

## Hazardous Waste Identification

**Summary/Purpose:** The Hazardous Waste Identification Policy details the minimum requirements and procedures to properly identify and classify Chemical and Hazardous Waste materials.

### Hazardous Waste Identification

#### *What is a Hazardous Waste*

The disposal of hazardous chemicals is strictly regulated under the Resource Conservation and Recovery Act (RCRA), the Mississippi Hazardous Waste Management Regulations, and the Environmental Protection Agency (EPA) regulations CFR 40, parts 100 - 399. Individuals who do not follow procedures in complying with state and federal regulations are individually responsible for possible fines and/or imprisonment.

**According to RCRA, a Hazardous waste is a solid, a semi-solid, a liquid, or a contained gas that, "because of its quantity, concentration, or physical, chemical, or infectious characteristics, it may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or pose a substantial present or potential hazard to human health and the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. "**

There are tens of thousands of wastes that can be hazardous for many different reasons. RCRA regulations identify hazardous wastes based on their physical characteristics and also provide lists of specific hazardous wastes. EPA regulations require that all waste generators evaluate their wastes to determine if any of the four hazardous characteristics are exhibited.

### Characteristic Wastes

A waste is hazardous if it exhibits one or more of the following characteristics:

- **Ignitability** EPA waste code D001 - Ignitable wastes can create fires under certain conditions. These materials give off heat, smoke, soot and may disperse toxic pollutants and by-products into the air. Examples include liquids, such as solvents that readily catch fire, and friction-sensitive substances. Ignitability applies if the waste is :
  - A Liquid with flashpoint less than 140° F. (60° C), or
  - The material is not a liquid and it can cause a fire by friction, absorption of moisture or spontaneous chemical changes AND, when ignited burns so vigorously and persistently that it creates a hazard, or
  - The material is is an ignitable compressed gas (Flammable gas), or
  - The material is an Oxidizer.

- **Corrosivity** EPA waste code D002 - Corrosive wastes include those that are acidic, wastes that can cause injury to the skin or body, or destroy their own containers (corrode metal) or other materials and be released into the environment. Corrosivity applies if the waste is:
  - Aqueous (water-based) with  $\text{pH} \leq 2.0$  or  $\text{pH} \geq 12.5$ , or
  - Liquid and corrodes steel at  $> 0.25$  inch / year, at  $55^\circ \text{C}$ .
- **Reactivity** EPA waste code D003 - Reactive Materials can react violently or give off poisonous gases when exposed to light, air, water or other materials. Reactivity applies if the waste is:
  - Normally Unstable and readily undergoes violent change without detonating, or
  - Reacts violently with water, or is capable of generating toxic gases or vapors or explosive mixtures when combined with water, or
  - A Cyanide or Sulfide containing material capable of releasing dangerous amounts of poisonous gas when mixed with corrosives, or
  - Capable of detonation or explosive decomposition, is a DOT Forbidden, Class A, or Class B explosive.
- **Toxicity** EPA waste codes D004 - D042 - Toxic wastes are harmful or fatal when ingested or absorbed. When toxic wastes are disposed of on land, contaminated liquid may drain (leach) from the waste and pollute ground water. Toxicity is identified through a laboratory procedure using the Toxicity Characteristic Leaching Procedure (TCLP) test. If your waste contains one or more of these contaminants (pesticides, organic constituents, metals) at or above the regulatory level, it is a hazardous waste

**Underlying Constituents** - Certain Trace amounts of materials, called underlying constituents, require additional processing to remove the contaminant(s) to a level called the Universal Treatment Standard (UTS) for the constituents. This table lists the underlying hazardous constituents for D001-D043 wastes.

A wastewater is any waste with less than 1% by weight total organic carbon (TOC) and less than 1% by weight total suspended solids (TSS). All other wastes are nonwastewater.

### Listed Wastes

EPA has already determined that some specific wastes are hazardous. These wastes are now incorporated into lists published by EPA. The lists are organized into three categories :

- **Source-Specific Wastes** EPA waste codes K001 - K148 - This list includes wastes from *specific industries* such as petroleum refining and wood preserving. Sludges and waste waters from treatment and production processes in these industries are examples of source-specific wastes.
- **Non-Specific Source Wastes** EPA waste codes F001 - F039 - This list identifies wastes commonly produced by manufacturing and industrial processes. Examples from this list include spent halogenated solvents used in degreasing and wastewater treatment sludges from electroplating processes as well as dioxin wastes, most of which are acutely hazardous wastes due to the danger they present to human health and the environment.
- **Commercial Chemical Products** P list (Acutely Hazardous) and U list - This list includes specific commercial *chemical products* such as creosote and some pesticides.

If your wastes material exhibits any of the four characteristics, or if it is a listed waste (F, K, P, or U list), it is a **Hazardous Waste** and it is subject to EPA's Subtitle C hazardous waste regulations.

All listed wastes are presumed to be hazardous *regardless of their concentrations* and must be handled according to EPA's Subtitle C hazardous waste regulations.

***TC Waste (Toxicity Characteristic)***

**The D List**

**If your waste contains one or more of these contaminants at or above the regulatory level, it is a hazardous waste.**

Maximum Concentration of Contaminants for the Toxicity Characteristic

<b>EPA Waste #</b>	<b>Contaminant</b>	<b>CAS No.</b>	<b>Regulatory Level (mg/L)</b>
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0.
D023	o-Cresol	95-48-7	*200.0
D024	m-Cresol	108-39-4	*200.0
D025	p-Cresol	106-44-5	*200.0
D026	Cresol	---	*200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	0.13
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2

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D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	5.0
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2

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

### *Non-Specific Source Wastes*

#### **The F List**

<b>Code</b>	<b>Description</b>
F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichlorethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those

