|  |  |  |  |
| --- | --- | --- | --- |
| 5-Nitro-o-toluidine | 99-55-8 | 0.32 | 28 |

U182

Paraldehyde.

|  |  |  |  |
| --- | --- | --- | --- |
| Paraldehyde | 123-63-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U183

Pentachlorobenzene.

|  |  |  |  |
| --- | --- | --- | --- |
| Pentachlorobenzene | 608-93-5 | 0.055 | 10 |

U184

Pentachloroethane.

|  |  |  |  |
| --- | --- | --- | --- |
| Pentachloroethane | 76-01-7 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |
| Pentachloroethane; alternate6 standards for both wastewaters and nonwastewaters | 76-01-7 | 0.055 | 6.0 |

U185

Pentachloronitrobenzene.

|  |  |  |  |
| --- | --- | --- | --- |
| Pentachloronitrobenzene | 82-68-8 | 0.055 | 4.8 |

U186

1,3-Pentadiene.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,3-Pentadiene | 504-60-9 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U187

Phenacetin.

|  |  |  |  |
| --- | --- | --- | --- |
| Phenacetin | 62-44-2 | 0.081 | 16 |

U188

Phenol.

|  |  |  |  |
| --- | --- | --- | --- |
| Phenol | 108-95-2 | 0.039 | 6.2 |

U189

Phosphorus sulfide.

|  |  |  |  |
| --- | --- | --- | --- |
| Phosphorus sulfide | 1314-80-3 | CHOXD; CHRED; or CMBST | CHOXD; CHRED; or CMBST |

U190

Phthalic anhydride.

|  |  |  |  |
| --- | --- | --- | --- |
| Phthalic anhydride (measured as Phthalic acid or Terephthalic acid) | 100-21-0 | 0.055 | 28 |
| Phthalic anhydride (measured as Phthalic acid or Terephthalic acid) | 85-44-9 | 0.055 | 28 |

U191

2-Picoline.

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Picoline | 109-06-8 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U192

Pronamide.

|  |  |  |  |
| --- | --- | --- | --- |
| Pronamide | 23950-58-5 | 0.093 | 1.5 |

U193

1,3-Propane sultone.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,3-Propane sultone | 1120-71-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U194

n-Propylamine.

|  |  |  |  |
| --- | --- | --- | --- |
| n-Propylamine | 107-10-8 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U196

Pyridine.

|  |  |  |  |
| --- | --- | --- | --- |
| Pyridine | 110-86-1 | 0.014 | 16 |

U197

p-Benzoquinone.

|  |  |  |  |
| --- | --- | --- | --- |
| p-Benzoquinone | 106-51-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U200

Reserpine.

|  |  |  |  |
| --- | --- | --- | --- |
| Reserpine | 50-55-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U201

Resorcinol.

|  |  |  |  |
| --- | --- | --- | --- |
| Resorcinol | 108-46-3 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U203

Safrole.

|  |  |  |  |
| --- | --- | --- | --- |
| Safrole | 94-59-7 | 0.081 | 22 |

U204

Selenium dioxide.

|  |  |  |  |
| --- | --- | --- | --- |
| Selenium | 7782-49-2 | 0.82 | 5.7 mg/ℓ TCLP |

U205

Selenium sulfide.

|  |  |  |  |
| --- | --- | --- | --- |
| Selenium | 7782-49-2 | 0.82 | 5.7 mg/ℓ TCLP |

U206

Streptozotocin.

|  |  |  |  |
| --- | --- | --- | --- |
| Streptozotocin | 18883-66-4 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U207

1,2,4,5-Tetrachlorobenzene.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | 14 |

U208

1,1,1,2-Tetrachloroethane.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.057 | 6.0 |

U209

1,1,2,2-Tetrachloroethane.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.057 | 6.0 |

U210

Tetrachloroethylene.

|  |  |  |  |
| --- | --- | --- | --- |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |

U211

Carbon tetrachloride.

