

Appendix H: Legal Definition of Hazardous Waste

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This Appendix provides background information on hazardous waste laws and their application at UWL. Environmental Health and Safety assists the campus with compliance through internal inspections, record keeping, and proper disposal. In Wisconsin, the Department of Natural Resources (DNR) has adopted U.S. Environmental Protection Agency (EPA) regulations. The EPA and DNR regulations are nearly identical.

This Appendix only deals with “hazardous waste” as it is defined by the EPA and DNR. Legally, EPA defines hazardous waste to include certain code specified hazardous *chemical* waste.

To limit the scope of this Appendix, this Appendix does not address other dangerous waste from laboratories, such as infectious, biological, radioactive, or sharps waste. Part H of this Guide describes disposal procedures for animals and Part I describes disposal procedures for sharps and other waste that can cause physical hazards.

EPA regulations focus on industrial waste types. As a result, many laboratory chemical wastes are not regulated by EPA as hazardous chemical waste. However, many unregulated chemical wastes do merit special handling and disposal procedures, so Part G and Appendix A of this Guide require the disposal of many unregulated wastes as if they were EPA hazardous wastes.

Contact Environmental Health and Safety for any questions you have related to proper disposal of wastes generated in UWL laboratories.

IMPORTANT WASTE DEFINITIONS

Hazardous waste is a specific legal term established by EPA and DNR regulations. In order to define “hazardous waste”, there is value in first knowing how to define “hazardous material” and “waste”.

A hazardous material is any material or substance that, if improperly handled or disposed, could be damaging to the health and well-being of people or the environment.

Hazardous materials are a general category of chemicals that do not necessarily mean waste materials.

A waste material is any material or substance that is no longer wanted and cannot be either redistributed, recycled, or used in any other manner.

Contact Environmental Health and Safety if you require assistance with determining if a waste is hazardous waste.

You might think that a hazardous waste is a hazardous material that cannot be redistributed, recycled, or reused, but you would be wrong. Hazardous waste is a legally defined term that is not as obvious as you might think. While all hazardous wastes are hazardous chemicals, not all unwanted hazardous chemicals meet the legal definition of hazardous wastes.

Under the 1976 Federal Resource Conservation and Recovery Act (RCRA) and amendments to the Act, a hazardous waste is generally defined as any waste that exhibits certain hazardous characteristics such as ignitability, corrosivity, reactivity, or toxicity. In addition, a hazardous material can be considered a hazardous waste if it is listed on one of four lists included in the EPA/DNR regulations. The lists include a variety of toxic chemicals, acutely toxic chemicals, and chemicals from specific and non-specific processes.

For further information, see the United States Environmental Protection Agency regulations in the Code of Federal Regulations - 40 CFR part 261, or the Wisconsin Department of Natural Resources Regulations in Wisconsin Administrative Code - Chapters NR600-699.

CATEGORIES OF CHARACTERISTIC HAZARDOUS WASTES

A hazardous waste includes any waste that exhibits one or more of the four hazardous characteristics of ignitability, corrosivity, reactivity, or toxicity.

Ignitable

A waste is ignitable if it has any of the listed properties.

1. A liquid, other than an aqueous solution containing less than 24% alcohol by volume, and has a flash point less than 60 degrees C (140 degrees F);
2. not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard;
3. an ignitable compressed gas; or
4. an oxidizer.

Ignitable chemical examples include, but are not limited to acetone, white phosphorus, and benzoyl peroxide.

Corrosive

A waste is corrosive if it has any of the listed properties.

1. Aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5; or
2. a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55 degrees C (130 degrees F).

Corrosive chemicals include, but are not limited to hydrochloric acid and ammonium hydroxide.

Reactive

A waste is reactive if it has any of the listed properties.

1. The material is normally unstable and readily undergoes violent change without detonating;
2. reacts violently with water;
3. forms potentially explosive mixtures with water;
4. generates toxic gases, vapors or fumes, when mixed with water, in a quantity sufficient to present a danger to human health or the environment;
5. is a cyanide or sulfide bearing waste, which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to endanger human health or the environment;
6. is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement;
7. is readily capable of detonation or explosive decomposition at standard pressure and temperature;
or
8. is a Class A, Class B, or forbidden explosive.

Reactive chemicals include, but are not limited to lithium metal, sodium polysulfide, trinitrotoluene, and nitroglycerine.

Toxic

EPA hazardous waste includes any waste that fails the Toxicity Characteristic Leachate Procedure (TCLP). This procedure simulates the ability of a compound to leach out of a landfill into groundwater. Any material that you dispose that contains any of the following listed chemicals is a hazardous waste if the concentration exceeds the value included in parentheses after the chemical name. All values are in milligrams/liter (mg/L). Dilution cannot be used to lower the chemical concentration in the waste.

The TCLP test is a multi-step procedure involving extraction, filtration and, in the case of some organic analysis, a second extraction before analysis.

Toxicity Characteristic Chemicals

Arsenic (5.0)	1,4-Dichlorobenzene (7.5)	Methyl Ethyl Ketone (200.0)
Barium (100.0)	1,2-Dichloroethane (0.5)	Nitrobenzene (2.0)
Benzene (0.5)	1,1-Dichloroethylene (0.7)	Pentachlorophenol (100.0)
Cadmium (1.0)	2,4-Dinitrotoluene (0.13)	Pyridine (5.0)
Carbon Tetrachloride (0.5)	Endrin (0.02)	Selenium (1.0)
Chlordane (0.03)	Heptachlor (and its epoxide) (0.008)	Silver (5.01)
Chlorobenzene (100.0)	Hexachlorobenzene (0.13)	Tetrachloroethylene (0.7)
Chloroform (6.0)	Hexachlorobutadiene (0.5)	Toxaphene (0.5)
Chromium (5.0)	Hexachloroethane (3.0)	Trichloroethylene (0.5)
m-Cresol (200.0)	Lead (5.0)	2,4,5-Trichlorophenol (400.0)
o-Cresol (200.0)	Lindane (0.4)	2,4,6-Trichlorophenol (2.0)
p-Cresol (200.0)	Mercury (0.2)	2,2,5-TP (Silvex) (1.0)
Cresol, total (200.0)	Methoxychlor (10.0)	Vinyl Chloride (0.2)
2,4-D (10.0)		

Note: Values in parentheses are in milligrams/Liter (mg/L)

Practical Applications of TCLP: Testing a waste material to see if it exhibits the characteristic of toxicity can be very expensive. If a waste contains a toxicity characteristic chemical, and it is a small volume, we assume that it is an EPA hazardous waste. If you generate a large volume of waste containing toxicity characteristic chemicals, contact Environmental Health and Safety to coordinate sample collection and analysis to determine if it is an EPA hazardous waste exhibiting characteristic of toxicity.