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	solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1_trichloroethane, chlorobenzene, 1,1,2_trichloro_1,2,2_trifluoroethane, ortho_dichlorobenzene, trichlorofluoromethane, and 1,1,2_trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F003	The following spent non_halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n_butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non_halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non_halogenated solvents, and a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent mixtures.
F004	The following spent non_halogenated solvents: cresols, cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non_halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F005	The following spent non_halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2_ethoxyethanol, and 2_nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non_halogenated solvents or those solvents listed in F001, F002 or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1)

	sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc_aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling aluminum.
F007	Spent cyanide plating bath solutions from electroplating operations.
F008	Plating bath residues from the bottom of plating baths from electroplating operations in which cyanides are used in the process.
F009	Spent stripping and cleaning bath solutions from electroplating operations in which cyanides are used in the process.
F010	Quenching bath residues from oil baths from metal heat treating operations in which cyanides are used in the process.
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.
F012	Quenching wastewater treatment sludges from metal heat treating operations in which cyanides are used in the process.
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.
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) or tri_ or tetrachlorophenol or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5_trichlorophenol.)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce derivatives.
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing

	use (as a reactant, chemical intermediate, or component in a formulating process) of tetra_ or penta_ or hexachlorobenzenes under alkaline conditions.
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in formulating process) or tri_ and tetrachlorophenols. (This listing does not includes wastes form equipment used only for the production or use of hexachlorophene from highly purified 2,4,5_trichlorophenol)
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 waste listed in Sections 261.31 or 261.32)
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one, to and including five, with varying amounts and positions of chlorine substitution.
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra_, penta_, or hexachlorobenzene under alkaline conditions.
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.)
F028	Residues resulting from the incinerations or thermal treatment of soil contaminated with EPA hazardous waste nos. F020, F021, F022, F023, F026, and F027.



F032	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use, or have previously used, chlorophenolic formulations [except potentially cross_contaminated wastes that have had the F032 waste code deleted in accordance with Section 261.35 (i.e., the newly promulgated equipment cleaning or replacement standards), and where the generator does not resume or initiate use of chlorophenolic formulations]. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.
F034	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.
F035	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.
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 storm water units receiving dry weather flow. Sludges generated in storm water units that do not receive dry weather flow, sludges generated in aggressive biological treatment units as defined in Section 261.31(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 exempted from this listing.
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge _ Any sludge and/or float generated from the physical and/or chemical

	separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in induced air flotation (IAF) units, tank and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated in aggressive biological treatment units as defined in Section 261.32(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units), and F037, K048, and K051 wastes are exempted from this listing.
F039	Leachate resulting from the treatment, storage, or disposal of wastes classified by more than one waste code under Subpart D, or from a mixture of wastes classified under Subparts C and D of this part. (Leachate resulting from the management of one or more of the following EPA Hazardous Wastes and no other hazardous wastes retains its hazardous waste code(s): F020, F021, F022, F023, F026, F027, and/or F028.)

*Source Specific Wastes*

**The K List**

<b>Code</b>	<b>Description</b>
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or

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	pentachlorophenol.
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 pigment (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.
K009	Distillation bottoms from the production of acetaldehyde from ethylene.
K010	Distillation side cuts from the production of acetaldehyde from ethylene.
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.
K013	Bottom streams from the acetonitrile column in the production of acrylonitrile.
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.
K015	Still bottoms from the distillation of benzyl chloride.
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.
K018	Heavy ends from the fractionation column in ethyl chloride production.
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.
K022	Distillation bottom tars from the production of phenol/acetate from cumene.

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K023	Distillation light ends from the production of phthalic anhydride from naphthalene.
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.
K026	Stripping still tails from the production of methyl ethyl pyridines.
K027	Centrifuge and distillation residues from toluene diisocyanate production.
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1_trichloroethane.
K029	Waste from the product steam stripper in the production of 1,1,1_trichloroethane.
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.
K031	By-product salts generated in the production of MSMA and cacodylic acid.
K032	Wastewater treatment sludge from the production of chlordane.
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.
K035	Wastewater treatment sludges generated in the production of creosote.
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.
K037	Wastewater treatment sludges from the production of disulfoton.
K038	Wastewater from the washing and stripping of phorate production.
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.
K040	Wastewater treatment sludge from the production of phorate.
K041	Wastewater treatment sludge from the production of toxaphene.
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5_T.
K043	2,6_dichlorophenol waste from the production of 2,4_D.

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K044	Wastewater treatment sludges from the manufacturing and processing of explosives.
K045	Spent carbon from the treatment of wastewater containing explosives.
K046	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead_based initiating compounds.
K047	Pink/red water from TNT operations.
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.
K049	Slop oil emulsion solids from the petroleum refining industry.
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.
K051	API seperator sludge from the petroleum refining industry.
K052	Tank bottoms (leaded) from the petroleum refining industry.
K060	Ammonia still lime sludge from coking operations.
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).
K064	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production.
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.
K066	Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.
K069	Emission control dust/sludge from secondary lead smelting.
K071	Brine purification muds from the mercury cell process in chlorine production, in which separately prepurified brine is not used.
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.
K083	Distillation bottoms from aniline production.
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or oragano_arsenic compounds.
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.

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K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment use in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.
K087	Decanter tank tar sludge from coking operations.
K088	Spent potliners from primary aluminum reduction.
K090	Emission control dust or sludge from ferrochromiumsilicon production.
K091	Emission control dust or sludge from ferrochromium production.
K093	Distillation light ends from the production of phthalic anhydride from ortho_xylene.
K094	Distillation bottoms from the production of phthalic anhydride from ortho_xylene.
K095	Distillation bottoms from the production of 1,1,1_trichloroethane.
K096	Heavy ends from the heavy ends column from the production of 1,1,1_trichloroethane.
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.
K098	Untreated process wastewater from the production of toxaphene.
K099	Untreated wastewater from the production of 2,4_D.
K100	Waste leaching solution from acid leaching of emisison control dust/sludge from secondary lead smelting.
K101	Distillation tar residues from the distillation of aniline_based compounds in the production of veterinary pharmaceuticals from arsenic or organo_arsenic compounds.
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo_arsenic compounds.
K103	Process residues from aniline extraction from the production of aniline.
K104	Combined wastewater streams generated from nitrobenzene/aniline production.
K105	Separated aqueous stream from the reactor product washing step in the production of cholorbenzenes.
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.
K107	Column bottoms from product separation from the production

	of 1,1_dimethylhydrazine (UDMH) from carboxylic acid hydrazines.
K018	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1_dimethylhydrazine (UDMH) from carboxylic acid hydrazides.
K109	Spent filter cartridges from product purification from the production of 1,1_dimethylhydrazine (UDMH) for carboxylic acid hydrazides.
K110	Condensed column overheads from intermediate separation from the production of 1,1_dimethylhydrazine (UDMH) from carboxylic acid hydrazides.
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene.
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.
K113	Condensed liquid light ends from purification of toluenediamine in production of toluenediamine via hydrogenation of dinitrotoluene.
K114	Vicinals from the purification of toluenediamine in production of toluenediamine via hydrogenation of dinitrotoluene.
K115	Heavy ends from purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.
K118	Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt.
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salt.
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.
K126	Baghouse dust and floor sweepings in milling and packaging