|  |  |  |  |
| --- | --- | --- | --- |
| Carbon tetrachloride | 56-23-5 | 0.057 | 6.0 |

U213

Tetrahydrofuran.

|  |  |  |  |
| --- | --- | --- | --- |
| Tetrahydrofuran | 109-99-9 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U214

Thallium (I) acetate.

|  |  |  |  |
| --- | --- | --- | --- |
| Thallium (measured in wastewaters only) | 7440-28-0 | 1.4 | RTHRM; or STABL |

U215

Thallium (I) carbonate.

|  |  |  |  |
| --- | --- | --- | --- |
| Thallium (measured in wastewaters only) | 7440-28-0 | 1.4 | RTHRM; or STABL |

U216

Thallium (I) chloride.

|  |  |  |  |
| --- | --- | --- | --- |
| Thallium (measured in wastewaters only) | 7440-28-0 | 1.4 | RTHRM; or STABL |

U217

Thallium (I) nitrate.

|  |  |  |  |
| --- | --- | --- | --- |
| Thallium (measured in wastewaters only) | 7440-28-0 | 1.4 | RTHRM; or STABL |

U218

Thioacetamide.

|  |  |  |  |
| --- | --- | --- | --- |
| Thioacetamide | 62-55-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U219

Thiourea.

|  |  |  |  |
| --- | --- | --- | --- |
| Thiourea | 62-56-6 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U220

Toluene.

|  |  |  |  |
| --- | --- | --- | --- |
| Toluene | 108-88-3 | 0.080 | 10 |

U221

Toluenediamine.

|  |  |  |  |
| --- | --- | --- | --- |
| Toluenediamine | 25376-45-8 | CARBN; or CMBST | CMBST |

U222

o-Toluidine hydrochloride.

|  |  |  |  |
| --- | --- | --- | --- |
| o-Toluidine hydrochloride | 636-21-5 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U223

Toluene diisocyanate.

|  |  |  |  |
| --- | --- | --- | --- |
| Toluene diisocyanate | 26471-62-5 | CARBN; or CMBST | CMBST |

U225

Bromoform (Tribromomethane).

|  |  |  |  |
| --- | --- | --- | --- |
| Bromoform (Tribromomethane) | 75-25-2 | 0.63 | 15 |

U226

1,1,1-Trichloroethane.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,1,1-Trichloroethane | 71-55-6 | 0.054 | 6.0 |

U227

1,1,2-Trichloroethane.

|  |  |  |  |
| --- | --- | --- | --- |
| 1,1,2-Trichloroethane | 79-00-5 | 0.054 | 6.0 |

U228

Trichloroethylene.

|  |  |  |  |
| --- | --- | --- | --- |
| Trichloroethylene | 79-01-6 | 0.054 | 6.0 |

U234

1,3,5-Trinitrobenzene.

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

U235

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

|  |  |  |  |
| --- | --- | --- | --- |
| tris-(2,3-Dibromopropyl)-phosphate | 126-72-7 | 0.11 | 0.10 |

U236

Trypan Blue.

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

U237

Uracil mustard.

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

U238

Urethane (Ethyl carbamate).

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

U239

Xylenes.

|  |  |  |  |
| --- | --- | --- | --- |
| Xylenes-mixed isomers  (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |

U240

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

|  |  |  |  |
| --- | --- | --- | --- |
| 2,4-D (2,4-Dichlorophenoxy­acetic acid) | 94-75-7 | 0.72 | 10 |
| 2,4-D (2,4-Dichlorophenoxy­acetic acid) salts and esters | NA | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U243

Hexachloropropylene.

|  |  |  |  |
| --- | --- | --- | --- |
| Hexachloropropylene | 1888-71-7 | 0.035 | 30 |

U244

Thiram.

|  |  |  |  |
| --- | --- | --- | --- |
| Thiram | 137-26-8 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U246

Cyanogen bromide.

|  |  |  |  |
| --- | --- | --- | --- |
| Cyanogen bromide | 506-68-3 | CHOXD; WETOX; or CMBST | CHOXD; WETOX; or CMBST |

