

**DEPARTMENT OF TRANSPORTATION  
Research and Special Programs  
Administration**

**49 CFR Part 172**

[Docket No. HM-145C Amdt. No. 172-66]

**Listing of Hazardous Materials**

March 10, 1981

**AGENCY:** Materials Transportation Bureau (MTB), Research and Special Programs Administration, Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** This rule amends the Hazardous Materials Regulations to include materials that have been determined by EPA to be "hazardous substances," as that term is defined in the comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), also known as the "Superfund" Act. Section 306(a) of that Act requires that each hazardous substance which is listed or designated as such shall, within 90 days after the date of enactment of the Act, be listed as a hazardous material under the Hazardous Materials Transportation Act. The effect of this rule is to initiate coordination of the MTB hazardous materials program with the implementation of CERCLA.

**EFFECTIVE DATE:** July 1, 1981.

**FOR FURTHER INFORMATION CONTACT:** Thomas Charlton (202-426-2075), Standards Division, Office of Hazardous Materials Regulation, Materials Transportation Bureau, Washington, D.C. 20590.

**SUPPLEMENTARY INFORMATION:**

**Background**

Section 306(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requires that, within 90 days after the date of enactment of the Act, each substance that is listed or designated as a hazardous substance under the Act shall be listed as a hazardous material under the Hazardous Materials Transportation Act (HMTA). Section 306(b) provides that common and contract carriers shall not be liable under CERCLA for releases of hazardous substances prior to the effective date of the listing of that substance as a hazardous material unless it is demonstrated that the carrier has actual knowledge of the identity or nature of the substance.

The purpose of these provisions is twofold: First, to assure coordination of the implementation of CERCLA (as it relates to transportation) with the administration of the HMTA so as to

avoid regulatory inconsistencies and overlaps; and, second, to provide reasonable notice, through the HMTA regulatory system, to transporters of hazardous substances that they are subject to the liability and other provisions of CERCLA.

**Listings**

The purpose of this final rule is to fulfill the requirements of Section 306(a) of CERCLA by listing as hazardous materials those substances that EPA has determined to be "hazardous substances," as defined in Section 101(14). That definition incorporates six lists of substances, five of which have been developed under other statutory authorities:

1. Section 311(b)(2)(A) of the Federal Water Pollution Control Act (FWPCA);
2. Section 3001 of the Solid Waste Disposal Act;
3. Section 307(a) of the FWPCA;
4. Section 112 of the Clean Air Act; and
5. Section 7 of the Toxic Substances Control Act (TSCA).

The sixth list is comprised of substances for which authority to designate is granted to EPA in Section 102 of CERCLA.

The listing in this rule does not include:

1. Substances listed under Section 311(b)(2)(A) of the FWPCA. These substances were incorporated into the Hazardous Materials Table on May 22, 1980, (45 FR 34560) and are currently covered by the Hazardous Materials Regulations. It is therefore unnecessary to repeat them in this listing.
2. Substances under Section 7 of the TSCA. No substances have yet been designated under this authority.
3. Substances designated under Section 102 of CERCLA. No substances have yet been designated under this authority.

The listing in this rule includes substances designated under Section 307(a) of the FWPCA, Section 3001 of the Solid Waste Disposal Act, and Section 112 of the Clean Air Act. It should be noted that many of these substances either are already listed in the Hazardous Materials Table or meet an existing hazard class definition and are currently subject to the Hazardous Materials Regulations. Today's listing indicates by asterisk (\*) those materials that were listed as hazardous substances in the Department's May 22, 1980, final rule. With respect to the other substances listed, reference should be made to the existing regulations to determine their applicability to those substances.

**Effect of Listings**

This rule meets the requirement of Section 306(a) of CERCLA since hazardous substances, as defined in Section 101(14) of CERCLA, are listed as hazardous materials under the Hazardous Materials Transportation Act. It does not, however, extend the applicability of the Department's Hazardous Materials Regulations to any materials that are not already covered by those regulations. For example, if in the past shipping papers were not required by 49 CFR 172.200 for a material included in this new listing, they will not now be required as a result of the listing. Specifically, the Department is not at this time incorporating these materials into the list of "hazardous substances," as defined in the Hazardous Materials Regulations (49 CFR 171.8), nor is the Department assigning reportable quantities (RQs) for purposes of the Hazardous Materials Regulations.

Section 102 of CERCLA provides that, pending establishment by EPA of a different quantity, the RQ for all hazardous substances shall be one pound. The Hazardous Materials Regulations provide that shipping papers must be issued for all shipments of hazardous substances (as defined in § 171.8) that equal or exceed their reportable quantity. Therefore, the effect of listing the materials covered by this action as "hazardous substances," as defined by the Department, and assigning an RQ of one pound would be to vastly increase the number of shipments requiring shipping papers under the Hazardous Materials Regulations. For example, every shipment of galvanized steel containing more than one pound of zinc would require a hazardous materials shipping paper. This result would not promote the purposes of CERCLA, and it would be contrary to the Department's goal of minimizing paperwork requirements.

At such time as EPA exercises its authority under Section 102 to establish RQs for particular substances, the Department will determine the appropriateness of listing those substances as "hazardous substances" and assigning those RQs to them.

It should be noted that, as discussed above, some of the materials listed in this rule are already designated as hazardous substances in the Hazardous Materials Table, and RQs for these materials have already been assigned.