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	operations from production or formulation of ethylenebisdithiocarbamic acid and its salts.
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

### *Commercial Chemical Products*

#### **The P List**

#### **Acutely Hazardous Materials**

<b>Code</b>	<b>Description</b>
P001	2H-1 Benzopyran-2-one,4-hydroxy-3-(3-oxo-1 phenylbutyl)-& salts, when present at concentrations greater than 0.3%
P001	Warfarin, & salts, when present at concentrations greater than 0.3%
P002	1-Acetyl-2-thiourea
P002	Acetamide, N-(aminothioxomethyl)-
P003	2-Propenal
P003	Acrolein
P004	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P004	Aldrin
P005	2-Propen-1-ol



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P005	Allyl alcohol
P006	Aluminum phosphide (R,T)
P007	3(2H)-Isoxazolone, 5-(aminomethyl)-
P007	5-(Aminomethyl)-3-isoxazolol
P008	4-Pyridinamine
P008	4-Aminopyridine
P009	Ammonium picrate (R)
P009	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P010	Arsenic acid H <sub>3</sub> AsO <sub>4</sub>
P011	Arsenic oxide As <sub>2</sub> O <sub>5</sub>
P011	Arsenic pentoxide
P012	Arsenic oxide As <sub>2</sub> O <sub>3</sub>
P012	Arsenic trioxide
P013	Barium cyanide
P014	Benzenethiol
P014	Thiophenol
P015	Beryllium
P016	Dichloromethyl ether
P016	Methane, oxybis[chloro-
P017	2-Propanone, 1-bromo-
P017	Bromoacetone
P018	Brucine
P018	Strychnidin-10-one, 2,3-dimethoxy-
P020	Dinoseb
P020	Phenol, 2-(1-methylpropyl)-4,6-dinitro
P021	Calcium cyanide
P021	Calcium cyanide Ca(CN) <sub>2</sub>
P022	Carbon disulfide
P023	Acetaldehyde, chloro-
P023	Chloroacetaldehyde
P024	Benzenamine, 4-chloro-
P024	p-Chloroaniline
P026	1-(o-Chlorophenyl)thiourea
P026	Thiourea, (2-chlorophenyl)-
P027	3-Chloropropionitrile

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P027	Propanenitrile, 3-chloro-
P028	Benzyl chloride
P028	Benzene, (chloromethyl)-
P029	Copper cyanide
P029	Copper cyanide Cu(CN)
P030	Cyanides (soluble cyanide salts), not otherwise specified
P031	Cyanogen
P031	Ethanedinitrile
P033	Cyanogen chloride
P033	Cyanogen chloride (CN)Cl
P034	2-Cycloheptyl-4,6-dinitrophenol
P034	Phenol, 2-cyclohexyl-4,6-dinitro
P036	Arsonous dichloride, phenyl-
P036	Dichlorophenylarsine
P037	2,7:3,6-Dimethanonaphth[2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a, 2,2a,3,6,6a,7,7a-octhydro-, (1aalpha, 2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)-
P037	Dieldrin
P038	Arsine, diethyl-
P038	Diethylarsine
P039	Disulfoton
P039	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P040	O,O-Diethyl O-pyrazinyl phosphorothioate
P040	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P041	Diethyl-p-nitrophenyl phosphate
P041	Phosphoric acid, diethyl 4-nitrophenyl ester
P042	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-,(R)-
P042	Epinephrine
P043	Diisopropylfluorophosphate (DFP)
P043	Phosphorofluoridic acid, bis(1-methylethyl)ester
P044	Dimethoate
P044	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
P045	2-Butanone, 3,3-dimethyl-1-(methylthio)-,O-[methylamino)carbonyl] oxime

P045	Thiofanox
P046	alpha,alpha-Dimethylphenethylamine
P046	Benzeneethanamine, alpha, alpha-dimethyl-
P047	4,6-Dinitro-o-cresol, & salts
P047	Phenol, 2-methyl-4,6-dinitro-, & salts
P048	2,4-Dinitrophenol
P048	Phenol, 2,4-dinitro-
P049	Dithiobiuret
P049	Thioimidodicarbonic diamide [(H <sub>2</sub> N)C(S)] <sub>2</sub> NH
P050	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide
P050	Endosulfan
P051	2,7:3,6-Dimethanonaphth[2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)-&metabolites
P051	Endrin
P051	Endrin, & metabolites
P054	Aziridine
P054	Ethyleneimine
P056	Fluorine
P057	Acetamide, 2-fluoro-
P057	Fluoroacetamide
P058	Acetic acid, fluoro-, sodium salt
P058	Fluoroacetic acid, sodium salt
P059	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P059	Heptachlor
P060	1,4,5,8-Dimethanonaphthalene,1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hecahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P060	Isodrin
P062	Hexaethyl tetraphosphate
P062	Tetraphosphoric acid, hexaethyl ester
P063	Hydrocyanic acid
P063	Hydrogen cyanide
P064	Methane, isocyanato-

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P064	Methyl isocyanate
P065	Fulminic acid, mercury(2+)salt(R,T)
P065	Mercury fulminate (R,T)
P066	Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester
P066	Methomyl
P067	1,2-Propylenimine
P067	Aziridine, 2-methyl-
P068	Hydrazine, methyl-
P068	Methyl hydrazine
P069	2-Methylactonitrile
P069	Propanenitrile, 2-hydroxy-2-methyl-
P070	Aldicarb
P070	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P071	Methyl parathion
P071	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P072	alpha-Naphthylthiourea
P072	Thiourea, 1-naphthylenyl-
P073	Nickel carbonyl
P073	Nickel carbonyl Ni(CO) <sub>4</sub> , (T-4)-
P074	Nickel cyanide
P074	Nickel cyanide Ni(CN) <sub>2</sub>
P075	Nicotine, & salts
P075	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P076	Nitric oxide
P076	Nitrogen oxide NO
P077	Benzenamine, 4-nitro-
P077	p-Nitroaniline
P078	Nitrogen dioxide
P078	Nitrogen oxide NO <sub>2</sub>
P081	1,2,3-Propanetriol, trinitrate (R)
P081	Nitroglycerine (R)
P082	Methanimine, N-methyl-N-nitroso-
P082	N-Nitrosodimethylamine