U247

Methoxychlor.

|  |  |  |  |
| --- | --- | --- | --- |
| Methoxychlor | 72-43-5 | 0.25 | 0.18 |

U248

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

|  |  |  |  |
| --- | --- | --- | --- |
| Warfarin | 81-81-2 | (WETOX or CHOXD) fb CARBN; or CMBST | CMBST |

U249

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

|  |  |  |  |
| --- | --- | --- | --- |
| Zinc Phosphide | 1314-84-7 | CHOXD; CHRED; or CMBST | CHOXD; CHRED; or CMBST |

U271

Benomyl.10

|  |  |  |  |
| --- | --- | --- | --- |
| Benomyl | 17804-35-2 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U278

Bendiocarb.10

|  |  |  |  |
| --- | --- | --- | --- |
| Bendiocarb | 22781-23-3 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U279

Carbaryl.10

|  |  |  |  |
| --- | --- | --- | --- |
| Carbaryl | 63-25-2 | 0.006; or CMBST, CHOXD, BIODG or CARBN | 0.14; or CMBST |

U280

Barban.10

|  |  |  |  |
| --- | --- | --- | --- |
| Barban | 101-27-9 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U328

o-Toluidine.

|  |  |  |  |
| --- | --- | --- | --- |
| o-Toluidine | 95-53-4 | CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN | CMBST |

U353

p-Toluidine.

|  |  |  |  |
| --- | --- | --- | --- |
| p-Toluidine | 106-49-0 | CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN | CMBST |

U359

2-Ethoxyethanol.

|  |  |  |  |
| --- | --- | --- | --- |
| 2-Ethoxyethanol | 110-80-5 | CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN | CMBST |

U364

Bendiocarb phenol.10

|  |  |  |  |
| --- | --- | --- | --- |
| Bendiocarb phenol | 22961-82-6 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U367

Carbofuran phenol.10

|  |  |  |  |
| --- | --- | --- | --- |
| Carbofuran phenol | 1563-38-8 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U372

Carbendazim.10

|  |  |  |  |
| --- | --- | --- | --- |
| Carbendazim | 10605-21-7 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U373

Propham.10

|  |  |  |  |
| --- | --- | --- | --- |
| Propham | 122-42-9 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U387

Prosulfocarb.10

|  |  |  |  |
| --- | --- | --- | --- |
| Prosulfocarb | 52888-80-9 | 0.042; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U389

Triallate.10

|  |  |  |  |
| --- | --- | --- | --- |
| Triallate | 2303-17-5 | 0.042; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U394

A2213.10

|  |  |  |  |
| --- | --- | --- | --- |
| A2213 | 30558-43-1 | 0.042; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U395

Diethylene glycol, dicarbamate.10

|  |  |  |  |
| --- | --- | --- | --- |
| Diethylene glycol, dicarbamate | 5952-26-1 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U404

Triethylamine.10

|  |  |  |  |
| --- | --- | --- | --- |
| Triethylamine | 121-44-8 | 0.081; or CMBST, CHOXD, BIODG or CARBN | 1.5; or CMBST |

U409

Thiophanate-methyl.10

|  |  |  |  |
| --- | --- | --- | --- |
| Thiophanate-methyl | 23564-05-8 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U410

Thiodicarb.10

|  |  |  |  |
| --- | --- | --- | --- |
| Thiodicarb | 59669-26-0 | 0.019; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

U411

Propoxur.10

|  |  |  |  |
| --- | --- | --- | --- |
| Propoxur | 114-26-1 | 0.056; or CMBST, CHOXD, BIODG or CARBN | 1.4; or CMBST |

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 USEPA hazardous waste number 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, “Technology Codes and Descriptions of Technology-Based Standards”.  “fb” inserted between USEPA hazardous waste numbers 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/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, 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≤6.0.

BOARD NOTE:  Derived from table to 40 CFR 268.40 (2017).