An unwanted laboratory chemical or other hazardous materials is a hazardous waste if the waste is ignitable, corrosive, reactive, or if it fails TCLP.

LISTED EPA HAZARDOUS WASTES

By definition, EPA hazardous waste includes hazardous wastes from non-specific sources and discarded commercial chemical products that are listed as acute hazardous wastes (Table IV) and toxic wastes (Table V). EPA lists these chemicals as hazardous waste based primarily on toxicity. In order for substances included on these lists to be hazardous wastes, they must have any of the properties.

- Unused and pure substances or the sole active ingredient.
- Spill residue.
- The unused rinsate from triple rinsing any Table IV acute hazardous waste (P-code) containers. After triple rinsing the container can then be placed in the normal trash.
- Any container containing the pure unused and pure substance or sole active ingredient of any Table IV hazardous waste (P-code) that has not been triple rinsed.

An alphabetical compilation of the lists is included at the end of this appendix.

STORAGE OF HAZARDOUS WASTE

The storage of EPA hazardous waste should first adhere to the guidelines for safe storage of chemicals, as explained in Part D of this Guide.

Additional EPA requirements for accumulation of hazardous waste in laboratories (otherwise known as satellite accumulation) follow. All EPA hazardous waste containers must have any of the listed properties.

- Be clearly marked "Hazardous Waste".
- Be stored close to where the waste is generated.
- Stored in a secure area that you have supervision over (i.e. not in the hallway).
- Be securely capped except when waste is being added. This will reduce the risk of fire, your exposure to toxic chemicals, and spills in case the container is tipped. This also prevents the illegal disposal of waste by evaporation.
- If a container holding hazardous waste begins to leak, the contents must be transferred immediately to another container.

WASTE VS. SURPLUS CHEMICALS

Most laboratory chemicals that are unwanted, unused, sealed, properly labeled, and not past a labeled storage date are not necessarily waste. Such unused or unwanted chemicals can be used by others. When

Environmental Health and Safety removes a chemical from your laboratory, we examine it to determine if others on campus can use the material. The surplus chemical only becomes a waste if no other laboratory is likely to accept the surplus chemicals. You can also work with and provide unwanted chemicals directly with your colleagues.

Please do not mark a surplus chemical as a “waste” unless you are certain it is not usable. Contact Environmental Health and Safety to request “Unwanted Chemical” labels. One exception to identifying material as waste is when your lab places waste chemicals in carboys or other waste containers. Because these used wastes are difficult to reuse, they are designated as a waste when they are generated in your laboratory. All Environmental Health and Safety provided carboys and other containers are tagged with the words “Hazardous Waste”.

On occasion, you may generate other wastes that cannot be reused. If so, please label these as “Unwanted Chemicals”. These labels are available from your department stockroom or Environmental Health and Safety. Environmental Health and Safety will determine if a waste is regulated as an EPA hazardous waste.

Please do not mark a surplus chemical as “hazardous waste” unless requested to do so by Environmental Health and Safety. Most waste laboratory chemicals should be labeled with “Unwanted Chemical” labels.

PROHIBITED DISPOSAL METHODS

According to Federal and State law, hazardous waste must not be disposed of by the following methods.

- Hazardous waste must not be disposed in the normal trash, garbage cans, refuse bins, recycling bins, sharps containers, or infectious waste bags.
- Hazardous wastes must not be disposed by evaporation.
- Hazardous waste must not be disposed of or managed by dilution. If hazardous wastes are diluted or combined with a non-hazardous material, the larger volume is regulated as an EPA hazardous waste.

Only dispose of chemicals according to the procedures in **Part G** of this Guide.

EPA HAZARDOUS WASTE LISTS

Table IV - Acute Hazardous Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
P023	00107-20-0	Acetaldehyde, chloro-
P002	00591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	00640-19-7	Acetamide, 2-fluoro-
P058	00062-74-8	Acetic acid, fluoro-, sodium salt
P002	00591-08-2	1-Acetyl-2-thiourea
P003	00107-02-8	Acrolein
P070	00116-06-3	Aldicarb
P023	1646-88-4	Aldicarb sulfone
P004	00309-00-2	Aldrin
P005	00107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	02763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	00504-24-5	4-Aminopyridine
P009	00131-74-8	Ammonium picrate (R)
P119	07803-55-6	Ammonium vanadate
P099	00506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	07778-39-4	Arsenic acid H ₃ AsO ₄
P012	01327-53-3	Arsenic oxide As ₂ O ₃
P011	01303-28-2	Arsenic oxide As ₂ O ₅
P011	01303-28-2	Arsenic pentoxide
P012	01327-53-3	Arsenic trioxide
P038	00692-42-2	Arsine, diethyl-
P036	00696-28-6	Arsonous dichloride, phenyl-
P054	00151-56-4	Aziridine
P067	00075-55-8	Aziridine, 2-methyl-
P013	00542-62-1	Barium cyanide
P024	00106-47-8	Benzenamine, 4-chloro-
P077	00100-01-6	Benzenamine, 4-nitro-
P028	00100-44-7	Benzene, (chloromethyl)-
P042	00051-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	00122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	00108-98-5	Benzenethiol
P127	1563-- 66-- 2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate

