

EH&S FACT SHEET

Environment, Health and Safety Information for the Berkeley Campus

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Unwanted Hazardous Chemicals

The Office of Environment, Health & Safety (EH&S) picks up unwanted hazardous chemical materials for reuse, recycling, and disposal. This Fact Sheet details the procedures to follow to ensure that chemicals are picked up promptly, safely, and in an environmentally sound manner. These guidelines apply only to unwanted hazardous chemicals, including but not limited to:

- Spent, contaminated or unused laboratory chemicals
- Debris or equipment contaminated with laboratory chemicals
- Maintenance chemicals such as oils, paints and cleaners

These guidelines do not apply to radioactive waste, medical waste, asbestos disposal, or unwanted controlled substances. Contact EH&S for information on how to dispose of those types of materials.

There are three basic steps to prepare for and request EH&S pickup of unwanted hazardous chemicals:

1. Open a recharge account;
2. Prepare hazardous chemicals for pickup by properly labeling each item, segregating incompatible materials, and safely packaging the chemicals; and
3. Complete a Materials Packing List (MPL) and submit it to EH&S.

By packaging materials for EH&S pickup properly and following the detailed instructions below, you can get unwanted materials out of your laboratory quickly, protect chemical handlers from injury, and help the environment by increasing the opportunity for chemical reuse and recycling.

Open a Recharge Account

Chemical waste recharge accounts can be opened online at <http://mpl.ehs.berkeley.edu>. You will need a CalNet ID and passphrase for security purposes, and you will need to know the chart of account string to be charged for disposal. See your PI or department accountant if you do not know your account information. EH&S uses this account to electronically recharge the department or research unit for disposal according to current chemical waste recharge rates (See the EH&S Fact Sheet, "Chemical Waste Recharge"). An estimate of the cost to dispose of your unwanted items is provided when you complete an online MPL (see below).


For your safety and the safety of those handling your unwanted hazardous chemicals, it is essential to properly label, segregate and package your materials.

1. Label every container with an orange Unwanted Hazardous Materials Tag provided at no charge by EH&S. Tags should be placed on each container when unwanted chemicals are first placed in the container (i.e., do not wait until the container is full

Prepare Hazardous Chemicals for Pickup



Office of Environment, Health & Safety
University of California
317 University Hall #1150
Berkeley, CA 94720-1150
<http://www.ehs.berkeley.edu>
(510) 642-3073

Unwanted Hazardous Materials Tag Office of Environment, Health & Safety 317 University Hall, MC 1150 TEL: (510) 642-3073 FAX: (510) 643-7595 www.ehs.berkeley.edu		
MPL#:	Item #:	
Check Appropriate Box(es) Below		
<input type="checkbox"/> - Flammable	<input type="checkbox"/> - Oxidizer	
<input type="checkbox"/> - Toxic	<input type="checkbox"/> - Corrosive	
<input type="checkbox"/> - Other _____	pH= _____	
Chemical Constituents: (No Chemical Formulas)	Final %	
_____	_____	
_____	_____	
_____	_____	
_____	_____	
_____	_____	
_____	_____	
_____	_____	
_____	_____	
TOTAL = 100%		
KEEP ALL CONTAINERS CLOSED WHEN NOT IN USE!		

to label it). Label every container of material with its proper chemical name; do not use generic terms (e.g., alcohol, mineral acid, spent solvent), chemical formulas, or brand names. For mixtures, list all chemical constituents and the percentage of each on the container tag. If you do not know the contents of the container, label it "Unknown." Unknown materials are costly and time-consuming to dispose of and can pose safety hazards, so be sure to label containers when chemicals are first added to avoid the accumulation of unknown chemicals in your facility. Once you have completed an MPL for the items (see below), write the 5-digit MPL number and item number on the tag where indicated.

