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Department of Chemical Engineering Michigan Technological University Houghton, MI

# HAZARDOUS WASTE MANUAL For Faculty, Staff, and Students

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### 1. INTRODUCTION TO WASTE DISPOSAL

All chemicals must be disposed of in a safe and environmentally friendly manner. Any chemical substance which is corrosive, flammable, reactive, toxic, radioactive, infectious, phytotoxic, mutagenic, or acutely hazardous must be treated as hazardous waste. Do not dispose of chemicals by evaporation in a fume hood or in the sink!

Collect and store chemical waste in containers which are clearly labeled. Do not combine containers unless the contents in each container is known, is compatible, and it is certain that it is safe to do so. Combined wastes, if not combined in the proper fashion, may be more difficult and costly to dispose of properly.

Ordinary waste such as paper, cardboard, etc., may be placed in the wastebasket. However, contaminated waste must be disposed of separately in a labeled container.

All chemical waste containers must be clearly labeled and must have:

- 1. A date identifying when the container was first placed in service
- 2. The waste class number.

A form (Appendix 1) must be filled out and the MTU Department of Occupational Safety and Health (OSHS) must be notified for collection. Keep in mind that MTU OSHS collects chemicals on an irregular basis.

Empty chemical containers must also be disposed of in an acceptable fashion. They must first be cleaned and then either returned to Chemical Stores or disposed through normal trash.

Most wastes generated in the laboratory are covered by federal and state hazardous waste regulations. These hazardous waste regulations originate with the Federal Resource Conservation and Recovery Act, RCRA, which regulates the generation, storage, and disposal of "hazardous waste."

The term "hazardous waste" is defined under RCRA to include solids, liquids, and gases that exhibit certain characteristics or are specifically listed in the rules. Hazardous waste is regulated under a "cradle to grave" concept, meaning that the waste is tracked via written records from the time it becomes a waste and that ownership remains with the generator forever. Therefore, the best method to reduce the risk of future remediation costs is to reduce the amount of hazardous waste generated. It is essential to consider the amounts and types of wastes that will be generated when a project is in the proposal stage in order to ensure that a disposal method exists that is both legal and affordable, and to minimize the amount of waste generated. Every person responsible for the generation of waste at MTU must understand the proper disposal procedures and the requirements of the Michigan hazardous waste rules under RCRA.

### 2. RCRA HAZARDOUS WASTE RULES

A waste is any solid, liquid, or contained gaseous material that you no longer use, and either recycle, throw away, store, treat, dispose of or abandon. Regardless of whether it is liquid, solid, or compressed gas, these wastes are known as solid wastes. Generators of solid waste are required to immediately determine if their wastes are hazardous waste. Generators are allowed to use knowledge and/or analytical laboratory testing data to make this determination, and must keep records for at least 3 years at the facility of how this determination was made. If you fail to determine that your waste is hazardous, then the waste may be managed or accumulated improperly. This is one of the most common generator mistakes found.

Hazardous waste must be accumulated and stored at the point of generation until removed by OSHS and must be:

- a. Collected in a container that is compatible with its contents under all conditions it might be subjected to during accumulation, storage, and shipment.
- b. Kept tightly sealed except when adding waste to the container.
- c. Handled only by personnel trained in the requirements of the hazardous waste rules for satellite accumulation of hazardous waste.
- d. Removed from the accumulation area within three days if the quantity of any one waste exceeds 55 gallons (from a safety perspective, no more than 5 gallons should be accumulated in a laboratory or shop).
- e. Labeled properly according to the following: (See Appendices II and III for labels)
  - i. Each container must have a label. The label should be attached to the container when it is initially used for waste. The label must contain the words "hazardous waste," the waste identification number (see Section 3), the accumulation start date, the name of the responsible person, room number and building, and a chemical description of the waste. The label must also contain the date the container becomes full.
  - ii. Wastes that are commingled must list all components in the contents section, including water and all trace materials.
  - iii. Aqueous wastes should have the pH of the solution recorded.
  - iv. All used oils must also be marked with the words, "used oil."

Label templates for both small and large labels are provided in Appendices 2 and 3.

### 3. HAZARDOUS WASTE DETERMINATION

Hazardous wastes are defined by the United States Environmental Protection Agency (USEPA) as either **listed** (meaning that it is listed on a table) or defined based on a particular **characteristic** of the material. Each hazardous waste type is described in detail below.

### 3.1 Listed Hazardous Waste

The USEPA has already predetermined that certain wastes are hazardous and these hazardous wastes have been incorporated into published lists.

**K-Listed Hazardous Wastes:** K-listed hazardous wastes are source-specific wastes that are generated by specific industries such as iron and steel production facilities. K-listed hazardous wastes are not likely to be found in a laboratory and are not listed here.

**F-Listed Hazardous Wastes:** F-listed hazardous wastes are non-specific source wastes that are generated by particular industrial processes that can occur in various industries. Industrial processes that generate F-listed hazardous wastes include wood preservation, electroplating and other metal finishing processes, and processes that generate waste solvents.

Other F-listed wastes that may be found in laboratories include the following solvents or mixtures containing 10 percent or more of the solvent (before use) when spent:

Acetone	Benzene	n-Butyl alcohol
Carbon disulfide	Carbon tetrachloride	Chlorinated fluorcarbons
Cresols	Cresylic acid	Cyclohexanone
2-ethoxyethanol	Ethyl acetate	Ethyl benzene
Ethyl ether	Isobutanol	Methanol
Methyl ethyl ketone	Methyl isobutyl ketone	Methylene chloride
Nitrobenzene	2-nitropropane	Ortho-dichlorobenzene
Pyridine	Tetrachloroethylene	Toluene
Trichloroethylene	1,1,1-trichloroethane	1,1,2-trichloroethane
Trichlorofluoromethane	Xylene	

A complete table of F-listed chemicals is provided in Appendix V

**U-Listed Wastes** are wastes regulated because they are a discarded chemical product or are spill-debris that contains a specific chemical compound which is considered toxic.

There are over 300 U-listed hazardous wastes. Please see Appendix VII for the complete list. The U-listed hazardous wastes most commonly found in laboratories include the following:

Acetaldehyde	Acetone	Acetonitrile
Acetophenone	Acrylamide	Acrylonitrile
Aniline	Benzene	1-Butanol
Carbon tetrachloride	Chlorobenzene	Chloroform
o-Chlorophenol	Cresol	Cyclohexane
Cyclohexanone	o-Dichlorobenzene	1,2-Dichloroethylene
1,4-Dioxane	Ethylene dichloride	2,4-Dichlorophenol

Ethyl acetate	Ethyl ether
Formic acid	Hydrazine
Lead acetate	Mercury
Methyl chloroform	Methyl ethyl ketone
Methyl isobutyl ketone	Methyl methacrylate
Naphthalene	Phenol
Resorcinol	1,1,1,2-Tetrachloroethane
Tetrachloroethylene	Tetrahydrofuran
Thiourea	Toluene
Trichloromonofluoromethane	;
	Ethyl acetate Formic acid Lead acetate Methyl chloroform Methyl isobutyl ketone Naphthalene Resorcinol Tetrachloroethylene Thiourea Trichloromonofluoromethane

**P-Listed Wastes** are also wastes regulated because they are a discarded product or are spill-debris that contains a specific chemical compound which is considered acutely toxic. P listed wastes are dangerous, even in small amounts, and are regulated the same way as larger amounts of other hazardous wastes. Dieldrin, endrin, epinephrine, and sodium cyanide are examples of P-listed wastes. Even the containers that hold these wastes are regulated as hazardous waste until they have been emptied and triple rinsed.

There are over 100 P-listed hazardous wastes. Please see Appendix VI for the complete list. The P-listed hazardous wastes most commonly found in laboratories include the following:

Acrolein	Allyl alcohol	Ammonium vanadate
Arsenic acid	Brucine	Carbon disulfide
Chloroacetaldehyde	Chloroaniline	Cyanides
Diisopropylfluorophosphate	2,4-Dinitrophenol	p-Nitroaniline
Phosgene	Potassium cyanide	Sodium azide
Sodium cyanide	Thallium oxide	Vanadium pentoxide

**Michigan Specific Wastes** are shown in Appendix VIII. These wastes are specifically listed for Michigan.

**Mixtures** Mixtures of any listed hazardous waste with other wastes will require you to manage the entire mixture as a listed hazardous waste. Spills of listed waste that impact soils and other debris, are also regulated the same as the listed hazardous waste. So it is important that you take steps to prevent spills. If you have a spill of listed hazardous waste, you should contact MTU OSHS to determine how to best manage impacted soils or other debris that contain the listed waste.

