

SAFETY FOCUS

UNWANTED MATERIALS DISPOSAL

Working with chemicals in a laboratory environment inevitably generates waste in some form. Chemicals may become unwanted because they have been used as a reactant, solvent, degreaser, or cleaner; are no longer needed due to a change in process; have reached their expiration date; or have degraded over time. Generally, the chemical properties of these unwanted chemicals make them a regulated waste for transportation and disposal purposes. The University of Utah has subscribed to the EPA's Academic Lab rule, which requires that labs refer to laboratory chemical as Unwanted Materials. This allows for the regulatory determination (regarding which waste code to apply) to occur at the U's regulated waste management facility alleviating laboratory personnel from having to make that determination.

WHO: Anyone who works with laboratory chemicals and/or generates wastes or non-usable byproducts of laboratory processes must be trained on the items listed in the "how" section for their lab's specific chemicals and processes. This training can be done via review of the lab specific Chemical Hygiene Plan and Standard Operating Procedures (SOPs) for chemical processes. Environmental Health and Safety (EHS) relies upon laboratory personnel to label and submit their Unwanted Materials for disposal so that EHS can make the required waste determination, segregate it by hazard type, and package the materials for treatment and disposal through a contracted vendor.

WHAT: Unwanted Materials must be collected into containers, labeled, segregated by the hazards they present, and disposed of through EHS.

HOW: Collect -

- Used chemicals as they are generated by laboratory processes.
- Unused chemicals as they become expired or no longer of use to the laboratory work.

Containers must -

- Be in good shape, with no evidence of cracks, leaks, or dents and free of contamination.
- Be compatible with the materials collected.
- Be kept closed unless actively adding materials, the material is still reacting so venting is necessary for safety, or for the operation of equipment (such as in-line collection from equipment).

- Be stored in secondary containment and at or near the point of generation (i.e. in the same room).
- Be labeled

Labels must include -

- The words Unwanted Materials
- The hazards presented by the materials collected.
- The chemical name(s) of the materials collected.
- The date material is first added to the container.

Disposal -

- Use Safety Administrative Management (SAM) to request pick up.
- Prepare for pick up by ensuring containers are closed, labeled, and have been successfully submitted.

WHEN: Label materials as soon as they are determined to be unwanted or fill out and apply the Unwanted Materials label on the collection container as soon as material is added (include a start date). Submit unwanted materials for disposal as often as necessary and in no case longer than 1 year after the date material is first added to the container. Submit for disposal any time the lab is nearing 55 gallons of unwanted materials (or 1L of acutely toxic materials).

Resources:

[Unwanted Materials labels](#)

[Unwanted Materials labels - small](#)

[Safety Administrative Management \(SAM\) tutorial](#) -