

Empty Container Disposal and Recycling

This Fact Sheet describes how to properly dispose of or recycle an unwanted container which previously held a hazardous material. Hazardous materials include laboratory chemicals, paints, solvents, pesticides, aerosols, compressed gas cylinders, and hazardous waste.

To dispose of any of the following empty containers through EH&S, please go to our web site at mpl.ehs.berkeley.edu to arrange for a pickup. You may also call EH&S to request a Material Packing List which, once completed, can be sent to EH&S to initiate a pickup.

NEVER
dispose of the
following
containers in
the trash:

Hazardous Material Containers Constructed of Absorbent Materials (e.g., Cardboard)

Containers made of an absorbent material such as cardboard or paper that were in direct contact with a hazardous material or hazardous waste must be disposed of through EH&S.

Hazardous Material Containers Larger Than 5 Gallons

It is illegal to throw empty hazardous materials containers that are larger than 5 gallons into the common trash. They must be reused on site, sent back to the distributor or picked up by EH&S for proper management. Reuse a container only if the contents will be compatible (same hazard class) as the contents previously held. Also, write "EMPTY" on empty containers and date them. By law, they must be reused or recycled within one year. Please be aware that containers may contain vapors that are flammable or toxic so they must continue to be kept closed and stored safely.

Compressed Gas Cylinders

The cost of disposing of pressurized, compressed gas cylinders can be extremely high. Compressed gas cylinders are legally empty when the pressure inside the cylinder is the same as outside (i.e., atmospheric). The preferred method of discarding empty gas cylinders, including lecture bottles, is to return them to the supplier. This must be arranged with your supplier ahead of time. Otherwise, empty gas cylinders must have their valves removed before they can be cut in half and recycled. (Contact EH&S for guidance!)

Containers Which Held Acutely or Extremely Hazardous Materials

Any container which previously held an extremely hazardous material is strictly regulated and should be picked up by EH&S for disposal. Even rinsing them to remove residues usually requires approval from the Department of Toxic Substances Control.

A waste, or a material, is acutely or extremely hazardous if it:

- (1) has an acute oral LD₅₀ less than or equal to 50 mg/kg; or
- (2) has an acute dermal LD₅₀ less than or equal to 43 mg/kg; or
- (3) has an acute inhalation LC₅₀ less than or equal to 100 ppm as a gas or vapor; or



The following
empty containers
may be thrown in
the trash:

- (4) has been shown through experience or testing that human exposure to the waste or material may likely result in death, disabling personal injury or serious illness because of the carcinogenicity, high acute or chronic toxicity, bioaccumulative properties, or persistence in the environment of the waste or material; or
- (5) is water-reactive; or
- (6) previously contained a substance listed in Title 22 of the California Code of Regulations (call EH&S for guidance).

Liquids and Pourable Materials, 5 Gallons or Less

A small container that held a pourable hazardous material or hazardous waste is empty when no material can be poured or drained from it at any orientation. The container must not have previously contained an acutely or extremely hazardous material.

Solids and Non-Pourable Materials, 5 Gallons in Capacity or Less

A small container that held a non-pourable hazardous material, such as sludges or “caked-up” solids, is empty when no material remains in the container that could feasibly be removed by scraping, chipping, or other physical methods. A thin uniform film is considered acceptable. The container must not have previously contained an acutely or extremely hazardous material.

Pesticide Containers, 5 Gallons in Capacity or Less

Small, empty pesticide containers may be discarded in the common trash if they are non-absorbent, triple-rinsed, and the rinseate is used on site. If the rinseate cannot be used on site, dispose of the entire container through EH&S.

Aerosol Containers (e.g., Spray Paint)

Aerosol containers may be disposed of in the common trash if they are completely empty of product and propellant and did not previously contain an acutely or extremely hazardous material. Containers with damaged nozzles that still contain hazardous material must be disposed of through EH&S. Since it is difficult to remove contents entirely, we suggest you dispose of aerosol containers through EH&S.

Check MSDS or call
EH&S to characterize
acutely and extremely
hazardous materials

EH&S recommends that you deface hazardous
materials markings and write “empty” on the
containers first.