P084	N-Nitrosomethylvinylamine
P084	Vinylamine, N-methyl-N-nitroso
P085	Diphosphoramidate, octamethyl-
P085	Octamethylpyrophosphoramidate
P087	Osmium oxide OsO <sub>4</sub> , (T-4)-
P087	Osimium tetroxide
P088	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P088	Endothall
P089	Parathion
P089	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester
P092	Mercury, (acetato-O)phenyl-
P092	Phenylmercury acetate
P093	Phenylthiourea
P093	Thiourea, phenyl-
P094	Phorate
P094	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P095	Carbonic dichloride
P095	Phosgene
P096	Hydrogen phosphide
P096	Phosphine
P097	Famphur
P097	Phosphorothioic acid O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P098	Potassium cyanide
P098	Potassium cyanide K(CN)
P099	Argentate (1-), bis(cyano-C)-, potassium
P099	Potassium silver cyanide
P101	Ethyl cyanide
P101	Propanenitrile
P102	2-Propyn-1-ol
P102	Propargyl alcohol
P103	Selenourea
P104	Silver cyanide
P104	Silver cyanide Ag(CN)

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P105	Sodium azide
P106	Sodium cyanide
P106	Sodium cyanide Na(CN)
P107	Strontium sulfide SrS
P108	Strychnidin-10-one, & salts
P108	Strychnine, & salts
P109	Tetraethyldithiopyrophosphate
P109	Thiodiphosphoric acid, tetraethyl ester
P110	Plumbane, tetraethyl-
P110	Tetraethyl lead
P111	Disphosphoric acid, tetraethyl ester
P111	Tetraethyl pyrophosphate
P112	Methane, tetranitro- (R)
P112	Tetranitromethane (R)
P113	Thallic oxide
P113	Thallium oxide Tl <sub>2</sub> O <sub>3</sub>
P114	Selenious acid, dithallium (1+) salt
P114	Thallium(I) selenite
P115	Sulfuric acid, dithallium (1+) salt
P115	Thallium(I) sulfate
P116	Hydrazinecarbothioamide
P116	Thiosemicarbazide
P118	Methanethiol, trichloro-
P118	Trichloromethanethiol
P119	Ammonium vanadate
P119	Vanadic acid, ammonium salt
P120	Vanadium oxide V <sub>2</sub> O <sub>5</sub>
P120	Vanadium pentoxide
P121	Zinc cyanide
P121	Zinc cyanide Zn(CN) <sub>2</sub>
P122	Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , when present at concentrations greater than 10% (R,T)
P123	Toxaphene

*Commercial Chemical Products*

**The U List**

<b>EPA Waste Codes (U-List)</b>	
<b>Code</b>	<b>Description</b>
U001	Acetaldehyde (I)
U001	Ethanol (I)
U002	2-Propanone (I)
U002	Acetone (I)
U003	Acetonitrile (I,T)
U004	Acetophenone
U004	Ethanone, 1-phenyl-
U005	2-Acetylaminofluorene
U005	Acetamide, N-9H-fluoren-2-yl
U006	Acetyl chloride (C,R,T)
U007	2-Propenamide
U007	Acrylamide
U008	2-Propenoic acid (I)
U008	Acrylic acid (I)
U009	2-Propenenitrile
U009	Acrylonitrile
U010	Azirino [2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione,6-amino-8- [[aminocarbonyl]oxy]methyl]-1,1a,2,8,8a,8b-hexahydro- 8a-methoxy-5-methyl-, [1aS-(1aalpha,8beta,8aalpha,8balpha)]-
U010	Mitomycin C
U011	1H-1,2,4-Triazol-3-amine

U011	Amitrole
U012	Aniline (I,T)
U012	Benzenamine (I,T)
U014	Auramine
U014	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U015	Azaserine
U015	L-Serine, diazoacetate (ester)
U016	Benz[c]acridine
U017	Benzal chloride
U017	Benzene, (dichloromethyl)-
U018	Benz[a]anthracene
U019	Benzene (I,T)
U020	Benzenesulfonic acid choride (C,R)
U020	Benzenesulfonyl chloride (C,R)
U021	[1,1'-Biphenyl]-4,4'-diamine
U021	Benzidine
U022	Benzo[a]pyrene
U023	Benzene, (trichloromethyl)-
U023	Benzotrichloride (C,R,T)
U024	Dichloromethoxy ethane
U024	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U025	Dichloroethyl ether
U025	Ethane, 1,1'-oxybis[2-chloro-
U026	Chlornaphazin
U026	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U027	Dichloroisopropyl ether
U027	Propane, 2,2'-oxybis[2-chloro-
U028	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U028	Diethylhexyl phthalate
U029	Methane, bromo-
U029	Methyl bromide
U030	4-Bromophenyl phenyl ether
U030	Benzene, 1-bromo-4-phenoxy-
U031	1-Butanol (I)



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U031	n-Butyl alcohol (I)
U032	Calcium chromate
U032	Chromic acid H <sub>2</sub> CrO <sub>4</sub> , calcium salt
U033	Carbon oxyfluoride (R,T)
U033	Carbonic difluoride
U034	Acetaldehyde, trichloro-
U034	Chloral
U035	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U035	Chlorambucil
U036	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U036	Chlordane, alpha & gamma isomers
U037	Benzene, chloro-
U037	Chlorobenzene
U038	Benzenecetic acid, 4-chloro-alpha-(4-chlorophenyl-alpha-hydroxy-, ethyl ester
U038	Chlorobenzilate
U039	p-Chloro-m-cresol
U039	Phenol, 4-chloro-3-methyl
U041	Epichlorohydrin
U041	Oxirane, (chloromethyl)-
U042	Ethene, (2-chloroethoxy)-
U043	Ethene, chloro-
U043	Vinyl chloride
U044	Chloroform
U044	Methane, trichloro-
U045	Methane, chloro- (I,T)
U045	Methyl chloride (I,T)
U046	Chloromethyl methyl ether
U046	Methane, chloromethoxy-
U047	beta-Chloronaphthalene
U047	Naphthalene, 2-chloro-
U048	o-Chlorophenol
U048	Phenol, 2-chloro-
U049	4-Chloro-o-toluidine, hydrochloride

