

UNIVERSITY OF WEST FLORIDA

PROGRAM FOR THE MANAGEMENT AND DISPOSAL OF HAZARDOUS WASTES

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Environmental Health & Safety
University of West Florida
11000 University Parkway
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SECTION I

UWF's HAZARDOUS WASTE MANAGEMENT PROGRAM

HAZARDOUS WASTE DISPOSAL AND MANAGEMENT

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Policy: UWF shall take every precaution against hazards normally associated with handling and disposal of hazardous chemicals and wastes to avoid human and environmental exposure.

The University is a *Small Quantity Generator* (EPA ID #FL0053000709) of hazardous waste and is thereby required to comply with Federal and State regulations governing the management and disposal of hazardous wastes. These regulations mandate that the University determine if any given waste is hazardous, and if so, manage and dispose of that waste strictly in compliance with applicable standards.

Standards: Chapter 403.704 and 403.721, Florida Statutes, and Chapter 62-730, Florida Administrative Codes, Rules of the Department of Environmental Protection (DEP); Title 40, Code of Federal Regulations, Chapters 260 - 271.

The DEP regulates hazardous wastes from the point of generation to disposal. A fine of up to \$25,000 per day per violation is authorized to be levied against violators of transportation, treatment, storage or disposal requirements during an enforcement action. Knowingly or repeatedly violating these rules or endangering another person can result in criminal imprisonment from 5 - 15 years and/or monetary fines from \$50,000 to \$1,000,000 per day per violation.

Responsibility:

The President of the University has the ultimate responsibility to insure that hazardous wastes and materials are properly managed. That responsibility has been delegated, via appropriate vice presidents, deans, and departmental chairs to insure that all users of hazardous materials properly manage hazardous wastes generated by their operations.

It shall be the responsibility of the departmental supervisor, instructor, principal investigator and/or laboratory supervisor to ensure the proper management, and storage of all hazardous wastes generated by their respective department, laboratory, or research operation.

The instructor, principle investigator, laboratory supervisor, or other departmental supervisor shall ensure that all hazardous wastes are identified at the point of generation and properly labeled and dated.

The Department of Environmental Health and Safety shall insure that hazardous wastes are collected from various generators in a timely manner, verify appropriate identification and labeling information, provide appropriate temporary storage, and arrange for transportation and disposal of the waste in a safe and legal manner.

Definitions:

- ◆ Solid Waste - For purposes of this program, a solid waste may be any solid, liquid, or containerized gas which no longer has an appropriate and legal intended use for the University. For a legal definition, refer to the Federal Solid Waste Disposal Act (SWDA).

- ◆ Hazardous Waste - Any solid waste (as defined by the Federal Solid Waste Disposal Act) which possess hazardous characteristics, including flammability, corrosivity, reactivity, or toxic characteristics (TCLP) as defined by the Code of Federal Regulations (40 CFR 261).
- ◆ Acutely Hazardous Waste - Wastes listed in 40 CFR 261.33(e) often referred to as the "P" Listed wastes. Refer to Section III.
- ◆ "Listed Hazardous Waste" - Any chemical or product as listed in 40 CFR 261.31 - 261.33. Listed wastes are often referred to as "D", "F", "K", "U", and "P" wastes. Refer to Section III.
- ◆ Flammable Characteristic Waste - Any waste with a flash point of less than 140F (60C). Common flammable materials include acetone, toluene, methanol, ethers, isopropanol, duplicating fluids, rubber cement glue, paint thinner or mineral spirits, oil based paints and stains, rubbing alcohol, nail polish remover, many aerosol containers such as spray paints and adhesives, and solvent-soaked rags.
- ◆ Corrosive Characteristic Waste - Any liquid waste which has a pH of less than 2 (acidic) or greater than 12.5 (basic), or corrodes steel at a rate specified by EPA. Corrosive wastes may include, sulfuric acid, hydrochloric acid (muriatic acid), sodium hydroxide, drain openers (Drano) and products which contain strong acids or bases, which include many cleaning products.
- ◆ Reactive Characteristic Waste - Any waste which is unstable, can readily undergo a violent change, reacts violently with water, is capable of detonation or explosive reaction, or contains sulfides or cyanides that have the potential for generating toxic fumes or vapors. Examples of reactive wastes include sodium and potassium metal, dry picric acid, compounds that form explosive peroxides, and cyanide plating operations.

- ◆ Toxic Characteristic Waste (or TCLP) - a waste identified through an EPA method (**Toxic Characteristic Leachate Procedure**) that has the potential of forming a leachate that may cause groundwater contamination. If any product contains a constituent greater than a specified concentration as determined by the TCLP, it is a hazardous waste. Examples are products that contain benzene (many petroleum based products), cadmium (nickel cadmium batteries), lead (lead batteries and lead paints), silver (spent photofixer, silver nitrate), chromium, mercury (mercury batteries, fluorescent light tubes), etc. Refer to Section II.

- ◆ Storage Area - Area in which hazardous wastes are temporally stored for up to 180 days while awaiting transport to a licensed disposal facility. This is a regulated area in which all containers must be labeled, dated, and inspected weekly.

- ◆ Satellite Accumulation Area - A temporary storage and collection area of hazardous waste, ***near the point of generation***, which is under direct control of the person or operator generating the waste. Waste in an approved satellite accumulation area is exempt from the 180 day time limit if other requirements are met. (NOTE: Subject to considerable interpretation and constraints by various regulators).

- ◆ Small-Quantity Generator (SQG) - A generator of hazardous waste who generates between 100 kg and 1000 kg of waste (or less than 1 kg of acutely hazardous waste) in a calendar month. At no time can a SQG have greater than 6000 kg of hazardous waste in storage. The University is considered a small quantity generator.

- ◆ Large-Quantity Generator (LQG) - A generator of hazardous waste who generates greater than 1000 kg (or greater than 1 kg of acutely hazardous waste) in a calendar month.

I. Procedures for Departments Generating Wastes:

- ◆ All hazardous waste shall be identified at the source. A material does not become a waste until it can no longer be used for its intended purpose. The words **HAZARDOUS WASTE** must be present on each container.
- ◆ The Department of Environmental Health and Safety will provide appropriate labels for the identification of hazardous wastes. See Section IV.
- ◆ Insure that hazardous wastes are collected in appropriate containers which are compatible with the waste and can be tightly capped. Do not use milk jugs.
- ◆ All hazardous waste shall be clearly labeled with all known constituents. Be sure to include both the solvent(s) and solute(s). Particular emphasis shall be placed on identifying listed and characteristic components.
- ◆ Hazardous Waste shall be stored in dedicated, secure, and safe location within the generating area. Waste shall not be placed in a location subject to accidental breakage or spillage.
- ◆ In order to comply with 40CFR265.177(c), hazardous wastes shall be segregated by a physical barrier according to hazard class, from the point of generation. Specifically, the following must be physically separate at all times by a barrier or sufficient distance: acids; bases; flammables; oxidizers; reactives. A barrier has been determined by DEP to be a cabinet, flammable storage cabinet, or a secondary containment capable of being sealed (i.e. container with a lid). Reference **Section VII** for compatibility charts.
- ◆ The START DATE shall be placed on the label on the date that waste is first added. **Do not** put a date in the STORAGE DATE location. The storage date will be completed when the container is moved from the generation point to the storage location.
- ◆ Complete the other information requested on the label including department and/or research group, name of individual/researcher/supervisor providing the information, and a phone number.
- ◆ Contact the Department of Environmental Health and Safety when a container has been filled or a particular project generating waste has been completed.

DO's and DON'T's

- ◆ **Do** use an appropriate size container for the waste generated. Under filled containers cost the same to dispose as a filled one.
- ◆ **Do not** overfill containers. Leave approximately a one to two inch air space at the top of the container. Over filled containers of volatile organics pressurize and leak in storage. Leaking containers are a violation of hazardous waste regulations and also eradicate the ink on labels.
- ◆ **Do** write legibly on the label with permanent ink. Write out chemical name(s) of the components. Avoid using chemical formulas. Please do not use water based felt tip markers.
- ◆ **Do not** mix metallic mercury (Hg) with any other chemicals.
- ◆ **Do** keep all organic and inorganic mercury compounds separate from other materials. Contact EH&S if a procedure uses mercuric compounds or generates a hazardous waste containing mercuric compounds.
- ◆ **Do not** mix radioactive materials with any hazardous waste.
- ◆ **Do not** mix biohazardous materials with any hazardous waste.
- ◆ **Do not** mix incompatible materials together. If unsure of any particular combinations, use a separate container.
- ◆ **Do not** store incompatible hazardous waste materials in the same cabinet, fume hood, etc.
- ◆ **Do** call the Office of Environmental Health and Safety if you have any questions or are not sure how to manage a particular substance.