Section 102 of CERCLA provides that all materials in today's listing that have not been assigned an RQ shall have an RQ of one pound pending establishment

of a different quantity by EPA. Section 103 (a) and (b) of CERCLA requires that all releases of an RQ of a hazardous substance into the environment be reported to the National Response Center. While the Department does not currently contemplate changing its general incident reporting requirements (49 CFR 171.15 and 171.16), EPA is currently developing a notice explaining how it will implement the requirements of Section 103 (a) and (b) of CERCLA. Shippers and transporters of materials listed in this rule should contact EPA (Mr. H. D. Van Cleave, Acting Director, Emergency Response Division (WH-548), Office of Hazardous Emergency Response, U.S. EPA, 401 M Street, SW., Washington, D.C. 20460, (202) 245-3045) for additional information regarding these reporting requirements.

With respect to those materials listed in this rule that are not already covered by the Hazardous Materials Regulations, the Department is aware that, since shipping papers are not required for these materials, carriers will not always be aware that CERCLA's release notification requirements apply to them. While this uncertainty is unfortunate, it is far preferable to the imposition of extensive new shipping paper and other regulatory requirements that would be necessary to provide carriers with certainty. Furthermore, this uncertainty is an interim consequence of the enactment of CERCLA; as EPA establishes RQs for these materials, the Department will begin to incorporate them into the Hazardous Materials Table as "hazardous substances" and assign RQs to them, at which point the Department's requirements of the Hazardous Materials Regulations will apply.

With respect to the release notification requirements for hazardous substances, (as defined in 49 CFR 171.8), it should be noted that, in addition to the requirements of 49 CFR 171.17 for releases "into or upon the navigable waters or adjoining shorelines," Section 103 (a) and (b) of CERCLA requires the reporting of such releases into the "environment," which is defined broadly to include surface water, ground water, land surface, and ambient air.

**Regulatory Impact**

The listing contained in this rulemaking, which is required by Section 306(a) of CERCLA to be promulgated within 90 days after the date of enactment of that Act, is essentially informational in nature since no new regulatory requirements are imposed as a result of the listing. Therefore, this rule does not constitute a "major rule" as defined in Executive Order 12291 and

DOT implementing procedures (44 FR 11034).

With regard to the requirements of the Administrative Procedure Act (5 U.S.C. 553), the Department finds that notice and public procedure thereon are impracticable and unnecessary because this rule is required to be promulgated within 90 days after the enactment of CERCLA.

In consideration of the foregoing, Part 172 of Title 49 Code of Federal Regulations is amended as follows:

**PART 172—HAZARDOUS MATERIALS TABLES AND HAZARDOUS MATERIALS COMMUNICATIONS REGULATIONS**

1. Section 172.101 is amended by adding the following after the Hazardous Materials Table:

**§ 172.101 Hazardous Materials Table.**

\* \* \* \* \*

**CERCLA List**

Note.—The following listing fulfills the requirement of Section 306(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), that all "hazardous substances," as defined in that Act, shall be listed as hazardous materials under the Hazardous Materials Transportation Act. That definition includes substances listed under Section 311(b)(2)(A) of the Federal Water Pollution Control Act (FWPCA). Those materials have already been listed as hazardous substances in the Hazardous Materials Table of this section, and that listing is not repeated here. The definition of "hazardous substance" in CERCLA also includes substances designated under Section 307(a) of the FWPCA, Section 3001 of the Solid Waste Disposal Act, and Section 112 of the Clean Air Act. The following listing consists of materials designated under those authorities. Materials indicated in the listing by an asterisk (\*) are also listed in the Hazardous Materials Table as hazardous substances. With respect to other materials in the following listing, those that are not forbidden materials or fall within a hazard class are not subject to the requirements of this Subchapter.

It should be noted that Section 306(b) of CERCLA provides that common and contract carriers may be held liable under that Act for the release of a "hazardous substance" as defined in that Act, after the effective date of the listing of that substance as a hazardous material under the Hazardous Materials Transportation Act.

**Specific Chemical Wastes**

EPA hazardous waste No.	Substance
U001	*Acetaldehyde (I)
U034	Acetaldehyde, trichloro-
U187	Acetamide, N-(4-ethoxyphenyl)-
U005	Acetamide, N-9H-fluoren-2-yl-
U112	Acetic acid, ethyl ester (I)
U144	*Acetic acid, lead salt