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Hazardous Waste Number	Chemical Abstracts No.	Substance
P028	00100-44-7	Benzyl chloride
P015	07440-41-7	Beryllium powder
P017	00598-31-2	Bromoacetone
P018	00357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[methylamino]carbonyl oxime
P021	00592-01-8	Calcium cyanide
P021	00592-01-8	Calcium cyanide $\text{Ca}(\text{CN})_2$
P189	55285-- 14-- 8	Carbamic acid, [(dibutylamino)- thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester
P191	644-- 64-- 4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl-1H- pyrazol-3-yl ester
P192	119-- 38-- 0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester
P190	1129-- 41-- 5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-- 66-- 2	Carbofuran
P022	00075-15-0	Carbon disulfide
P095	00075-44-5	Carbonic dichloride
P189	55285-- 14-- 8	Carbosulfan
P023	00107-20-0	Chloroacetaldehyde
P024	00106-47-8	p-Chloroaniline
P026	05344-82-1	1-(o-Chlorophenyl)thiourea
P027	00542-76-7	3-Chloropropionitrile
P029	00544-92-3	Copper cyanide
P029	00544-92-3	Copper cyanide $\text{Cu}(\text{CN})$
P202	64-- 00-- 6	m-Cumenyl methylcarbamate
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	00460-19-5	Cyanogen
P033	00506-77-4	Cyanogen chloride
P033	00506-77-4	Cyanogen chloride $(\text{CN})\text{Cl}$
P034	00131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	00542-88-1	Dichloromethyl ether
P036	00696-28-6	Dichlorophenylarsine
P037	00060-57-1	Dieldrin
P038	00692-42-2	Diethylarsine
P041	00311-45-5	Diethyl-p-nitrophenyl phosphate
P040	00297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	00055-91-4	Diisopropylfluorophosphate (DFP)
P004	00309-00-2	1,4,5,8-Dimethanonaphthalene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a,-hexahydro-,(1alpha,4alpha, 4abeta,5alpha,8alpha,8abeta)-

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Hazardous Waste Number	Chemical Abstracts No.	Substance
P060	00465-73-6	1,4,5,8-Dimethanonaphthalene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1 alpha,4 alpha, 4 beta,5 beta,8 beta,8 beta)-
P037	00060-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene3,4,5,6,9,9-hexachloro-1a, 2,2a,3,6,6a,7,7a-octahydro-, (1 aalpha,2beta, 2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)-
P051	¹ 00072-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene3,4,5,6,9,9-hexachloro-1a, 2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta, 3alpha,6alpha,6abeta,7beta, 7aalpha)-, & metabolites
P044	00060-51-5	Dimethoate
P046	00122-09-8	alpha,alpha-Dimethylphenethylamine
P191	644-- 64-- 4	Dimetilan
P047	¹ 00534-52-1	4,6-Dinitro-o-cresol, & salts
P048	00051-28-5	2,4-Dinitrophenol
P020	00088-85-7	Dinoseb
P085	00152-16-9	Diphosphoramidate, octamethyl-
P111	00107-49-3	Diphosphoric acid, tetraethyl ester
P039	00298-04-4	Disulfoton
P049	00541-53-7	Dithiobiuret
P185	26419-- 73-- 8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)- carbonyl]oxime
P050	00115-29-7	Endosulfan
P088	00145-73-3	Endothall
P051	00072-20-8	Endrin
P051	00072-20-8	Endrin, & metabolites
P042	00051-43-4	Epinephrine
P031	00460-19-5	Ethanedinitrile
P066	16752-77-5	Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester
P194	23135-- 22-- 0	Ethanimidothioic acid, 2-(dimethylamino)-N-[[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester
P101	00107-12-0	Ethyl cyanide
P054	00151-56-4	Ethyleneimine
P097	00052-85-7	Famphur
P056	07782-41-4	Fluorine
P057	00640-19-7	Fluoroacetamide
P058	00062-74-8	Fluoroacetic acid, sodium salt
P198	23422-- 53-- 9	Formetanate hydrochloride
P197	17702-- 57-- 7	Formparanate
P065	00628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P059	00076-44-8	Heptachlor
P062	00757-58-4	Hexaethyl tetraphosphate
P116	00079-19-6	Hydrazinecarbothioamide

Table IV - Acute Hazardous Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
P068	00060-34-4	Hydrazine, methyl-
P063	00074-90-8	Hydrocyanic acid
P063	00074-90-8	Hydrogen cyanide
P096	07803-51-2	Hydrogen phosphide
P060	00465-73-6	Isodrin
P192	119-- 38-- 0	Isolan
P202	64-- 00-- 6	3-Isopropylphenyl N-methylcarbamate
P007	02763-96-4	3 (2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-- 36-- 3	Manganese, bis(dimethylcarbamodithioato-S,S')-,
P196	15339-- 36-- 3	Manganese dimethyldithiocarbamate
P092	00062-38-4	Mercury, (acetato-O)phenyl-
P065	00628-86-4	Mercury fulminate (R,T)
P082	00062-75-9	Methanamine, N-methyl-N-nitroso-
P064	00624-83-9	Methane, isocyanato-
P016	00542-88-1	Methane, oxybis[chloro-
P112	00509-14-8	Methane, tetranitro- (R)
P118	00075-70-7	Methanethiol, trichloro-
P198	23422-- 53-- 9	Methanimidamide, N,N-dimethyl-N'-[3-[[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride
P197	17702-- 57-- 7	Methanimidamide,N,N-dimethyl-N'-[2-methyl-4-[[[(methylamino)carbonyl]oxy]phenyl]-
P050	00115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059	00076-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro-
P128	315-- 13-- 4	Methiocarb
P066	16752-77-5	Methomyl
P068	00060-34-4	Methyl hydrazine
P064	00624-83-9	Methyl isocyanate
P069	00075-86-5	2-Methylactonitrile
P071	00298-00-0	Methyl parathion
P190	1129-- 41-- 5	Metolcarb
P128	315-- 18-- 4	Mexacarbate
P072	00086-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO) ₄ , (T-4)-
P074	00557-19-7	Nickel cyanide
P074	00557-19-7	Nickel cynaide Ni(CN) ₂
P075	¹ 00054-11-5	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	00100-01-6	p-Nitroaniline