II. Procedures for the Scientific Stores/ Building 58:

1. All procedures listed in Section I above shall be followed.
2. Scientific Stores shall be responsible for managing hazardous waste from all Teaching Laboratories in Building 58 and Building 58A.
3. Each teaching laboratory shall be considered a **satellite accumulation area**.
4. Hazardous waste containers from Teaching Laboratories shall be collected by Scientific Stores personnel when full or when a given procedure is complete.
5. The STORAGE DATE shall be completed on each container when removed from the laboratory (i.e. the Satellite Accumulation Area).
6. Containers shall be stored temporarily in a dedicated storage area of Building 58/Room 31 until collected by the EH&S Office. Containers in this area may be stored for up to 180 days, however, typically will not be stored for greater than 30 days. All state and federal regulations governing Hazardous Waste Storage Areas are applicable in this area.

III. Procedures for the Department of Environmental Health and Safety (EH&S):

1. The EH&S Department shall collect hazardous wastes from generating departments periodically as needed or requested by the generating department.
2. The EH&S Department shall verify label information including contents, generating department, hazard classification, and storage date. Any incomplete information will be obtained from the generator prior to collection and removal from the area.
3. All hazardous waste collected by the EH&S Department will be taken to the hazardous waste storage building and stored up to 180 days.
4. Every waste container shall be identified with an ID number and the words HAZARDOUS WASTE.
5. A data base shall be maintained including the chemical identity, ID number, generating department, quantity of material, dates of storage and collection, and other pertinent information.
6. The EH&S Department shall maintain a contract with a licensed hazardous waste transporter and disposal contractor to legally and properly dispose of hazardous wastes generated by the University.
7. All hazardous waste shall be collected by the licensed contractor and removed from campus within 180 days of the storage date. All hazardous waste shall be packaged, labeled, manifested, and transported as required by applicable EPA, DOT, and state DEP regulations.

IV. Waste Minimization

Waste minimization is federally mandated for hazardous waste generators. Each department of The University of West Florida shall take reasonable and appropriate actions to minimize the amount of hazardous waste generated by their operations, teaching, and research. Waste minimization techniques shall include, but are not limited to:

1. Eliminate the waste generating process - Change or modify a process so that a hazardous waste is not produced. For example, use a computer program or model demonstration.

2. Substitute a non-hazardous or less hazardous material - Use surfactant cleaning compounds instead of chromic acid; use non-formaldehyde based fixatives in place of formalin, purchase formaldehyde-free preserved specimens, use non-hazardous scintillation fluids in place of toluene; use water-based latex paints and stains in place of oil based paints, stains, and solvents, etc.
3. Purchase small quantities/only purchase what you need - Remember that the cost of disposal often exceeds the purchase price. Check with other labs or the Stockroom to see if they may have what is needed. *Do not purchase large quantities of materials because they are less expensive per unit volume.*
4. Use less material - Reduce the scale of procedures or process.
5. Reuse and recycle materials where practical.

V. Training

1. State and Federal regulations {40 CFR 262.34(a)(4) and 265.16} require that training be provided to all individuals who generate hazardous waste.
2. Training shall be provided to all faculty, staff, and OPS student assistants performing activities which generate or potentially generate a hazardous waste.
3. Training will be provided by the Department of Environmental Health and Safety at mutually convenient and prearranged times.
4. Hazardous waste training provided by other facilities or recognized organizations (eg. University of Florida TREEO Center, Georgia Tech Continuing Education) will be evaluated on a case by case basis to determine if required topics have been covered. However, in all cases, individuals must be trained in specific procedures used by the University.
5. Training topics to be covered will include at a minimum the following:
 - a. Standard operating procedures and safety evaluations.
 - b. Hazardous waste identification and classification.
 - c. Proper labeling.

- d. Proper containers, segregation, and storage within generating areas.
- e. Emergency procedures and spill response.
- f. Penalties for non-compliance.

VI. Emergency Notifications and Emergency Response

NOTE: Please refer to Appendix IV and Section VI for locations of fire extinguishers, spill control kits/supplies and emergency phones.

1. State and Federal regulations {40 CFR 262.34(d)(4)} require that the University develop and maintain an Emergency Response Plan to address spills, fires and other emergencies associated with hazardous waste.
2. An emergency contact shall be appointed who has authority to take appropriate action and is on call 24 hours per day. The Emergency contact for the University is the **Director of Environmental Health and Safety**. A list of other contacts and phone numbers in order of contact is listed at the end of this section.
3. Spills and releases of certain chemicals in excess of their *Reportable Quantities (RQ)* requires immediate notification of the National Response Center (1-800-424-8802) and the State Warning Point (904-413-9911 or 1-800-320-0519). A list of chemicals and their RQ's is available from the Environmental Health and Safety Office. The Director of Environmental Health and Safety or other designee should be contacted immediately if a RQ of a substance has been spilled or released.
4. Spills of laboratory-quantities occur on occasion. In most cases these spills can and should be handled by laboratory personnel in a safe manner. Spilled materials and absorbents must be handled as a hazardous waste if applicable criteria is met.
5. Spills that cannot be handled safely by laboratory personnel should be referred to the Department of Environmental Health and Safety. In most cases, laboratory spills can be contained and absorbed with equipment in-house. Should the spill exceed the capabilities of EH&S personnel, a spill containment contractor - SWS - will be contacted to respond (1-800-852-8878).

6. Spills of large quantities, extremely hazardous substances, or any spill that is an immediate threat to personal safety or the environment shall be handled through the Emergency Notification System. That system shall be activated as follows:
 - a. Contact Campus Emergency at x911. Inform them of the exact situation, chemicals and quantities involved, and the location.
 - b. Campus Police shall contact the Escambia County Emergency Notification System via a direct line who will notify Ferry Pass Fire Department, EMS, and DEP Emergency Response. Campus Police will also contact the Director of EH&S or designee and other personnel as described in the UWF Emergency Action Plan.
 - c. The Director of EH&S or designee will determine if RQ's have been exceeded and make appropriate notification to the State Warning Point and the National Response Center.

Appendix I

LIST OF EMERGENCY CONTACTS

CAMPUS EMERGENCY NUMBER X911

(Inform them of the exact situation, chemicals and quantities involved, and the location)

Mr. Peter Robinson, Director
Environmental Health and Safety
Office 474-2435

Mr. Floyd Replogle, Asst. Director
Environmental Health and Safety
Office 473-7440

Mr. John Warren, Director
Public Safety
Office 474-2415

Lt. Rex Bryant, Administration
Public Safety
Office 474-2415

Lt. David Faircloth, Patrol
Public Safety
Office 474-3274

Mr Bert Hartley, Vice President
Administrative Affairs
Office 474-2209

Appendix II

Examples of Hazardous Waste

(including special waste that must be separated from normal trash)

Flammable Materials/Solvents

Mineral Spirits
Oil-based paints/spray paint/spray adhesives
Turpentine
Rubber Cement
Rubbing (isopropyl) alcohol
Aerosol cans
Citrus-based solvents
Cleaning rags used w/flammable solvents
Paints or markers, or dyes containing non-aqueous solvents

Corrosives

Drain Openers
Sodium hydroxide
Muriatic acid (hydrochloric acid)
Sulfuric acid

Reactives

Sodium and potassium metal
Sodium and potassium cyanide & solutions
Water reactive and shock sensitive compounds

Other

Photofixer and any products containing silver at a concentration of >5ppm.
Paint strippers
Products containing methylene chloride or other chlorinated solvents
UV lamps
HID (sodium or mercury vapor) lamps
Florescent lamps
Ballasts or capacitors containing PCB's (Polychlorinated biphenyls)
Nickel-cadmium or lead batteries (also silver or mercury batteries)
Mercury switches, thermostats, thermometers, barometers, etc.

IF YOU ARE UNSURE THAT A WASTE MATERIAL MAY BE CLASSIFIED AS A HAZARDOUS WASTE, PLEASE CONTACT THE OFFICE OF ENVIRONMENTAL HEALTH AND SAFETY.

Appendix III

ROUTINE CONTACTS FOR HAZARDOUS WASTE COLLECTION OR INFORMATION

Peter Robinson, Director
Environmental Health and Safety
Tel: X2435
E-mail: probinson@uwf.edu

Floyd Replogle, Asst. Director
Environmental Health and Safety
Tel: X2435
E-mail: freplogle@uwf.edu

Appendix IV

Primary Hazardous Waste Generation Locations on Campus

Building 13 - Physics
Building 80 - West - Duplicating Services
Building 36 - Communication Arts (Voyager - Photography)
Building 37 - Instructional Media Center (Photography)
Buildings 40/91/93 - Utilities/Physical Plant Maintenance/Transportation
Building 46 - Housing Maintenance
Building 95A - Fluorescent Bulb and PCB Ballast Storage
Building 58 - Biology/Chemistry/Medical Technology/CEDB
Building 82 - Art /Theater
Building 83 - ICER
Building 148 - Hazardous Waste Storage Building
Building 58A- Biology/Chemistry

Spill Control and Fire Extinguishing Equipment

Refer to Section VI for Floor Plans

Spill Control and Clean-up Equipment - Laboratories and maintenance operations using hazardous materials will on occasion spill products. The clean-up materials from spilled hazardous products may be regulated as a hazardous waste. Each area generating and accumulating hazardous waste in satellite accumulation areas, shall have spill control materials readily available for the types of waste generated. Materials shall include at a minimum absorbants, neutralizing agents, containers, brushes and dust pans, gloves, safety glasses and goggles. Departments are encouraged to purchase and maintain the materials needed. Environmental Health and Safety maintains spill control materials in the Hazardous Waste Storage Building and in Building 55.