### 3.2 Characteristic wastes.

Even if a waste does not appear on the EPA lists, it is considered hazardous if it exhibits one or more of the following characteristics:

#### **Ignitability - Waste Class Number D001**

A waste exhibits the characteristic of ignitability and is identified by the hazardous waste number

**D001** if a representative sample of the waste has any of the following properties:

- It is a liquid and has a flash point less than 60 degrees Centigrade (140 degrees Fahrenheit).
- It is 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.
- It is an ignitable compressed gas as defined in the provisions of 49 C.F.R. §173.115 (gas in a cylinder will likely have a flammable gas label).
- It is an oxidizer as defined in the provisions of 49 C.F.R. §173.127.

### **Corrosivity - Waste Class Number D002**

A waste exhibits the characteristic of corrosivity and is identified by the hazardous waste number **D002** if a representative sample of the waste has either of the following properties:

- It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5.
- It is a liquid and corrodes steel (SAE 1020) at a rate of more than 6.35 mm (0.250 inch) per year at a test temperature of 55 degrees Centigrade (130 degrees Fahrenheit) as determined by the test method specified in the National Association of Corrosion Engineers (NACE) standard TM -01-69.

### **Reactivity - Waste Class Number D003**

A waste exhibits the characteristic of reactivity and is identified by the hazardous waste number **D003** if a representative sample of the waste has any of the following properties:

- It is normally unstable and readily undergoes violent change without detonating.
- It reacts violently with water.
- It forms potentially explosive mixtures with water.
- When mixed with water, it generates toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.
- It is a cyanide or sulfide-bearing waste that, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.
- It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.
- It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

• It is a forbidden explosive as defined in the provisions of 49 C.F.R. §173.54, or it meets the definition of a class 1/division 1.1, 1.2, or 1.3 explosive as defined in the provisions of 49 C.F.R. §173.50.

**Toxicity - Waste Class Number D003 thru D043. See Tables 1 and in Appendix IV..** A waste exhibits the toxicity characteristic if, using the toxicity characteristic leaching procedure, the extract from a representative sample of the waste contains any of the contaminants listed in **Table 1** at a concentration equal to or greater than the respective values given in the table. If the waste contains less than 0.5% filterable solids, then the waste itself, is considered to be the extract for the purposes of this rule.

A waste exhibits the characteristic of severe toxicity if the waste contains l part per million or more of a severely toxic substance listed in **Table 2**.

### 4. DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINERS, CONTAINER RESIDUES, AND SPILL RESIDUES

The following materials or items are hazardous wastes when they are discarded or intended to be discarded as described:

- Any commercial chemical product or manufacturing chemical intermediate having the generic name in Tables 4, 5, and 6.
- Any off-specification commercial chemical product or manufacturing intermediate which, if it met specifications, would have the generic name listed in Tables 4, 5, and 6.
- Any material that remains in a container or in an inner liner which is removed from a container that has the generic names listed in Tables 4, 5, and 6 of these rules, unless the container is empty.
- ► Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill into any water or on any land of any commercial chemical product, a manufacturing chemical intermediate having the generic name listed in Tables 4, 5, and 6 of these rules, any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill into any water or on any land of any off-specification chemical product, and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in Tables 4, 5, and 6 of these rules.

The phrases "commercial chemical product," "manufacturing chemical intermediate," "offspecification commercial chemical product," refer to materials that are manufactured or formulated for commercial or manufacturing use. The phrases do not refer to materials, such as manufacturing process wastes, that contain any of the substances listed in Tables 4, 5, and 6 of these rules nor does it include wastes resulting from the use of these substances unless they meet one of the other definitions of hazardous waste, for example, ignitability.

## MTU is limited to the possession of no more than 1Kg of a waste listed in Table 4

(including the container, other components of a mixture or solution, and spill cleanup debris). Employees who think they might need to purchase one of the substances listed in Table

4 should first notify MTU Occupational Safety and Health Services.

# Appendix I

# **Request for Collection of Hazardous Waste**

Complete and send form to MTU Occupational Safety and Health Services



# **Request for Collection of Waste Chemicals**

Requested by	Date
Department/Office/Division	Telephone number
Location of Waste Chemicals	
Disposal Approved by	Date

Item No.	Chemical Name/Description	EPA Waste ID No.*	Physical State **	Quantity	Container Size
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

\* Refer to EPA hazardous waste tables or contact OSHS

\*\* Indicate whether waste is solid, liquid, gas, or sludge

# Appendix II

# Small Hazardous Waste Labels

Print on plain paper or on Avery #5162 labels

MH09106

#### HAZARDOUS WASTE

Dept:		Waste Code
Rm/Bldg:	7	1
Name:	''	1
Date:		′/
	-Complete Label in Pencil-	

#### HAZARDOUS WASTE

#### HAZARDOUS WASTE

HAZARDOUS WASTE

Dept:	Waste Code
Rm/Bldg:	
Name:	/ /
Date:	'/ '/
-Complete Lab	el in Pencil-

#### HAZARDOUS WASTE

HAZARDOUS WASTE

Dept:		Waste Code
Rm/Bldg:		1
Name:		1
Date:		1
	-Complete Label in Pencil-	

#### HAZARDOUS WASTE HAZARDOUS WASTE

Dept:		Waste Code
Rm/Bldg:	T	1
Name:	1	7
Date:	1_	7

-Complete Label in Pencil-

#### HAZARDOUS WASTE

#### HAZARDOUS WASTE

Dept:		Waste Code
Rm/Bldg:		1
Name:		1 1
Date:		7 7
	-Complete Label in Pend	cil-

#### HAZARDOUS WASTE

#### HAZARDOUS WASTE

Dept:		Waste Code
Rm/Bldg:		1 1
Name:	/	i 1.
Date:	/	//
	<u> </u>	

#### -Complete Label in Pencil-

#### HAZARDOUS WASTE

#### HAZARDOUS WASTE



HAZARDOUS WASTE

#### HAZARDOUS WASTE

Dept:		Waste Code
Rm/Bldg:		1
Name:		) ]
Date:		7 7
	-Complete Label in Penc	:il-

HAZARDOUS WASTE HAZARDOUS WASTE

HAZARDOUS WASTE

Dept:		Waste Code
Rm/Bldg:		1 1
Name:		i 1
Date:		/ '/
	-Complete Label in Penci	-  -

#### HAZARDOUS WASTE

Dept:		Waste Code
Rm/Bldg:		1 1
Name:		1 1
Date:		1 1
	Complete Label in Dana	,

-Complete Label in Pencil-

#### HAZARDOUS WASTE HAZARDOUS WASTE

Dept:		Waste Code	
Rm/Bldg:		1	7
Name:		1 1	l
Date:		1 1	1
	-Complete Label in Pen	cil-	

#### HAZARDOUS WASTE HAZARDOUS WASTE

Dept:		Waste Code
Rm/Bldg:		' /
Name:	'	1
Date:	′/	' '/
	-Complete Label in Pencil	- '

#### HAZARDOUS WASTE

#### HAZARDOUS WASTE

Dept:		Waste Code
Rm/Bldg:	7	1
Name:	<i>'</i> /	)
Date:		1
	-Complete Label in Pencil-	

#### HAZARDOUS WASTE

#### HAZARDOUS WASTE

Dept:		Waste Code
Rm/Bldg:		1 1
Name:		1 1
Date:		1 1
	-Complete Label in Pen	cil-

Complete Label in Pencil-

# Appendix III

# Large Hazardous Waste Labels - for Mixtures

Print on plain paper

MH09106

*HAZARDOUS WASTE*	ADOUS WASTE*         Complete Label in Pencil		*HAZARDOUS WASTE* Complete Lab		Complete Label in Pe	encil	
Dept.: Date:		Dept.:		Date:	17 m 201		
Room:	oom: Name:		Room: Name:				
Contents	%			Contents	%		1
		pH If Aqueous				pH If Aqueous	

*HAZARDOUS WASTE*		Complete Label in	Pencil	*HAZARDOUS WA	STE*	Complete Label	n Pencil
Dept.:		Date:		Dept.:		Date:	
Room:	Name			Room:		Name:	
Contents	%			Contents	%		
	pl	H If Aqueous				pH If Aqueous	

