



Hopkins Marine Station @ Stanford University Laboratory Chemical Waste Guidelines



Hazard Awareness

How well do you know waste & chemical properties?



Corrosive (Acids and Bases): Materials that corrode skin or metal. **Examples:** Hydrochloric Acid, Sodium Hydroxide



Flammable (and Combustible): Materials that readily ignite and burn vigorously. **Examples:** Alcohols, Acetone, Ethers, Acetic Acid



Oxidizer (and Organic Peroxides): Materials that release oxygen readily to stimulate the combustion of organic matter. **Examples:** Concentrated Hydrogen Peroxide, Potassium Permanganate, Bleach



Air or Water Reactive (and Pyrophorics): Materials that react violently with air or water. **Examples:** Zinc Dust, Magnesium Metal



Toxic (Poisons, Carcinogens, Mutagens): Materials that contain a known carcinogen or known mutagen; exhibit oral toxicity; contain toxic metals or pesticides, or are toxic to aquatic species. **Examples:** Mercury, Ethyl Acetate, Formaldehyde, Ethidium Bromide

For regulatory reasons, chemical wastes that are not clearly in one of the above categories, and are not listed on the Stanford nonhazardous waste list should be considered toxic.

nonhazardouswaste.stanford.edu

Hazardous Materials are Never to be disposed of in the sink nor intentionally evaporated!



Note: This poster contains important regulatory information about hazardous materials and hazardous wastes that every laboratory worker is required to know. You may be asked to demonstrate your knowledge of these subjects by City, County or State inspectors.

Handling Laboratory Wastes

A laboratory chemical becomes a waste when you no longer intend to use or reuse the chemical.

Laboratory wastes may be accumulated in laboratories for up to 6 months.

Call Chris, x216 cpatton@stanford.edu as soon as the container is full or 6 months after the initial accumulation, whichever comes first.



Waste tags can be found on the door to Loeb 26



All laboratory waste containers must be:

- in good condition with no leaks or cracks,
- kept closed except when adding waste,
- segregated from other incompatible wastes,
- stored in clean and compatible secondary containment, and
- affixed with a fully completed hazardous waste label.

All laboratory chemical waste must be managed as hazardous waste unless it is listed on the Stanford University Non-Hazardous Waste List.



- See: nonhazardouswaste.stanford.edu
- Follow instructions from the list for other disposal options such as drain disposal for non-hazardous wastes.

Spill Response

Call Chris, x216 for cleanup assistance of spills if:



- the spill is not contained in a hood or on a lab bench, and
- in your judgement, the spill may result in an environmental impact by entering a sink or floor drain, or by contaminating soil, or by producing personnel inhalation hazard, and
- you cannot complete cleanup within 15 minutes.

You do not need to call EH&S for assistance if:



- the chemical spill is less than 1 ounce, and
- you are knowledgeable of the hazards of the material, and
- you can clean it up using available spill response and personal protective equipment.

- Report to Chris if you clean up a spill of less than 1 ounce yourself and it takes longer than 15 minutes.
- For cleanup of small spills that do not involve immersion in liquids or risk of overexposure, use laboratory protective equipment available for routine handling of the material (including appropriate gloves and eye protection).
- All contaminated spill cleanup materials must be managed as hazardous waste.

Accident Response

Emergency Response for Accidents Involving Hazardous Materials

If the accident is a fire, explosion, or health-threatening:

- call 9-911 for emergency assistance, and
- alert people in the vicinity, and
- evacuate the area, and
- remain nearby to provide information to emergency personnel.

In case of eye or skin contact with hazardous chemicals,



- immediately flush the affected area with water for 15 minutes
- use a safety shower/eyewash for any eye exposure and in cases of serious skin exposure.
- contact Judy for all injuries at x249

Contact Environmental Health & Safety (650) 723-0448
ehs.stanford.edu