Fire Control/Extinguishing Equipment - Federal and state regulations require that fire extinguishing equipment must be readily available. Fire extinguishers are located in prominent areas in each building in accordance with the requirements of NFPA 10 and the Office of the State Fire Marshal. Buildings 13 and 58 are also protected by a fire sprinkler system. Building 148 is equipped with an automatic heat or manually activated dry chemical fire suppression system.

Emergency Phones - Red Phones or emergency phones are located in all classroom/laboratory buildings as indicated on the floor plans in *Section VI*. Office phones are available in non-teaching, administrative and support areas. Buildings 55 and 148 have access to phones in Buildings 48 and 49 and/or two-way radio communication.

Location of Spill Control

Building 13 - Physics - Laboratory Room - Room 216, 324
Building 80 - West - Duplicating Services - Room 162B
Building 36 - Communication Arts (Voyager - Photography) - Rooms 112, 120, 122
Building 37 - Instructional Media Center (Photography) - Room 106
Buildings 40/91/93 - Physical Plant Maintenance/Transportation/Utilities - Waste generation area.
Building 46 - Housing Maintenance - Paint Shed
Building 95A - Fluorescent Bulb and PCB Ballast Storage - Container/Absorbent storage for EH&S
Building 58 - Biology/Chemistry/Medical Technology/CEDB - Portable cart in hallway accessible to labs
Building 82 - Art /Theater - 243A, 254
Building 83 - ICER- Hallway outside Room 116
Building 148 - Hazardous Waste Storage Buildings

Appendix V

ADDITIONAL INFORMATION

Additional information may be obtained from the following sources:

1. Laboratory Waste Management: A Guidebook, ACS Taskforce on Laboratory Waste Management; American Chemical Society, Washington, D.C. (1994).
2. Less is Better: Laboratory Chemical Management for Waste Reduction, 2nd Ed.; ACS Taskforce on Laboratory Waste Management; American Chemical Society, Washington, D.C. (1993).
3. Prudent Practices in the Laboratory: Handling and Disposal of Chemicals; National Research Council; National Academy Press; Washington, D.C. (1995).
4. Summary of Hazardous Waste Regulations; Florida Department of Environmental Protection; (1997) - See Section V.
5. Pollution Prevention and Waste Minimization in Laboratories; Reinhardt, Peter, et al; CRC Press Lewis Publishers; Boca Raton, FL; (1996)

SECTION II

TCLP Wastes (D List)

Table 5.4 TOXICITY CHARACTERISTICS WASTES

Constituent	EPA Waste Number	Regulatory Level,^a mg/L	Constituent	EPA Waste Number	Regulatory Level,^a mg/L
Arsenic	D004	5	Hexachlorobenzene	D032	0.13
Barium	D005	100	Hexachlorobutadiene	D033	0.5
Benzene	D018	0.5	Hexachloroethane	D034	3.0
Cadmium	D006	1	Lead	D006	5.0
Carbon tetrachloride	D019	0.5	Lindane	D013	0.4
Chlordane	D020	0.03	Mercury	D009	0.2
Chlorobenzene	D021	100	Methoxychlor	D014	10
Chloroform	D022	6	Methyl ethyl ketone	D035	200
Chromium	D007	5	Nitrobenzene	D036	2
o-Cresol	D023	200	Pentachlorophenol	D037	100
m-Cresol	D024	200	Pyridine	D038	5
p-Cresol	D025	200	Selenium	D010	1
Cresol	D026	200	Silver	D011	5
2,4-D	D016	10	Tetrachloroethylene	D039	0.7
1,4-Dichlorobenzene	D027	7.5	Toxaphene	D015	0.5
1,2-Dichloroethane	D028	0.5	Trichloroethylene	D040	0.5
1,1-Dichloroethylene	D029	0.7	2,4,5-Trichlorophenol	D041	400
2,4-Dinitrotoluene	D030	0.13	2,4,6-Trichlorophenol	D042	2
Endrin	D012	0.02	2,4,5-TP (silvex)	D017	1
Heptachlor	D031	0.008	Vinyl chloride	D043	0.2

^aFor materials undergoing the Toxicity Characteristic Leaching Procedure, concentrations exceeding these values result in the waste being regulated as "hazardous".

SECTION III

RCRA Listed Wastes

(F, U, and P Lists)

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Generic:		
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/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F003	The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I)*
F004	The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F005	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I,T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	(T)
F007	Spent cyanide plating bath solutions from electroplating operations	(R, T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R, T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	(R, T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R, T)
F012	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.	(T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.	(T)
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.).	(H)

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	(H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	(H)
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in § 261.31 or § 261.32.)	(T)
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	(T)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	(H)
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.	(T)
F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with § 261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
F037	Petroleum refinery primary oil/water/solids separation sludge—Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in § 261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.	(T)

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Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
F038	<p>Petroleum refinery secondary (emulsified) oil/water/solids separation sludge—Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in §261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing.</p>	(T)
F039	<p>Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subpart D of this part. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.).</p>	(T)

Hazardous waste No.	Chemical abstracts No.	Substance
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 H_3AsO_4
P012	1327-53-3	Arsenic oxide As_2O_3
P011	1303-28-2	Arsenic oxide As_2O_5
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-
P028	100-44-7	Benzene, (chloromethyl)-

Hazardous waste No.	Chemical abstracts No.	Substance
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	122-09-8	Benzenethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1).
P001	181-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & 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
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	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
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 otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
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	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-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-, (1alpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta, 7aalpha)-
P051	172-20-8	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-, (1alpha,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	1534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramidate, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Diithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)- carbonyl]oxime.
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P194	23135-22-0	Ethanimidothiolic acid, 2-(dimethylamino)-N-[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester.
P066	16752-77-5	Ethanimidothiolic acid, N-[(methylamino)carbonyl]oxy]-, methyl ester

Hazardous waste No.	Chemical abstracts No.	Substance
P101	107-12-0	Ethyl cyanide
P054	151-56-4	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(2+) 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(dimethylcarbomodithioato-S,S')-
P196	15339-36-3	Manganese dimethyldithiocarbamate.
P092	62-38-4	Mercury, (acetato-O)phenyl-
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)carbonyloxy]phenyl]-, monohydrochloride.
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[(methylamino)carbonyloxy]phenyl]-
P050	115-29-7	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-Methylacetonitrile
P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb.
P128	315-8-4	Mexacarbate.
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO) ₄ , (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide Ni(CN) ₂
P075	154-11-5	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	109-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO ₂
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramidate
P087	20816-12-0	Osmium oxide OsO ₄ , (T-4)-
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-
P048	51-28-5	Phenol, 2,4-dinitro-
P047	1534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester).
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate.
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate.

Hazardous waste No.	Chemical abstracts No.	Substance
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-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-[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-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl 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
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, 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	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	154-11-5	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	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	157-24-9	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	157-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
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 oxide Tl ₂ O ₃
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH
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

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Hazardous waste No.	Chemical abstracts No.	Substance
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V ₂ O ₅
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	¹ 81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN) ₂
P122	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10% (R,T)
P205	137-30-4	Ziram.

¹ CAS Number given for parent compound only.

Hazardous waste No.	Chemical abstracts No.	Substance
U394	30558-43-1	A2213.
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	¹ 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethyl ester (I)
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 (I)
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 (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U365	2212-67-1	H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester.
U010	50-07-7	Azino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[aminocarbonyloxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1alpha, 8beta,8alpha,8balpha)]-
U280	101-27-9	Barban.
U278	22781-23-3	Bendiocarb.
U364	22961-82-6	Bendiocarb phenol.
U271	17804-35-2	Benomyl.
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-

Hazardous waste No.	Chemical abstracts No.	Substance
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
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	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) 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, dioctyl 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
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
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)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U202	181-07-2	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	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U064	189-55-9	Benzo[rs]pentaphene
U248	181-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U022	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
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-
U401	97-74-5	Bis(dimethylthiocarbamoyl) sulfide.
U400	120-54-7	Bis(pentamethylene)thiuram tetrasulfide.
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 (I)
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)

