

Procedure for the Disposal of Hazardous Waste

Proper management of the hazardous waste generated in a lab is not only the right thing to do, it's also the law. This waste is regulated by a federal agency (EPA) and a state agency (DEP).

Here are the important issues for managing hazardous waste in a laboratory.

1. Containers

All Hazardous waste containers must:

- Be secure and in good condition. You can use any empty, rinsed bottle for waste. Please remove barcodes and give discarded barcodes to Joanne Brown (L303, 610-896-1326).
- Be compatible with waste.
- Have a YELLOW Hazardous Waste Label on it before waste collection begins. See the last page of this document for instructions on how to fill out the label properly.
- Must have the DATE the first time waste is added.
- Have a screw cap - no corks or rubber stoppers allowed.
- Be kept closed at all times unless waste is being added. **Do not leave funnels in waste containers.** This is one of the most common citations from inspectors.
- Not be overfilled. Always leave at least one inch at the top of the container.

2. Labels

- YELLOW Waste Labels are available in the Chemistry Stockroom, Chemical Waste Room and also in Joanne Brown's office, L303.
- Remember, record the date when you add waste to the bottle for the first time
- **You must list the specific, full chemical name of the contents.** No formulas, abbreviations, or vague statements such as "hydrocarbons" or "organic waste" allowed.
- Estimate the percent of each chemical. The total should add up to 100%.
- You can always affix ANOTHER label on the container if the contents or percentages have changed over time. The important point is that a legible and accurate label be on the bottle along with the yellow label when it is moved from your lab to the hazardous waste room.

3, Other helpful information:

- Do not dispose of hazardous waste by evaporation, drain or trash.
- Hazardous waste must be segregated according to waste types and compatibility. Here is a good resource on how to segregate your waste: <https://uwaterloo.ca/safety-office/programs-and-procedures/laboratory-safety/biosafety/hazardous-waste/hazardous-waste-segregation>
- All waste containers must be stored in a secondary container, in case of leak or spillage. Do not store waste bottles in sinks.
- Waste cannot be accumulated for more than 180 days. It is a good rule of practice to remove waste from your lab at least once a semester and once in the summer. Waste pick up takes place

every July and January. *Bottles do NOT need to be full to be moved to the hazardous waste room. This will not save money or increase efficiency.*

Most Common Regulatory Violations Involving Hazardous Wastes

The following list shows which violations are most commonly cited by regulators. Please review this information and correct any problems in your area. Periodically review your compliance efforts to avoid health and safety concerns, as well as fines from city, county, state or federal inspectors.

PROBLEM	SOLUTION
Labeled improperly	Waste containers must have: <ul style="list-style-type: none"> • The words "Hazardous Waste" on them • Complete description of the waste. • The start date.
Containers not closed	Keep containers closed except when adding or removing waste.
Waste not stored properly	Containers of liquid waste need secondary containment. Bottles of waste should be kept in chemically resistant trays.
Lab personnel not aware of proper response in event of chemical spill, fire, explosion, or injury	Train your employees and students in emergency procedures. Follow procedures in your Chemical Hygiene Plan.
Chemicals disposed of improperly	<ol style="list-style-type: none"> 1. Do not dispose of hazardous wastes by drain. 2. Do not evaporate residual solvents in fume hoods. Use condensers on all distillation and concentration procedures. 3. Do not throw hazardous waste in trash. 4. Destroy highly reactive, pyrophoric materials properly before adding to the waste container.
Waste not compatible with hazardous waste storage container used	Use containers and lids or caps that are compatible with the waste stored in them.
Personnel not properly trained	Employees and students must be trained prior to working with chemicals and must receive annual refresher training.