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Hazardous Waste Number	Chemical Abstracts No.	Substance
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO ₂
P081	00055-63-0	Nitroglycerine (R)
P082	00062-75-9	N-Nitrosodimethylamine
P084	04549-40-0	N-Nitrosomethylvinylamine
P085	00152-16-9	Octamethylpyrophosphoramidate
P087	20816-12-0	Osmium oxide OsO ₄ , (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	00145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P194	23135-- 22-- 0	Oxamyl
P089	00056-38-2	Parathion
P034	00131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P128	315-- 18-- 4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)
P199	2032-- 65-- 7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P048	00051-28-5	Phenol, 2,4-dinitro-
P047	¹ 00534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P202	64-- 00-- 6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P201	2631-- 37-- 0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P020	00088-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	00131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	00062-38-4	Phenylmercury acetate
P093	00103-85-5	Phenylthiourea
P094	00298-02-2	Phorate
P095	00075-44-5	Phosgene
P096	07803-51-2	Phosphine
P041	00311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	00298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	00298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	00060-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
P043	00055-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	00056-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	00297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	00052-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P071	00298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester
P204	57-- 47-- 6	Physostigmine
P188	57-- 64-- 6	Physostigmine salicylate

Table IV - Acute Hazardous Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
P110	00078-00-2	Plumbane, tetraethyl-
P098	00151-50-8	Potassium cyanide
P098	00151-50-8	Potassium cyanide K(CN)
P099	00506-61-6	Potassium silver cyanide
P201	2631-- 37-- 0	Promecarb
P203	1646-- 88-- 4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime
P070	00116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P101	00107-12-0	Propanenitrile
P027	00542-76-7	Propanenitrile, 3-chloro-
P069	00075-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	00055-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	00598-31-2	2-Propanone, 1-bromo-
P102	00107-19-7	Propargyl alcohol
P003	00107-02-8	2-Propenal
P005	00107-18-6	2-Propen-1-ol
P067	00075-55-8	1,2-Propylenimine
P102	00107-19-7	2-Propyn-1-ol
P008	00504-24-5	4-Pyridinamine
P075	¹ 00054-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P204	57-- 47-- 6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	00630-10-4	Selenourea
P104	00506-64-9	Silver cyanide
P104	00506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	00143-33-9	Sodium cyanide
P106	00143-33-9	Sodium cyanide Na(CN)
P108	¹ 00057-24-9	Strychnidin-10-one, & salts
P018	00357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	¹ 00057-24-9	Strychnine, & salts
P115	07446-18-6	Sulfuric acid, dithallium(1+) salt
P109	03689-24-5	Tetraethyldithiopyrophosphate
P110	00078-00-2	Tetraethyl lead
P111	00107-49-3	Tetraethyl pyrophosphate
P112	00509-14-8	Tetranitromethane (R)
P062	00757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	01314-32-5	Thallic oxide

Table IV - Acute Hazardous Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
P113	01314-32-5	Thallium oxide Tl_2O_3
P114	12039-52-0	Thallium(I) selenite
P115	07446-18-6	Thallium(I) sulfate
P109	03689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	00541-53-7	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$
P014	00108-98-5	Thiophenol
P116	00079-19-6	Thiosemicarbazide
P026	05344-82-1	Thiourea, (2-chlorophenyl)-
P072	00086-88-4	Thiourea, 1-naphthalenyl-
P093	00103-85-5	Thiourea, phenyl-
P185	26419-- 73-- 8	Tirpate
P123	08001-35-2	Toxaphene
P118	00075-70-7	Trichloromethanethiol
P119	07803-55-6	Vanadic acid, ammonium salt
P120	01314-62-1	Vanadium oxide V_2O_5
P120	01314-62-1	Vanadium pentoxide
P084	04549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	¹ 00081-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-- 30-- 4	Zinc, bis(dimethylcarbamodithioato-S,S')-,
P121	00557-21-1	Zinc cyanide
P121	00557-21-1	Zinc cyanide $Zn(CN)_2$
P122	01314-84-7	Zinc phosphide Zn_3P_2 , when present at concentrations greater than 10% (R,T)
P205	137-- 30-- 4	Ziram

¹ CAS Number given for parent compound only.

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U394	30558-- 43-- 1	A2213
U001	00075-07-0	Acetaldehyde (I)
U034	00075-87-6	Acetaldehyde, trichloro-
U187	00062-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	00053-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	00094-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	00141-78-6	Acetic acid ethyl ester (I)
U144	00301-04-2	Acetic acid, lead(2+) salt
U214	00563-68-8	Acetic acid, thallium(1+) salt
See F027	00093-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	00067-64-1	Acetone (I)
U003	00075-05-8	Acetonitrile (I,T)
U004	00098-86-2	Acetophenone
U005	00053-96-3	2-Acetylaminofluorene
U006	00075-36-5	Acetyl chloride (C,R,T)
U007	00079-06-1	Acrylamide
U008	00079-10-7	Acrylic acid (I)
U009	00107-13-1	Acrylonitrile
U011	00061-82-5	Amitrole
U012	00062-53-3	Aniline (I,T)
U136	00075-60-5	Arsinic acid, dimethyl-
U014	00492-80-8	Auramine
U015	00115-02-6	Azaserine
U365	2212-- 67-- 1	H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester
U010	00050-07-7	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)]]-
U280	101-- 27-- 9	Barban
U278	22781-- 23-- 3	Bendiocarb
U364	22961-- 82-- 6	Bendiocarb phenol
U271	17804-- 35-- 2	Benomyl
U157	00056-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	00225-51-4	Benz[c]acridine
U017	00098-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	00056-55-3	Benz[a]anthracene
U094	00057-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	00062-53-3	Benzenamine (I,T)

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U014	00492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	03165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	00060-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	00095-53-4	Benzenamine, 2-methyl-
U353	00106-49-0	Benzenamine, 4-methyl-
U158	00101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	00636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	00099-55-8	Benzenamine, 2-methyl-5-nitro-
U019	00071-43-2	Benzene (I,T)
U038	00510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U030	00101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	00305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	00108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	00117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	00084-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	00084-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	00131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	00117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	00095-50-1	Benzene, 1,2-dichloro-
U071	00541-73-1	Benzene, 1,3-dichloro-
U072	00106-46-7	Benzene, 1,4-dichloro-
U060	00072-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	00098-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	01330-20-7	Benzene, dimethyl- (I,T)
U201	00108-46-3	1,3-Benzenediol
U127	00118-74-1	Benzene, hexachloro-
U056	00110-82-7	Benzene, hexahydro- (I)
U220	00108-88-3	Benzene, methyl-
U105	00121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	00606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	00098-82-8	Benzene, (1-methylethyl)- (I)
U169	00098-95-3	Benzene, nitro-
U183	00608-93-5	Benzene, pentachloro-
U185	00082-68-8	Benzene, pentachloronitro-