Hazardous waste No.	Chemical abstracts No.	Substance
U143	303-34-4	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*),7alpha]]-
U031	71-36-3	n-Butyl alcohol (l)
U392	2008-41-5	Butylate.
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.
U375	55406-53-6	Carbamic acid, butyl-, 3-iodo-2-propynyl ester.
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester.
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	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-
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.
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.
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.
U114	1111-54-6	Carbamodithioic acid, 1,2-ethanediybis-, salts & esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U279	63-25-2	Carbaryl.
U372	10605-21-7	Carbendazim.
U367	1563-38-8	Carbofuran phenol.
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (l,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, alpha & gamma isomers
U026	494-03-1	Chlormaphazin
U037	108-90-7	Chlorobenzene
U038	51-15-6	Chlorobenzilate
U039	59-50-7	p-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 H ₂ CrO ₄ , calcium salt
U050	218-01-9	Chrysene
U393	137-29-1	Copper, bis(dimethylcarbamodithioato-S,S')-
U393	137-29-1	Copper dimethyldithiocarbamate.
U051	Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (l)
U246	506-68-3	Cyanogen bromide (CN)Br
U386	1134-23-2	Cycloate.
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (l)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U057	108-94-1	Cyclohexanone (l)

Hazardous waste No.	Chemical abstracts No.	Substance
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	194-75-7	2,4-D, salts & esters
U059	20830-81-3	Daunomycin
U366	533-74-4	Dazomet.
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	Dibenzo[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
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	111-91-1	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-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U395	5952-26-1	Diethylene glycol, dicarbamate.
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	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha, alpha-Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
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 (I)
U111	621-64-7	Di-n-propylnitrosamine
U403	97-77-8	Disulfiram.
U390	759-94-4	EPTC.
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U404	121-44-8	Ethanamine, N,N-diethyl-
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
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, hexachloro-
U024	111-91-1	Ethane, 1,1'-(methylenebis(oxy))bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
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

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Hazardous waste No.	Chemical abstracts No.	Substance
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, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (l)
U113	140-88-5	Ethyl acrylate (l)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (l)
U114	1111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
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 (l,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U407	14324-55-1	Ethyl Ziram.
U396	14484-64-1	Ferbam.
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (l)
U125	98-01-1	2-Furancarboxaldehyde (l)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro-(l)
U125	98-01-1	Furfural (l)
U124	110-00-9	Furfuran (l)
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	Glycidyaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
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 H ₂ S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	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	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (l,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate

Hazardous waste No.	Chemical abstracts No.	Substance
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
U384	137-42-8	Metam Sodium.
U152	126-98-7	Methacrylonitrile (I, T)
U092	124-40-3	Methanamine, N-methyl- (I)
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-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
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 (MEK) (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 (I)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U365	2212-67-1	Mollinate.
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	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
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine

Hazardous waste No.	Chemical abstracts No.	Substance
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, (chloromethyl)-
2	123-63-7	Paraldehyde
U391	1114-71-2	Pebulate.
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See	87-86-5	Pentachlorophenol
F027		
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
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-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediy)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	87-86-5	Phenol, pentachloro-
F027		
See	58-90-2	Phenol, 2,3,4,6-tetrachloro-
F027		
See	95-95-4	Phenol, 2,4,5-trichloro-
F027		
See	88-06-2	Phenol, 2,4,6-trichloro-
F027		
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-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-
U400	120-54-7	Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-
U383	128-03-0	Potassium dimethyldithiocarbamate.
U378	51026-28-9	Potassium n-hydroxymethyl- n-methyl-di-thiocarbamate.
U377	137-41-7	Potassium n-methyldithiocarbamate.
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- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
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	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
F027		
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 (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-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 (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)

Hazardous waste No.	Chemical abstracts No.	Substance
U373	122-42-9	Propam.
U411	114-26-1	Propoxur.
U387	52888-80-9	Prosulfocarb.
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
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	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U202	181-07-2	Saccharin, & 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 ₂ (R,T)
U376	144-34-3	Selenium, tetrakis(dimethyldithiocarbamate).
U015	115-02-6	L-Serine, diazoacetate (ester)
See	93-72-1	Silvex (2,4,5-TP)
F027		
U379	136-30-1	Sodium dibutyldithiocarbamate.
U381	148-18-5	Sodium diethyldithiocarbamate.
U382	128-04-1	Sodium dimethyldithiocarbamate.
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U277	95-06-7	Sulfallate.
U189	1314-80-3	Sulfur phosphide (R)
See	93-76-5	2,4,5-T
F027		
U402	1634-02-2	Tetrabutylthiuram disulfide.
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See	58-90-2	2,3,4,6-Tetrachlorophenol
F027		
U213	109-99-9	Tetrahydrofuran (I)
U401	97-74-5	Tetramethylthiuram monosulfide.
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 TlCl
U217	10102-45-1	Thallium(I) nitrate
U366	533-74-4	2H-1,3,5-Thiadiazine- 2-thione, tetrahydro-3,5-dimethyl-
U218	62-65-5	Thioacetamide
U410	59669-26-0	Thiodicarb.
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl-
U402	1634-02-2	Thioperoxydicarbonic diamide, tetrabutyl.
U403	97-77-8	Thioperoxydicarbonic diamide, tetraethyl.
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
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See	95-95-4	2,4,5-Trichlorophenol
F027		
See	88-06-2	2,4,6-Trichlorophenol
F027		

§ 261.35

Hazardous waste No.	Chemical abstracts No.	Substance
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-
U385	1929-77-7	Vernolate.
U043	75-01-4	Vinyl chloride
U248	181-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	1330-20-7	Xylene (l)
U200	50-55-5	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(diethylcarbamodithioato-S,S')
U249	1314-84-7	Zinc phosphide Zn_3P_2 , when present at concentrations of 10% or less

¹ CAS Number given for parent compound only.

SECTION IV

UWF Hazardous Waste ID Label

HAZARDOUS WASTE

The University of West Florida

EPA ID #

CHEMICAL COMPOSITION: _____

LABELED BY _____ DATE _____

DEPARTMENT _____

BUILDING/ROOM _____

PHONE _____ STORAGE DATE _____

CALL SLIP:

HAZARDOUS CLASS: _____ STORAGE CODE: _____

FLAMMABLE

REACTIVE

OTHER EXPLAIN: _____

OXIDIZER

CORROSIVE

TOXIC

NON-HAZARDOUS

ENVIRONMENTAL HEALTH & SAFETY

(850)474-2177/2435

SECTION V

Florida DEP Summary Of Hazardous Waste Regulations



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

SUMMARY OF HAZARDOUS WASTE REGULATIONS

This summary is provided to assist hazardous waste handlers in complying with federal and State of Florida regulations. Most of the following regulations have been in effect since November 19, 1980. Florida has adopted and incorporated portions of Title 40 Code of Federal Regulations (CFR) Parts 260-271 into its Florida Administrative Code (FAC) Rule 62-730. In some instances, FAC 62-730 is more stringent than 40 CFR.

Hazardous wastes (HW) are wastes *listed* in 40 CFR 261 Subpart D as hazardous by the U.S. Environmental Protection Agency (EPA). Or they are wastes *characterized* in 40 CFR 261 Subpart C as hazardous by exhibiting one of four characteristics: *ignitability* (i.e., an oxidizer or flash point < 140"), *corrosivity* (i.e., pH < 2 or ≥ 12.5), *reactivity*, or *toxicity*. A hazardous waste determination must be made of any waste material generated (§262.1 1). If the material is hazardous, then it must be recycled, treated, stored, or disposed at a proper HW facility. HW cannot be disposed on or in the ground, or in local landfills, septic tanks, or injection wells. Also, regardless of quantity, the generator of HW is ultimately responsible for the waste from "cradle to grave", and can be held liable for improper management of HW even though it may have been sent to a "proper" HW management facility using a licensed transporter.

A copy of the federal hazardous waste regulations (40 CFR 260-268) can be obtained from public, college or law libraries; EPA Region 4, Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta, Georgia 30303-3104 (4041562-8579); the U.S. Government Printing Office, Washington, D.C. 20402; or the U.S. Government Printing Office, 100 West Bay Street, Suite 100, Jacksonville, Florida 32202 (904/353-0569). Copies of FAC 62-730 may be obtained from the Department of Environmental Protection (DEP).

This handout is based on DEP's understanding of the HW regulations. It should be read in conjunction with (and not as a substitute for) the federal and state HW regulations. This summary includes the principal components of the HW regulations. Regulatory requirements may change because of changes in the regulations, new interpretations or guidance from EPA or DEF, judicial rulings, etc.

Ultimately, it is the facility's responsibility to stay current with the HW regulations and be in compliance with all applicable environmental regulations. Failure to meet the applicable rules may subject facilities to more stringent standards. For example, small quantity generators (SQGS) dumping HW illegally not only become subject to disposal facility standards but will also be subject to enforcement actions. DEP has an agreement with EPA that mandates the assessment of penalties for violations of the Resource Conservation and Recovery Act (RCRA) requirements.

8/86; Revised 7/87; 10/87-@ 9/88; 10/89; 3/91; 8/93; 2/95,,9195; 12195; 4196; 8/97

Protect, Conserve and Manage Florida's Environment and Natural Resources'

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Many local governments have regulations and ordinances regarding the management of hazardous materials and/or wastes. Please check with those agencies for information on local requirements. New regulations may be adopted by EPA and become effective in Florida prior to adoption by DEP. In December, 1996 generators and permitted hazardous waste facilities became subject to new air emissions standards- for containers, tanks and recycling equipment. For information and copies of new regulations, call the RCRA Hotline at 1- 800-424-9346.