NA means not applicable.

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)

**Section 728.TABLE U Universal Treatment Standards (UTS)**

|  |  |  |  |
| --- | --- | --- | --- |
| Regulated Constituent-Common Name | CAS1 No. | Wastewater Standard Concentration2 (in mg/ℓ) | Nonwastewater Standard Concentration3 (in mg/kg unless noted as “mg/ℓ TCLP”) |
| Acenaphthylene | 208-96-8 | 0.059 | 3.4 |
| Acenaphthene | 83-32-9 | 0.059 | 3.4 |
| Acetone | 67-64-1 | 0.28 | 160 |
| Acetonitrile | 75-05-8 | 5.6 | 38 |
| Acetophenone | 96-86-2 | 0.010 | 9.7 |
| 2-Acetylaminofluorene | 53-96-3 | 0.059 | 140 |
| Acrolein | 107-02-8 | 0.29 | NA |
| Acrylamide | 79-06-1 | 19 | 23 |
| Acrylonitrile | 107-13-1 | 0.24 | 84 |
| Aldrin | 309-00-2 | 0.021 | 0.066 |
| 4-Aminobiphenyl | 92-67-1 | 0.13 | NA |
| Aniline | 62-53-3 | 0.81 | 14 |
| o-Anisidine (2-methoxy­aniline) | 90-04-0 | 0.010 | 0.66 |
| Anthracene | 120-12-7 | 0.059 | 3.4 |
| Aramite | 140-57-8 | 0.36 | NA |
| a-BHC | 319-84-6 | 0.00014 | 0.066 |
| b-BHC | 319-85-7 | 0.00014 | 0.066 |
| d-BHC | 319-86-8 | 0.023 | 0.066 |
| γ-BHC | 58-89-9 | 0.0017 | 0.066 |
| Benz(a)anthracene | 56-55-3 | 0.059 | 3.4 |
| Benzal chloride | 98-87-3 | 0.055 | 6.0 |
| Benzene | 71-43-2 | 0.14 | 10 |
| Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene) | 205-99-2 | 0.11 | 6.8 |
| Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene) | 207-08-9 | 0.11 | 6.8 |
| Benzo(g,h,i)perylene | 191-24-2 | 0.0055 | 1.8 |
| Benzo(a)pyrene | 50-32-8 | 0.061 | 3.4 |
| Bromodichloromethane | 75-27-4 | 0.35 | 15 |
| Methyl bromide (Bromo­methane) | 74-83-9 | 0.11 | 15 |
| 4-Bromophenyl phenyl ether | 101-55-3 | 0.055 | 15 |
| n-Butyl alcohol | 71-36-3 | 5.6 | 2.6 |
| Butyl benzyl phthalate | 85-68-7 | 0.017 | 28 |
| 2-sec-Butyl-4,6-dinitrophenol (Dinoseb) | 88-85-7 | 0.066 | 2.5 |
| Carbon disulfide | 75-15-0 | 3.8 | 4.8 mg/ℓ TCLP |
| Carbon tetrachloride | 56-23-5 | 0.057 | 6.0 |
| Chlordane (α and γ isomers) | 57-74-9 | 0.0033 | 0.26 |
| p-Chloroaniline | 106-47-8 | 0.46 | 16 |
| Chlorobenzene | 108-90-7 | 0.057 | 6.0 |
| Chlorobenzilate | 510-15-6 | 0.10 | NA |
| 2-Chloro-1,3-butadiene | 126-99-8 | 0.057 | 0.28 |
| p-Chloro-m-cresol | 59-50-7 | 0.018 | 14 |
| Chlorodibromomethane | 124-48-1 | 0.057 | 15 |
| Chloroethane | 75-00-3 | 0.27 | 6.0 |
| bis(2-Chloroethoxy)methane | 111-91-1 | 0.036 | 7.2 |
| bis(2-Chloroethyl) ether | 111-44-4 | 0.033 | 6.0 |