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U020	00098-09-9	Benzenesulfonic acid chloride (C,R)
U020	00098-09-9	Benzenesulfonyl chloride (C,R)
U207	00095-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	00050-29-3	Benzene,1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	00072-43-5	Benzene,1,1'-(2,2,2-trichloroethylidene)bis[4- methoxy-
U023	00098-07-7	Benzene, (trichloromethyl)-
U234	00099-35-4	Benzene, 1,3,5-trinitro-
U021	00092-87-5	Benzidine
U202	¹ 00081-07-2	1,2-Benzisothiazol-3 (2H)-one, 1,1-dioxide, & salts
U278	22781-- 23-- 3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U364	22961-- 82-- 6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,
U203	00094-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	00120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	00094-58-6	1,3-Benzodioxole, 5-propyl-
U367	1563-- 38-- 8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U064	00189-55-9	Benzo[rst]pentaphene
U248	¹ 00081-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U022	00050-32-8	Benzo[a]pyrene
U197	00106-51-4	p-Benzoquinone
U023	00098-07-7	Benzotrichloride (C,R,T)
U085	01464-53-5	2,2'-Bioxirane
U021	00092-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	00091-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	00119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	00119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U401	97-- 74-- 5	Bis(dimethylthiocarbamoyl) sulfide
U400	120-- 54-- 7	Bis(pentamethylene)thiuram tetrasulfide
U225	00075-25-2	Bromoform
U030	00101-55-3	4-Bromophenyl phenyl ether
U128	00087-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	00924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	00071-36-3	1-Butanol (I)
U159	00078-93-3	2-Butanone (I,T)
U160	01338-23-4	2-Butanone, peroxide (R,T)
U053	04170-30-3	2-Butenal
U074	00764-41-0	2-Butene, 1,4-dichloro- (I,T)

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U143	00303-34-4	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]]-
U031	00071-36-3	n-Butyl alcohol (I)
U392	2008-- 41-- 5	Butylate
U136	00075-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U372	10605-- 21-- 7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U271	17804-- 35-- 2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester
U375	55406-- 53-- 6	Carbamic acid, butyl-, 3-iodo-2-propynyl ester
U280	101-- 27-- 9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butyryl ester
U238	00051-79-6	Carbamic acid, ethyl ester
U178	00615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U373	122-- 42-- 9	Carbamic acid, phenyl-, 1-methylethyl ester
U409	23564-- 05-- 8	Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester
U097	00079-44-7	Carbamic chloride, dimethyl-
U379	136-- 30-- 1	Carbamodithioic acid, dibutyl, sodium salt
U277	95-- 06-- 7	Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester
U381	148-- 18-- 5	Carbamodithioic acid, diethyl-, sodium salt
U383	128-- 03-- 0	Carbamodithioic acid, dimethyl, potassium salt
U382	128-- 04-- 1	Carbamodithioic acid, dimethyl-, sodium salt
U376	144-- 34-- 3	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid
U114	¹ 00111-54-6	Carbamodithioic acid, 1,2-ethanedithiolbis-, salts & esters
U378	51026-- 28-- 9	Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt
U384	137-- 42-- 8	Carbamodithioic acid, methyl-, monosodium salt
U377	137-- 41-- 7	Carbamodithioic acid, methyl-, monopotassium salt
U062	02303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U389	2303-- 17-- 5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U392	2008-- 41-- 5	Carbamothioic acid, bis(2-methylpropyl)-, S-ethyl ester
U391	1114-- 71-- 2	Carbamothioic acid, butylethyl-, S-propyl ester
U386	1134-- 23-- 2	Carbamothioic acid, cyclohexylethyl-, S-ethyl ester
U390	759-- 94-- 4	Carbamothioic acid, dipropyl-, S-ethyl ester
U387	52888-- 80-- 9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U385	1929-- 77-- 7	Carbamothioic acid, dipropyl-, S-propyl ester
U279	63-- 25-- 2	Carbaryl
U372	10605-- 21-- 7	Carbendazim
U367	1563-- 38-- 8	Carbofuran phenol

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U215	06533-73-9	Carbonic acid, dithallium(1+) salt
U033	00353-50-4	Carbonic difluoride
U156	00079-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	00353-50-4	Carbon oxyfluoride (R,T)
U211	00056-23-5	Carbon tetrachloride
U034	00075-87-6	Chloral
U035	00305-03-3	Chlorambucil
U036	00057-74-9	Chlordane, alpha & gamma isomers
U026	00494-03-1	Chlornaphazin
U037	00108-90-7	Chlorobenzene
U038	00510-15-6	Chlorobenzilate
U039	00059-50-7	p-Chloro-m-cresol
U042	00110-75-8	2-Chloroethyl vinyl ether
U044	00067-66-3	Chloroform
U046	00107-30-2	Chloromethyl methyl ether
U047	00091-58-7	beta-Chloronaphthalene
U048	00095-57-8	o-Chlorophenol
U049	03165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H ₂ CrO ₄ , calcium salt
U050	00218-01-9	Chrysene
U393	137-- 29-- 1	Copper, bis(dimethylcarbomodithioato-S,S')-,
U393	137-- 29-- 1	Copper dimethyldithiocarbamate
U051		Creosote
U052	01319-77-3	Cresol (Cresylic acid)
U053	04170-30-3	Crotonaldehyde
U055	00098-82-8	Cumene (I)
U246	00506-68-3	Cyanogen bromide (CN)Br
U386	1134-- 23-- 2	Cycloate
U197	00106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	00110-82-7	Cyclohexane (I)
U129	00058-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-(1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U057	00108-94-1	Cyclohexanone (I)
U130	00077-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	00050-18-0	Cyclophosphamide
U240	¹ 00094-75-7	2,4-D, salts & esters
U059	20830-81-3	Daunomycin