TOXICITY CHARACTERISTIC

The federal regulations regarding the determination of hazardous wastes (40 CFR 261) were revised effective September 25, 1990, to replace the Extraction Procedure Toxicity Characteristic (EP Toxic) with the Toxicity Characteristic Leaching Procedure- (TCLP). Information about the TC final rule can be obtained from the March 29, 1990, Federal Register (55 FR 11798 - 11877). Further information regarding the TC Rule can be obtained from the RCRA/Superfund Hotline (1/800-424-9346).

LAND DISPOSAL RESTRICTIONS

On November 8, 1984, the President signed into law the Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA). The amendments require the EPA to evaluate all listed and characteristic hazardous wastes to determine which wastes should be restricted from land disposal. These restrictions are called the Land Disposal Restrictions (LDR). As of May 8, 1990, most hazardous wastes must be treated to meet these standards prior to disposal in permitted hazardous waste landfills or surface impoundments. The LDR rule prohibits the dilution of restricted wastes as a substitute for effective adequate treatment.

Before treating a HW or disposing of it off site, the generator must determine whether the waste is subject to the LDR rules, what hazardous constituent levels are in the waste, and whether the waste must be treated or already meets the applicable treatment standard or prohibition level upon generation.

Generators who treat hazardous waste on site in tanks or containers under 40 CFR 262.34 must develop and follow a written waste analysis plan. The plan must be based on a detailed chemical and physical analysis of the waste. Records must be kept documenting treatment. Listed hazardous wastes must still be disposed of to a permitted hazardous waste landfill after treatment.

Effective August 11, 1997, EPA revised the 40 CFR 268 requirements for HW generators. For the initial shipment of a waste shipped off site, the generator must notify treatment and disposal facilities of the nature and hazardous constituents of each hazardous waste shipped. The written generator notice must include:

- a) The initial manifest document number and all applicable EPA hazardous waste number(s) and treatability groups (See 40 CFR 268.40);
- b) A list of the hazardous constituents that must be treated;
- c) Waste analysis data (if available);
- d) A signed certification if the generator is claiming that his waste already meets the treatment standard.

All notifications certifications, and waste analysis data must be kept on-site for at least **three (3)** years from the date the waste was last sent to on or off site treatment or disposal. **The generator must submit a new notice if the waste or the receiving facility changes.**

The LDR rule provides for a few limited opportunities for delaying the effective date of prohibition, for a treatability variance, or for gaining an exemption from the prohibitions. Contact the EPA for additional details. This LDR explanation is a brief synopsis of a complex set of rules and regulations and is not all inclusive. Contact the EPA or DEP or review 40 CFR 268 for detailed information.

Claims that hazardous waste is exempt from regulation because it came from one or more conditionally exempt small quantity generators must be documented (FAC 62- 730.030(4)). In addition, generators must keep records of hazardous wastes gene-rated that were subsequently managed pursuant to an exclusion. This includes wastes that were generated, accumulated and then disposed of in a waste water treatment pretreatment unit or unit subject to the Clean Water Act.

USED OIL REQUIREMENTS FOR ALL GENERATORS - 40 CFR PART 279

1. Used oil may only be stored in tanks or containers.
2. Containers and tanks must be in good condition and not leaking.
3. Containers and tanks must be labeled "Used Oil."
4. Spills must be cleaned up, and contaminated materials disposed of properly.
5. Oil filters may not be disposed of to landfills. They must be recycled by an oil filter processor or municipal refuse incinerator (FAC 62-71 0).

HAZARDOUS WASTE REQUIREMENTS

- I. **CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS (CESQG)**
40CFR 261.5. *CESQGs generate less than-100 kilograms of HW per - month and less than 1 kilogram of acute HW (such as some pesticides, toxins or arsenic and cyanide compounds) per month.* Many wastes that are recycled are included in this quantity determination.
 1. Perform HW determination (§262.1 1).
 2. Cannot accumulate > I 000 kg at any time.
 3. Ensure delivery of HW to a proper recycling facility or TSDF.
 4. Keep records documenting proper disposal (FAC 62-730).

- II. SMALL QUANTITY GENERATORS (SQG) 40 CFR 262. *SQGs generate 100 - 1000 kilograms of HW per month.* Many wastes that are recycled are included in this quantity determination.
1. Obtain a DEPIEPA ID Number (§262.12) (phone 850/488-0300).
 2. Use manifest system (unless there is a reclamation agreement pursuant to §262.20(e)), and ship only to a permitted facility (262, Subpart B).
 3. Never exceed the 6000 kg accumulations/180 day storage time limit.
 4. Emergency Planning:
 - a) Have at least one employee or a designee with authority as Emergency Coordinator (EC) on 24-hour call.
 - b) Next to the telephone, post
 - (i) the EC name and phone number,
 - (ii) fire department's number,
 - (iii) location of fire extinguishers; spill control equipment/material, and fire alarm (if any).
 - c) Follow emergency procedures in §262.34(d)(5), including taking necessary steps to address spills and fires, and notifying the National Response Center (24-hour number: 800/424-8802) and the State Warning Point (850/413- 9911).
 - d) Upon request, the DEP will provide contingency plan guidance if the facility wishes to develop a more comprehensive emergency plan than required of SQGS.
 5. Training of personnel regarding proper HW handling and emergency response [§262.34(d)(5)(iii)].
 6. Keep records (§262.44), including manifests, test results, etc., a minimum of three (3) years.
 7. If tanks are used for management of HW, meet the tank requirements of §265.201. This includes daily and weekly. inspections, required maintenance, spill response and closure standards.
 8. **Meet the following requirements under III -- LOG Requirements, below:**
Items 1, 2, 4, 5, 6, 12 to 15, 17, and 22.
 9. If a SQG fails to meet applicable requirements, the full generator standards (and possibly TSDF standards) may apply.

- III. LARGE QUANTITY GENERATORS (LQG) 40 CFR 262. *LQG's generate 1000 kilograms or more of HW per month or 1 kilogram or more of acute HW (such as some pesticides, toxins or arsenic and cyanide compounds) per month.* Many wastes that are recycled are included in this quantity determination.
1. Perform HW determination (§262.1 1), including LDR waste analyses (§268.7).
 2. Obtain a DEP/EPA ID number (§262.12) (phone 850/488-0300).
 3. Use manifest system, and ship to a permitted facility (262, Subpart B). State rules require the generator to complete areas D, F, H, 1, K, O, Q, R and T on the form in addition to the other requirements.
 4. Meet pre-transport requirements for packaging, labeling, marking and placarding (262 Subpart C).
 5. Meet satellite accumulation rules (§262.34(c)). Close and label these containers.
 6. Label containers and tanks with the words "Hazardous Waste" and label containers with accumulation start dates (§262.34(a)).
 7. Do not store HW > 90 days (§262.34(b)).
 8. Keep all records (§262 Subpart D) for at least three (3) years (including manifests, test data, biennial reports, etc.).
 9. File a biennial report for HW shipped off site (FAC 62-730.160).
 10. File exception report for late or missing manifests from the designated facility (§262.42).
 11. Meet personnel training requirements, including documentation of training (§265.16).
 12. Maintain and operate the facility in a clean, safe manner (§265.31).
 13. Emergency equipment (§265.32).
 - a) telephone or hand-held two-way radio;
 - b) internal communication or alarm system;
 - c) fire and spill control equipment (e.g. fire extinguishers, hoses, sprinklers, etc.);
 - d) neutralizing agents, spill adsorbents, overpack drums, standby 55-gallon drums, etc.;
 - e) test and maintain the emergency equipment (§265.33).
 14. Maintain adequate aisle space for evacuation, inspecting drums, etc. (e.g. no less than three (3) feet) (§265.35).
 15. Attempt to make arrangements with local fire and police departments, hospitals, and emergency response contractors/equipment suppliers, with regards to emergency arrangements, hazards of materials handled, layout of facility, etc. (§265.37).

16. Have a contingency plan meeting the requirements of 265 Subpart D. Upon request, DEP will provide contingency plan guidance. Emergencies that require implementation of the contingency plan must be reported to DEP. Updated contingency plans must be distributed when facility conditions or emergency coordinators change.
17. Containers (e.g. drums, cans, etc.) must be kept closed and in good condition, inspected at least weekly, be compatible with the HW stored, and separated from other incompatible wastes (e.g. keep cyanides away from acids (265-Subpart 1)). **Records must be kept of these inspections (FAC 62-730.160).**
18. Ignitable or reactive HW must be stored at least fifty (**50**) feet from the facility's boundary line (265 Subpart 1).
19. Tanks must meet the requirements of 265 Subpart J (structural integrity; containment and detection of releases; inspections; response to leaks or spills; operating requirements; closure and post-closure care; special requirements for ignitable, reactive and/or incompatible wastes; waste analysis and trial tests).
20. Special cautions (including "no smoking" signs) are required for ignitable or reactive wastes (§265.17).
21. Security (e.g. a locked fence) and bermed containment areas (with roof and impermeable floor) for HW storage areas are strongly recommended.
22. A Land Disposal Restrictions (LDR) Certification or Notification must accompany the initial manifest for a restricted waste. Generators who treat waste to meet land disposal restrictions must submit a waste analysis plan to DEP (§268.7).
23. Meet applicable air emission standards under 40 CFR 265 Subparts AA, BB and CC.