# Appendix IV

Waste Numbers based on Toxicity

Table 1: Toxic Chemicals, List A					
Waste Number	Chem Abstracts Number	Chemical Name	Concentration (mg/l)		
D004	7440-38-2	Arsenic	5.0		
D005	7440-39-3	Barium	100.0		
D018	71-43-2	Benzene	0.5		
D006	7440-43-9	Cadmium	1.0		
D019	56-23-5	Carbon tetrachloride	0.5		
D020	57-74-9	Chlordane	0.03		
D021	108-90-7	Chlorobenzene	100.0		
D022	67-66-3	Chloroform	6.0		
D007	7440-47-3	Chromium	5.0		
D023	95-48-7	o-Cresol	200.0**		
D024	108-39-4	m-Cresol	200.0**		
D025	106-44-5	p-Cresol	200.0**		
D026		Cresol	200.0**		
D16	94-75-7	2,4-D (2,4-Dichlorophenoxyacetic Acid)	10.0		
D027	106-46-7	1,4-Dichlorobenzene	7.5		
D028	107-06-2	1,2-Dichloroethane	0.5		
D029	75-35-4	1,1-Dichloroethylene	0.7		
D030	121-14-2	2,4-Dinitrotoluene	0.13*		
D012	72-20-8	Endrin (1,2,3,4,10,10-hexachloro-1,7- Epoxy-1,4,4a,5,6,7,8,8a octahydro- 1,4-endo, endo-5,8-dimenthano naphthalene)	0.02		
D031	76-44-8	Heptachlor (and its Epoxide)	0.008		
D032	118-74-1	Hexachlorobenzene	0.13*		
D033	87-68-3	Hexachlorobutadiene	0.5		
D034	67-72-1	Hexachloroethane	3.0		
D008	7439-92-1	Lead	5.0		
D013	58-89-9	Lindane (1,2,3,4,5,6-hexachlorocyclo- hexane, gamma isomer)	0.4		

Table 1: Toxic Chemicals, List A			
D009	7439-97-6	Mercury	0.2
D014	72-43-5	Methoxychlor (1,1,1-trichloro-2,2- bis(p-methoxyphenyl)ethane)	10.0
D035	78-93-3	Methyl ethyl ketone	200.0
D036	98-95-3	Nitrobenzene	2.0
D037	87-86-5	Pentachlorophenol	100.0
D038	110-86-1	Pyridine	5.0*
D010	7782-49-2	Selenium	1.0
D011	7440-22-4	Silver	5.0
D039	127-18-4	Tetrachloroethylene	0.7
D015	8001-35-2	Toxaphene (C10H10C18, Technical chlorinated camphene, 67-69 percent chlorine)	0.5
D040	79-01-6	Trichloroethylene	0.5
D041	95-95-4	2,4,5-Trichlorophenol	400.0
D042	88-06-2	2,4,6-Trichlorophenol	2.0
D017	93-72-1	2,4,5 TP Silvex (2,4,5- Trichlorophenoxypropionic acid)	1.0
D043	75-01-4	Vinyl chloride	0.2
* Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.			

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

Table 2: Toxic Chemicals, List B		
Waste Number	Chemical Name	
001S	Aflatoxin	
0025	2,3,7,8-Tetrachlorodibenzo-p-dioxin	
0035	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	
004S	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	
0055	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	
006S	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	
007S	2,3,7,8-Tetrachloridibenzo furan	

# Appendix V

# F-Listed Hazardous Wastes

Table 3: Specific Hazardous Wastes			
Waste Number	Chemical Name and Description		
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1- trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures and blends used in degreasing containing, before use, a total of 10% or more, by volume, of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.		
F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1- trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane; all spent solvent mixtures and blends containing, before use, a total of 10% or more, by volume, of one or more of the above halogenated solvents or those solvents listed in FOOI, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.		
F003	The following spent nonhalogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures and blends containing, before use, only the above spent nonhalogenated solvents; and all spent solvent mixtures or blends, containing before use, one or more of the above nonhalogenated solvents, and a total of 10% or more, by volume, of one or more of those solvents listed in FOOI, F002, F004, and F005 and still bottoms from the recovery of these spent solvents and spent solvent mixtures.		
F004	The following spent nonhalogenated solvents: cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures and blends containing, before use, a total of 10% or more, by volume, of one or more of the above non-halogenated solvents or those solvents listed in FOOI, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.		
F005	The following spent nonhalogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures and blends containing, before use, a total of 10% or more, by volume, of one or more of the above nonhalogenated solvents or those solvents listed in FOOI, F002 and F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.		
F027 Note: MTU may not generate more than 1Kg of waste meeting this description.	Discarded unused formulations containing tri- tetra-, or pentachlorophenol or discarded unused formulation containing compounds derived from these chlorophenols. This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.		

# Appendix VI

# **P-Listed Hazardous Wastes**

# Table 4: P-Listed Wastes

Table 4: Generic Chemicals			
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
P023	107-20-0	Acetaldehyde, chloro-	
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-	
P057	640-19-7	Acetamide, 2-fluoro-	
P058	62-74-8	Acetic acid, fluoro-, sodium salt	
P002	591-08-2	1-Acetyl-2-thiourea	
P003	107-02-8	Acrolein	
P070	116-06-3	Aldicarb	
P203	1646-88-4	Aldicarb sulfone	
P004	309-00-2	Aldrin	
P005	107-18-6	Allyl alcohol	
P006	20859-73-8	Aluminum phosphide	(R,T,)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol	
P008	504-24-5	4-Aminopyridine	
P009	131-74-8	Ammonium picrate	(R)
P119	7803-55-6	Ammonium vanadate	
P099	506-61-6	Argentate (1-), bis(cyano-C)-, potassium	
P010	7778-39-4	Arsenic acid	
P012	1327-53-3	Arsenic (III) oxide	
P011	1303-28-2	Arsenic (V) oxide	
P011	1303-28-2	Arsenic pentoxide	
P012	1327-53-3	Arsenic trioxide	
P038	692-42-2	Arsine, diethyl-	
P036	696-28-6	Arsonous dichloride, phenyl-	

#### P054 151-56-4 Aziridine P067 75-55-8 Aziridine, 2-methyl-P013 542-62-1 Barium cyanide P024 106-47-8 Benzenamine, 4-chloro-P077 100-01-6 Benzenamine, 4-nitro-100-44-7 Benzene, (chloromethyl)-P028 P042 51-43-4 1,2-Benzenediol, 4-[1-hydroxy-2-(R) (methylamino)ethyl]-P046 122-09-2 Benzeneethanamine, alpha, alphadimethyl-108-98-5 P014 Benzenethiol P127 1563-66-2 7-benzofuranol, 2,3-dihydro-2,2-dimethyl-, methoycarbamate P188 57-64-7 Benzoic acid, 2-hydroxy-, compd. with (3aS-cis) - 1,2,3,3a,8,8a-hexahydro-1,3a,8trimethylpyrrolo [2,3b] indol-5-vl methylcarbamate ester (1:1) P001 81-81-2 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3% P028 100-44-7 Benzyl chloride P015 7440-41-7 Beryllium powder P017 598-31-2 Bromoacetone P018 357-57-3 Brucine P045 39196-18-4 2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino) carbonyl] oxime P021 592-01-8 Calcium cyanide P021 592-01-8 Calcium cyanide Ca(CN)2 55285-14-8 P189 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	75-15-0	Carbon disulfide	
P095	75-44-5	Carbonyl chloride	
P189	55285-14-8	Carbosulfan	
P023	107-20-0	Chloroacetaldehyde	
P024	106-47-8	p-Chloroaniline	
P026	5344-82-1	1-(o-Chlorophenyl)thiourea	
P027	542-76-7	3-Chloropropionitrile	
P029	544-92-3	Copper cyanide	
P029	544-92-3	Copper cyanide Cu(CN)	
P202	64-00-6	m-Cumenyl methylcarbamate	
P030		Cyanides (soluble cyanide salts), not elsewhere specified	
P031	460-19-5	Cyanogen	
P033	506-77-4	Cyanogen chloride	
P033	506-77-4	Cyanogen chloride (CN)C1	
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol	
P016	542-88-1	Dichloromethyl ether	
P036	696-28-6	Dichlorophenylarsine	
P037	60-57-1	Dieldrin	
P038	692-42-2	Diethylarsine	
P041	311-45-5	Diethyl-p-nitrophenyl phosphate	
P040	297-97-2	0,0-Diethyl 0-pyrazinyl phosphorothioate	
P043	55-91-4	Diisopropyl fluorophosphate	
P004	309-00-2	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)-	
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a- hexahydro-, (1alpha,4alpha,4abeta, 5beta,8beta,8abeta)-	
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha, 3beta,6beta,6aalpha,7beta,7aalpha)-	
P051	72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta,2abeta,3alpha, 6alpha,6abeta,7beta, 7aalpha)-, & metabolites	
P044	60-51-5	Dimethoate	
P046	122-09-8	alpha,alpha-Dimethylphenethylamine	
P191	644-64-4	Dimetilan	
P047	534-52-1	4,6-Dinitro-o-cresol and salts	
P048	51-28-5	2,4-Dinitrophenol	
P020	88-85-7	Dinoseb	
P085	152-18-9	Diphosphoramide, octamethyl-	
P111	107-49-3	Diphosphoric acid, tetraethyl ester	
P039	298-04-4	Disulfoton	
P049	541-53-7	2,4-Dithiobiuret	
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2-4- dimethyl-, O-[(methylamino)- carbonyl]oxime	
P050	115-29-7	Endosulfan	
P088	145-73-7	Endothall	
P051	72-20-8	Endrin	
P051	72-20-8	Endrin, and metabolites	
P042	51-43-4	Epinephrine	
	I		I

