

# Weber State University

## **MERCURY SPILLS AND BROKEN THERMOMETERS**

### **Standard Operating Procedure**



**WEBER STATE UNIVERSITY**

Environmental Health & Safety

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# Mercury Spill Information

Even the smallest amount of mercury needs to be treated as a serious issue. Care must be taken not to touch the mercury.

- **Never** use a vacuum cleaner to clean up mercury. The vacuum will put mercury into the air and increase exposure. The vacuum appliance will be contaminated and have to be thrown away.
- **Never** use a broom to clean up mercury. It will break the mercury into smaller droplets and spread them.
- **Never** pour mercury down a drain. It may lodge in the plumbing and cause future problems during plumbing repairs. If discharged, it can cause the pollution of the septic tank or sewage treatment plants.
- **Never** wash mercury-contaminated items in a washing machine. Mercury may contaminate the machine and/or pollute the sewage.
- **Never** walk around if your shoes might be contaminated with mercury. Contaminated clothing can also spread mercury around.

## Small Spills—A Dime-Sized Puddle

- Remove everyone from the area where cleanup will take place. Shut the door of the impacted area. Turn off the ventilation system if possible. Remove all jewelry and watches from your hands as mercury will bond with the metal.
- Mercury can be cleaned up easily from the following surfaces: wood, linoleum, tile and any other like surface.
- If a spill occurs on carpet, curtains, upholstery or other like surface, these contaminated items should be thrown away in accordance with the disposal means outlined below. Only cut and remove the affected portion of the contaminated carpet for disposal.

## Check List Items Needed to Clean Up a Small Mercury Spill

- 4 to 5 Ziplock-type Bags
- Trash Bags (2 to 6 mm thick)
- Rubber or Latex Gloves
- Paper Towels
- Cardboard or Squeegee
- Eyedropper
- Duct Tape, or Shaving Cream and Small Paint Brush
- Flashlight
- Powdered Sulfur (optional)

## Cleanup Instructions

1. Put on rubber or latex gloves.
2. If there are any broken pieces of glass or sharp objects, place them on a paper towel. Fold the paper towel and place in a zip lock bag. Secure the bag and label it.
3. Use a squeegee or cardboard to gather mercury beads, making slow sweeping motions to keep mercury from becoming uncontrollable. A flashlight can help locate additional glistening beads of mercury that may be sticking to the surface or in small cracked areas of the surface. Note: Mercury can move surprising distances on hard-flat surfaces, so be sure to inspect the entire room when “searching.”

4. Use the eyedropper to collect or draw up the mercury beads. Slowly and carefully squeeze mercury onto a damp paper towel. Place the paper towel in a zip lock bag and label it.
5. After removing larger beads, put shaving cream on a small paint brush or duct tape and gently “dot” the affected area to pick up smaller hard-to-see beads. Place the paint brush or duct tape in a zip lock bag and secure. Make sure to label all waste bags.
6. It is **optional** to use commercially available mercury spill kits with powdered sulfur to absorb the beads that are too small to see. The sulfur does two things: (1) it makes the mercury easier to see since there may be a color change from yellow to brown and (2) it binds the mercury so that it can be easily removed and suppresses the vapor of any missing mercury. Note: When using powdered sulfur, do not breathe in the powder as it can be moderately toxic. Powdered sulfur may also stain fabrics a dark color. Additionally, users should read and understand all product information before use.
7. Place all materials used with the cleanup, including gloves, in a trash bag. Place all mercury beads and objects into the trash bag. Secure trash bag and label it.
8. Take the trash bag outside.
9. Wash your hands and face.
10. Contact Environmental Health and Safety for proper disposal in accordance with local, state and federal laws.
11. Remember to keep the area well-ventilated to the outside (i.e., windows open and fans running) for at least 24 hours after your successful cleanup. If sickness occurs, seek medical attention immediately.

## Large Spills—More Than a Dime-Sized Puddle of Mercury

Caution: The general public can clean up from flat surfaces small mercury spills no greater than the amount contained in a thermometer. If you estimate your mercury spill to be greater than the amount in a thermometer, isolate the contaminated area and call Environmental Health and Safety.

### Cleanup Instructions

1. Isolate and Evacuate the Area
2. Turn Down the Temperature if you can
3. Open Windows if possible
4. Don't Let Anyone Walk Through the Mercury
5. **Don't Vacuum**
6. Contact Environmental Health and Safety ASAP