**Specific Chemical Wastes—Continued**

EPA hazardous waste No.	Substance
U214	Acetic acid, thallium (I) salt
U002	Acetone (I)
U003	Acetonitrile (I,7)
U004	Acetophenone
U005	2-Acetylaminofluorene
U006	*Acetyl Chloride (C,R,T)
U007	Acrylamide
U008	Acrylic acid (I)
U009	*Acrylonitrile
U150	Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-, L-
U011	Amitrole
U012	*Aniline (I,T)
U014	Auramine
U015	Azaserine
U010	Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-[[[aminocarbonyloxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-me-
U157	Benz[1]aceanthrylene, 1,2-dihydro-3-methyl-
U016	Benz[1]acridine
U016	3,4-Benzacridine
U017	Benzalchloride
U018	Benz[a]anthracene
U018	1,2-Benzanthracene
U094	1,2-Benzanthracene, 7,12-dimethyl-
U012	*Benzenamine: (I,T)
U014	Benzenamine, 4,4-carbonimidoylbis(N,N-di-methyl-
U049	Benzenamine, 4-chloro-2-methyl-
U093	Benzenamine, N,N-dimethyl-4-phenylazo-
U158	Benzenamine, 4,4'-methylenebis(2-chloro-
U222	Benzenamine, 2-methyl-, hydrochloride
U181	Benzenamine, 2-methyl-5-nitro-
U019	*Benzene (I,T)
U038	Benzeneacetic acid, 4-chloro-alpha-(4-chloro-phenyl)-alpha-hydroxy-, ethyl ester
U030	Benzene, 1-bromo-4-phenoxy-
U037	*Benzene, chloro-
U190	1,2-Benzenedicarboxylic acid anhydride
U028	1,2-Benzenedicarboxylic acid, [bis(2-ethyl-hexyl)] ester
U069	*1,2-Benzenedicarboxylic acid, dibutyl ester
U088	1,2-Benzenedicarboxylic acid, diethyl ester
U102	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	1,2-Benzenedicarboxylic acid, di-n-octyl ester
U070	*Benzene, 1,2-dichloro-
U071	*Benzene, 1,3-dichloro-
U072	*Benzene, 1,4-dichloro-
U017	Benzene, (dichloromethyl)-
U223	Benzene, 1,3-bisocyanatomethyl-(R,T)
U239	*Benzene, dimethyl-(I,T)
U201	*1,3-Benzenediol
U127	Benzene, hexachloro-
U056	*Benzene, hexahydro-(I)
U188	*Benzene, hydroxy-
U220	*Benzene, methyl-
U105	*Benzene, 1-methyl-2,4-dinitro-
U106	*Benzene, 1-methyl-2,6-dinitro-
U203	Benzene, 1,2-methylenedioxy-4-allyl-
U141	Benzene, 1,2-methylenedioxy-4-propenyl-
U090	Benzene, 1,2-methylenedioxy-4-propenyl-
U055	Benzene, (1-methylethyl)-(I)
U169	*Benzene, nitro-(I,T)
U183	Benzene, penachloro-
U185	Benzene, penachloro-nitro-
U020	Benzenesulfonic acid chloride (C,R)
U020	Benzenesulfonyl chloride (C,R)
U207	Benzene, 1,2,4,5-Tetrachloro-
U023	Benzene, (trichloromethyl)-(C,R,T)
U234	Benzene, 1,3,5-trinitro-(R,T)
U021	Benzidine
U202	1,2-Benzisothiazolin-3-one, 1,1-dioxide
U120	Benzo[1,1-k]fluorene
U022	Benzo[a]pyrene
U022	3,4-Benzopyrene
U197	p-Benzoquinone
U023	Benzotrifluoride (C,R,T)
U050	1,2-Benzophenanthrene
U085	2,2'-Bioxirane (I,T)
U021	(1,1'-Biphenyl)-4,4'-diamine
U073	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-
U091	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-
U095	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-
U024	Bis(2-chloroethoxy) methane
U027	Bis(2-chloroisopropyl) ether
U244	Bis(dimethylthiocarbonyl) disulfide
U028	Bis(2-ethylthyl) phthalate
U246	Bromine cyanide
U225	Bromoform

