

# HAZARDOUS WASTE MANAGEMENT

PLEASE REFER TO THE USF HAZARDOUS WASTE MANAGEMENT PROCEDURE FOR MORE INFORMATION

## IDENTIFICATION

Hazardous waste is material that has no intended use or reuse and includes chemicals that are no longer needed, expired, or spilled. Categories of hazardous waste are:

1-*Listed wastes* are specifically listed by the EPA in 40 CFR 261.31, 40 CFR 261.32, and 40 CFR 261.33.

2-*Characteristic wastes* exhibit one or more of the following characteristics

- Ignitability-may catch fire
- Corrosivity-pH less than 2 or greater than 12.5
- Reactivity-unstable and capable of causing explosions or emitting toxic fumes, gases, or vapors
- Toxicity-harmful when ingested, absorbed, or released into the environment

**At USF all chemical waste is to be considered hazardous and be disposed of through EH&S.**

**Never put any chemicals down the drain or in the trash.**

## STORAGE

- All chemical waste must be labeled and stored in a nearby satellite accumulation area (SAA) identified with a sign available through the EH&S Office.
- Chemical waste may not be moved to an SAA in a different room or work area for storage.
- A maximum of 55 gallons of regular waste or 1 quart p-listed waste may be kept in the SAA.

Containers must be:

- Appropriate for the materials they store (no food/beverage containers)
- Capped when materials not being added
- Labeled with the words "*Hazardous Waste*", the contents of the container, and a description of the hazard (example: "Toxic")
- Enclosure by secondary containment (polyethylene trays) is recommended.
- Transfer contents of leaking or damaged containers to new containers.
- Empty containers (except for EPA p-listed waste) may be disposed of as regular trash if their labels are defaced and marked "empty".



## SEGREGATION GUIDE

- Acidic solutions (separate inorganic/organic)
- Basic solutions (separate inorganic/organic)
- Water-reactives and pyrophorics (e.g. alkali metals)
- Strong oxidizers and peroxides (e.g. nitric acid)
- Peroxide-forming chemicals (e.g. ether)
- Cyanides
- Non-halogenated flammable liquids (e.g. xylene, methanol, gasoline)
- Halogenated flammable liquids (e.g. chloroform, dichloromethane)
- Mercury solutions and salts
- Heavy metal solutions and salts (e.g. lead, arsenic, chromium)
- Used oil (e.g. used pump oil)
- Toxic liquids (e.g. ethidium bromide)
- Toxic solids (e.g. acrylamide)

## WASTE MINIMIZATION

- Substitute or use less-hazardous materials
- Use smaller amounts of chemicals in experiments when possible
- Keep an accurate inventory and label/date all containers