

Mercury Management

Responsible Official: Chief Operating

Officer

Responsible Office: Environmental Health and

Safety

Policy Purpose

This policy specifies the proper storage, disposal, and clean-up procedures to be followed for mercury-containing equipment and when mercury is spilled or otherwise released into the environment.

Policy Statement

The ETSU Environmental Health and Safety (EHS) Office is responsible for managing mercury waste disposal and cleanup according to state and federal regulations and the ETSU <u>Hazardous Waste Management Policy</u>.

Mercury is regulated by the State of Tennessee and the federal Environmental Protection Agency (EPA) as a hazardous waste. Exposure to excessive levels can permanently damage the brain and kidneys. Mercury is a persistent environmental threat (especially to waterways) and cannot be dumped down the drain into sanitary or storm sewers, or disposed of in regular landfill trash. All mercury waste should be disposed of according to the procedures specified in this policy.

Mercury spills from broken thermometers are expensive to clean up and present a hazard to faculty, staff and students in laboratory areas. EHS strongly encourages the replacement of mercury-based thermometers with alternatives such as digital or alcohol-based thermometers.

Authority: Focus Act, TCA § 49-8-203 et. Seq; Tennessee Mercury Product Disposal Control Act,

TCA § 68-211-2; 40 CFR Part 273.

Previous Policy: Mercury Management Plan 700.17

Defined Terms

A defined term has a special meaning within the context of this policy.

Mercury (Hg)

Mercury is a naturally occurring element that is found in air, water, and soil. It exists in several forms: elemental or metallic mercury, inorganic mercury compounds and organic mercury compounds. Elemental or metallic mercury is a shiny, silver-white metal and is liquid at room temperature. If heated, it is a colorless, odorless gas. Elemental mercury is used in thermometers, fluorescent light bulbs and electrical switches.

Policy History

Effective Date

Initial: 01/09/2023

Revised:

Procedure EHS can be contacted at (423) 439-6028.

A. Mercury Spills

- 1. Mercury is regulated by the EPA as a hazardous waste.
- 2. If a mercury spill occurs, contact the Office of Environmental Health and Safety (EHS) *immediately* at extension 9-7784 or 9-7900. EHS has the proper equipment specifically designed to cleanup dry and liquid mercury.
- 3. Keep people away from the spill area to limit mercury exposure and to prevent the spread of contamination.
- 4. EHS maintains an inventory of mercury spill kits that consist of items such as mercury absorbent powder, nitrile gloves, dust pan, scraper, shoe covers, and sealable bags. Utilizing the spill kit's contents, carefully try to prevent the mercury from spreading and divert the mercury away from drains, cracks and crevices. Do not let the mercury touch your skin. If needed, contact EHS to obtain a mercury spill kit.

- 5. Do not use a vacuum cleaner to clean up a mercury spill. The vacuum will vent vaporized mercury into the air and increase the risk of exposure by inhalation.
- 6. Do not use a broom to clean up mercury. It will break the mercury into smaller droplets and spread them around, increasing the risk of exposure.
- 7. Do not pour or rinse the mercury down a drain. It may lodge in the plumbing and cause future problems during plumbing repairs. If discharged, it will pollute septic tanks, sewage treatment plants, and, eventually, waterways.
- 8. Clothing that has come into direct contact with mercury should be discarded. Consult EHS on proper disposal. Mercury may contaminate washing machines and pollute sewage drains.
- 9. Shoes contaminated with mercury should be discarded to further prevent the spread of contamination by walking around. Again, consult EHS on proper disposal.
- 10. Mercury collected from a spill must be managed as hazardous waste.

B. Mercury as a Hazardous Waste

- Mercury waste from broken thermometers and must be managed according to all federal and state regulations, as well as ETSU's <u>Hazardous Waste Management</u> and Mercury Management Policies.
- 2. Mercury waste must be properly labeled with an orange ETSU Hazardous Waste Tag and stored in a sealable container. These tags are supplied by the Office of Environmental Health & Safety.
- 3. Mercury waste must be segregated from other waste streams when stored for later pickup. The Office of Environmental Health & Safety Office must be notified for a hazardous waste pickup using the form found at: http://healthsafety.etsu.edu/static/pickupform.

C. Mercury as a Universal Waste

- 1. Universal wastes are EPA regulated wastes, but are not hazardous waste if properly recycled.
- 2. Mercury-containing equipment means a device or part of a device that contains elemental mercury integral to its function. Examples include thermostats, batteries and fluorescent light bulbs.

- 3. A structurally sound container must be used for storage and properly labeled. The best practice is to use the original box or container. The container must have the accumulation start date clearly marked, be kept closed, and separated from other waste streams. These waste containers must be removed to Central Receiving with 12 months of the start date.
- 4. Contact the Office of Environmental Health & Safety Office at extension 9-7784 to request a Universal Waste label or submit a request to: https://www.etsu.edu/facilities/healthsafety/service-request.php.

Procedure History

Effective Date

Initial: 01/09/2023

Revised:

Related Form(s) & Materials

Hazardous Waste Pickup Form

<u>Information/Service Request Form</u>

ETSU Hazardous Waste Management Policy

Please visit https://www.epa.gov/mercury for more information on all mercury related topics.