P031	460-19-5	Ethanedinitrile	
P194	23135-22-0	Ethanimidothioc acid, 2-(dimethylamino)- N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester	
P066	16752-77-5	Ethanimidothioic acid, N- [[(methylamine)carbonyl] oxyl]-, methyl ester	
P101	107-12-0	Ethyl cyanide	
P054	151-58-4	Ethyleneimine	
P097	52-85-7	Famphur	
P056	7782-41-4	Fluorine	
P057	640-19-7	Fluoroacetamide	
P058	62-74-8	Fluoroacetic acid, sodium salt	
P198	23422-53-9	Formetanate hydrochloride	
P197	17702-57-7	Formparanate	
P065	628-86-4	Fulminic acid, mercury (II) salt	(R,T)
P059	76-44-8	Heptachlor	
P062	757-58-4	Hexaethyl tetraphosphate	
P116	79-19-6	Hydrazinecarbothioamide	
P068	60-34-4	Hydrazine, methyl-	
P063	74-90-8	Hydrocyanic acid	
P063	74-90-8	Hydrogen cyanide	
P096	7803-51-2	Hydrogen phosphide	
P060	465-73-6	Isodrin	
P192	119-38-0	Isolan	
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate	
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-	
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,	
P196	15339-36-3	Manganese, dimethyldithiocarbamate	
P092	62-38-4	Mercury, (acetato-O)phenyl-	
	I		1 I

P065	628-86-4	Mercury fulminate	(R,T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-	
P064	624-83-9	Methane, isocyanato-	
P016	542-88-1	Methane, oxybis(chloro-	
P112	509-14-8	Methane, tetranitro-	(R)
P118	75-70-7	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	115-20-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a- hexahydro-, 3-oxide	
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8- heptachloro- 3a,4,7,7a-tetrahydro-	
P199	2032-65-7	Methiocarb	
P066	16752-77-5	Methomyl	
P068	60-34-4	Methyl hydrazine	
P064	624-83-9	Methyl isocyanate	
P069	75-86-5	2-Methyllactonitrile	
P071	298-00-0	Methyl parathion	
P190	1129-41-5	Metolcarb	
P128	315-18-4	Mexacarbate	
P072	86-88-4	alpha-Naphthylthiourea	
P073	13463-39-3	Nickel carbonyl	
P073	13463-39-3	Nickel carbonyl Ni(CO) <sub>4</sub> , (T-4)-	
P074	557-19-7	Nickel cyanide	
P074	557-19-7	Nickel (II) cyanide	
P075	54-11-5	Nicotine and salts	
P076	10102-43-9	Nitric oxide	
•	I		

P077	100-01-6	p-Nitroaniline	
P078	10102-44-0	Nitrogen dioxide	
P076	10102-43-9	Nitrogen (II) oxide	
P078	10102-44-0	Nitrogen (IV) oxide	
P081	55-63-0	Nitroglycerine	(R)
P082	62-75-9	N-Nitrosodimethylamine	
P084	4549-40-0	N-Nitrosomethylvinylamine	
P085	152-16-9	Octamethylpyrophosphor-amide	
P087	20816-12-0	Osmium oxide	
P087	20816-12-0	Osmium tetroxide	
P088	145-73-3	7-Oxabicyclo [2.2.1] heptane-2,3- dicarboxylic acid	
P194	23135-22-0	Oxamyl	
P089	56-38-2	Parathion	
P034	131-89-5	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	51-28-5	Phenol, 2,4-dinitro-	
P047	534-52-1	Phenol, 2-methyl-4,6-dinitro- and salts	
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate	
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	
P020	88-85-7	Phenol, 2,4-dinitro-6-(1-methylpropyl)-	
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt	(R)
P092	62-38-4	Phenylmercuric acetate	
P093	103-85-5	N-Phenylthiourea	
P094	298-02-2	Phorate	
P095	75-44-5	Phosgene	
	I	l	1

P096	783-51-2	Phosphine	
P041	311-45-5	Phosphoric acid, diethyl p-nitrophenyl ester	
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2- (ethylthio)ethyl] ester	
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S- [(ethylthio) methyl] ester	
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S- O[2-(methylamino)-2-oxoethyl] ester	
P043	55-91-4	Phosphorofluoridic acid, bis(1- methylethyl)ester	
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4- nitrophenyl) ester	
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O- pyrazinyl ester	
P097	52-85-7	Phosphorothioic acid, O,O-dimethyl O-[p- ((dimethylamino) sulfonyl)phenyl] ester	
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4- nitrophenyl) ester	
P204	57-47-6	Physostigmine	
P188	57-64-7	Physostigmine salicylate	
P110	78-00-2	Plumbane, tetraethyl-	
P098	151-50-8	Potassium cyanide	
P098	151-50-8	Potassium cyanide K(CN)	
P099	506-61-6	Potassium silver cyanide	
P201	2631-37-0	Promecarb	
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-,O- [(methylamino)carbonyl] oxime	
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O- [(methylamino)carbonyl] oxime	
P101	107-12-0	Propanenitrile	
P027	542-76-7	Propanenitrile, 3-chloro-	
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-	
P081	55-63-0	1,2,3-Propanetriol, trinitrate-	(R)

P017	596-31-2	2-Propanone, 1-bromo-	
P102	107-19-7	Propargyl alcohol	
P003	107-02-8	2-Propenal	
P005	107-18-6	2-Propen-1-o1	
P067	75-55-8	1,2-Propylenimine	
P102	107-19-7	2-Propyn-1-o1	
P008	504-24-5	4-Pyridinamine	
P075	54-11-5	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and 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	630-10-4	Selenourea	
P104	506-64-9	Silver cyanide	
P104	506-64-9	Silver cyanide Ag(CN)	
P105	26628-22-8	Sodium azide	
P106	143-33-9	Sodium cyanide	
P106	143-33-9	Sodium cyanide Na(CN)	
P108	57-24-9	Strychnidin-10-one, and salts	
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-	
P108	57-24-9	Strychnine and salts	
P115	7446-18-6	Sulfuric acid, thallium (I) salt	
P109	3689-24-5	Tetraethyldithiopyrophosphate	
P110	78-00-2	Tetraethyl lead	
P111	107-49-3	Tetraethylpyrophosphate	
P112	509-14-8	Tetranitromethane	(R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester	
P113	1314-32-5	Thallic oxide	
P113	1314-32-5	Thallium (III) oxide	

P114	12039-52-0	Thallium (I) selenide	
D115	7446 18 6	Thallium (I) sulfato	
P100	2000.04.5		
P109	3689-24-5	l hiodiphosphoric acid, tetraethyl ester	
P045	39196-18-4	Thiofanox	
P049	541-53-7	Thioimidodicarbonic diamide	
P014	108-98-5	Thiophenol	
P116	79-19-6	Thiosemicarbazide	
P026	5344-82-1	Thiourea, (2-chlorophenyl)-	
P072	86-88-4	Thiourea, 1-naphthalenyl-	
P093	103-85-5	Thiourea, phenyl-	
P185	26419-73-8	Tirpate	
P123	8001-35-2	Toxaphene	
P118	75-70-7	Trichloromethanethiol	
P119	7803-55-6	Vanadic acid, ammonium salt	
P120	1314-62-1	Vanadium (V) oxide	
P120	1314-62-1	Vanadium pentoxide	
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-	
P001	81-81-2	Warfarin, when present at concentrations greater than 0.3%	
P205	137-30-4	Zinc, bis(dismethylcarbamodithioato-S,S')-	
P121	557-21-1	Zinc cyanide	
P121	557-21-1	Zinc cyanide Zn(CN) <sub>2</sub>	
P122	1314-84-7	Zinc phosphide, when present at concentrations greater than 10%	(R,T)
P205	137-30-4	Ziram	

# Appendix VII

# **U-Listed Hazardous Wastes**

# Table 5: U-Listed Wastes

Table 5: Discarded Commercial Chemical Products, Off-spec Species, Container and Spill Residues			
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U394	30558-43-1	A2213	
U001	75-07-0	Acetaldehyde	(1)
U034	75-87-6	Acetaldehyde, trichloro-	
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-	
U005	53-96-3	Acetamide, N-9H-fluoren-2-y1-	
U240	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters	
U112	141-78-6	Acetic acid, ethyl ester	(1)
U144	301-04-2	Acetic acid, lead(2+) salt	
U214	563-68-8	Acetic acid, thallium(1+) salt	
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	
U002	67-64-1	Acetone	(1)
U003	75-05-8	Acetonitrile	(I,T)
U004	98-86-2	Acetophenone	
U005	53-96-3	2-Acetylaminofluorene	
U006	75-36-5	Acetyl chloride	(C,R,T)
U007	79-06-1	Acrylamide	
U008	79-10-7	Acrylic acid	(1)
U009	107-13-1	Acrylonitrile	
U011	61-82-5	Amitrole	
U012	62-53-3	Aniline	(I,T)
U136	75-60-5	Arsinic acid, dimethyl-	

