

	Environmental Health and Safety Manual	
	Policy Number: EH&S 4-6	
Title: Mercury Spills		
Effective Date: 9/79	Revision: 6/00	Number of Pages: 2

PURPOSE: To establish uniform procedures for contamination control, disposal and reclamation of mercury in its elemental form as a liquid metal or in a combined form as a compound.

SCOPE: University wide.

PROCEDURES:

I. Minor Spills: Thermometer

1. The user is responsible for the clean up of minor mercury spills. Do not ask Custodial or Housekeeping staff to clean the spill.
2. Always wear gloves when cleaning up a spill. Clean up any broken glass using tongs or heavy towel. Do not pick up broken glass by hand.
3. Gather all of the mercury with a wet paper towel or sponge and place into a sealed container or bag. Also put the paper towel or sponge and the gloves in the bag. Label the bag "mercury waste" and include the department name. Place the bag in a safe area for removal by the Department of Environmental Health and Safety.

NOTE: Unbroken thermometers that are no longer needed should also be placed in a safe area for removal. Keep these separate from the broken thermometers.

4. Do not dispose of mercury in the general refuse.

II. Major Spills: Blood Pressure Unit or Larger

1. Isolate the area of the spill by placing a box or waste can over the spill to reduce the spread of the mercury vapors. Notify everyone to remain clear of the area.
2. Immediately contact the local Fire Department or Hazardous Materials Response Team and Environmental Health and Safety.
3. Do not ask Housekeeping or Custodial Staff to clean up the spill.
4. The Department of Environmental Health and Safety is responsible for clean up of large mercury spills.

III. Health and Safety Information

Mercury can have adverse effect to man, animal and plant life. Hazards exist when mercury either ingested or inhaled. Methyl mercury and alkyl forms are the most toxic. Methyl mercury can be released into water when phenyl, inorganic or elementary mercury is converted, and is introduced into the food chain and ingested by man through fish. When elemental mercury is exposed to air or its compounds are heated, it emits vapors. Some pesticides contain mercury; mercury vapor lamps (white fluorescent tubes) contain a great deal of mercury and constitute a serious hazard if they are broken and the "white dust" is inhaled. Inhaled mercury vapors or compounds can be absorbed through the respiratory tract and accumulate in the brain, causing damage to the nervous system.

Mercury is a health hazard which can cause acute poisoning, interstitial pneumonia, bronchitis, muscle tremor, irritability, gingivitis, and localized skin irritation and sensitization. Mercury is also both a neurotoxin and nephrotoxin. The OSHA 8 hour Permissible Exposure Limit (PEL) is 0.05 mg/m³. The ACGIH 15 minute Short Term Exposure Limit (STEL) is 0.01 mg/m³. Environmental Health and Safety monitoring has shown that mercury vapors from small spills are well below these levels. Spills should not be allowed to remain, especially on heated surfaces such as radiators, ductwork, and ovens where toxic concentration could develop. Mercury will also contaminate jewelry. Occasionally, elemental mercury may spill from manometers or mercurial thermometers may break. There may be gross spills from storage containers. The mercury may find its way into the water system of the region.

The University utilizes mercury in its elemental form in some medical procedures, manometers, thermometers and some electric switches. Mercurous and mercuric compounds are used for medicinal purposes in diuretics, cathartics, and antiseptics; in disinfectants in cleaning; some mildew prevention compounds; and are contained in the "long life" mercury batteries.

INQUIRIES/REQUESTS:

Environmental Health and Safety
110 Suffolk Hall
Zip 6200
Main Office: 632-6410
FAX: 632-9683

RELATED FORMS:

RELATED DOCUMENTS:

-Rev. 2/97-