| 2-Chloroethyl vinyl ether | 110-75-8 | 0.062 | NA |
| Chloroform | 67-66-3 | 0.046 | 6.0 |
| bis(2-Chloroisopropyl) ether | 39638-32-9 | 0.055 | 7.2 |
| Chloromethane (Methyl chloride) | 74-87-3 | 0.19 | 30 |
| 2-Chloronaphthalene | 91-58-7 | 0.055 | 5.6 |
| 2-Chlorophenol | 95-57-8 | 0.044 | 5.7 |
| 3-Chloropropylene | 107-05-1 | 0.036 | 30 |
| Chrysene | 218-01-9 | 0.059 | 3.4 |
| p-Cresidine | 120-71-8 | 0.010 | 0.66 |
| o-Cresol | 95-48-7 | 0.11 | 5.6 |
| m-Cresol (difficult to distinguish from p-cresol) | 108-39-4 | 0.77 | 5.6 |
| p-Cresol (difficult to distinguish from m-cresol) | 106-44-5 | 0.77 | 5.6 |
| Cyclohexanone | 108-94-1 | 0.36 | 0.75 mg/ℓ TCLP |
| o,p'-DDD | 53-19-0 | 0.023 | 0.087 |
| p,p'-DDD | 72-54-8 | 0.023 | 0.087 |
| o,p'-DDE | 3424-82-6 | 0.031 | 0.087 |
| p,p'-DDE | 72-55-9 | 0.031 | 0.087 |
| o,p'-DDT | 789-02-6 | 0.0039 | 0.087 |
| p,p'-DDT | 50-29-3 | 0.0039 | 0.087 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.055 | 8.2 |
| Dibenz(a,e)pyrene | 192-65-4 | 0.061 | NA |
| 1,2-Dibromo-3-chloro­propane | 96-12-8 | 0.11 | 15 |
| 1,2-Dibromoethane/Ethylene dibromide | 106-93-4 | 0.028 | 15 |
| Dibromomethane | 74-95-3 | 0.11 | 15 |
| m-Dichlorobenzene | 541-73-1 | 0.036 | 6.0 |
| o-Dichlorobenzene | 95-50-1 | 0.088 | 6.0 |
| p-Dichlorobenzene | 106-46-7 | 0.090 | 6.0 |
| Dichlorodifluoromethane | 75-71-8 | 0.23 | 7.2 |
| 1,1-Dichloroethane | 75-34-3 | 0.059 | 6.0 |
| 1,2-Dichloroethane | 107-06-2 | 0.21 | 6.0 |
| 1,1-Dichloroethylene | 75-35-4 | 0.025 | 6.0 |
| trans-1,2-Dichloroethylene | 156-60-5 | 0.054 | 30 |
| 2,4-Dichlorophenol | 120-83-2 | 0.044 | 14 |
| 2,6-Dichlorophenol | 87-65-0 | 0.044 | 14 |
| 2,4-Dichlorophenoxyacetic acid/2,4-D | 94-75-7 | 0.72 | 10 |
| 1,2-Dichloropropane | 78-87-5 | 0.85 | 18 |
| cis-1,3-Dichloropropylene | 10061-01-5 | 0.036 | 18 |
| trans-1,3-Dichloropropylene | 10061-02-6 | 0.036 | 18 |
| Dieldrin | 60-57-1 | 0.017 | 0.13 |
| Diethyl phthalate | 84-66-2 | 0.20 | 28 |
| p-Dimethylaminoazobenzene | 60-11-7 | 0.13 | NA |
| 2,4-Dimethylaniline (2,4-xylidine) | 95-68-1 | 0.010 | 0.66 |
| 2,4-Dimethyl phenol | 105-67-9 | 0.036 | 14 |
| Dimethyl phthalate | 131-11-3 | 0.047 | 28 |
| Di-n-butyl phthalate | 84-74-2 | 0.057 | 28 |
| 1,4-Dinitrobenzene | 100-25-4 | 0.32 | 2.3 |
| 4,6-Dinitro-o-cresol | 534-52-1 | 0.28 | 160 |
| 2,4-Dinitrophenol | 51-28-5 | 0.12 | 160 |
| 2,4-Dinitrotoluene | 121-14-2 | 0.32 | 140 |