Table 5 continued			
Chemical Abstract Services <u>Number</u>	Substance	Hazard <u>Code</u>	
492-80-8	Auramine		
115-02-6	Azaserine		
50-07-7	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-,		
101-27-9	Barban		
22781-23-3	Bendiocarb		
22961-82-6	Bendiocarb phenol		
17804-35-2	Benomyl		
56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3- methyl-		
225-51-4	Benz[c]acridine		
98-87-3	Benzal chloride		
23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl- 2-propynyl)-		
56-55-3	Benz[a]anthracene		
57-97-6	1,2-Benzanthracene, 7,12-dimethyl-		
62-53-3	Benzenamine	(I,T)	
492-80-8	Benzenamine, 4,4'-carbonimidoylbis(N,N- dimethyl-		
3165-93-3	Benzenamine, 4-chloro-2-methyl-		
60-11-7	Benzenamine, N,N-dimethyl-4- (phenylazo)-		
95-53-4	Benzenamine, 2-methyl-		
106-49-0	Benzenamine, 4-methyl-		
101-14-4	Benzenamine, 4,4'-methylenebis(2-chloro-		
	Chemical Abstract Services <u>Number</u> 492-80-8 115-02-6 50-07-7 22781-23-3 22961-82-6 17804-35-2 56-49-5 225-51-4 98-87-3 23950-58-5 56-55-3 57-97-6 62-53-3 492-80-8 3165-93-3 60-11-7 95-53-4 106-49-0 101-14-4	Table 5 continuedChemical Abstract Services NumberSubstance492-80-8Auramine115-02-6Azaserine50-07-7Azirino(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-,101-27-9Barban22781-23-3Bendiocarb22961-82-6Bendiocarb phenol17804-35-2Benomyl56-49-5Benz[c]acridine98-87-3Benzel chloride23950-58-5Benzel chloride23950-58-5Benzamide, 3,5-dichloro-N-(1,1-dimethyl- 2-propynyl)-56-55-3Benzel anthracene57-97-61,2-Benzanthracene, 7,12-dimethyl- 2-propynyl)-56-55-3Benzenamine, 4,4'-carbonimidoylbis(N,N- dimethyl-492-80-8Benzenamine, 4-chloro-2-methyl-60-11-7Benzenamine, 4-chloro-2-methyl-60-11-7Benzenamine, 4-methyl-106-49-0Benzenamine, 4-methyl-106-49-0Benzenamine, 4-methyl-101-14-4Benzenamine, 4-Wethylenebis(2-chloro-	

Table 5 continued			
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride	
U181	99-55-8	Benzenamine, 2-methyl-5-nitro	
U019	71-43-2	Benzene	(I,T)
U038	510-15-8	Benzeneacetic acid, 4-chloro-alpha-(4- chlorophenyl)- alpha-hydroxy, ethyl ester	
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-	
U035	305-03-03	Benzenebutanoic acid, 4-[bis(2- chloroethyl)amino]-	
U037	106-90-7	Benzene, chloro-	
U221	25376-45-8	Benzenediamine, ar-methyl-	
U028	117-81-7	1,2-Benzenedicarboxylic acid, [bis(2-ethyl- hexyl)] ester	
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	
U107	117-84-0	1,2-Benzenedicarboxylic acid, di-n-octyl ester	
U070	95-50-1	Benzene, 1,2-dichloro-	
U071	541-73-1	Benzene, 1,3-dichloro-	
U072	106-46-7	Benzene, 1,4-dichloro-	
U060	72-54-8	Benzene, 1,1'-(2,2- dichloroethylidene)bis=[4-chloro-	
U017	98-87-3	Benzene (dichloromethyl)-	
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl-	(R,T)
U239	1330-20-7	Benzene, dimethyl-	(I,T)
U201	108-46-3	1,3-Benzenediol	

	Table 5 continued			
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>	
U127	118-74-1	Benzene, hexachloro-		
U056	110-82-7	Benzene, hexahydro-	(1)	
U220	108-88-3	Benzene, methyl-		
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-		
U106	606-20-2	Benzene, 1-methyl-2,6-dinitro-		
U055	98-82-8	Benzene, (1-methylethyl)-	(1)	
U169	98-95-3	Benzene, nitro-	(I,T)	
U183	608-93-5	Benzene, pentachloro-		
U185	82-68-8	Benzene, pentachloronitro-		
U020	98-09-9	Benzenesulfonic acid chloride	(C,R)	
U020	98-09-9	Benzenesulfonyl chloride	(C,R)	
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-		
U061	50-29-3	Benzene, 1,1'-(2,2,2- trichloroethylidene)=bis [4-chloro-		
U247	72-43-5	Benzene, 1,1'-(2,2,2- trichloroethylidene)=bis [4-methoxy-		
U023	98-07-7	Benzene, (trichloromethyl)-	(C,R,T)	
U234	99-35-4	Benzene, 1,3,5-trinitro-	(R,T)	
U021	92-87-5	Benzidine		
U202	81-07-2	1,2-Benzisothiazol-3-(2H)-one, 1,1-dioxide and 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	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-		
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-		

Table 5 continued			
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U090	94-58-6	1,3-Benzodioxole, 5-propyl-	
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	
U064	189-55-9	Benzo[rst]pentaphene	
U248	81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3- oxo-1-phenylbutyl)-, and salts, when present at concentrations of 0.3% or less	
U022	50-32-8	Benzo[a]pyrene	
U197	106-51-4	p-Benzoquinone	
U023	98-07-7	Benzotrichloride	(C,R,T)
U085	1464-53-5	2,2'-Bioxirane	(I,T)
U021	92-87-5	(1,1'-Biphenyl)-4,4'-diamine	
U073	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-	
U091	119-90-4	(1,1'-Biphenyl)-4,4'-diamine, 3,3'- dimethoxy-	
U095	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	
U225	75-25-2	Bromoform	
U030	101-55-3	4-Bromophenyl phenyl ether	
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-	
U031	71-36-3	1-Butanol	(1)
U159	78-93-3	2-Butanone	(I,T)
U160	1338-23-4	2-Butanone peroxide	(R,T)
U053	4170-30-3	2-Butenal	
U074	764-41-0	2-Butene, 1,4-dichloro-	(I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3- dihydroxy-2-(1-methoxyethyl)-3-methyl-1- oxybutoyx]methyl]-2,3,5,7a-tetrahydro-1H-	

Table 5 continued				
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>	
		pyrrolizin-1-y1 ester, [1S- [1alpha(Z),7(2S*,3R*), 7aalpha]]-		
U031	71-36-3	n-Butyl alcohol	(1)	
U136	75-60-5	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		
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro- 2-butynyl ester		
U238	51-79-6	Carbamic acid, ethyl ester		
U178	815-53-2	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	79-44-7	Carbamic chloride, dimethyl		
U114	111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts and esters		
U062	2303-16-4	Carbamodithioic 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		
U387	52888-80-9	Carbamothioic acid, dipropyl-, S- (phenylmethyl) ester		
U279	63-25-2	Carbaryl		
U372	10605-21-7	Carbendazim		

	Table 5 continued		
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	Substance	Hazard <u>Code</u>
U367	1563-38-8	Carbofuran phenol	
U215	6533-73-9	Carbonic acid, dithallium(1+) salt	
U156	79-22-1	Carbonochloridic acid, methyl ester	(I,T)
U033	353-50-4	Carbon oxyfluoride	(R,T)
U211	56-23-5	Carbon tetrachloride	
U034	75-87-6	Chloral	
U035	305-03-3	Chlorambucil	
U036	57-74-9	Chlordane, technical	
U026	494-03-1	Chlornaphazine	
U037	108-90-7	Chlorobenzene	
U038	510-15-6	Chlorobenzilate	
U039	59-50-7	4-Chloro-m-cresol	
U042	110-75-8	2-Chloroethyl vinyl ether	
U044	67-66-3	Chloroform	
U046	107-30-2	Chloromethyl methyl ether	
U047	91-58-7	beta-Chloronaphthalene	
U048	95-57-8	o-Chlorophenol	
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride	
U032	13765-19-0	Chromic acid, calcium salt	
U050	218-01-9	Chrysene	
U051		Creosote	
U052	1319-77-3	Cresylic acid	
U053	4170-30-3	Crotonaldehyde	
U055	98-82-8	Cumene	(1)