- Segregate incompatible chemicals to help prevent contact between incompatible materials if containers leak or break. Contact between incompatible chemicals can result in fire, explosion, or the formation of toxic fumes. Always segregate chemicals according to their chemical family or hazard classifications. For guidance on proper segregation, use the online MPL (see below) or reference the EH&S booklet "Safe Storage of Hazardous Chemicals."
- Safely package the chemicals for EH&S pickup and transportation. Most items should be packed in boxes; remember, NEVER pack incompatible chemicals together in the same box. Large items such as 5-gallon cans, buckets and carboys do not require additional packaging. Bagged waste, (e.g., used gloves, gels, other debris) should be placed in a box whenever possible. Additional guidelines for safe packaging are listed below:
 - Use sturdy boxes that will not bend or break when transported. The packed box should weigh no more than 60 pounds, and should be large enough to completely contain all the items without anything protruding.
 - Cushion all containers with crumpled newspaper or other packing material.
 - Pack containers of liquids upright, and ensure they have tight caps that do not leak. Pack no more than four 1-gallon bottles of liquid in one box.
 - Pack sharp objects in a rigid, puncture-resistant container and label it "Sharps." (See the EH&S Fact Sheet, "Handling and Disposing of Sharps."). Securely tape broken thermometers to cover sharp edges. Place taped broken thermometers in a Ziploc® plastic bag or double-bag them in clear plastic bags, taping each bag closed to prevent mercury from being released.
 - Once you have completed an MPL for the box according to the guidelines in the following sections, attach a copy of the completed MPL to the box. Do not tape the box closed as EH&S personnel will need to inspect its contents.

Improperly packaged chemicals can result in a chemical spill. EH&S is committed to protecting campus health and safety and therefore will not pick up improperly packaged chemicals. EH&S will contact you if your box of chemicals does not meet the above guidelines.

For each box (or large container) of unwanted hazardous materials, fill out an MPL, available at <http://mpl.ehs.berkeley.edu>. You may find it useful to complete the MPL as you segregate and package your chemicals. EH&S picks up unwanted materials within ten days (on average) of receiving a properly completed MPL. Errors and omissions on the MPL can result in delays. If you have questions as you complete an MPL, call EH&S at 642-3073 or contact your Department Safety Coordinator. To ensure timely pickup of your unwanted items, please follow these guidelines:

Complete & Submit an MPL



- Complete a separate MPL for each box of materials and for each container that is 5 gallons or larger.
- Provide a complete chemical name for each material. Whenever possible, use the “Search ChemIndex” function to choose a chemical name listed in the Chemical Index, which will then estimate disposal costs and alert you to incompatibilities. For mixtures, list all chemical constituents and the quantity of each. If you do not know the contents of the container, choose “Unknown” from the Chemical Index. The information on the MPL should be consistent with the information provided on the orange Unwanted Hazardous Materials Tag on each item.
- Describe the physical state of the material. Gels (with no free liquid) are considered solid.
- List the container type: glass bottle, plastic bottle, metal can, cardboard, bag, wood, drum, or other specific description.
- State the condition of the material:
 - Sealed—factory seal is unbroken, new material;
 - Opened—opened, usable material;
 - Spent/Used—used or expired material.
- Indicate the unit of measurement for the volume or weight of the material.
- Indicate the container size by volume or weight capacity.
- Record the amount of material in the container. Example: for a 500-gram bottle that is 1/4 full, the amount is 125 grams. Use the same unit of measure as that used for container size.
- Print the MPL, attach a copy to the box or container, and keep a copy for your records.
- Click the “Submit this MPL” button to send the MPL to EH&S. If you do not click the submit button, we will not receive your information, and your materials will not be picked up by EH&S.

For More Information

The online MPL will inform you if you list incompatible materials in the same box. Place incompatible materials in a separate box and complete a separate MPL for the additional box. Contact EH&S if you have questions about your materials’ compatibility.

If you have questions about any aspect of preparing your hazardous materials for pickup, call EH&S at 642-3073 and ask to speak to a member of the Hazardous Materials Management Team. The following EH&S Fact Sheets provide additional information related to hazardous materials disposal:

Help us Keep Batteries out of UC's Trash

Chemical Waste Recharge

Electronic Waste

Ethidium Bromide

Guidelines for Managing and Disposing of Medical Waste

Handling and Disposing of Sharps

Managing and Disposing of Unwanted Controlled Substances

Managing Surplus Paint and Painting Supplies

Minimizing Hazardous Waste

Photoprocessing