## Specific Chemical Wastes—Continued

## Specific Chemical Wastes—Continued

## Specific Chemical Wastes—Continued

EPA hazardous waste No.	Substance
U030.....	4-Bromophenyl phenyl ether
U128.....	1,3-Butadiene, 1,1,2,3,4,4,-hexachloro-
U172.....	1-Butanamine, N-butyl-N-nitroso-
U035.....	Butanoic acid, 4-[Bis(2-chloroethyl) amino] benzene-
U031.....	1-Butanol (I)
U159.....	2-Butanone (I,T)
U160.....	2-Butanone peroxide (R,T)
U053.....	*2-Butenal
U074.....	2-Butene, 1,4,-dichloro-(I,T)
U031.....	n-Butyl alcohol (I)
U136.....	Cacodylic acid
U032.....	*Calcium chromate
U238.....	Carbamic acid, ethyl ester
U178.....	Carbamic acid, methylnitroso-, ethyl ester
U176.....	Carbamide, N-ethyl-N-nitroso-
U177.....	Carbamide, N-methyl-N-nitroso-
U219.....	Carbamide, thio-
U097.....	Carbamoyl chloride, dimethyl-
U215.....	Carbonic acid, dithallium(I) salt
U156.....	Carbonochloridic acid, methyl ester (I,T)
U033.....	Carbon oxyfluoride (R,T)
U211.....	*Carbon tetrachloride
U033.....	Carbonyl fluoride (R,T)
U034.....	Chloral
U035.....	Chlorambucil
U036.....	*Chlordane, technical
U026.....	Chloromaphazine
U037.....	*Chlorobenzene
U245.....	1-(p-Chlorobenzoyl)-5-methoxy-2-methylindole-3-acetic acid
U039.....	4-Chloro-m-cresol
U041.....	1-Chloro-2,3-epoxypropane
U042.....	2-Chloroethyl vinyl ether
U044.....	*Chloroform
U046.....	Chloromethyl methyl ether
U047.....	beta-Chloronaphthalene
U048.....	o-Chlorophenol
U049.....	4-Chloro-o-toluidine, hydrochloride
U032.....	*Chromic acid, calcium salt
U050.....	Chrysene
U051.....	Cresosote
U052.....	*Cresols
U052.....	Cresylic acid
U053.....	*Crotonaldehyde
U055.....	Cumene (I)
U246.....	Cyanogen bromide
U197.....	1,4-Cyclohexadienedione
U056.....	*Cyclohexane (I)
U057.....	Cyclohexanone (I)
U130.....	*1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058.....	Cyclophosphamide
U240.....	*2,4-D, salts and esters
U059.....	Daunomycin
U060.....	*DDD
U061.....	*DDT
U142.....	*Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta [c,d]-pentalen-2-one
U062.....	Diallate
U133.....	Diamine (R,T)
U221.....	Diaminotoluene
U063.....	Dibenz [a,h] anthracene
U063.....	1,2,5,6-Dibenzanthracene
U064.....	1,2,7,8-Dibenzopyrene
U064.....	Dibenz [a,i] pyrene
U068.....	1,2-Dibromo-3-chloropropane
U069.....	*Dibutyl phthalate
U062.....	S-(2,3-Dichloroalkyl) diisopropylthiocarbamate
U070.....	*o-Dichlorobenzene
U071.....	*m-Dichlorobenzene
U072.....	*p-Dichlorobenzene
U073.....	3,3'-Dichlorobenzidine
U074.....	1,4-Dichloro-2-butene (I,T)
U075.....	Dichlorodifluoromethane
U192.....	3,5-Dichloro-N-(1,1-dimethyl-2-propynyl) benzamide
U060.....	*Dichloro diphenyl dichloroethane
U061.....	*Dichloro diphenyl trichloroethane
U078.....	*1,1-Dichloroethylene
U079.....	1,2-Dichloroethylene
U025.....	Dichloroethyl ether
U081.....	2,4-Dichlorophenol
U082.....	2,6-Dichlorophenol
U240.....	*2,4-Dichlorophenoxyacetic acid, salts and esters
U083.....	*1,2-Dichloropropane
U084.....	*1,3-Dichloropropane
U085.....	1,2,3,4-Diepoxybutane (I,T)
U108.....	1,4-Diethylene dioxide
U086.....	N,N-Diethylhydrazine

EPA hazardous waste No.	Substance
U087.....	O-O-Diethyl-S-methyl-dithiophosphate
U088.....	Diethyl phthalate
U089.....	Diethylstilbestrol
U148.....	1,2-Dihydro-3,6-pyridazinedione
U090.....	Dihydrosofrole
U091.....	3,3'-Dimethoxybenzidine
U092.....	*Dimethylamine (I)
U093.....	Dimethylaminoazobenzene
U094.....	7,12-Dimethylbenz[a] anthracene
U095.....	3,3'-Dimethylbenzidine
U096.....	alpha, alpha-Dimethylbenzylhydroperoxide (R)
U097.....	Dimethylcarbamoyl chloride
U098.....	1,1-Dimethylhydrazine
U099.....	1,2-Dimethylhydrazine
U101.....	*2,4-Dimethylphenol
U102.....	Dimethyl phthalate
U103.....	Dimethyl sulfate
U105.....	*2,4-Dinitrotoluene
U106.....	*2,6-Dinitrotoluene
U107.....	Di-n-octyl phthalate
U108.....	1,4-Dioxane
U109.....	1,2-Diphenylhydrazine
U110.....	Dipropylamine (I)
U111.....	Di-n-propylnitrosamine
U001.....	*Ethanal (I)
U174.....	Ethanamine, N-ethyl-N-nitroso-
U067.....	*Ethane, 1,2-dibromo-
U076.....	Ethane, 1,1-dichloro-
U077.....	*Ethane, 1,2-dichloro-
U114.....	1,2-Ethanedithiocarbamodithioic acid
U131.....	Ethane, 1,1,1,2,2,2-hexachloro-
U024.....	Ethane, 1,1'-[methylenebis(oxy)]bis [2-chloro-
U003.....	*Ethanenitrile (I,T)
U117.....	Ethane, 1,1'-oxybis-(I)
U025.....	Ethane, 1,1'-oxybis [2-chloro-
U184.....	Ethane, pentachloro-
U208.....	Ethane, 1,1,1,2-tetrachloro-
U209.....	Ethane, 1,1,2,2-tetrachloro-
U218.....	Ethanethioamide
U227.....	Ethane, 1,1,2-trichloro-
U043.....	Ethene, chloro-
U042.....	Ethene, 2-chloroethoxy-
U078.....	*Ethene, 1,1-dichloro-
U079.....	Ethene, trans-1,2-dichloro-
U210.....	Ethene, 1,1,2,2-tetrachloro-
U173.....	Ethanol, 2,2'-(nitrosoimino)bis-
U004.....	Ethanone, 1-phenyl-
U006.....	*Ethanoyl chloride (C,R,T)
U112.....	Ethyl acetate (I)
U113.....	Ethyl acrylate (I)
U238.....	Ethyl carbamate (urethan)
U038.....	Ethyl 4,4'-dichlorobenzilate
U114.....	Ethylenebis(dithiocarbamic acid)
U067.....	*Ethylene dibromide
U077.....	*Ethylene dichloride
U115.....	Ethylene oxide (I,T)
U116.....	Ethylene thiourea
U117.....	Ethyl ether (I)
U076.....	Ethylidene dichloride
U118.....	Ethyl methacrylate
U119.....	Ethyl methanesulfonate
U139.....	Ferric dextran
U120.....	Fluoranthene
U122.....	*Formaldehyde
U123.....	*Formic acid (C,T)
U124.....	Furan (I)
U125.....	*2-Furancarboxaldehyde (I)
U147.....	*2,5-furandione
U213.....	Furan, tetrahydro- (I)
U125.....	*Furfural (I)
U124.....	Furfuran (I)
U206.....	D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitroso-ureido)-
U126.....	Glycidylaldehyde
U163.....	Guanidine, N-nitroso-N-methyl-N'-nitro-
U127.....	Hexachlorobenzene
U128.....	Hexachlorobutadiene
U129.....	*Hexachlorocyclohexane (gamma isomer)
U130.....	*Hexachlorocyclopentadiene
U131.....	Hexachloroethane
U132.....	Hexachlorophene
U243.....	Hexachloropropene
U133.....	Hydrazine (R,T)
U086.....	Hydrazine, 1,2-diethyl-
U098.....	Hydrazine, 1,1-dimethyl-
U099.....	Hydrazine, 1,2-dimethyl-
U109.....	Hydrazine, 1,2-diphenyl-
U134.....	*Hydrofluoric acid (C,T)
U134.....	*Hydrogen fluoride (C,T)