	Table 5 continued			
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>	
U246	506-68-3	Cyanogen bromide		
U197	106-51-4	1,4-Cyclohexadienedione		
U056	110-82-7	Cyclohexane	(I)	
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha, 2alpha,3beta,4alpha, 5alpha,6beta)-		
U057	108-94-1	Cyclohexanone	(I)	
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexa- chloro-		
U058	50-18-0	Cyclophosphamide		
U240	94-75-7	2,4-D, salts and esters		
U059	20830-81-3	Daunomycin		
U060	72-54-8	DDD		
U061	50-29-3	DDT		
U062	2303-16-4	Diallate		
U063	53-70-3	Dibenz[a,h]anthracene		
U064	189-55-9	Dibenz[a,i]pyrene		
U066	96-12-8	1,2-Dibromo-3-chloropropane		
U069	84-74-2	Dibutyl phthalate		
U070	95-50-1	o-Dichlorobenzene		
U071	541-73-1	m-Dichlorobenzene		
U072	106-46-7	p-Dichlorobenzene		
U073	91-94-1	3,3'-Dichlorobenzidine		
U074	764-41-0	1,4-Dichloro-2-butene	(I,T)	
U075	75-71-8	Dichlorodifluoromethane		

		Table 5 continued	
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U078	75-35-4	1,1-Dichloroethylene	
U079	156-60-5	1,2-Dichloroethylene	
U025	111-44-4	Dichloroethyl ether	
U027	108-60-1	Dichloroisopropyl ether	
U024	111-91-7	Dichloromethoxy ethane	
U081	120-83-2	2,4-Dichlorophenol	
U082	87-65-0	2,6-Dichlorophenol	
U084	542-75-6	1,3-Dichloropropene	
U085	1464-53-5	1,2:3,4-Diepoxybutane	(I,T)
U108	123-91-1	1,4-Diethylene dioxide	
U395	5952-26-1	Diethylene glycol, dicarbamate	
U028	117-81-7	Diethylhexyl phthalate	
U086	1615-80-1	N,N-Diethylhydrazine	
U087	3288-58-2	O,O-Diethyl-S-methyl-dithiophosphate	
U088	84-66-2	Diethyl phthalate	
U089	56-53-1	Diethylstilbestrol	
U090	94-58-6	Dihydrosafrole	
U091	119-90-4	3,3'-dimethoxybenzidine	
U092	124-40-3	Dimethylamine	(1)
U093	60-11-7	Dimethylaminoazobenzene	
U094	57-97-6	7,12-Dimethylbenz[a]anthracene	
U095	119-93-7	3,3'-Dimethylbenzidine	
U096	80-15-9	Alpha,alpha-Dimethyl-benzylhydroperoxide	(R)
U097	79-44-7	Dimethylcarbamoyl chloride	

	Table 5 continued			
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>	
U098	57-14-7	1,1-Dimethylhydrazine		
U099	540-73-8	1,2-Dimethylhydrazine		
U101	105-67-9	2,4-Dimethylphenol		
U102	131-11-3	Dimethyl phthalate		
U103	77-78-1	Dimethyl sulfate		
U105	121-14-2	2,4-Dinitrotoluene		
U106	606-20-2	2,6-Dinitrotoluene		
U107	117-84-0	Di-n-octyl phthalate		
U108	123-91-1	1,4-Dioxane		
U109	122-66-7	1,2-Diphenylhydrazine		
U110	142-84-7	Dipropylamine	(1)	
U111	621-64-7	Di-n-propylnitrosamine		
U041	106-89-8	Epichlorhydrin		
U001	75-07-0	Ethanal	(1)	
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-		
U404	121-44-8	Ethanamine, N,N-diethyl-		
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2- pyridinyl-N'-(2-thienylmethyl)-		
U067	106-93-4	Ethane, 1,2-dibromo-		
U076	75-34-3	Ethane, 1,1-dichloro-		
U077	107-06-2	Ethane, 1,2-dichloro-		
U131	67-72-1	Ethane, 1,1,1,2,2,2-hexachloro-		
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2- chloro-		
U117	60-29-7	Ethane, 1,1'-oxybis-	(1)	

	Table 5 continued			
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>	
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-		
U184	76-01-7	Ethane, pentachloro-		
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-		
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-		
U218	62-55-5	Ethanethioamide		
U226	71-55-6	Ethane, 1,1,1-trichloro-		
U227	79-00-5	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		
U359	110-80-5	Ethanol, 2-ethoxy-		
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-		
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate		
U004	98-86-2	Ethanone, 1-phenyl		
U043	75-01-4	Ethene, chloro-		
U042	110-75-8	Ethene, 2-chloroethoxy-		
U078	75-35-4	Ethene, 1,1-dichloro-		
U079	156-60-5	Ethene, trans-1,2-dichloro-		
U210	127-18-4	Ethene, 1,1,2,2-tetrachloro-		
U228	79-01-6	Ethene, trichloro-		
U112	141-78-8	Ethyl acetate	(1)	
U113	140-88-5	Ethyl acrylate	(1)	
U238	51-79-6	Ethyl carbamate (urethan)		
U117	60-29-7	Ethyl ether	(1)	

	Table 5 continued			
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>	
U114	111-54-6	Ethylenebis(dithiocarbamic acid), salts and ester		
U067	106-93-4	Ethylene dibromide		
U077	107-06-2	Ethylene dichloride		
U359	110-80-5	Ethylene glycol monoethyl ether		
U115	75-21-8	Ethylene oxide	(I,T)	
U116	96-45-7	Ethylene thiourea		
U076	75-34-3	Ethylidene dichloride		
U118	97-63-2	Ethyl methacrylate		
U119	62-50-0	Ethyl methanesulfonate		
U120	206-44-0	Fluoranthene		
U122	50-00-0	Formaldehyde		
U123	64-18-6	Formic acid	(C,T)	
U124	110-00-9	Furan	(1)	
U125	98-01-1	2-Furancarboxaldehyde	(1)	
U147	108-31-6	2,5-Furandione		
U213	109-99-9	Furan, tetrahydro-	(1)	
U125	98-01-1	Furfural	(1)	
U124	110-00-9	Furfuran	(1)	
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]-		
U126	765-34-4	Glycidylaldehyde		
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-		

Table 5 continued			
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U127	118-74-1	Hexachlorobenzene	
U128	87-68-3	Hexachlorobutadiene	
U130	77-47-4	Hexachlorocyclopentadiene	
U131	67-72-1	Hexachloroethane	
U132	70-30-4	Hexachlorphene	
U243	1888-71-7	Hexachloropropene	
U133	302-01-2	Hydrazine	(R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-	
U098	57-14-7	Hydrazine, 1,1-dimethyl-	
U099	540-73-8	Hydrazine, 1,2-dimethyl-	
U109	122-66-7	Hydrazine, 1,2-diphenyl-	
U134	7664-39-3	Hydrofluoric acid	(C,T)
U134	7664-39-3	Hydrogen fluoride	(C,T)
U135	7783-06-4	Hydrogen sulfide	
U135	7783-06-4	Hydrogen sulfide H2S	
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-	(R)
U116	96-45-7	2-Imidazolidinethione	
U137	193-39-5	Indeno[1,2,3cd]pyrene	
U190	85-44-9	1,3-Isobenzofurandione	
U140	78-83-1	Isobutyl alcohol	(I,T)
U141	120-58-1	Isosafrole	
U142	143-50-0	Kepone	
U143	303-34-4	Lasiocarpine	
U144	301-04-2	Lead acetate	

		Table 5 continued	
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U146	1335-32-6	Lead, bis(acetato-O) tetrahydroxytri-	
U145	7446-27-7	Lead phosphate	
U146	1335-32-6	Lead subacetate	
U129	58-89-9	Lindane	
U163	70-25-7	MNNG	
U147	108-31-6	Maleic anhydride	
U148	123-33-1	Maleic hydrazide	
U149	109-77-3	Malononitrile	
U150	148-82-3	Melphalan	
U151	7439-97-6	Mercury	
U152	126-98-7	Methacrylonitrile	(I,T)
U092	124-40-3	Methanamine, N-methyl-	(1)
U029	74-83-9	Methane, bromo-	
U045	74-87-3	Methane, chloro-	(I,T)
U046	107-30-2	Methane, chloromethoxy-	
U068	74-95-3	Methane, dibromo-	
U080	75-09-2	Methane, dichloro-	
U075	75-71-8	Methane, dichlorodifluoro-	
U138	74-88-4	Methane, iodo-	
U119	62-50-0	Methanesulfonic acid, ethyl ester	
U211	56-23-5	Methane, tetrachloro-	
U153	74-93-1	Methanethiol	(I,T)
U225	75-25-2	Methane, tribromo-	
U044	67-66-3	Methane, trichloro-	