It is the facility's responsibility to comply with Occupational Safety & Health Administration (OSHA) worker safety and protective clothing rules; fire codes; Florida's Right to Know Law; Superfund Amendments and Reauthorization Act (SARA); etc.

HAZARDOUS WASTE MAY NEVER BE DISPOSED OF IN SEPTIC TANKS OR ON THE GROUND AT FACILITIES THAT DO NOT HAVE HAZARDOUS WASTE PERMITS.

HAZARDOUS WASTE MAY ONLY BE BURNED IN PERMITTED HAZARDOUS WASTE INCINERATORS. DO NOT DISPOSE OF HAZARDOUS WASTE BY EVAPORATION.

IV. TRANSPORTERS (40 CFR 263) (FAC 62-730).

1. Obtain ID number (§263.1 1) (phone 850/488-0300).
2. Use manifest system (263 Subpart 8).
3. Ability to clean up hazardous waste discharges during transportation-related incidents (263 Subpart C).
4. Provide annual documentation of financial responsibility (FAC 62-730.170).
5. Submit annual status update to DEP (FAC 62-730.170).
6. Transporters storing waste > 24 hours at a transfer facility must notify DEP and meet many TSD requirements (FAC 62-730.171), including containment, operating record, contingency plan, training, security, and closure.
7. All transfer facilities operated in the state must have a unique ID number (FAC 62- 730.171).
8. Transfer facilities must submit closure plan and contingency plan to DEP (FAC 62- 730.171).
9. Transfer facilities must maintain a written record of when all hazardous waste enters and leaves the facility (FAC 62-730.171).

FLORIDA'S HAZARDOUS WASTE REGULATIONS FOR TRANSPORTERS AND TRANSFER FACILITIES ARE MORE STRINGENT THAN THE FEDERAL REGULATIONS.

V. TREATMENT, STORAGE AND DISPOSAL FACILITIES (TSD) (40 CFR 264 or 265).

1. Obtain a DEPIEPA ID number (§264.1 1).
2. Obtain a HW permit unless exempt (e.g. wastewater treatment units, elementary neutralization, etc.) and comply with permit conditions. Facilities receiving HW from off-site (including some recycling facilities) may be subject to TSD requirements.
3. Must meet applicable generator standards (111, above).
4. Comply with general facility standards, including waste analyses, security, inspections, and personnel training (264 Subpart B).
5. Maintain emergency equipment, adequate aisle space, and make arrangements with local authorities (264 Subpart C).
6. Have a contingency plan meeting the requirements of 264 Subpart D.

7. Use manifest system and comply with recordkeeping requirements (264 Subpart E).
8. Comply with groundwater monitoring requirements (264 Subpart F).
9. Comply with closure and post-closure requirements (264 Subpart G).
10. Maintain financial assurance foreclosure, post closure (if applicable) and liability (264 Subpart H).
11. Comply with container management standards (264 Subpart I).
12. Comply with tank management standards (264 Subpart J).
13. Comply with additional requirements for individual units such as surface impoundments, waste piles, containment buildings, incinerators, drip pads, etc. (264 Subpart K - 264 Subpart DD).
14. Meet applicable air emission standards (264 Subparts AA, BB, and CC, Subpart CC effective December 1996).
15. Meet applicable LDR requirements for treatment facilities, or as generators for wastes sent off site for further treatment (Part 268).

IV. MANIFEST FORMS

Title 40 CFR Part 262 Subpart B requires the use of the Uniform Hazardous Waste Manifest (EPA Form 8700-22 and 8700-22a) for hazardous waste shipments. Florida adopted 40 CFR 262 Subpart B by reference in FAC 62-730.160(1).

Obtaining Manifest Forms

Florida does not supply manifests, but does supply a list of vendors from which copies of the manifest may be obtained. Copies may also be available from hazardous waste transporters or hazardous waste management facilities.

Manifest Copies

40 CFR 262.22 requires the manifest to consist of a copy for:

1. the generator;
2. each transporter;
3. the owner/operator of the designated facility; and
4. a signed copy to be returned to the generator by the designated facility.

For regular shipments of hazardous waste, Florida does not require the submission of a manifest copy to DEP. However, manifests must be retained for three (3) years and are reviewed as part of hazardous waste compliance inspections conducted by DEP.

When hazardous wastes are shipped under an emergency EPAIDF-P identification number, as defined in FAG 62-730.161, the generator must send a legible copy of all signed and returned manifests to DEP within 45 days of the last shipment.

The owner/operator of a designated facility must submit to DEP any manifests for which a significant discrepancy is discovered, as defined in 40 CFR 264.72 and 40 CFR 265.72, if the discrepancy is not resolved within 15 days.

A large quantity generator must submit a legible copy of a manifest to DEP if he has not received a copy of the signed manifest from the designated facility within 45 days of shipment. A small quantity generator must submit a legible copy of a manifest to DEP if the signed manifest is not received from the designated facility within 60 days of shipment.

Completing the Manifest

Florida requires the completion of the following sections of the manifest in addition to those required by federal regulations in accordance with Appendix I of 40 CFR 262. Waste codes are listed in 40 CFR 261 Subparts C and D.

Form 8700-22

Items I - 16

D and F - Transporter phone numbers

H - Facility phone number

I - Waste codes for each waste stream

K - Handling codes for wastes

Form 8700-22a

Items 21-32

O and Q - Transporter phone numbers

R - Waste codes for each waste stream

T - Handling codes for wastes

SECTION VI

Floor Plans for Spill Control And Fire Extinguishers

SECTION VII

Hazard Class Compatibility Charts

- T88 Titanium Dioxide Chloride Process Oxidation Reactor
- T89 Methane Reforming Furnace
- T90 Pulping Liquor Recovery Furnace
- T91 Combustion Device Used in the Recovery of Sulfur Values From Spent Sulfuric Acid
- T92 Halogen Acid Furnaces
- T93 Other Industrial Furnaces Listed in 40 CFR 260.10 (specify)
- (f) Other Treatment
- T94 Containment Building (Treatment)

3. Disposal

- D79 Underground Injection
- D80 Landfill
- D81 Land Treatment
- D82 Ocean Disposal
- D83 Surface Impoundment (to be closed as a landfill)
- D99 Other Disposal (specify)

4. Miscellaneous (Subpart X)

- X01 Open Burning/Open Detonation
- X02 Mechanical Processing
- X03 Thermal Unit
- X04 Geologic Repository
- X99 Other Subpart X (specify)

[45 FR 33232, May 19, 1980, as amended at 59 FR 13892, Mar. 24, 1994]

APPENDIX II TO PART 265—[RESERVED]

APPENDIX III TO PART 265—EPA INTERIM PRIMARY DRINKING WATER STANDARDS

Parameter	Maximum level (mg/l)
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Fluoride	1.4-2.4
Lead	0.05
Mercury	0.002
Nitrate (as N)	10
Selenium	0.01
Silver	0.05
Endrin	0.0002
Lindane	0.004
Methoxychlor	0.1
Toxaphene	0.005
2,4-D	0.1
2,4,5-TP Silver	0.01
Radium	5 pCi/l
Gross Alpha	15 pCi/l
Gross Beta	4 millirem/yr
Turbidity	1/TU
Coliform Bacteria	1/100 ml

[Comment: Turbidity is applicable only to surface water supplies.]

APPENDIX IV TO PART 265—TESTS FOR SIGNIFICANCE

As required in § 265.93(b) the owner or operator must use the Student's t-test to determine statistically significant changes in the concentration or value of an indicator parameter in periodic ground-water samples when compared to the initial background concentration or value of

that indicator parameter. The comparison must consider individually each of the wells in the monitoring system. For three of the indicator parameters (specific conductance, total organic carbon, and total organic halogen) a single-tailed Student's t-test must be used to test at the 0.01 level of significance for significant increases over background. The difference test for pH must be a two-tailed Student's t-test at the overall 0.01 level of significance.

The student's t-test involves calculation of the value of a t-statistic for each comparison of the mean (average) concentration or value (based on a minimum of four replicate measurements) of an indicator parameter with its initial background concentration or value. The calculated value of the t-statistic must then be compared to the value of the t-statistic found in a table for t-test of significance at the specified level of significance. A calculated value of t which exceeds the value of t found in the table indicates a statistically significant change in the concentration or value of the indicator parameter.

Formulae for calculation of the t-statistic and tables for t-test of significance can be found in most introductory statistics texts.