EPA hazardous waste No.	Substance
U135.....	Hydrogen sulfide
U096.....	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U136.....	Hydroxydimethylarsine oxide
U116.....	2-Imidazolidinethione
U137.....	Indeno [1,2,3-cd] pyrene
U245.....	Indomethacin
U139.....	Iron dextran
U140.....	Isobutyl alcohol (I,T)
U141.....	Isosafrole
U142.....	*Kepon
U143.....	Lasiocarpine
U144.....	*Lead acetate
U145.....	Lead phosphate
U146.....	Lead subacetate
U129.....	*Lindane
U147.....	*Maleic anhydride
U148.....	Maleic hydrazide
U149.....	Malonitrile
U150.....	Malphalan
U151.....	Mercury
U152.....	Methacrylonitrile (I,T)
U092.....	*Methanamine, N-methyl-(I)
U029.....	Methane, bromo-
U045.....	Methane, chloro-(I,T)
U046.....	Methane, chloromethoxy-
U068.....	Methane, dibromo-
U080.....	Methane, dichloro-
U075.....	Methane, dichlorodifluoro-
U138.....	Methane, iodo-
U119.....	Methanesulfonic acid, ethyl ester
U211.....	*Methane, tetrachloro-
U153.....	Methanethiol (I,T)
U225.....	Methane, tribromo-
U044.....	*Methane, trichloro-
U121.....	Methane, trichlorofluoro-
U123.....	*Methanoic acid (C,T)
U036.....	*4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3a,4-, 7,7a-tetrahydro-
U154.....	Methanol (I)
U155.....	Methapyrene
U154.....	Methyl alcohol (I)
U029.....	Methyl bromide
U186.....	1-Methylbutadiene (I)
U045.....	Methyl chloride (I,T)
U156.....	Methyl chlorocarbonate (I,T)
U226.....	Methyl chloroform
U157.....	3-Methylcholanthrene
U158.....	4,4'-Methylenebis(2-chloroaniline)
U132.....	2,2'-Methylenebis(3,4,6-trichlorophenol)
U068.....	Methylene bromide
U080.....	Methylene chloride
U122.....	*Methylene oxide
U159.....	Methyl ethyl ketone (I,T)
U160.....	Methyl ethyl ketone peroxide (R,T)
U138.....	Methyl iodide
U161.....	Methyl isobutyl ketone (I)
U162.....	*Methyl methacrylate (I,T)
U163.....	N-Methyl-N'-nitro-N-nitrosoguanidine
U164.....	4-Methyl-2-pentanone (I)
U164.....	Methylthiouacil
U010.....	Mitomycin C
U059.....	5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl) oxy]1-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-
U165.....	*Naphthalene
U047.....	Naphthalene, 2-chloro-
U166.....	1,4-Naphthalenedione
U236.....	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)]-bis(azo)bis(5-amino-4-hydroxy)-, tetrasodium salt
U166.....	1,4-Naphthoquinone
U167.....	1-Naphthylamine
U168.....	2-Naphthylamine
U167.....	alpha-Naphthylamine
U168.....	beta-Naphthylamine
U026.....	2-Naphthylamine, N,N'-bis(2-chloromethyl)-
U169.....	*Nitrobenzene (I,T)
U170.....	*p-Nitrophenol
U171.....	2-Nitropropane (I)
U172.....	N-Nitrosodi-n-butylamine
U173.....	N-Nitrosodiethanolamine
U174.....	N-Nitrosodiethylamine
U111.....	N-Nitrosodi-n-propylamine
U176.....	N-Nitroso-N-ethylurea
U177.....	N-Nitroso-N-methylurea
U178.....	N-Nitroso-N-methylurethane
U179.....	N-Nitrosopiperidine
U180.....	N-Nitrosopyrrolidine