		Table 5 continued	
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U121	75-69-4	Methane, trichlorofluoro-	
U036	57-74-9	4,7-Methanoindan, 1,2,4,5,6,7,8,8- octachloro-3a,4,7,7a-tetrahydro	
U154	67-56-1	Methanol	(1)
U155	91-80-5	Methapyrilene	
U142	143-50-0	1,3,4-Metheneo-2H-cyclobuta[cd]pentalen- 2-one,1,1a,3,3a,4,5,5,5a,5b,6- decachlorooctahydro-	
U247	72-43-5	Methoxychlor	
U154	67-56-1	Methyl alcohol	(1)
U029	74-83-9	Methyl bromide	
U186	504-60-9	1-Methylbutadiene	(1)
U045	74-87-3	Methyl chloride	(I,T)
U156	79-22-1	Methyl chlorocarbonate	(I,T)
U226	71-55-6	Methylchloroform	
U157	56-49-5	3-Methylcholanthrene	
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)	
U068	74-95-3	Methylene bromide	
U080	75-09-2	Methylene chloride	
U159	78-93-3	Methyl ethyl ketone	(I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide	(R,T)
U138	74-88-4	Methyl iodide	
U161	108-10-1	Methyl isobutyl ketone	(1)
U162	80-62-6	Methyl methacrylate	(I,T)
U161	108-10-1	4-Methyl-2-pentanone	(1)
U164	56-04-2	Methylthiouracil	

Table 5 continued			
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U010	50-07-7	Mitomycin	(C)
U059	20830-81-3	5,12-Naphthacenedione, (8S-cis)-8-acetyl- 10-[(3-amino-2,3,6-trideoxy-alpha-L- lyxohexopyranosyl)oxyl]- 7,8,9,10- tetrahydro-6,8,11-trihydroxy-1-methoxy-	
U167	134-32-7	1-Naphthalenamine	
U168	91-59-8	2-Naphthalenamine	
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-	
U165	91-20-3	Naphthalene	
U047	91-58-7	Naphthalene, 2-chloro-	
U166	130-15-4	1,4-Naphthalenedione	
U236	72-57-1	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	130-15-4	1,4-Naphthoquinone	
U167	134-32-7	alpha-Naphthylamine	
U168	91-59-8	beta-Naphthylamine	
U217	10102-45-1	Nitric acid, thallium(1+) salt	
U169	98-95-3	Nitrobenzene	(I,T)
U170	100-02-7	p-Nitrophenol	
U171	79-46-9	2-Nitropropane	(I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine	
U173	1116-54-7	N-Nitrosodiethanolamine	
U174	55-18-5	N-Nitrosodiethylamine	
U176	759-73-9	N-Nitroso-N-ethylurea	

		Table 5 continued	
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U177	684-93-5	N-Nitroso-N-methylurea	
U178	615-53-2	N-Nitroso-N-methylurethane	
U179	100-75-4	N-Nitrosopiperidine	
U180	930-55-2	N-Nitrosopyrrolidine	
U181	99-55-8	5-Nitro-o-toluidine	
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide	
U058	50-18-0	2H-1,3,2-Oxazaphosphorin, 2-amine, N,N- bis(2-chloroethyl) tetrahydro-, 2-oxide	
U115	75-21-8	Oxirane	(I,T)
U126	765-34-4	Oxiranecarboxyaldehyde	
U041	106-89-8	Oxirane, 2-(chloromethyl)-	
U182	123-63-7	Paraldehyde	
U183	608-93-5	Pentachlorobenzene	
U184	76-01-7	Pentachloroethane	
U185	82-68-8	Pentachloronitrobenzene	
See F027	87-86-5	Pentachlorophenol	
U161	108-10-1	Pentanonl, 4-methyl-	
U186	504-60-9	1,3-Pentadiene	(1)
U187	62-44-2	Phenacetin	
U188	108-95-2	Phenol	
U048	95-57-8	Phenol, 2-chloro-	
U039	59-50-7	Phenol, 4-chloro-3-methyl-	
U081	120-83-2	Phenol, 2,4-dichloro-	
U082	87-65-0	Phenol, 2,6-dichloro-	

		Table 5 continued	
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	
U101	105-67-9	Phenol, 2,4-dimethyl-	
U052	1319-77-3	Phenol, methyl-	
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate	
U170	100-02-7	Phenol, 4-nitro-	
See F027	87-86-5	Phenol, pentachloro-	
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-	
See F027	95-95-4	Phenol, 2,4,5-trichloro-	
See F027	88-06-2	Phenol, 2,4,6-trichloro-	
U150	148-82-3	L-Phenylalanine, 4-[bis(2- chloroethyl)amino]-	
U145	7446-27-7	Phosphoric acid, lead salt	
U087	3288-58-2	Phosphorodithioic acid, 0,0-diethyl-S- methyl ester	
U189	1314-80-3	Phosphorus sulfide	(R)
U190	85-44-9	Phthalic anhydride	
U191	109-06-8	2-Picoline	
U179	100-75-4	Piperidine, 1-nitroso-	
U192	23950-58-5	Pronamide	
U194	107-10-8	1-Propanamine	(I,T)
U111	621-64-7	1,Propanamine, N-nitroso-N-propyl-	
U110	142-84-7	1-Propanamine, N-propyl-	(1)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-	

		Table 5 continued	
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U083	78-87-5	Propane, 1,2-dichloro-	
U149	109-77-3	Propanedinitrile	
U171	79-46-9	Propane, 2-nitro-	(I,T)
U027	108-60-1	Propane, 2,2'oxybis[2-chloro-	
U193	1120-71-4	1,3-Propane sultone	
See F027	93-72-1	Propionic acid, 2-(2,4,5-trichlorphenoxy)-	
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)	
U140	78-83-1	1-Propanol, 2-methyl-	(I,T)
U002	67-64-1	2-Propanone	(1)
U007	79-06-1	2-Propenamide	
U084	542-75-6	Propene, 1,3-dichloro-	
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	
U009	107-13-1	2-Propenenitrile	
U152	126-98-7	2-Propenenitrile, 2-methyl-	(I,T)
U008	79-10-7	2-Propenoic acid	(1)
U113	140-88-5	2-Propenoic acid, ethyl ester	(1)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	(I,T)
U373	122-42-9	Propham	
U411	114-26-1	Propoxur	
U194	107-10-8	n-Propylamine	(I,T)
U083	78-87-5	Propylene dichloride	
U387	52888-80-9	Prosulfocarb	
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-	

		Table 5 continued	
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U196	110-86-1	Pyridine	
U191	109-06-8	Pyridine, 2-methyl-	
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2- chloroethyl)amino]-	
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl- 2-thioxo-	
U180	930-55-2	Pyrrole, tetrahydro-N-nitroso-	
U200	50-55-5	Reserpine	
U201	108-46-3	Resorcinol	
U202	81-07-2	Saccharin and salts	
U203	94-59-7	Safrole	
U204	7783-00-8	Selenious acid	
U204	7783-00-8	Selenium dioxide	
U205	7488-56-4	Selenium sulfide	
U205	7488-56-4	Selenium sulfide SeS <sub>2</sub>	(R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)	
See F027	93-72-1	Silvex	
U206	18883-66-4	Streptozotocin	
U103	77-78-1	Sulfuric acid, dimethyl ester	
U189	1314-80-3	Sulfur phosphide	(R)
See F027	93-76-5	2,4,5-T	
U207	95-94-3	1,2,4,5-Tetrachlorobenzene	
U208	630-20-6	1,1,1,2-Terachloroethane	
U209	79-34-5	1,1,2,2-Tetrachloroethane	
U210	127-18-4	Tetrachloroethylene	

		Table 5 continued	
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
See F027	58-90-2	2,3,4,6-Tetrachlorophenol	
U213	109-99-9	Tetrahydrofuran	(1)
U214	563-68-8	Thallium (I) acetate	
U215	6533-73-9	Thallium (I) carbonate	
U216	7791-12-0	Thallium (I) chloride	
U216	7791-12-0	Thallium chloride T1C1	
U217	10102-45-1	Thallium (I) nitrate	
U218	62-55-5	Thioacetamide	
U410	59669-26-0	Thiodicarb	
U153	74-93-1	Thiomethanol	(I,T)
U244	137-26-8	Thioperoxydicarbonic diamide [(H <sub>2</sub> N)C(S)] <sub>2</sub> 5 <sub>2</sub> , tetramethyl-	
U409	23564-05-8	Thiophanate-methyl	
U219	62-56-6	Thiourea	
U244	137-26-8	Thiram	
U220	108-88-3	Toluene	
U221	25376-45-8	Toluenediamine	
U223	26471-62-5	Toluene diisocyanate	(R,T)
U328	95-53-4	o-Toluidine	
U353	106-49-0	p-Toluidine	
U222	636-21-5	o-Toluidine hydrochloride	
U389	2303-17-5	Triallate	
U011	61-82-5	1H-1,2,4-Triazol-3-amine	
U227	79-00-5	1,1,2-Trichloroethane	