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U366	533-- 74-- 4	Dazomet
U060	00072-54-8	DDD
U061	00050-29-3	DDT
U062	02303-16-4	Diallate
U063	00053-70-3	Dibenz[a,h]anthracene
U064	00189-55-9	Dibenzo[a,i]pyrene
U066	00096-12-8	1,2-Dibromo-3-chloropropane
U069	00084-74-2	Dibutyl phthalate
U070	00095-50-1	o-Dichlorobenzene
U071	00541-73-1	m-Dichlorobenzene
U072	00106-46-7	p-Dichlorobenzene
U073	00091-94-1	3,3'-Dichlorobenzidine
U074	00764-41-0	1,4-Dichloro-2-butene (I,T)
U075	00075-71-8	Dichlorodifluoromethane
U078	00075-35-4	1,1-Dichloroethylene
U079	00156-60-5	1,2-Dichloroethylene
U025	00111-44-4	Dichloroethyl ether
U027	00108-60-1	Dichloroisopropyl ether
U024	00111-91-1	Dichloromethoxy ethane
U081	00120-83-2	2,4-Dichlorophenol
U082	00087-65-0	2,6-Dichlorophenol
U084	00542-75-6	1,3-Dichloropropene
U085	01464-53-5	1,2:3,4-Diepoxybutane (I,T)
U395	5952-- 26-- 1	Diethylene glycol, dicarbamate
U108	00123-91-1	1,4-Diethyleneoxide
U028	00117-81-7	Diethylhexyl phthalate
U086	01615-80-1	N,N'-Diethylhydrazine
U087	03288-58-2	O,O-Diethyl S-methyl dithiophosphate
U088	00084-66-2	Diethyl phthalate
U089	00056-53-1	Diethylstilbesterol
U090	00094-58-6	Dihydrosafrole
U091	00119-90-4	3,3'-Dimethoxybenzidine
U092	00124-40-3	Dimethylamine (I)
U093	00060-11-7	p-Dimethylaminoazobenzene
U094	00057-97-6	7,12-Dimethylbenz[a]anthracene
U095	00119-93-7	3,3'-Dimethylbenzidine

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U096	00080-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	00079-44-7	Dimethylcarbamoyl chloride
U098	00057-14-7	1,1-Dimethylhydrazine
U099	00540-73-8	1,2-Dimethylhydrazine
U101	00105-67-9	2,4-Dimethylphenol
U102	00131-11-3	Dimethyl phthalate
U103	00077-78-1	Dimethyl sulfate
U105	00121-14-2	2,4-Dinitrotoluene
U106	00606-20-2	2,6-Dinitrotoluene
U107	00117-84-0	Di-n-octyl phthalate
U108	00123-91-1	1,4-Dioxane
U109	00122-66-7	1,2-Diphenylhydrazine
U110	00142-84-7	Dipropylamine (I)
U111	00621-64-7	Di-n-propylnitrosamine
U403	97-- 77-- 8	Disulfiram
U041	00106-89-8	Epichlorohydrin
U390	759-- 94-- 4	EPTC
U001	00075-07-0	Ethanal (I)
U404	121-- 44-- 8	Ethanamine, N,N-diethyl-
U174	00055-18-5	Ethanamine, N-ethyl-N-nitroso-
U155	00091-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U067	00106-93-4	Ethane, 1,2-dibromo-
U076	00075-34-3	Ethane, 1,1-dichloro-
U077	00107-06-2	Ethane, 1,2-dichloro-
U131	00067-72-1	Ethane, hexachloro-
U024	00111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	00060-29-7	Ethane, 1,1'-oxybis-(I)
U025	00111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	00076-01-7	Ethane, pentachloro-
U208	00630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	00079-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	00062-55-5	Ethanethioamide
U226	00071-55-6	Ethane, 1,1,1-trichloro-
U227	00079-00-5	Ethane, 1,1,2-trichloro-
U410	59669-- 26-- 0	Ethanimidothioic acid, N,N'- [thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester
U394	30558-- 43-- 1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U359	00110-80-5	Ethanol, 2-ethoxy-
U173	01116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952-- 26-- 1	Ethanol, 2,2'-oxybis-, dicarbamate
U004	00098-86-2	Ethanone, 1-phenyl-
U043	00075-01-4	Ethene, chloro-
U042	00110-75-8	Ethene, (2-chloroethoxy)-
U078	00075-35-4	Ethene, 1,1-dichloro-
U079	00156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	00127-18-4	Ethene, tetrachloro-
U228	00079-01-6	Ethene, trichloro-
U112	00141-78-6	Ethyl acetate (I)
U113	00140-88-5	Ethyl acrylate (I)
U238	00051-79-6	Ethyl carbamate (urethane)
U117	00060-29-7	Ethyl ether (I)
U114	¹ 00111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U067	00106-93-4	Ethylene dibromide
U077	00107-06-2	Ethylene dichloride
U359	00110-80-5	Ethylene glycol monoethyl ether
U115	00075-21-8	Ethylene oxide (I,T)
U116	00096-45-7	Ethylenethiourea
U076	00075-34-3	Ethylidene dichloride
U118	00097-63-2	Ethyl methacrylate
U119	00062-50-0	Ethyl methanesulfonate
U407	14324-- 55-- 1	Ethyl Ziram
U396	14484-- 64-- 1	Ferbam
U120	00206-44-0	Fluoranthene
U122	00050-00-0	Formaldehyde
U123	00064-18-6	Formic acid (C,T)
U124	00110-00-9	Furan (I)
U125	00098-01-1	2-Furancarboxaldehyde (I)
U147	00108-31-6	2,5-Furandione
U213	00109-99-9	Furan, tetrahydro-(I)
U125	00098-01-1	Furfural (I)
U124	00110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)- carbonyl]amino]-