Specific Chemical Wastes—Continued

EPA hazardous waste No.	Substance
U181	5-Nitro-o-toluidine
U193	1,2-Cyclohexane, 2,2-dioxide
U198	2H-1,3,2-Oxazaphosphorine, 2-[bis(2-chloroethyl) amino] tetrahydro-2-oxide
U115	Oxirane (E.T)
U041	*Oxirane, 2-(chloromethyl)-
U182	Paraldehyde
U163	Pentachlorobenzene
U184	Pentachloroethane
U185	Pentachlorotoluene
U242	*Pentachlorophenol
U186	1,3-Pentadiene (I)
U187	Phenacetin
U188	*Phenol
U018	Phenol, 2-chloro-
U039	Phenol, 4-chloro-3-methyl-
U081	Phenol, 2,4-dichloro-
U082	Phenol, 2,6-dichloro-
U101	*Phenol, 2,4-dimethyl-
U170	*Phenol, 4-nitro-
U242	*Phenol, pentachloro-
U212	Phenol, 2,3,4,6-tetrachloro-
U230	*Phenol, 2,4,5-trichloro-
U231	*Phenol, 2,4,6-trichloro-
U137	1,10-(1,2-Phenylene)pyrene
U145	Phosphoric acid, lead salt
U087	Phosphorodithioic acid, O,O-diethyl-, S-methyl ester
U189	Phosphorous sulfide (R)
U190	Phthalic anhydride
U191	2-Picoline
U192	Pronamide
U194	1-Propanamine (I,T)
U110	1-Propanamine, N-propyl-(I)
U066	Propane, 1,2-dibromo-3-chloro-
U149	Propanedinitrile
U171	Propane, 2-nitro-(I)
U027	Propane, 2,2-oxybis[2-chloro-
U193	1,3-Propane sulfone
U235	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U126	1-Propanol, 2,3-epoxy-
U140	1-Propanol, 2-methyl-(I,T)
U002	2-Propanone (I)
U007	2-Propanamide
U084	*Propene, 1,3-dichloro-
U243	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	*2-Propenenitrile
U152	2-Propenenitrile, 2-methyl-(I,T)
U008	2-Propenoic acid (I)
U113	2-Propenoic acid, ethyl ester (I)
U118	2-Propenoic acid, 2-methyl-, ethyl ester
U162	*2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U233	*Propionic acid, 2-(2,4,5-trichlorophenoxy)-
U194	n-Propylamine (I,T)
U083	*Propylene dichloride
U196	Pyridine
U155	Pyridine, 2-[(2-dimethylamino)ethyl]-2-thenylamino]-
U179	Pyridine, hexahydro-N-nitroso-
U191	Pyridine, 2-methyl-
U164	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U160	Pyrolic, tetrahydro-N-nitroso-
U200	Reserpine
U201	*Resorcinol
U202	Saccharin acid salts
U203	Safrole
U204	Selenous acid
U204	*Selenium dioxide
U205	Selenium disulfide (R,T)
U015	L-Serine, diazoacetate (ester)
U233	*Sivex
U039	4,4'-Stibenediol, alpha, alpha-diethyl-
U206	Streptozotcin
U135	Sulfur hydride
U103	Sulfuric acid, dimethyl ester
U189	Sulfur phosphide (R)
U205	Sulfur selenide (R,T)
U232	*2,4,5-T
U207	1,2,4,5-Tetrachlorobenzene
U208	1,1,1,2-Tetrachloroethane
U209	1,1,2,2-Tetrachloroethane
U210	Tetrachloroethylene
U212	2,3,4,6-Tetrachlorophenol
U213	Tetrahydrofuran (I)
U214	Thallium(I) acetate
U215	Thallium(I) carbonate
U216	Thallium(I) chloride
U217	Thallium(I) nitrate

Specific Chemical Wastes—Continued

EPA hazardous waste No.	Substance
U218	Thioacetamide
U153	Thiomethanol (I,T)
U219	Thiourea
U244	Thram
U220	Toluene
U221	Toluene diamine
U223	Toluene diisocyanate (R,T)
U222	o-Toluidine hydrochloride
U011	1H-1,2,4-Triazol-3-amine
U226	1,1,1-Trichloroethane
U227	1,1,2-Trichloroethane
U228	*Trichloroethene
U228	*Trichloroethylene
U121	Trichloromethylfluoromethane
U230	*2,4,5-Trichlorophenol
U231	*2,4,6-Trichlorophenol
U232	*2,4,5-Trichlorophenoxyacetic acid
U234	sym-Tribromobenzene (R,T)
U182	1,3,5-Trioxane, 2,4,5-trimethyl-
U235	Tris(2,3-dibromopropyl) phosphate
U236	Trypan blue
U237	Uracil, 5[bis(2-chloromethyl)amino]-
U237	Uracil mustard
U043	Vinyl chloride
U239	*Xylene (I)
U200	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxy-benzoyloxy)-, methyl ester
P012	*Arsenic(III) oxide
P011	*Arsenic pentoxide
P011	*Arsenic(V) oxide
P012	*Arsenic trioxide
P038	Arsine, diethyl-
P054	Aziridine
P013	*Barium cyanide
P024	Benzenamine, 4-chloro-
P077	Benzenamine, 4-nitro-
P028	*Benzene, (chloromethyl)-
P042	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino) ethyl]-
P014	Benzenethiol
P028	*Benzyl chloride
P015	Beryllium dust
P016	Bis(chloromethyl) ether
P017	Bromoacetone
P018	Brucine
P021	*Calcium cyanide
P123	Camphene, octachloro-
P103	Carbamimidoseleonic acid
P022	*Carbon bisulfide
P022	*Carbon disulfide
P095	*Carbonyl chloride
P033	*Chlorine cyanide
P023	Chloroacetaldehyde
P024	p-Chloroaniline
P026	1-(o-Chlorophenyl)thiourea
P027	3-Chloropropionitrile
P029	Copper cyanides
P030	Cyanides (soluble cyanide salts), not elsewhere specified
F031	Cyanogen
P033	*Cyanogen chloride
P036	Dichlorophenylarsine
P037	*Dieldrin
P038	Diethylarsine
P039	*O,O-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate
P041	Diethyl-p-nitrophenyl phosphate
P040	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	Diisopropyl fluorophosphate
P044	Dimethoate
P045	3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methyl-amino)carbonyl] oxime
P071	*O,O-Dimethyl O-p-nitrophenyl phosphorothioate
P082	Dimethylnitrosamine
P046	alpha, alpha-Dimethylphenethylamine
P047	4,6-Dinitro-o-cresol and salts
F034	4,6-Dinitro-o-cyclohexylphenol
P048	*2,4-Dinitrophenol
P020	Dinoseb
P085	Diphosphoramide, octamethyl-
P039	*Disulfoton
P049	2,4-Dithiourea
P109	Dithiopyrophosphoric acid, tetraethyl ester
P050	*Endosulfan
P088	Endothall
P051	*Endrin
P042	Ephedrine
P046	Ethanamine, 1,1-dimethyl-2-phenyl-