APPENDIX V TO PART 265—EXAMPLES OF POTENTIALLY INCOMPATIBLE WASTE

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

Group 1-A	Group 1-B
Acetylene sludge	Acid sludge
Alkaline caustic liquids	Acid and water
Alkaline cleaner	Battery acid
Alkaline corrosive liquids	Chemical cleaners
	Electrolyte, acid
Alkaline corrosive battery fluid	

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Group 1-A	Group 1-B
Caustic wastewater	Etching acid liquid or solvent
Lime sludge and other corrosive alkalines	Pickling liquor and other corrosive acids
Lime wastewater	Spent acid
Lime and water	Spent mixed acid
Spent caustic	Spent sulfuric acid

Potential consequences: Heat generation; violent reaction.

Group 2-A	Group 2-B
Aluminum	Any waste in Group 1-A or 1-B
Beryllium	
Calcium	
Lithium	
Magnesium	
Potassium	
Sodium	
Zinc powder	
Other reactive metals and metal hydrides	

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

Group 3-A	Group 3-B
Alcohols	Any concentrated waste in Groups 1-A or 1-B
Water	Calcium
	Lithium
	Metal hydrides
	Potassium
	SO ₂ Cl ₂ SOCl ₂
	PCl ₃ , CH ₃ SiCl ₃
	Other water-reactive waste

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

Group 4-A	Group 4-B
Alcohols	Concentrated Group 1-A or 1-B wastes
Aldehydes	Group 2-A wastes
Halogenated hydrocarbons	
Nitrated hydrocarbons	
Unsaturated hydrocarbons	
Other reactive organic compounds and solvents	

Potential consequences: Fire, explosion, or violent reaction.

Group 5-A	Group 5-B
Spent cyanide and sulfide solutions	Group 1-B wastes

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

Group 6-A	Group 6-B
Chlorates	Acetic acid and other organic acids
Chlorine	Concentrated mineral acids
Chlorites	Group 2-A wastes
Chromic acid	Group 4-A wastes
Hyphochlorites	Other flammable and combustible wastes
Nitrates	
Nitric acid, fuming	
Perchlorates	
Permanganates	
Peroxides	
Other strong oxidizers	

Potential consequences: Fire, explosion, or violent reaction.

Source: "Law, Regulations, and Guidelines for Handling of Hazardous Waste." California Department of Health, February 1975.

Chemical Compatibility Chart

Below is a chart adapted from the CRC Laboratory Handbook which groups various chemicals in to 23 groups with examples and incompatible chemical groups. This chart is by no means complete but it will aid in making decisions about storage. For more complete information please refer to the MSDS for the specific chemical.

Group	Name	Example	Incompatible Groups
Group 1	Inorganic Acids	Hydrochloric acid Hydrofluoric acid Hydrogen chloride Hydrogen fluoride Nitric acid Sulfuric acid Phosphoric acid	2,3,4,5,6,7,8,10,13,14,16,17,18,19,21,22,
Group 2 :	Organic acids	Acetic acid Butyric acid Formic acid Propionic acid	1,3,4,7,14,16,17,18,19,22
Group 3 :	Caustics	Sodium hydroxide Ammonium hydroxide solution	1,2,6,7,8,13,14,15,16,17,18,20,23
Group 4 :	Amines and Alkanolamines	Aminoethylethanolamine Aniline Diethanolamine Diethylamine Dimethylamine Ethylenediamine 2-Methyl-5-ethylpyridine Monoethanolamine Pyridine Triethanolamine Triethylamine Triethylenetetramine	1,2,5,7,8,13,14,15,16,17,18,23
Group 5 :	Halogenated Compounds	Allyl chloride Carbon tetrachloride Chlorobenzene Chloroform Methylene chloride Monochlorodifluoromethane 1,2,4-Trichlorobenzene 1,1,1-Trichloroethane Trichloroethylene Trichlorofluoromethane	1,3,4,11,14,17

Group 6 :	Alcohols Glycols Glycol Ether	1,4-Butanediol Butanol (iso, n, sec, tert) Diethylene glycol Ethyl alcohol Ethyl butanol Ethylene glycol Furfuryl alcohol Isoamyl alcohol Methyl alcohol Methylamyl alcohol Propylene glycol	1,7,14,16,20,23
Group 7 :	Aldehydes Acetaldehyde	Acrolein Butyraldehyde Crotonaldehyde Formaldehyde Furfural Paraformaldehyde Propionaldehyde	1,2,3,4,6,8,15,16,17,19,20,23
Group 8 :	Ketones	Acetone Acetophenone Diisobutyl ketone Methyl ethyl ketone	1,3,4,7,19,20
Group 9 :	Saturated Hydrocarbons	Butane Cyclohexane Ethane Heptane Paraffins Paraffin wax Pentane Petroleum ether	20
Group 10	Aromatic Hydrocarbons	Benzene Cumene Ethyl benzene Naphtha Naphthalene Toluene Xylene	1,20
Group 11 :	Olefins	Butylene 1-Decene 1-Dodecene Ethylene Turpentine	1,5,20
Group 12 :	Petroleum Oils	Asphalt Gasolines Mineral Oil	20

Group 13 :	Esters	Amyl acetate Butyl acetates Castor oil Dimethyl sulfate Ethyl acetate	1,3,4,19,20
Group 14 :	Monomers Polymerizable Esters	Acrylic acid Acrylonitrile Butadiene Acrylates	1,2,3,4,5,6,15,16,19,20,21,23
Group 15 :	Phenols	Carbolic acid Cresote Cresols Phenol	3,4,7,14,16,19,20
Group 16 :	Alkylene Oxides	Ethylene oxide Propylene oxide	1,2,3,4,6,7,14,15,17,18,19,23
Group 17 :	Cyanohydrins	Acetone cyanohydrin Ethylene cyanohydrin	1,2,3,4,5,7,16,19,23
Group 18 :	Nitriles	Acetonitrile Adiponitrile	1,2,3,4,16,23
Group 19 :	Ammonia	Ammonia gas Ammonium Hydroxide	1,2,7,8,13,14,15,16,17,20,23
Group 20 :	Halogens	Chlorine Fluorine	3,6,7,8,9,10,11,12,13,14,15,19,21,22
Group 21 :	Ethers	Diethyl Ether THF	1,14,20
Group 22 :	Phosphorus	Phosphorus, Elemental	1,2,3,20
Group 23 :	Acid Anhydrides	Acetic anhydride Propionic anhydride	1,3,4,6,7,14,16,17,18,19

Chemical Storage Groups

Large volumes of chemicals and/or those stored in glass containers, should be grouped into the following hazard groups first before they are placed in alphabetical order:

Phase	Hazard Group	Common Chemical Examples
Solid	explosive	picric acid (dried), picrates
	oxidizer	chlorates, dichromates, nitrates, perchlorates, permanganates, peroxides
	very reactive (w/ water or other chemicals)	aluminum chloride (anhydrous), calcium, calcium carbide, lithium, phosphorus pentachloride, phosphorus pentoxide, potassium, sodium, white phosphorus
Liquid	strong acid	hydrogen fluoride, hydrochloric acid
	strong caustic	sodium hydroxide, potassium hydroxide
	flammable	acetaldehyde, acetic acid, acetone, acetonitrile, acrylonitrile, allyl alcohol, n-amyl acetate, sec-amyl acetate, n-amyl alcohol, tert-amyl alcohol, benzene, 1-butanol, tert-butyl alcohol, carbon disulfide, chlorobenzene, cyclohexane, cyclohexene, 1,1- and 1,2-dichloroethane, 1,1- and 1,2-dimethylhydrazine, dioxane, ethanol, ethyl acrylate, ethylenediamine, ethyl formate, n-heptane, n-hexane, hydrazine, isoamyl alcohol, isobutanol, isobutyl alcohol, isopropyl acetate, isopropyl alcohol, methyl alcohol, isopropylamine, methyl ethyl ketone, morpholine, nitromethane, 2-nitropropane, pentane, propylene oxide, pyridine, TEMED, toluene, triethylamine, vinyl acetate, xylene
	oxidizer	acid dichromate, chromic acid, chromium trioxide, hydrogen peroxide (> 30%), nitric acid, sodium peroxide, sulfuric acid
	perchloric acid	--
	very reactive/explosive	chlorosulfuric acid, chlorates, organic peroxides
Gas	strong acid/caustic	ammonia, hydrogen chloride
	flammable	acetylene
	oxidizer	chlorine, nitrous oxide

SECTION VIII

Special Requirements for Construction Contractors

Summary of PROCEDURES TO IDENTIFY AND MANAGE ENVIRONMENTAL ISSUES DURING DEMOLITION, RENOVATION, AND NEW CONSTRUCTION PROJECTS AT THE UNIVERSITY OF WEST FLORIDA

The Florida Department of Environmental Protection (DEP) has determined that regulated small and large quantity generators of hazardous waste are responsible for all hazardous wastes generated on their sites. Therefore, contractors working on the campus must comply with the same federal and state regulations pertaining to hazardous waste management and disposal as the University.

