

**L**ab waste generated during day-to-day lab operations is often a mixture of biohazards, hazardous chemicals, and/or radioisotopes. To dispose of the mixed waste through its proper waste stream, it is important to first classify it per the waste hierarchy i.e., non-hazardous, biohazardous, chemical, and radiological.

## NON-HAZARDOUS WASTE

Non-hazardous waste encompasses lab items (e.g., gloves, paper towels, and packaging) that are not contaminated with any biohazardous, chemical, or radiological materials and may be discarded in regular trash. If you have questions regarding non-hazardous waste disposal, contact (323) 442-2200, [hazmat@usc.edu](mailto:hazmat@usc.edu), or [EHS@usc.edu](mailto:EHS@usc.edu).

## BIOHAZARDOUS WASTE

Biohazardous waste includes cultures, fluids, sharps, pathological waste, contaminated glassware, and other general lab supplies (e.g., gloves, microscope slides) that are contaminated with pathogens or other potentially infectious material (OPIM).

Solid biohazardous waste must be disposed of in proper biohazardous waste bins/tabletop containers, biohazardous sharps containers, or pathological waste containers, as appropriate (see [Hazardous Waste Disposal Guide Sheet](#)).

Liquid biohazardous waste may be inactivated using an approved protocol. For more information, please refer to the [Biosafety Manual](#).

## CHEMICAL WASTE

Chemical waste is defined by the US EPA as ignitable, corrosive, reactive, and/or toxic. Proper segregation of chemical waste must be ensured to prevent unintended chemical reactions.

For more information on chemical waste practices, such as containment and proper hazardous waste labeling, see the [Chemical Waste Disposal Guide Sheet](#), [Hazardous Waste Disposal Guide Sheet](#), and [Hazardous Waste Labeling Guide Sheet](#).

## WHAT I NEED TO KNOW

- Wear splash goggles, lab coat, and gloves when handling hazardous waste.
- Segregate lab waste into its proper waste stream.
- Use the waste hierarchy diagram to segregate mixed waste and/or lab articles of mixed contamination. Refer to the [Chemical Hygiene Plan](#) and [Hazardous Waste Management Manual](#) for more information.
- Contact [EHS@usc.edu](mailto:EHS@usc.edu), [hazmat@usc.edu](mailto:hazmat@usc.edu), or (323) 442-2200 if I have any questions.

## RADIOACTIVE WASTE

Radioactive waste includes anything that contains or has come in contact with radioactive materials. This waste may be aqueous liquid, dry/solid, scintillation vials, organic liquid, sharps, and/or animal carcasses. It is segregated by radioisotope. For more information on proper radioactive waste practices, see the [Radioactive Waste Disposal Guide Sheet](#).

## MIXED LAB WASTE

Lab waste often fits into more than one of the aforementioned categories at a time. A common example is gloves which may be contaminated with both biohazards and chemicals. In these instances of mixed waste, the hazardous waste hierarchy shall be followed.






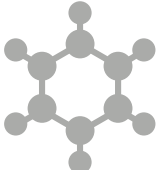


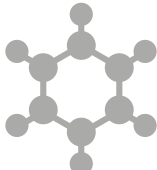

The Hazardous Waste Hierarchy (Figure 1) ranks waste according to its overall hazardous nature and the strict regulations (e.g., NRC, RCRA) that govern it. Per the illustration, “radiological” is the highest tier waste, followed by “chemical”, “biohazardous”, and finally, “non-hazardous” as lowest tier.



Waste which fits into multiple categories, shall be classified and disposed of according to the highest-ranking waste category that applies. In the previous example, the gloves would be treated as chemical waste as opposed to biohazardous waste.

### HAZARDOUS WASTE HIERARCHY

Figure 1. Hazardous waste hierarchy which details how to properly dispose of waste of mixed contamination.

Waste Stream	Contaminant(s) Present						
Regular Trash (non-hazardous)	 Glove (non-contaminated)						
Biohazardous Waste	 Glove	+	 Biohazard				
Chemical Waste	 Glove	+	 Biohazard	+	 Chemical		
Radioactive Waste	 Glove	+	 Biohazard	+	 Chemical	+	 Radioactive