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U126	00765-34-4	Glycidylaldehyde
U163	00070-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	00118-74-1	Hexachlorobenzene
U128	00087-68-3	Hexachlorobutadiene
U130	00077-47-4	Hexachlorocyclopentadiene
U131	00067-72-1	Hexachloroethane
U132	00070-30-4	Hexachlorophene
U243	01888-71-7	Hexachloropropene
U133	00302-01-2	Hydrazine (R,T)
U086	01615-80-1	Hydrazine, 1,2-diethyl-
U098	00057-14-7	Hydrazine, 1,1-dimethyl-
U099	00540-73-8	Hydrazine, 1,2-dimethyl-
U109	00122-66-7	Hydrazine, 1,2-diphenyl-
U134	07664-39-3	Hydrofluoric acid (C,T)
U134	07664-39-3	Hydrogen fluoride (C,T)
U135	07783-06-4	Hydrogen sulfide
U135	07783-06-4	Hydrogen sulfide H ₂ S
U096	00080-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	00096-45-7	2-Imidazolidinethione
U137	00193-39-5	Indeno[1,2,3-cd]pyrene
U375	55406-- 53-- 6	3-Iodo-2-propynyl n-butylcarbamate
U396	14484-- 64-- 1	Iron, tris(dimethylcarbamodithioato-S,S')-,
U190	00085-44-9	1,3-Isobenzofurandione
U140	00078-83-1	Isobutyl alcohol (I,T)
U141	00120-58-1	Isosafrole
U142	00143-50-0	Kepone
U143	00303-34-4	Lasiocarpine
U144	00301-04-2	Lead acetate
U146	01335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	07446-27-7	Lead phosphate
U146	01335-32-6	Lead subacetate
U129	00058-89-9	Lindane
U163	00070-25-7	MNNG
U147	00108-31-6	Maleic anhydride
U148	00123-33-1	Maleic hydrazide
U149	00109-77-3	Malononitrile

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U150	00148-82-3	Melphalan
U151	07439-97-6	Mercury
U384	137-- 42-- 8	Metam Sodium
U152	00126-98-7	Methacrylonitrile (I, T)
U092	00124-40-3	Methanamine, N-methyl- (I)
U029	00074-83-9	Methane, bromo-
U045	00074-87-3	Methane, chloro- (I, T)
U046	00107-30-2	Methane, chloromethoxy-
U068	00074-95-3	Methane, dibromo-
U080	00075-09-2	Methane, dichloro-
U075	00075-71-8	Methane, dichlorodifluoro-
U138	00074-88-4	Methane, iodo-
U119	00062-50-0	Methanesulfonic acid, ethyl ester
U211	00056-23-5	Methane, tetrachloro-
U153	00074-93-1	Methanethiol (I, T)
U225	00075-25-2	Methane, tribromo-
U044	00067-66-3	Methane, trichloro-
U121	00075-69-4	Methane, trichlorofluoro-
U036	00057-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U154	00067-56-1	Methanol (I)
U155	00091-80-5	Methapyrilene
U142	00143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-
U247	00072-43-5	Methoxychlor
U154	00067-56-1	Methyl alcohol (I)
U029	00074-83-9	Methyl bromide
U186	00504-60-9	1-Methylbutadiene (I)
U045	00074-87-3	Methyl chloride (I,T)
U156	00079-22-1	Methyl chlorocarbonate (I,T)
U226	00071-55-6	Methyl chloroform
U157	00056-49-5	3-Methylcholanthrene
U158	00101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	00074-95-3	Methylene bromide
U080	00075-09-2	Methylene chloride
U159	00078-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	01338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	00074-88-4	Methyl iodide

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U161	00108-10-1	Methyl isobutyl ketone (I)
U162	00080-62-6	Methyl methacrylate (I,T)
U161	00108-10-1	4-Methyl-2-pentanone (I)
U164	00056-04-2	Methylthiouracil
U010	00050-07-7	Mitomycin C
U365	2212-- 67-- 1	Molinate
U059	20830-81-3	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)-
U167	00134-32-7	1-Naphthalenamine
U168	00091-59-8	2-Naphthalenamine
U026	00494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	00091-20-3	Naphthalene
U047	00091-58-7	Naphthalene, 2-chloro-
U166	00130-15-4	1,4-Naphthalenedione
U236	00072-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U279	63-- 25-- 2	1-Naphthalenol, methylcarbamate
U166	00130-15-4	1,4-Naphthoquinone
U167	00134-32-7	alpha-Naphthylamine
U168	00091-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	00098-95-3	Nitrobenzene (I,T)
U170	00100-02-7	p-Nitrophenol
U171	00079-46-9	2-Nitropropane (I,T)
U172	00924-16-3	N-Nitrosodi-n-butylamine
U173	01116-54-7	N-Nitrosodiethanolamine
U174	00055-18-5	N-Nitrosodiethylamine
U176	00759-73-9	N-Nitroso-N-ethylurea
U177	00684-93-5	N-Nitroso-N-methylurea
U178	00615-53-2	N-Nitroso-N-methylurethane
U179	00100-75-4	N-Nitrosopiperidine
U180	00930-55-2	N-Nitrosopyrrolidine
U181	00099-55-8	5-Nitro-o-toluidine
U193	01120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	00050-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	00075-21-8	Oxirane (I,T)
U126	00765-34-4	Oxiranecarboxyaldehyde

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U041	00106-89-8	Oxirane, (chloromethyl)-
U182	00123-63-7	Paraldehyde
U391	1114-- 71-- 2	Pebulate
U183	00608-93-5	Pentachlorobenzene
U184	00076-01-7	Pentachloroethane
U185	00082-68-8	Pentachloronitrobenzene (PCNB)
See F027	00087-86-5	Pentachlorophenol
U161	00108-10-1	Pentanol, 4-methyl-
U186	00504-60-9	1,3-Pentadiene (I)
U187	00062-44-2	Phenacetin
U188	00108-95-2	Phenol
U048	00095-57-8	Phenol, 2-chloro-
U039	00059-50-7	Phenol, 4-chloro-3-methyl-
U081	00120-83-2	Phenol, 2,4-dichloro-
U082	00087-65-0	Phenol, 2,6-dichloro-
U089	00056-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	00105-67-9	Phenol, 2,4-dimethyl-
U052	01319-77-3	Phenol, methyl-
U411	114-- 26-- 1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U132	00070-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U170	00100-02-7	Phenol, 4-nitro-
See F027	00087-86-5	Phenol, pentachloro-
See F027	00058-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	00095-95-4	Phenol, 2,4,5-trichloro-
See F027	00088-06-2	Phenol, 2,4,6-trichloro-
U150	00148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	07446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	03288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	01314-80-3	Phosphorus sulfide (R)
U190	00085-44-9	Phthalic anhydride
U191	00109-06-8	2-Picoline
U179	00100-75-4	Piperidine, 1-nitroso-
U400	120-- 54-- 7	Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-
U383	128-- 03-- 0	Potassium dimethyldithiocarbamate
U378	51026-- 28-- 9	Potassium n-hydroxymethyl- n-methyldi-thiocarbamate
U377	137-- 41-- 7	Potassium n-methyldithiocarbamate