All contractors, sub-contractors, and their employees, intending to bid on projects and do work for the University of West Florida, must comply with these procedures as summarized. A complete copy of the procedures may be obtained by contacting one of the Departments listed at the end of this summary. Violations of State and Federal regulations could result in fines or civil and criminal action against the Contractor or the University. The following guidelines have been developed to assist the Contractor and the University in meeting the requirements of the state and federal regulatory agencies.

1. Prior to commencement of all demolition and renovation projects, the contractor shall receive a site inspection report from the Office of Environmental Health and Safety (EH&S), A/E, Environmental Consultant, or Project Manager identifying any potential building components of an environmental concern *within the scope of the renovation or demolition only.* {10.4.1}
2. Prior to contracting for work, each contractor, subcontractor, and their employees, *who use hazardous materials and may generate a hazardous waste*, must provide evidence of having received RCRA Hazardous Waste Awareness Training, **and annual refresher training**, as required by 40 CFR 265.16 and 262.34. {10.5.3}
3. Contractors and subcontractors shall identify all hazardous materials and maintain Material Safety Data Sheets (MSDS) for each product **on site** as required by the OSHA Hazard Communication Standard. {10.4.2 and 10.7.1.3}
4. Contractors shall be responsible for estimating the type and quantity of hazardous waste that will be generated by all contractor employees and sub-contractors prior to start of a project. {10.4.2}
5. The General Contractor shall be responsible for the proper identification, and management of all hazardous wastes within the scope of a given project. Specifically, contractors must identify a secure waste accumulation area, store waste in appropriate containers, identify the contents of the containers including the words HAZARDOUS WASTE, and inspect the containers on a weekly basis. The inspection must be documented.{10.1.5.3}
6. The Contractor shall turn all properly identified hazardous waste over to the University, Office of Environmental Health and Safety, at the end of the project or other agreed upon time. Any other arrangements shall have prior written approval from the Office of Environmental Health and Safety and the Office of Facilities Planning. {10.1.5.4}
7. **HAZARDOUS WASTE shall not be removed from the campus by contractors or sub-contractors, unless prior arrangements have been made with the University and the waste is properly manifested and transported by a licensed hazardous waste transporter.** {10.1.5.5}

8. The Office of Environmental Health and Safety will verify the identification of the waste. If the identification is unacceptable, EH&S will not accept the waste and the contractor shall bear the cost of laboratory analysis for adequate identification. {10.1.5.6}
9. All hazardous waste will be shipped off site using the University's hazardous waste contractor, under a manifest bearing the USEPA ID# of the University of West Florida, and signed by a University EH&S representative, unless prior arraignments have been made and approved in writing by UWF Office of EH&S and Facilities Planning. {10.13.5}
10. All hazardous waste turned over to the University shall be contained in appropriate, compatible, and closed, containers for the type and volume of waste generated. Containers may include DOT approved 55 or 30 gallon open-head or closed-head drums, 5 gallon pails or cans, etc., or possibly the original container. The contractor shall be responsible for providing the appropriate container for all types of hazardous waste generated. {10.10.3}
11. Paint brushes, rollers, rags, sludges, absorbent, etc. used with oil paints or solvents, and that are waste materials shall be placed in 5 gallon sealable buckets, or other appropriate size containers. {10.1.5.7}
12. In no cases shall evaporation be used to dry solvent laden materials destined for disposal. Evaporation of waste solvents is considered illegal disposal of hazardous waste. {10.1.5.7}
13. All hazardous waste must be stored in a secured, locked, and safe location. Incompatible waste (acids/bases/flammables) must be stored in physically separate locations. Hazardous waste storage locations shall be coordinated and approved by EH&S. {10.6.1}
14. All hazardous waste containers must be closed at all times except when adding waste. {10.1.5.7}
15. Fluorescent bulbs and ballasts shall be removed from all lighting fixtures prior to disposal.
 - a. Fluorescent bulbs shall be placed in appropriate size tube cartons from original cartons or available from bulb recycling facilities. Do not break bulbs. Do not tape bulbs. Broken bulbs must be placed in sealed containers and handled separately. Each box must be labeled in accordance with FAC 62-737 and dated. {10.12.3}
 - b. Ballasts shall be separated into PCB and non-PCB categories and placed into separate 55 gallon (or appropriate smaller size) open-head steel DOT drum. Each drum must be labeled with appropriate labels: "PCB Ballasts for Recycling" or "Non-PCB Ballasts for Recycling". {10.12.4}
16. The Contractor shall be charged by the University for all hazardous waste based on the current contract rates with the University's Hazardous Waste Contractor. {10.1.5.9}

The General Contractor and Sub-Contractors shall agree to all requirements as specified in the document entitled PROCEDURES TO IDENTIFY AND MANAGE ENVIRONMENTAL ISSUES DURING DEMOLITION, RENOVATION, AND NEW CONSTRUCTION PROJECTS AT THE UNIVERSITY OF WEST FLORIDA.

For a copy of PROCEDURES TO IDENTIFY AND MANAGE ENVIRONMENTAL ISSUES DURING DEMOLITION, RENOVATION, AND NEW CONSTRUCTION PROJECTS AT THE UNIVERSITY OF WEST FLORIDA, or if you have questions concerning this information, please contact one of the following:

Mr. Ron Hambrick, Director of Environmental Health and Safety--(850) 474-2177
Mr. Phil Turner, Director of Facilities Planning -- (850) 474-2938
Ms. Elaine Smith, University Purchasing -- (850) 474-2627

EXAMPLES OF TRADES THAT MAY GENERATE HAZARDOUS WASTES

Demolition Contractors
Roofing Contractors
Painting Contractors
Carpet/Floor Finish Applications
Speciality Application Contractors
Plumbers

EXAMPLES OF HAZARDOUS WASTE THAT MAY BE GENERATED

Florescent and HID Light Tubes
PCB/non-PCB Ballasts
Lead-containing Paint
Mercury Containing devices (thermostats & Controls)
Mineral Spirits
Toluene
Acetone
Oil based paints and stains
Paint Thinners
Aerosol cans (paints, cleaners, adhesives)
Roof Patch/tar
Carpet glue
PVC Primer and glue
Brushes, rollers, and rags used with oil based paint and solvents
Sludge from cleaning oil paints and equipment
Waste product from any container labeled flammable or combustible or that contain "petroleum distillates" or chlorinated hydrocarbon compounds.

HAZARDOUS WASTE DISPOSAL COSTS for Contractor Generated Hazardous Wastes

General contractors will be invoiced for hazardous waste generated by construction activities, including activities by sub-contractors, on their projects. All costs will be based on the University's most current contract prices with our licensed hazardous waste transporter and -TSD facility. Prices below reflect the maximum price for disposal of most construction related hazardous materials. In most cases, the actual charge will be less. Actual costs will be determined by packing methods after other "compatible" materials are included. (NOTE: These categories only reflect examples of types of waste, containers, and packing methods. Actual charges will be based on material identity, compatibility, properties, container type and sizes, etc.)

1.	Flammable, combustible or latex paints, solvents, etc. {Examples: roofing patch, acetone, toluene, paint stripper, solvent-based cleaners, oil based paint/stain, mineral spirits}	
	1 gallon (or less in 5 gallon overpack)	\$105 ea
	5 gallons (DOT approved container)	\$105 ea
	5 gallons (in 20 gallon over pack)	\$225 ea
	5 gallon (overpack)	\$105 ea
	10 gallon (overpack)	\$120 ea
	20 gallon overpack	\$225 ea
	30 gallon (overpack)	\$310 ea
	38 gallon AETS PLC, DOT115 Container	\$380 ea
	55 gallon (overpack)	\$525 ea
2.	1-tube (or less) of caulking (For other container sizes, See #1)	\$105 ea
3.	Bulk Liquids(non-blendable- e.g mineral spirits w/paint residue) (In DOT Approved Containers)	
	5 gallon	\$120 ea
	10 gallon	\$230 ea
	20 gallon	\$250 ea
	30 gallon	\$265 ea
	55 gallon	\$337 ea
4.	Corrosives (Acids or bases) See #3	
5.	Aerosol Cans (in DOT approved Drums)	
	5 gallon	\$125 ea
	10 gallon	\$240 ea
	20 gallon	\$255 ea
	30 gallon	\$300 ea
	55 gallon	\$545 ea
6.	Fluorescent or HID Bulbs (Properly boxed and stored)	
	4' or less straight tubes	\$0.262 ea
	4' or greater straight tubes	\$0.30 ea
	Compact fluorescent tubes	\$0.30 ea
	HID Lamps	\$0.85 ea
	U-tubes or other irregular shaped bulbs	\$0.26 ea
	Shatter shields	\$0.80 ea
	Broken Tubes	\$0.35 ea
7.	PCB Ballasts (in DOT approved containers)	\$0.65 /lb
	Non-PCB Ballasts (in DOT approved containers)	\$0.55 /lb

Disposal costs for materials not conforming to these categories or properties will be will be obtained upon request.