



ECKERD COLLEGE

Safe Operating Procedure

(1/04)

MERCURY CLEAN-UP AND DISPOSAL

Mercury and mercury debris (e.g., broken thermometers, spill debris) will be collected periodically by a Chemical Hygiene Officer, consolidated, and sent to Facilities Maintenance. Mercury compounds are handled as hazardous waste.

Disposal Procedures

1. Collect mercury in a sealable container. Place broken thermometers or similar materials in a sealable plastic bag or plastic or glass jar. Keep the amount of debris to a minimum. Be sure that materials may be easily removed for consolidation.
2. Label the container "MERCURY SPILL DEBRIS".
3. Keep the material in your laboratory until the next scheduled waste pickup.

Contact the Hazardous waste Coordinator in your building with any concerns or for advice clean-up and packaging of elemental mercury or mercury debris for disposal.

Broken Thermometers and Similar Materials

In the event that a thermometer, manometer or similar mercury-containing device breaks, proceed as follows:

1. Put on a pair of gloves and eye protection.
2. Pick up the broken glass or debris and place in a puncture-resistant container.
3. Clean up any remaining mercury:

Begin by picking up the droplets. Use an index card or scraper to consolidate the droplets, and pick up the pool using a pipette, syringe or small, hand-held vacuum pump.

Small droplets can be picked up with adhesive tape or wet paper towels. Commercial products such as sponges and powders may also be used. The sponges are typically not very effective. Sulfur is not a very effective means for cleaning up mercury.

Many commercial products and items contain metallic mercury and/or mercury compounds. Mercury-containing products are regulated as hazardous waste

when disposed. All mercury containing products and items must be disposed of via outside contractors. Examples of items that may contain mercury are given below.

- **Paints.** Prior to 1991, mercury was incorporated into some paint formulations as a biocidal agent. Mercury-containing paints and related items (i.e., brushes, rags, etc.) must be disposed of via Facilities. See also, Shop Safe Operating Procedure (SOP), ***Paint and Paint-Related Materials***.
- **Thermostats.** Many commercial and residential temperature control devices contain an ampule of pure mercury metal. Digital models that do not use mercury are now available. Do not attempt to disassemble a mercury-containing thermostat or otherwise disturb the housing. Package the entire apparatus for pick-up by Facilities. When replacing defective thermostats, select a digital type replacement.
- **Electrical Switches and Dials.** Some electrical switches and dials contain mercury. Care should be taken to prevent breakage or leakage of mercury when removing these types of items from service and they should be left intact for pick-up by Facilities.
- **Thermometers, Manometers, Sphygmomanometers, etc.** Mercury thermometers for measuring body and other temperatures are widely used as are other mercury containing devices such as manometers and sphygmomanometers. It is highly recommended that mercury thermometers be replaced with digital or organic liquid thermometers. Do not use mercury thermometers in ovens or other heat producing equipment.
- **Batteries.** Certain types of batteries contain significant amounts of mercury and must be disposed via Facilities.
- **Fluorescent and High Intensity Bulbs.** Some fluorescent, neon, mercury vapor, high-pressure sodium, metal halide, and high intensity lamps contain regulated quantities of mercury. These items must be disposed via Facilities.