U049	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U050	Chrysene
U051	Creosote
U052	Cresol (Cresylic acid)
U052	Phenol, methyl-
U053	2-Butenal
U053	Crotonaldehyde
U055	Benzene, (1-methylethyl)-(I)
U055	Cumene (I)
U056	Benzene, hexahydro- (I)
U056	Cyclohexane (I)
U057	Cyclohexanone (I)
U058	2H-1,3,2-Oxazaphosphorin-2-amine,N,N-bis(2-chloroethyl)tetrahydro-,2-oxide
U058	Cyclophosphamide
U059	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl]oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U059	Daunomycin
U060	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U060	DDD
U061	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U061	DDT
U062	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U062	Diallate
U063	Dibenz[a,h]anthracene
U064	Benzo[rs]pentaphene
U064	Dibenzo[a,i]pyrene
U066	1,2-Dibromo-3-chloropropane
U066	Propane, 1,2-dibromo-3-chloro
U067	Ethane, 1,2-dibromo-
U067	Ethylene dibromide
U068	Methane, dibromo-
U068	Methylene bromide

U069	1,2-Benzenedicarboxylic acid, dibutyl ester
U069	Dibutyl phthalate
U070	Benzene, 1,2-dichloro-
U070	o-Dichlorobenzene
U071	Benzene, 1,3-dichloro-
U071	m-Dichlorobenzene
U072	Benzene, 1,4-dichloro-
U072	p-Dichlorobenzene
U073	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dichloro-
U073	3,3'-Dichlorobenzidine
U074	1,4-Dichloro-2-butene (I,T)
U074	2-Butene, 1,4-dichloro- (I,T)
U075	Dichlorodifluoromethane
U075	Methane, dichlorodifluoro-
U076	Ethane, 1,1-dichloro-
U076	Ethylidene dichloride
U077	Ethane, 1,2- dichloro-
U077	Ethylene dichloride
U078	1,1-Dichloroethylene
U078	Ethene, 1,1-dichloro-
U079	1,2-Dichloroethylene
U079	Ethene, 1,2-dichloro-, (E)-
U080	Methane, dichloro-
U080	Methylene chloride
U081	2,4-Dichlorophenol
U081	Phenol, 2,4-dichloro-
U082	2,6-Dichlorophenol
U082	Phenol, 2,6-dichloro-
U083	Propane,1 2-dichloro
U083	Propylene dichloride
U084	1,3-Dichloropropene
U084	1-Propene, 1,3-ichloro-
U085	1,2:3,4-Diepoxybutane (I,T)
U085	2,2'-Bioxirane

U086	Hydrazine, 1,2-diethyl-
U086	N,N'-Diethylhydrazine
U087	O,O-Diethyl S-methyl dithiophosphate
U087	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U088	1,2-Benzenedicarboxylic acid, diethyl ester
U088	Diethyl phthalate
U089	Diethylstilbesterol
U089	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis, (E)-
U090	1,3-Benzodioxole, 5-propyl-
U090	Dihydrosafrole
U091	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethoxy
U091	3,3'-Dimethoxybenzidine
U092	Dimethylamine (I)
U092	Methanamine, N-methyl- (I)
U093	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U093	p-Dimethylaminoazobenzene
U094	7,12-Dimethylbenz[a]anthracene
U094	Benz[a]anthracene, 7,12-dimethyl-
U095	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U095	3,3'-Dimethylbenzidine
U096	alpha, alpha-Dimethylbenzylhydroperoxide (R)
U096	Hydroperoxide, 1-methyl-1-phenylethyl (R)
U097	Carbamic chloride, dimethyl-
U097	Dimethylcarbamoyl chloride
U098	1,1-Dimethylhydrazine
U098	Hydrazine, 1,1-dimethyl
U099	1,2-Dimethylhydrazine
U099	Hydrazine, 1,1-dimethyl-
U101	2,4-Dimethylphenol
U101	Phenol, 2,4-dimethyl-
U102	1,2-Benzenedicarboxylic acid, dimethyl ester
U102	Dimethyl phthalate
U103	Dimethyl sulfate
U103	Sulfuric acid, dimethyl ester

U105	2,4-Dinitrotoluene
U105	Benzene, 1- methyl-2,4-dinitro-
U106	2,6-Dinitrotoluene
U106	Benzene, 2-methyl-1,3-dinitro-
U107	1,2-Benzenedicarboxylic acid, dioctyl ester
U107	Di-n-octyl phthalate
U108	1,4-Diethyleneoxide
U108	1,4-Dioxane
U109	1,2-Diphenylhydrazine
U109	Hydrazine, 1,2-diphenyl-
U110	1-Propanimine, N-propyl-(I)
U110	Dipropylamine (I)
U111	1-Propanamine, N-nitroso-N-propyl-
U111	Di-n-propylnitrosamine
U112	Acetic acid ethyl ester (I)
U112	Ethyl acetate (I)
U113	2-Propenoic acid, ethyl ester (I)
U113	Ethyl acrylate (I)
U114	Carbamodithioic acid, 1,2-ethanediy[bis-, salts & esters
U114	Ethylenebisdithiocarbamic acid, salts & esters
U115	Ethylene oxide (I,T)
U115	Oxirane (I,T)
U116	2-Imidazolidnethione
U116	Ethylenethiourea
U117	Ethane, 1,1'-oxybis-(I)
U117	Ethyl ether (I)
U118	2-Propenoic acid, 2-methyl-, ethyl ester
U118	Ethyl methacrylate
U119	Methanesulfonic acid, ethyl ester
U119	Ethyl methanesulfonate
U120	Fluoranthene
U121	Methane, trichlorofluoro-
U121	Trichloromonofluoromethane
U122	Formaldehyde

U123	Formic acid (C,T)
U124	Furan (I)
U124	Furfuran (I)
U125	2-Furancarboxaldehyde (I)
U125	Fufural (I)
U126	Glycidylaldehyde
U126	Oxiranecarboxyaldehyde
U127	Benzene, hexachloro-
U127	Hexachlorobenzene
U128	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U128	Hexachlorobutadiene
U129	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U129	Lindane
U130	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U130	Hexachlorocyclopentadiene
U131	Ethane, hexachloro-
U131	Hexachloroethane
U132	Hexachlorophene
U132	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U133	Hydrazine (R,T)
U134	Hydrofluoric acid (C,T)
U134	Hydrogen fluoride (C,T)
U135	Hydrogen sulfide
U135	Hydrogen sulfide H <sub>2</sub> S
U136	Arsenic acid, dimethyl-
U136	Cacodylic acid
U137	Indeno[1,2,3-cd]pyrene
U138	Methane, iodo-
U138	Methyl iodide
U140	1-Propanol, 2-methyl- (I,T)
U140	Isobutyl alcohol (I,T)
U141	1,3-Benzodioxole, 5-(1-propenyl)-
U141	Isosafrole
U142	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one,