| 2,6-Dinitrotoluene | 606-20-2 | 0.55 | 28 |
| Di-n-octyl phthalate | 117-84-0 | 0.017 | 28 |
| Di-n-propylnitrosamine | 621-64-7 | 0.40 | 14 |
| 1,4-Dioxane | 123-91-1 | 12.0 | 170 |
| Diphenylamine (difficult to distinguish from diphenylnitrosamine) | 122-39-4 | 0.92 | 13 |
| Diphenylnitrosamine (difficult to distinguish from diphenylamine) | 86-30-6 | 0.92 | 13 |
| 1,2-Diphenylhydrazine | 122-66-7 | 0.087 | NA |
| Disulfoton | 298-04-4 | 0.017 | 6.2 |
| Endosulfan I | 959-98-8 | 0.023 | 0.066 |
| Endosulfan II | 33213-65-9 | 0.029 | 0.13 |
| Endosulfan sulfate | 1031-07-8 | 0.029 | 0.13 |
| Endrin | 72-20-8 | 0.0028 | 0.13 |
| Endrin aldehyde | 7421-93-4 | 0.025 | 0.13 |
| Ethyl acetate | 141-78-6 | 0.34 | 33 |
| Ethyl benzene | 100-41-4 | 0.057 | 10 |
| Ethyl cyanide (Propanenitrile) | 107-12-0 | 0.24 | 360 |
| Ethylene oxide | 75-21-8 | 0.12 | NA |
| Ethyl ether | 60-29-7 | 0.12 | 160 |
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 0.28 | 28 |
| Ethyl methacrylate | 97-63-2 | 0.14 | 160 |
| Famphur | 52-85-7 | 0.017 | 15 |
| Fluoranthene | 206-44-0 | 0.068 | 3.4 |
| Fluorene | 86-73-7 | 0.059 | 3.4 |
| Heptachlor | 76-44-8 | 0.0012 | 0.066 |
| 1,2,3,4,6,7,8-Heptachloro­dibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD) | 35822-46-9 | 0.000035 | 0.0025 |
| 1,2,3,4,6,7,8-Heptachloro­dibenzofuran (1,2,3,4,6,7,8-HpCDF) | 67562-39-4 | 0.000035 | 0.0025 |
| 1,2,3,4,7,8,9-Heptachloro­dibenzofuran (1,2,3,4,7,8,9-HpCDF) | 55673-89-7 | 0.000035 | 0.0025 |
| Heptachlor epoxide | 1024-57-3 | 0.016 | 0.066 |
| Hexachlorobenzene | 118-74-1 | 0.055 | 10 |
| Hexachlorobutadiene | 87-68-3 | 0.055 | 5.6 |
| Hexachlorocyclopentadiene | 77-47-4 | 0.057 | 2.4 |
| HxCDDs (All Hexachloro­dibenzo-p-dioxins) | NA | 0.000063 | 0.001 |
| HxCDFs (All Hexachloro­dibenzofurans) | 55684-94-1 | 0.000063 | 0.001 |
| Hexachloroethane | 67-72-1 | 0.055 | 30 |
| Hexachloropropylene | 1888-71-7 | 0.035 | 30 |
| Indeno (1,2,3-c,d) pyrene | 193-39-5 | 0.0055 | 3.4 |
| Iodomethane | 74-88-4 | 0.19 | 65 |
| Isobutyl alcohol | 78-83-1 | 5.6 | 170 |
| Isodrin | 465-73-6 | 0.021 | 0.066 |
| Isosafrole | 120-58-1 | 0.081 | 2.6 |
| Kepone | 143-50-0 | 0.0011 | 0.13 |
| Methacrylonitrile | 126-98-7 | 0.24 | 84 |
| Methanol | 67-56-1 | 5.6 | 0.75 mg/ℓ TCLP |
| Methapyrilene | 91-80-5 | 0.081 | 1.5 |
| Methoxychlor | 72-43-5 | 0.25 | 0.18 |
| 3-Methylcholanthrene | 56-49-5 | 0.0055 | 15 |