Specific Chemical Wastes—Continued

EPA hazardous waste No.	Substance
P084	Ethanamine, N-methyl-N-nitroso-
P101	Ethyl cyanide
P054	Ethylenimine
P097	Famphur
P056	Fluorine
P057	Fluoroacetamide
P058	Fluoroacetic acid, sodium salt
P065	Fulmic acid, mercury (II) salt (R,T)
P059	*Heptachlor
P051	*1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8a-octahydro-endo,endo-1,4,5,8-dimethanonaphthalene
P037	*1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,exo-1,4,5,8-dimethanonaphthalene
P060	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo,endo-dimethanonaphthalene
P004	*1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo,exo-dimethanonaphthalene
P060	Hexachlorohexahydro-exo,exo-dimethanonaphthalene
P062	Hexaethyl tetraphosphate
P116	Hydrazinecarbothioamide
P068	Hydrazine, methyl-
P063	*Hydrocyanic acid
P063	*Hydrogen cyanide
P096	Hydrogen phosphide
P064	Isocyanic acid, methyl ester
P007	3(2H)-Isoxazolone, 5-(aminomethyl)-
P092	Mercury (aceta-o-O)phenyl-
P065	Mercury fulminate (R,T)
P016	Methane, oxybis(chloro-
P112	Methane, tetranitro-(R)
P118	Methanethiol, tichloro-
P059	*4,7-Methano-1H-indene, 1,4,5,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P066	Methylol
P067	2-Methylaziridine
P068	Methyl hydrazine
P064	Methyl isocyanate
P069	*2-Methylacetonitrile
P071	*Methyl parath on
P072	alpha-Naphthylthiourea
P073	Nickel carbonyl
P074	Nickel cyanide
P074	Nickel(II) cyanide
P073	Nickel tetracarbonyl
P075	Nicotine and salts
P076	Nitric oxide
P077	p-Nitroaniline
P078	*Nitrogen dioxide
P076	Nitrogen(II) oxide
P078	*Nitrogen(V) oxide
P081	Nitroglycerine (R)
P082	N-Nitrosodimethylamine
P084	N-Nitrosomethylmethylamine
P050	*5-Norbornene-2,3-dimethanone, 1,4,5,6,7,7-Hexachloro cyclic sulfone
P085	Octamethylpyrophosphoramide
P087	Osmium oxide
P087	Osmium tetroxide
P088	7-Oxabicyclo[2.2.1] heptane-2,3-dicarboxylic acid
P089	*Parathion
P034	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	*Phenol, 2,4-dinitro-
P047	Phenol, 2,4-dinitro-6-methyl-
P020	Phenol, 2,4-dinitro-6-(1-methylpropyl)-
P009	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P036	Phenyl dichloroarsine
P092	Phenylmercuric acetate
P093	N-Phenylthiourea
P034	Phorate
P095	*Phosgene
P096	Phosphine
P041	Phosphoric acid, diethyl p-nitrophenyl ester
P044	Phosphorodithioic acid, O,O-dimethyl S-[2-(methyl-amino)-2-oxoethyl] ester
P043	Phosphorofluoric acid, bis[(methyl)ethyl] ester
P094	Phosphorothioic acid, O,O-diethyl S-(ethylthio)methyl ester
P089	*Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl) ester
P040	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	Phosphorothioic acid, O,O-dimethyl O-[p-(dimethyl-amino)sulfonyl]phenyl) ester
P110	*Plumbane, tetraethyl-