	1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U142	Ketone
U143	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl-ester, [1S-[1alpha(Z), 7(2S*,3R*),7aalpha]]-
U143	Lasiocarpine
U144	Acetic acid, lead(2+) salt
U144	Lead acetate
U145	Lead phosphete
U145	Phosphoric acid, lead(2+) salt (2:3)
U146	Lead subacetate
U146	Lead, bis(acetato-O)tetrahydroxytri-
U147	2,5-Furandione
U147	Maleic anhydride
U148	3,6-Pyridazinedione, 1,2-dihydro-
U148	Maleic hydrazide
U149	Malononitrile
U149	Propanedinitrile
U150	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U150	Melaphalan
U151	Mercury
U152	2-Propenenitrile, 2-methyl- (I,T)
U152	Methacrylonitrile, (I,T)
U153	Methanethiol (I,T)
U153	Thiomethanol (I,T)
U154	Methanol (I)
U154	Methyl alcohol (I)
U155	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U155	Methapyrilene
U156	Carbonochloridic acid, methyl ester (I,T)
U156	Methyl chlorocarbonate (I,T)
U157	3-Methylchloanthrene
U157	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-

U158	4,4'-Methylenebis(2-chloroaniline)
U158	Benzeneamine, 4,4'-methylenebis[2-chloro-
U159	2-Butanone (I,T)
U159	Methyl ethyl ketone (MEK) (I,T)
U160	2-Butanone, peroxide (R,T)
U160	Methyl ethyl ketone peroxide (R,T)
U161	4-Methyl-2-pentanone (I)
U161	Methyl isobutyl ketone (I)
U161	Pentanol, 4-methyl-
U162	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U162	Methyl methacrylate (I,T)
U163	Guanidine, N-methyl-N'-nitro-N-nitroso
U163	MNNG
U164	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U164	Methylthiouracil
U165	Naphthalene
U166	1,4-Naphthalenedione
U166	1,4-Naphthoquinone
U167	1-Naphthalenamine
U167	alpha-Naphthylamine
U168	2-Naphthalenamine
U168	beta-Naphthylamine
U169	Benzene, nitro-
U169	Nitrobenzene (I,T)
U170	p-Nitrophenol
U170	Phenol, 4-nitro-
U171	2-Nitropropane (I,T)
U171	Propane, 2-nitro- (I,T)
U172	1-Butanamine, N-butyl-N-nitroso-
U172	N-Nitrosodi-n-butylamine
U173	Ethanol, 2,2'-(nitrosoimino)bis-
U173	N-Nitrosodiethanolamine
U174	Ethanamine, N-ethyl-N-nitroso-
U174	N-Nitrosodiethylamine



U176	N-Nitroso-N-ethylurea
U176	Urea, N-ethyl-N-nitroso-
U177	N-Nitroso-N-methylurea
U177	Urea, N-methyl-N-nitroso-
U178	Carbamic acid, methylnitroso-, ethyl ester
U178	N-Nitroso-N-methylurethane
U179	N-Nitropiperidine
U179	Piperidine, 1-nitroso-
U180	N-Nitrosopyrrolidine
U180	Pyrrolidine, 1-nitroso-
U181	5-Nitro-o-toluidine
U181	Benzenamine, 2-methyl-5-nitro
U182	1,3,5-Trioxane, 2,4,-trimethyl-
U182	Paraldehyde
U183	Benzene, pentachloro-
U183	Pentachlorobezene
U184	Ethane, pentachloro-
U184	Pentachloroethane
U185	Benzene, pentachloronitro-
U185	Pentachloronitrobenzene (PCNB)
U186	1,3-Pentadiene (I)
U186	1-Methylbutadiene (I)
U187	Acetamide, N-(4-ethoxyphenyl)-
U187	Phenacetin
U188	Phenol
U189	Phosphorus sulfide (R)
U189	Sulfur phosphide (R)
U190	1,3-Isobenzofurandione
U190	Phthalic anhydride
U191	2-Picoline
U191	Pyridine, 2-methyl-
U192	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U192	Pronamide
U193	1,2-Oxathiolane, 2,2-dioxide

U193	1,3-Propane sultone
U194	1-Propanamine (I,T)
U194	n-Propylamine (I,T)
U196	Pyradine
U197	2,5-Cyclohexadiene-1,4-dione
U197	p-Benzoquinone
U200	Reserpine
U200	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenoyl)oxy]-,methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U201	1,3-Benzenediol
U201	Resorcinol
U202	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts
U202	Saccharin, & salts
U203	1,3-Benzodioxole, 5-(2-propenyl)-
U203	Safrole
U204	Selenious acid
U204	Selenium dioxide
U205	Selenium sulfide
U205	Selenium sulfide SeS <sub>2</sub> (R,T)
U206	D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)-carbonyl]amino]-
U206	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-,D-
U206	Streptozotocin
U207	1,2,4,5-Tetrachlorobenzene
U207	Benzene, 1,2,4,5-tetrachloro-
U208	1,1,1,2-Tetrachloroethane
U208	Ethane, 1,1,1,2-tetrachloro-
U209	1,1,2,2-Tetrachloroethane
U209	Ethane, 1,1,2,2-tetrachloro-
U210	Ethene, tetrachloro-
U210	Tetrachloroethylene
U211	Carbon tetrachloride
U211	Methane, tetrachloro-
U213	Furan, tetrahydro- (I)

U213	Tetrahydrofuran (I)
U214	Acetic acid, thallium(1+) salt
U214	Thallium(I) acetate
U215	Carbonic acid, dithallium(1+) salt
U215	Thallium(I) carbonate
U216	Thallium chloride TlCl
U216	Thallium(I) chloride
U217	Nitric acid, thallium(1+) salt
U217	Thallium(I) nitrate
U218	Ethanethioamide
U218	Thioacetamide
U219	Thiourea
U220	Benzene, methyl-
U220	Toluene
U221	Benzenediamine, ar-methyl-
U221	Toluenediamine
U222	Benzenamine, 2-methyl-, hydrochloride
U222	o-Toluidine hydrochloride
U223	Benzene, 1,3-diisocyanatomethyl- (R,T)
U223	Toluene diisocyanate (R,T)
U225	Bromoform
U225	Methane, tribromo-
U226	Ethane, 1,1,1-trichloro-
U226	Methyl chloroform
U227	1,1,2-Trichloroethane
U227	Ethane, 1,1,2-trichloro-
U228	Ethene, trichloro-
U228	Trichloroethylene
U234	1,3,5-Trinitrobenzene (R,T)
U234	Benzene, 1,3,5-trinitro
U235	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U235	Tris(2,3,-dibromopropyl) phosphate
U236	2,7-Naphthalenedisulfonic acid,3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bix(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt

U236	Trypan blue
U237	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U237	Uracil mustard
U238	Carbamic acid, ethyl ester
U238	Ethyl carbamate (urethane)
U239	Benzene, dimethyl- (I,T)
U239	Xylene (I)
U240	2,4-D, salts & esters
U240	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U243	1-Propene, 1,1,2,3,3,3-hexachloro-
U243	Hexachloropropene
U244	Thioperoxydicarbonic diamide [(H <sub>2</sub> N)C(S)] <sub>2</sub> S <sub>2</sub> , tetramethyl-
U244	Thiram
U246	Cyanogen bromide (CN)Br
U247	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U247	Methoxychlor
U248	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U249	Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , when present at concentrations of 10% or less
U328	Benzenamine, 2-methyl-
U328	o-Toluidine
U353	Benzenamine, 4-methyl-
U353	p-Toluidine
U359	Ethanol, 2-ethoxy-
U359	Ethylene glycol monoethyl ether

*Underlying Constituents*

**This lists the Universal Treatment Standard (UTS) constituents and their wastewater and nonwastewater treatment standards. Use this table to identify the underlying hazardous constituents for D001-D043 wastes.**

**A wastewater is any waste with less than 1% by weight total organic carbon (TOC) and less than 1% by weight total suspended solids (TSS). All other wastes are nonwastewater.**

Underlying Constituent	Wastewater	Nonwastewater
	(mg/l)	(mg/kg)
A2213	0.042	1.4
Acenaphthylene	0.059	3.4
Acenaphthene	0.059	3.4
Acetone	0.28	160
Acetonitrile	5.6	38
Acetophenone	0.01	9.7
2-Acetylaminofluorene	0.059	140
Acrolein	0.29	NA
Acrylamide	19	23
Acrylonitrile	0.24	84
Aldicarb sulfone	0.056	0.28
Aldrin	0.021	0.066
4-Aminobiphenyl	0.13	NA
Aniline	0.81	14
Anthracene	0.059	3.4
Aramite	0.36	NA
Barban	0.056	1.4
Bendiocarb	0.056	1.4
Bendiocarb phenol	0.056	1.4
Benomyl	0.056	1.4
alpha-BHC	0.00014	0.066
beta-BHC	0.00014	0.066

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delta-BHC	0.023	0.066
gamma-BHC	0.0017	0.066
Benzene	0.14	10
Benz(a)anthracene	0.059	3.4
Benzal chloride	0.055	6
Benzo(b)fluoranthene	0.11	6.8
Benzo(k)fluoranthene	0.11	6.8
Benzo(g,h,i)perylene	0.0055	1.8
Benzo(a)pyrene	0.061	3.4
Bromodichloromethane	0.35	15
Methyl bromide (Bromomethane)	0.11	15
4-Bromophenyl phenyl ether	0.055	15
n-Butyl alcohol	5.6	2.6
Butylate	0.042	1.4
Butyl benzyl phthalate	0.017	28
2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	0.066	2.5
Carbaryl	0.006	0.14
Carbenzadim	0.056	1.4
Carbofuran	0.006	0.14
Carbofuran phenol	0.056	1.4
Carbon disulfide	3.8	4.8 mg/l TCLP
Carbon tetrachloride	0.057	6
Carbosulfan	0.028	1.4
Chlordane (alpha and gamma isomers)	0.0033	0.26
p-Chloroaniline	0.46	16
Chlorobenzene	0.057	6
Chlorobenzilate	0.1	NA
2-Chloro-1,3-butadiene	0.057	0.28
Chlorodibromomethane	0.057	15
Chloroethane	0.27	6
bis(2-Chloroethoxy)methane	0.036	7.2
bis(2-Chloroethyl)ether	0.033	6
Chloroform	0.046	6
bis(2-Chloroisopropyl)ether	0.055	7.2

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p-Chloro-m-cresol	0.018	14
2-Chloroethyl vinyl ether	0.062	NA
Chloromethane (Methyl chloride)	0.19	30
2-Chloronaphthalene	0.055	5.6
2-Chlorophenol	0.044	5.7
3-Chloropropylene	0.036	30
Chrysene	0.059	3.4
o-Cresol	0.11	5.6
m-Cresol	0.77	5.6
p-Cresol	0.77	5.6
m-Cumenyl methlycarbamate	0.056	1.4
Cyclohexanone	0.36	0.75 mg/l TCLP
1,2-Dibromo-3-chloropropane	0.11	15
Ethylene dibromide (1,2-Dibromoethane)	0.028	15
Dibromomethane	0.11	15
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.72	10
o,p'-DDD	0.023	0.087
p,p'-DDD	0.023	0.087
o,p'-DDE	0.031	0.087
p,p'-DDE	0.031	0.087
o,p'-DDT	0.0039	0.087
p,p'-DDT	0.0039	0.087
Dibenz(a,h)anthracene	0.055	8.2
Dibenz(a,e,)pyrene	0.061	NA
m-Dichlorobenzene	0.036	6
o-Dichlorobenzene	0.088	6
p-Dichlorobenzene	0.09	6
Dichlorodifluoromethane	0.23	7.2
1,1-Dichloroethane	0.059	6
1,2-Dichloroethane	0.21	6
1,1-Dichloroethylene	0.025	6
trans-1,2-Dichloroethylene	0.054	30
2,4-Dichlorophenol	0.044	14

2,6-Dichlorophenol	0.044	14
1,2-Dichloropropane	0.85	18
cis-1,3-Dichloropropylene	0.036	18
trans-1,3-Dichloropropylene	0.036	18
Dieldrin	0.017	0.13
Diethylene glycol, dicarbamate	0.056	1.4
Diethyl phthalate	0.2	28
2,4-Dimethyl phenol	0.036	14
Dimethyl phthalate	0.047	28
Dimetilan	0.056	1.4
Di-n-butyl phthalate	0.057	28
1,4-Dinitrobenzene	0.32	2.3
4,6-Dinitro-o-cresol	0.28	160
2,4-Dinitrophenol	0.12	160
2,4-Dinitrotoluene	0.32	140
2,6-Dinitrotoluene	0.55	28
Di-n-octyl phthalate	0.017	28
p-Dimethylaminoazobenzene	0.13	NA
Di-n-propylnitrosamine	0.4	14
1,4-Dioxane	12	170
Diphenylamine	0.92	13
Diphenylnitrosamine	0.92	13
1,2-Diphenylhydrazine	0.087	NA
Disulfoton	0.017	6.2
Dithiocarbamates (total)	0.028	28
Endosulfan I	0.023	0.066
Endosulfan II	0.029	0.13
Endosulfan sulfate	0.029	0.13
Endrin	0.0028	0.13
Endrin aldehyde	0.025	0.13
EPTC	0.042	1.4
Ethyl acetate	0.34	33
Ethyl benzene	0.057	10
Ethyl cyanide (Propanenitrile)	0.24	360
Ethyl ether	0.12	160