| 4,4-Methylene bis(2-chloro­aniline) | 101-14-4 | 0.50 | 30 |
| Methylene chloride | 75-09-2 | 0.089 | 30 |
| Methyl ethyl ketone | 78-93-3 | 0.28 | 36 |
| Methyl isobutyl ketone | 108-10-1 | 0.14 | 33 |
| Methyl methacrylate | 80-62-6 | 0.14 | 160 |
| Methyl methansulfonate | 66-27-3 | 0.018 | NA |
| Methyl parathion | 298-00-0 | 0.014 | 4.6 |
| Naphthalene | 91-20-3 | 0.059 | 5.6 |
| 2-Naphthylamine | 91-59-8 | 0.52 | NA |
| o-Nitroaniline | 88-74-4 | 0.27 | 14 |
| p-Nitroaniline | 100-01-6 | 0.028 | 28 |
| Nitrobenzene | 98-95-3 | 0.068 | 14 |
| 5-Nitro-o-toluidine | 99-55-8 | 0.32 | 28 |
| o-Nitrophenol | 88-75-5 | 0.028 | 13 |
| p-Nitrophenol | 100-02-7 | 0.12 | 29 |
| N-Nitrosodiethylamine | 55-18-5 | 0.40 | 28 |
| N-Nitrosodimethylamine | 62-75-9 | 0.40 | 2.3 |
| N-Nitroso-di-n-butylamine | 924-16-3 | 0.40 | 17 |
| N-Nitrosomethylethylamine | 10595-95-6 | 0.40 | 2.3 |
| N-Nitrosomorpholine | 59-89-2 | 0.40 | 2.3 |
| N-Nitrosopiperidine | 100-75-4 | 0.013 | 35 |
| N-Nitrosopyrrolidine | 930-55-2 | 0.013 | 35 |
| 1,2,3,4,6,7,8,9-Octachloro­dibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD) | 3268-87-9 | 0.000063 | 0.005 |
| 1,2,3,4,6,7,8,9-Octachloro­dibenzofuran (1,2,3,4,6,7,8,9-OCDF) | 39001-02-0 | 0.000063 | 0.005 |
| Parathion | 56-38-2 | 0.014 | 4.6 |
| Total PCBs (sum of all PCB isomers, or all Aroclors)8 | 1336-36-3 | 0.10 | 10 |
| Pentachlorobenzene | 608-93-5 | 0.055 | 10 |
| PeCDDs (All Pentachloro­dibenzo-p-dioxins) | 36088-22-9 | 0.000063 | 0.001 |
| PeCDFs (All Pentachloro­dibenzofurans) | 30402-15-4 | 0.000035 | 0.001 |
| Pentachloroethane | 76-01-7 | 0.055 | 6.0 |
| Pentachloronitrobenzene | 82-68-8 | 0.055 | 4.8 |
| Pentachlorophenol | 87-86-5 | 0.089 | 7.4 |
| Phenacetin | 62-44-2 | 0.081 | 16 |
| Phenanthrene | 85-01-8 | 0.059 | 5.6 |
| Phenol | 108-95-2 | 0.039 | 6.2 |
| 1,3-Phenylenediamine | 108-45-2 | 0.010 | 0.66 |
| Phorate | 298-02-2 | 0.021 | 4.6 |
| Phthalic acid | 100-21-0 | 0.055 | 28 |
| Phthalic anhydride | 85-44-9 | 0.055 | 28 |
| Pronamide | 23950-58-5 | 0.093 | 1.5 |
| Pyrene | 129-00-0 | 0.067 | 8.2 |
| Pyridine | 110-86-1 | 0.014 | 16 |
| Safrole | 94-59-7 | 0.081 | 22 |
| Silvex (2,4,5-TP) | 93-72-1 | 0.72 | 7.9 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.055 | 14 |
| TCDDs (All Tetrachloro­dibenzo-p-dioxins) | 41903-57-5 | 0.000063 | 0.001 |