## Specific Chemical Wastes—Continued

EPA hazardous waste No.	Substance
P098.....	*Potassium cyanide
P099.....	Potassium silver cyanide
P070.....	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino) carbonyl] oxime
P101.....	Propanenitrile
P027.....	Propanenitrile, 3-chloro-
P069.....	*Propanenitrile, 2-hydroxy-2-methyl-
P081.....	1,2,3-Propanetriol, trinitrate (R)
P017.....	2-Propanone, 1-bromo-
P102.....	Propargyl alcohol
P003.....	*2-Propanal
P005.....	*2-Propen-1-ol
P067.....	1,2-Propylenimine
P102.....	2-Propyn-1-ol
P008.....	4-Pyridamine
P075.....	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts
P111.....	*Pyrophosphoric acid, tetraethyl ester
P103.....	Selenourea
P104.....	Silver cyanide
P105.....	Sodium azide
P106.....	*Sodium cyanide
P107.....	Strontium sulfide
P108.....	*Strychnidin-10-one, and salts
P018.....	Strychnidin-10-one, 2,3-dimethoxy-
P108.....	Strychnine and salts
P115.....	*Sulfuric acid, thallium(I) salt
P109.....	Tetraethylthiopyrophosphate
P110.....	*Tetraethyl lead
P111.....	*Tetraethylpyrophosphate
P112.....	Tetranitromethane (F)
P062.....	Tetraphosphoric acid, hexaethyl ester
P113.....	Thallic oxide
P113.....	Thallium(III) oxide
P114.....	Thallium(I) selenite
P115.....	*Thallium(I) sulfate
P045.....	Thiofanox
P049.....	Thioimidodicarbonic diamide
P014.....	Thiophenol
P116.....	Thiosemicarbazide
P026.....	Thiourea, (2-chlorophenyl)-
P072.....	Thiourea, 1-naphthalenyl-
P093.....	Thiourea, phenyl-
P123.....	*Toxaphene
P118.....	Trichloromethanethiol
P119.....	Vanadic acid, ammonium salt
P120.....	*Vanadium pentoxide
P120.....	*Vanadium(V) oxide
P001.....	Warfadin
P121.....	*Zinc cyanide
P122.....	*Zinc phosphide (R,T)
F001.....	The following spent halogenated solvents used in degreasing: tetrachlorethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; and sludges from the recovery of these solvents in degreasing operations.
F002.....	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene, and trichlorofluoromethane; and the still bottoms from the recovery of these solvents.
F003.....	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; and the still bottoms from the recovery of these solvents.
F004.....	The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; and the still bottoms from the recovery of these solvents.
F005.....	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, and pyridine; and the still bottoms from the recovery of these solvents.
F006.....	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.

## Specific Chemical Wastes—Continued

EPA hazardous waste No.	Substance
F019.....	Wastewater treatment sludges for the chemical conversion coating of aluminum.
F007.....	Spent cyanide plating bath solutions from electroplating operations (except for precious metals electroplating spent cyanide plating bath solutions).
F008.....	Plating bath sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process (except for precious metals electroplating plating bath sludges).
F009.....	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (except for precious metals electroplating spent stripping and cleaning bath solutions).
F010.....	Quenching bath sludge from oil baths from metal heat treating operations where cyanides are used in the process (except for precious metals heat-treating quenching bath sludges).
F011.....	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning).
F012.....	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process (except for precious metals heat treating quenching wastewater treatment sludges).
F015.....	Spent cyanide bath solutions from mineral metals recovery operations.
K001.....	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or 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 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.
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 stream from the acetonitrile column in the production of acrylonitrile.
K014.....	Bottoms from the acetonitrile purification column in the production of acrylonitrile.
K015.....	Still bottoms from the distillation of benzyl chloride.
K016.....	Heavy ends or distillation residues from the production of carbon tetrachloride.
K017.....	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.
K018.....	Heavy ends from the fractionation column in ethyl chloride production.
K019.....	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.
K020.....	Heavy ends from the distillation of vinyl dichloride in vinyl chloride monomer production.
K021.....	Aqueous spent antimony catalyst waste from fluoromethanes production.
K022.....	Distillation bottom tars from the production of phenol/acetone from cumene.
K023.....	Distillation light ends from the production of phthalic anhydride from naphthalene.
K024.....	Distillation bottoms from the production of phthalic anhydride from naphthalene.
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.

## Specific Chemical Wastes—Continued

EPA hazardous waste No.	Substance
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.....	Cenifuge 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.
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.
K030.....	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.
K083.....	Distillation bottoms from aniline production.
K103.....	Process residues from aniline extraction from the production of aniline.
K104.....	Combined wastewater streams generated from nitrobenzene/aniline production.
K085.....	Distillation or fractionation column bottoms from the production of chlorobenzenes.
K105.....	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.
K071.....	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.
K073.....	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.
K106.....	Wastewater treatment sludge from the mercury cell process in chlorine production.
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 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.
K097.....	Vacuum stripper discharge from the chlordane chlorinator 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 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.
K098.....	Untreated process wastewater 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
K099.....	Untreated wastewater from the production of 2,4-D.
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.

## Specific Chemical Wastes—Continued

EPA hazardous waste No	Substance
K051	API separator sludge from the petroleum refining industry.
K052	Tank bottoms (leaded) from the petroleum refining industry.
K061	Emission control dust/sludge from the primary production of steel in electric furnaces
K062	Spent pickle liquor from steel finishing operations.
K069	Emission control dust/sludge from secondary lead smelting
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
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
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead
K060	Ammonia still lime sludge from coking operations.
K087	Decanter tank tar sludge from coking operations.

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