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bis(2-Ethylhexyl)phthalate	0.28	28
Ethyl methacrylate	0.14	160
Ethylene oxide	0.12	NA
Famphur	0.017	15
Fluoroanthene	0.068	3.4
Fluorene	0.059	3.4
Formetanate hydrochloride	0.056	1.4
Formparanate	0.056	1.4
Heptachlor	0.0012	0.066
Heptachlor epoxide	0.016	0.066
Hexachlorobenzene	0.055	10
Hexachlorobutadiene	0.055	5.6
Hexachlorocyclopentadiene	0.057	2.4
HxCDDs (All Hexachlorodibenzo-p-dioxins)	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	0.000063	0.001
Hexachloroethane	0.055	30
Hexachloropropylene	0.035	30
Indeno (1,2,3,-c,d) pyrene	0.0055	3.4
Iodomethane	0.19	65
Isobutyl alcohol	5.6	170
Isodrin	0.021	0.066
Isolan	0.056	1.4
Isosafrole	0.081	2.6
Kepone	0.0011	0.13
Methacrylonitrile	0.24	84
Methanol	5.6	0.75 mg/l TCLP
Methapyrilene	0.081	1.5
Methiocarb	0.056	1.4
Methomyl	0.028	0.14
Methoxychlor	0.25	0.18
3-Methylcholanthrene	0.0055	15
4,4-Methylene bis(2-chloroaniline)	0.5	30
Methylene chloride	0.089	30

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Methyl ethyl ketone	0.28	36
Methyl isobutyl ketone	0.14	33
Methyl methacrylate	0.14	160
Methyl methansulfonate	0.018	NA
Methyl parathion	0.014	4.6
Metolcarb	0.056	1.4
Mexacarbate	0.056	1.4
Molinate	0.042	1.4
Naphthalene	0.059	5.6
2-Naphthylamine	0.52	NA
o-Nitroaniline	0.27	14
p-Nitroaniline	0.028	28
Nitrobenzene	0.068	14
5-Nitro-o-toluidine	0.32	28
o-Nitrophenol	0.028	13
p-Nitrophenol	0.12	29
N-Nitrosodiethylamine	0.4	28
N-Nitrosodimethylamine	0.4	2.3
N-Nitroso-di-n-butylamine	0.4	17
N-Nitrosomethylethylamine	0.4	2.3
N-Nitrosomorpholine	0.4	2.3
N-Nitrosopiperidine	0.013	35
N-Nitrosopyrrolidine	0.013	35
Oxamyl	0.056	0.28
Parathion	0.014	4.6
Total PCBs (sum of all PCB isomers, or all Aroclors)	0.1	10
Pebulate	0.042	1.4
Pentachlorobenzene	0.055	10
PeCDDs (All Pentachlorodibenzo-p- dioxins)	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	0.000035	0.001
Pentachloroethane	0.055	6
Pentachloronitrobenzene	0.055	4.8
Pentachlorophenol	0.089	7.4

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Phenacetin	0.081	16
Phenanthrene	0.059	5.6
Phenol	0.039	6.2
o-Phenylenediamine	0.056	5.6
Phorate	0.021	4.6
Phthalic acid	0.055	28
Phthalic anhydride	0.055	28
Physostigmine	0.056	1.4
Physostigmine salicylate	0.056	1.4
Promecarb	0.056	1.4
Pronamide	0.093	1.5
Propham	0.056	1.4
Propoxur	0.056	1.4
Prosulfocarb	0.042	1.4
Pyrene	0.067	8.2
Pyridine	0.014	16
Safrole	0.081	22
Silvex (2,4,5-TP)	0.72	7.9
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.72	7.9
1,2,4,5-Tetrachlorobenzene	0.055	14
TCDDs (All Tetrachlorodibenzo-p-dioxins)	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	0.000063	0.001
1,1,1,2-Tetrachloroethane	0.057	6
1,1,2,2-Tetrachloroethane	0.057	6
Tetrachloroethylene	0.056	6
2,3,4,6-Tetrachlorophenol	0.03	7.4
Thiodicarb	0.019	1.4
Thiophanate-methyl	0.056	1.4
Tirpate	0.056	0.28
Toluene	0.08	10
Toxaphene	0.0095	2.6
Triallate	0.042	1.4
Tribromomethane (Bromoform )	0.63	15

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2, 4, 6-Tribromophenol	0.035	7.4
1,2,4-Trichlorobenzene	0.055	19
1,1,1-Trichloroethane	0.054	6
1,1,2-Trichloroethane	0.054	6
Trichloroethylene	0.054	6
Trichloromonofluoromethane	0.02	30
2,4,5-Trichlorophenol	0.18	7.4
2,4,6-Trichlorophenol	0.035	7.4
1,2,3-Trichloropropane	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.057	30
Triethylamine	0.081	1.5
tris-(2,3-Dibromopropyl) phosphate	0.11	0.1
Vernolate	0.042	1.4
Vinyl chloride	0.27	6
Xylenes-mixed isomers	0.32	30
Antimony	1.9	1.15 mg/l TCLP
Arsenic	1.4	5.0 mg/l TCLP
Barium	1.2	21 mg/l TCLP
Beryllium	0.82	1.22 mg/l TCLP
Cadmium	0.69	0.11 mg/l TCLP
Chromium (Total)	2.77	0.60 mg/l TCLP
Cyanides (Total)	1.2	590
Cyanides (Amenable)	0.86	30
Lead	0.69	0.75 mg/l TCLP
Mercury - Nonwastewater from Retort	NA	0.20 mg/l TCLP
Mercury - All Others	0.15	0.025 mg/l TCLP
Nickel	3.98	11 mg/l TCLP
Silver	0.43	0.14 mg/l TCLP
Thallium	1.4	0.20 mg/l TCLP