| TCDFs (All Tetrachloro­dibenzofurans) | 55722-27-5 | 0.000063 | 0.001 |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.057 | 6.0 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.057 | 6.0 |
| Tetrachloroethylene | 127-18-4 | 0.056 | 6.0 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | 0.030 | 7.4 |
| Toluene | 108-88-3 | 0.080 | 10 |
| Toxaphene | 8001-35-2 | 0.0095 | 2.6 |
| Tribromomethane (Bromoform) | 75-25-2 | 0.63 | 15 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 0.055 | 19 |
| 1,1,1-Trichloroethane | 71-55-6 | 0.054 | 6.0 |
| 1,1,2-Trichloroethane | 79-00-5 | 0.054 | 6.0 |
| Trichloroethylene | 79-01-6 | 0.054 | 6.0 |
| Trichloromonofluoromethane | 75-69-4 | 0.020 | 30 |
| 2,4,5-Trichlorophenol | 95-95-4 | 0.18 | 7.4 |
| 2,4,6-Trichlorophenol | 88-06-2 | 0.035 | 7.4 |
| 2,4,5-Trichlorophenoxyacetic acid/2,4,5-T | 93-76-5 | 0.72 | 7.9 |
| 1,2,3-Trichloropropane | 96-18-4 | 0.85 | 30 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76-13-1 | 0.057 | 30 |
| tris-(2,3-Dibromopropyl) phosphate | 126-72-7 | 0.11 | 0.10 |
| Vinyl chloride | 75-01-4 | 0.27 | 6.0 |
| Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations) | 1330-20-7 | 0.32 | 30 |
| Antimony | 7440-36-0 | 1.9 | 1.15 mg/ℓ TCLP |
| Arsenic | 7440-38-2 | 1.4 | 5.0 mg/ℓ TCLP |
| Barium | 7440-39-3 | 1.2 | 21 mg/ℓ TCLP |
| Beryllium | 7440-41-7 | 0.82 | 1.22 mg/ℓ TCLP |
| Cadmium | 7440-43-9 | 0.69 | 0.11 mg/ℓ TCLP |
| Chromium (Total) | 7440-47-3 | 2.77 | 0.60 mg/ℓ TCLP |
| Cyanides (Total)4 | 57-12-5 | 1.2 | 590 |
| Cyanides (Amenable)4 | 57-12-5 | 0.86 | 30 |
| Fluoride5 | 16984-48-8 | 35 | NA |
| Lead | 7439-92-1 | 0.69 | 0.75 mg/ℓ TCLP |
| Mercury-Nonwastewater from Retort | 7439-97-6 | NA | 0.20 mg/ℓ TCLP |
| Mercury-All Others | 7439-97-6 | 0.15 | 0.025 mg/ℓ TCLP |
| Nickel | 7440-02-0 | 3.98 | 11 mg/ℓ TCLP |
| Selenium7 | 7782-49-2 | 0.82 | 5.7 mg/ℓ TCLP |
| Silver | 7440-22-4 | 0.43 | 0.14 mg/ℓ TCLP |
| Sulfide | 18496-25-8 | 14 | NA |
| Thallium | 7440-28-0 | 1.4 | 0.20 mg/ℓ TCLP |
| Vanadium5 | 7440-62-2 | 4.3 | 1.6 mg/ℓ TCLP |
| Zinc5 | 7440-66-6 | 2.61 | 4.3 mg/ℓ TCLP |

1 CAS means Chemical Abstract Services.  When the USEPA hazardous waste number 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 USEPA has removed and marked “reserved”.  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 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) (2017).

(Source: Amended at 42 Ill. Reg. 24924, effective November 19, 2018)