	Table 5 continued		
EPA Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	<u>Substance</u>	Hazard <u>Code</u>
U228	79-01-6	Trichloroethylene	
U121	75-69-4	Trichloromonofluoromethane	
See F027	95-95-4	2,4,5-Trichlorophenol	
See F027	88-06-2	2,4,6-Trichlorophenol	
U404	121-44-8	Triethylamine	
U234	99-35-4	1,3,5-Trinitrobenzene	(R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-	
U235	126-72-7	Tris(2,3-Dibromopropyl) phosphate	
U236	72-57-1	Trypan blue	
U237	66-75-1	Uracil mustard	
U176	759-73-9	Urea, N-ethyl-N-nitroso-	
U177	684-93-5	Urea, N-methyl-N-nitroso-	
U043	75-01-4	Vinyl chloride	
U248	81-81-2	Warfarin, and salts, when present at a concentration of 0.3% or less	
U239	1330-20-7	Xylene	(1)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17- dimethoxy-18-[(3,4,5-trimethoxy- benzoyl)oxy]-, methyl ester	
U249	1314-84-7	Zinc phosphide, when present at concentration 10% or less	

# Appendix VIII

# Michigan Specific Hazardous Wastes

Michigan Hazardous Waste <u>Number</u>	Chemical Abstract Services <u>Number</u>	Substance	Hazard <u>Code</u>
001U	50-76-0	Actinomvcin D	
002U	107-05-1	Allvl chloride	
003U	117-79-3	2-aminoanthraguinone	
004U	60-09-3	Aminoazobenzene	
005U	97-56-3	0-aminoazotoluene	
006U	92-67-1	4-aminobiphenyl	
007U	132-32-1	3-amino-9-ethyl carbazole	
157U	57360-17-5	3-amino-9-ethyl carbazole hydrochloride	
008U	82-28-0	1-amino-2-methyl anthraquinone	
009U	101-05-3	Anilazine	
158U	142-04-1	Aniline hydrochloride	
011U	90-04-0	o-Anisidine	
012U	134-29-2	o-Anisidine hydrochloride	
013U	Class-01-0	Antimony (when in the form of particles 100 microns or less)	
014U	1397-94-0	Antimycin A	
147U	2642-71-9	Azinphos-ethyl	
148U	86-50-0	Azinphos-methyl	
159U	103-33-3	Azobenzene	
015U	101-27-9	Barban	
016U	22781-23-3	Bendiocarb	
017U	17804-35-2	Benomyl	
020U	1689-84-5	Bromoxynil	
160U	106-99-0	1,3-Butadiene	
161U	85-68-7	Butyl benzl phthalate	
021U	140-57-8	2(p-tert-Butylphenoxy)-isopropyl-2- chloroethyl sulfite	
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022U	2425-06-1	Captafol
023U	133-06-2	Captan
024U	63-25-3	Carbaryl
025U	1563-66-2	Carbofuran
027U	786-19-6	Carbophenothion
028U	Class-08-6	Chloramines
152U	470-90-6	Chlorfenuinphos
029U	2921-88-2	Chloropyrifos
030U	Class-05-3	Chlorinated dibenzofurans (other than those listed in Table 202)
031U	Class-05-4	Chlorinated dioxins (other than those listed in Table 202)
032U	7782-50-5	Chlorine gas
033U	107-07-3	2-Chloroethanol
034U	6959-48-4	3-(Chloromethyl) pyridine hydrochloride
150U	106-48-9	p-chlorophenol
162U	7005-72-3	1-chloro-4-phenoxybenzene
036U	5131-60-2	4-chloro-m-phenylenediamine
037U	95-83-0	4-chloro-o-phenylenediamine
038U	126-99-8	Chloroprene
163U	590-21-6	1-chloropropene
151U	96-79-4	5-chloro-o-toluidene
040U	1420-04-8	Clonitralid
041U	Class-01-6	Cobalt (when in the form of particles 100 microns or less)
042U	56-72-4	Coumasphos
043U	120-71-8	p-Cresidine
044U	7700-17-6	Crotoxyphos
046U	66-81-9	Cycloheximide
164U	72-55-9	P,P' DDE
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047U	8065-48-3	Demeton
048U	39156-41-7	2,4-Diaminoanisole sulfate
049U	101-80-4	4,4'-Diaminodiphenyl ether
050U	95-80-7	2,4-Diaminotoluene
051U	333-41-5	Diazinon
052U	117-80-6	Dichlone
054U	62-73-7	Dichlorvos
055U	141-66-2	Dichrotophos
056U	64-67-5	Diethyl sulfate
165U	105-55-5	N,N'-Diethylthiourea
057U	39300-45-3	Dinocap
058U	78-34-2	Dioxathion
059U	2104-64-5	EPN
166U	106-88-7	1,2-Epoxybutane
061U	563-12-2	Ethion
063U	115-90-2	Fensulfothion
064U	55-38-9	Fenthion
065U	33245-39-5	Fluchloralin
068U	680-31-9	Hexamethyl phosphoramide
070U	123-31-9	Hydroquinone
071U	1072-52-2	N-(2-Hydroxyethyl) ethyleneimine
072U	7778-54-3	Hypochlorite
073U	54-85-3	Isonicotinic acid hydrazine
167U	59299-51-3	Kanechlor C
074U	463-51-4	Ketene
075U	78-97-7	Lactonitril
076U	21609-90-5	Leptophos
077U	Class-02-0	Lithium and compounds
078U	569-64-2	Malachite green

079U	121-75-5	Malathion
080U	72-33-3	Mestranol
082U	838-88-0	4,4'-Methylenebis(2-methylaniline)
083U	101-61-1	4,4'-Methylenebis(N,N-dimethylaniline)
086U	90-12-0	1-Methylnaphthalene
088U	7786-34-7	Mevinphos
089U	315-18-4	Mexacarbate
090U	2385-85-5	Mirex
092U	6923-22-4	Monocrotophos
093U	505-60-2	Mustard gas
094U	300-76-5	Naled
095U	2243-62-1	1,5-Napthalenediamine
096U	Class-02-2	Nickel (when in the form of particles 100 microns or less)
097U	61-57-4	Niridazole
098U	139-94-6	Nithiazide
099U	602-87-9	5-Nitroacenaphthene
100U	99-59-2	Nitro-o-anisidine
101U	92-93-3	Nitrobiphenyl
102U	1836-75-5	Nitrofen
103U	531-82-8	N-(4-(5-nitro-2-furanyl)-2-thiazolyl)- acetamide
104U	51-75-2	Nitrogen mustard
106U	156-10-5	p-Nitrosodiphenylamine
168U	4549-40-0	N-Nitrosomethylvinylamine
108U	135-20-6	N-nitroso-N-phenylhydroxylamine, ammonium salt
169U	29082-74-4	Octachlorostyrene
110U	301-12-2	Oxydemeton-methyl
111U	1910-42-5	Paraquat

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112U	79-21-0	Peroxyacetic acid	
113U	136-40-3	Phenazopyridine hydrochloride	
114U	3546-10-9	Phenesterin	
115U	50-06-6	Phenobarbitol	
116U	57-41-0	Phenytoin	
117U	630-93-3	Phenytoin sodium	
118U	4104-14-7	Phosazetim	
119U	732-11-6	Phosmet	
120U	13171-21-6	Phosphamidon	
121U	120-62-7	Piperonyl sulfoxide	
122U	Class-07-8	Polybrominated biphenyls (PBB)	
124U	57-57-8	Propiolactone	
127U	51-52-5	Propylthiouracil	
128U	83-74-4	Rotenone	
129U	57-56-7	Semicarbazide	
170U	563-41-7	Semicarbazide hydrochloride	
153U	62-74-8	Sodium fluoroacetate	
131U	100-42-5	Styrene	
132U	95-06-7	Sulfallate	
134U	72-54-8	TDE	
135U	107-49-3	TEPP	
136U	13071-79-9	Terbufos	
137U	961-11-5	Tetrachlorvinphos	
138U	139-65-1	4,4'-Thiodianiline	
139U	95-53-4	o-Toluidine	
140U	Class-08-4	Triaryl phosphate esters	
154U	56-35-9	Bis(tri-n-butyl tin) oxide	
171U	688-73-3	Tributyltin (and other salts and esters)	
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172U	87-61-6	1,2,3-Trichlorobenzene	
173U	120-82-1	1,2,4-Trichlorobenzene	
141U	52-68-6	Trichlorfon	
142U	1582-09-8	Trifluralin	
143U	137-17-7	2,4,5-Trimethylaniline	
144U	512-56-1	Triamethylphosphate	
174U	51-79-6	Urethane	
175U	593-60-2	Vinyl bromide	
155U	75-35-4	Vinylidene chloride	
146U	137-30-4	Ziram	