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U192	23950-58-5	Pronamide
U194	00107-10-8	1-Propanamine (I,T)
U111	00621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	00142-84-7	1-Propanamine, N-propyl- (I)
U066	00096-12-8	Propane, 1,2-dibromo-3-chloro-
U083	00078-87-5	Propane, 1,2-dichloro-
U149	00109-77-3	Propanedinitrile
U171	00079-46-9	Propane, 2-nitro- (I,T)
U027	00108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	01120-71-4	1,3-Propane sultone
See F027	00093-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	00126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	00078-83-1	1-Propanol, 2-methyl- (I,T)
U002	00067-64-1	2-Propanone (I)
U007	00079-06-1	2-Propenamide
U084	00542-75-6	1-Propene, 1,3-dichloro-
U243	01888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	00107-13-1	2-Propenenitrile
U152	00126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	00079-10-7	2-Propenoic acid (I)
U113	00140-88-5	2-Propenoic acid, ethyl ester (I)
U118	00097-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	00080-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U373	112-- 42-- 9	Propham
U411	114-- 26-- 1	Propoxur
U194	00107-10-8	n-Propylamine (I,T)
U083	00078-87-5	Propylene dichloride
U387	52888-- 80-- 9	Prosulfocarb
U148	00123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	00110-86-1	Pyridine
U191	00109-06-8	Pyridine, 2-methyl-
U237	00066-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2- chloroethyl)amino]-
U164	00056-04-2	4 (1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	00930-55-2	Pyrrolidine, 1-nitroso-
U200	00050-55-5	Reserpine
U201	00108-46-3	Resorcinol

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U202	00081-07-2	Saccharin, & salts
U203	00094-59-7	Safrole
U204	07783-00-8	Selenious acid
U376	144-- 34-- 3	Selenium, tetrakis(dimethyldithiocarbamate)
U204	07783-00-8	Selenium dioxide
U205	07488-56-4	Selenium sulfide
U205	07488-56-4	Selenium sulfide SeS ₂ (R,T)
U015	00115-02-6	L-Serine, diazoacetate (ester)
See F027	00093-72-1	Silvex (2,4,5-TP)
U379	136-- 30-- 1	Sodium dibutyldithiocarbamate
U381	148-- 18-- 5	Sodium diethyldithiocarbamate
U382	128-- 04-- 1	Sodium dimethyldithiocarbamate
U206	18883-66-4	Streptozotocin
U277	95-- 06-- 7	Sulfallate
U103	00077-78-1	Sulfuric acid, dimethyl ester
U189	01314-80-3	Sulfur phosphide (R)
See F027	00093-76-5	2,4,5-T
U402	1634-- 02-- 2	Tetrabutylthiuram disulfide
U207	00095-94-3	1,2,4,5-Tetrachlorobenzene
U208	00630-20-6	1,1,1,2-Tetrachloroethane
U209	00079-34-5	1,1,2,2-Tetrachloroethane
U210	00127-18-4	Tetrachloroethylene
See F027	00058-90-2	2,3,4,6-Tetrachlorophenol
U213	00109-99-9	Tetrahydrofuran (I)
U401	97-- 74-- 5	Tetramethylthiuram monosulfide
U214	00563-68-8	Thallium(I) acetate
U215	06533-73-9	Thallium(I) carbonate
U216	07791-12-0	Thallium(I) chloride
U216	07791-12-0	Thallium chloride TlCl
U217	10102-45-1	Thallium(I) nitrate
U366	533-- 74-- 4	2H-1,3,5-Thiadiazine- 2-thione, tetrahydro-3,5-dimethyl-
U218	00062-55-5	Thioacetamide
U410	59669-- 26-- 0	Thiodicarb
U153	00074-93-1	Thiomethanol (I,T)
U402	1634-- 02-- 2	Thioperoxydicarbonic diamide, tetrabutyl
U403	97-- 77-- 8	Thioperoxydicarbonic diamide, tetraethyl

Table V - Toxic Commercial Chemical Products and Manufacturing Chemical Intermediates

Hazardous Waste Number	Chemical Abstracts No.	Substance
U244	00137-26-8	Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl-
U409	23564-- 05-- 8	Thiophanate-methyl
U219	00062-56-6	Thiourea
U244	00137-26-8	Thiram
U220	00108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	00095-53-4	o-Toluidine
U353	00106-49-0	p-Toluidine
U222	00636-21-5	o-Toluidine hydrochloride
U389	2303-- 17-- 5	Triallate
U011	00061-82-5	1H-1,2,4-Triazol-3-amine
U227	00079-00-5	1,1,2-Trichloroethane
U228	00079-01-6	Trichloroethylene
U121	00075-69-4	Trichloromonofluoromethane
See F027	00095-95-4	2,4,5-Trichlorophenol
See F027	00088-06-2	2,4,6-Trichlorophenol
U404	121-- 44-- 8	Triethylamine
U234	00099-35-4	1,3,5-Trinitrobenzene (R,T)
U182	00123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	00126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	00072-57-1	Trypan blue
U237	00066-75-1	Uracil mustard
U176	00759-73-9	Urea, N-ethyl-N-nitroso-
U177	00684-93-5	Urea, N-methyl-N-nitroso-
U385	1929-- 77-- 7	Vernolate
U043	00075-01-4	Vinyl chloride
U248	00081-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	01330-20-7	Xylene (I)
U200	00050-55-5	Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester,(3beta,16beta,17alpha,18beta,20alpha)-
U407	14324-- 55-- 1	Zinc, bis(diethylcarbamoithioato-S,S')-
U249	01314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations of 10% or less

1 CAS Number given for parent compound only.