Guide Sheet: Hazardous Waste Disposal

University Operations--such as those in teaching and research laboratories or construction projects--generate four primary categories of waste: chemical, biohazardous, radioactive, and universal. Each is subject to strict local, state, and federal regulations, regarding management, and disposal. Non-compliance can lead to significant fines and legal consequences.

Chemical Waste

US EPA defines hazardous waste as: ignitable; corrosive; reactive; and toxic. Commingling of incompatible waste streams may lead to unintended chemical reactions with disastrous outcomes. To start the collection process:

1. Segregate chemical waste into appropriate waste streams. Do not mix solid waste with liquid waste.

2. Select the appropriate chemical container for disposal (refer to guide sheet).

3. Print out a "hazardous waste tag" using the RSS software (refer to guide sheet).
4. Place the container inside a secondary container and stage it in a designated area.

5. Request a hazardous waste pick-up via RSS (refer to WASTe instructions) .

Biohazardous (Infectious) Waste

Biohazardous waste has potentially infectious pathogens that reside in cultures, fluids, sharps, pathological waste, and contaminated glassware. To start the collection process:

1. Select the appropriate bio containers for disposal (refer to biowaste guide sheet).

2. Keep the biohazard waste containers always clean.

3. Dispose of tabletop container waste into large biohazard waste container. Remove the bag and line up the container with a new biohazard bag.

4. DO NOT exceed the "fill line" of sharps and pharmaceutical/ chemotherapy containers.

5. EH&S will coordinate with the department to conduct a weekly pickup

Radioactive Waste

Radioactive waste contains aqueous liquid, dry/solid, scintillation vials, organic liquid, sharps, and animal carcasses, and is segregated by each radioisotope. Refer to the Radiation Safety Manual for information on appropriate containers to collect waste and instructions for disposal.

Universal Waste

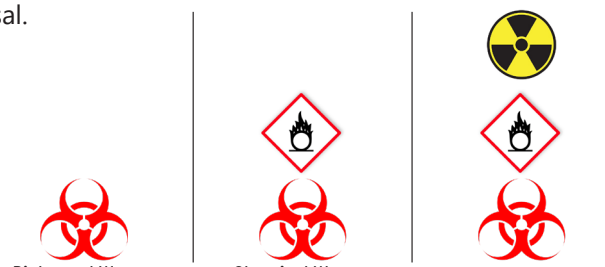
Universal waste applies to consumer products and business equipment that are near or at the end of their useful life. This includes computer equipment, old lab equipment, batteries, aerosol cans, toner cartridges, light bulbs, and old office equipment to name a few. Refer to the Universal Waste Management Fact Sheet for more information.

Things to Remember:

- **Do Not** fill liquid containers completely. Leave enough head space to allow for expansion
- **Do Not** use structural formulas or abbreviations on the hazardous waste labels.
- **Do Not** store filled waste containers awaiting pick-up on high traffic floor. Store in suitable cabinets

Hierarchy of Mixed Hazardous Waste

All chemical wastes from laboratories are presumed to be regulated hazardous waste, unless EH&S has demonstrated that they are both non-hazardous and appropriate for drain or trash disposal.



Hierarchy of Mixed Hazardous Waste

Mixed Hazardous Waste

Mixed waste contains radiological or biological waste in addition to chemical waste. It must be handled properly. According to the hierarchy of mixed waste, radiological properties, when present, are the most important factors used to determine proper waste handling, followed by chemical properties, then biological properties.

The first step is to determine if the hazardous materials are present in sufficient concentration to make your waste a regulated mixed waste. Dilute concentrations of hazardous materials may not meet the regulatory definition (e.g., dilution buffers).