Mercury Waste Disposal

Purpose

This procedure specifies the proper disposal of mercury waste in order to ensure the safety of workers and staff, and in compliance with all applicable legislation.

Scope

This procedure applies to the safe and proper disposal of mercury waste. This waste includes equipment or devices such as: thermometers, barometers, manometers, blood pressure monitors (broken or unbroken), microscope lamps, fluorescent lamps/light bulbs, thermostats, electric switches, etc.

Background

The BC Hazardous Waste Regulation, 2009 and Metro Vancouver's Sewer Use Bylaw No. 299 prohibit the discharge of waste mercury into landfills and sewers.

Waste mercury is regulated as class 8 (corrosive) and class 6.1 (toxic substance), as defined by the current Transportation of Dangerous Goods (TDG) Regulations.

Fluorescent lamps/light bulbs contain very small amounts of mercury in vapour form, which can be released when the bulbs are broken. At the UBC Point Grey campus, light bulbs and lamps (including microscope lamps) are recycled by Building Operations via Light Recycling BC, while thermostats and electric switches are sent for disposal - contact the Service Centre at 604-822-2173 for more information.

The most common mercury containing lab devices are thermometers and manometers and they are disposed of via the Environmental Service Facility (ESF).

Refer to additional resources on the SRS website (Environment and Research Safety).

Procedure

A. Mercury Thermometers or Manometers (Intact/Unbroken)

- These devices contain elemental (liquid) mercury.
- If thermometers are intact, pack safely into an appropriate secondary container (e.g. plastic box).
- Label the container "Mercury Thermometers for Disposal".
- Unbroken manometers or blood pressure monitors contain a fairly high amount of mercury compared to thermometers and require the safe removal of elemental mercury before disposal.
- Collect all elemental (liquid) mercury in a vial or jar, then seal and label it.
- Dispose as chemical waste via the on/off-campus Chemical Waste Inventory System (CWIS).

B. Broken Mercury Thermometers or Manometers, and Other Mercury Waste

- Report the mercury spill to a supervisor, then to SRS via the UBC Centralized Accident Incident Reporting System (CAIRS). If necessary, contact HAZMAT (911) for immediate assistance.
- Review your local spill clean-up procedures, the SRS Spill Response guidelines, or the SRS Mercury Spill Clean-up Procedure for details on how to clean up a mercury spill.
- Ensure liquid mercury does not enter any drains.
- Collect all elemental (liquid) mercury in a vial or jar then seal it; separate all the clean-up materials in a leak-proof container.
- Label the jar(s) as "Mercury Waste" or "Mercury Debris" and list as "Mercury" under the chemical name when entering the information in the Chemical Waste Inventory System.
- Dispose as chemical waste via the on/off-campus Chemical Waste Inventory System (CWIS).
- Do NOT dispose of any liquid mercury via organic solvent waste cans!