

# FAYETTEVILLE STATE UNIVERSITY

## MANAGEMENT AND DISPOSAL OF MERCURY-CONTAINING DEVICES

<b>Authority:</b>	Issued by the Chancellor. Changes or exceptions to administrative policies issued by the Chancellor may only be made by the Chancellor.
<b>Category:</b>	University-Wide
<b>Applies to:</b>	● Administrators      ● Faculty      ● Staff      ● Students
<b>History:</b>	Approved – December 7, 2011
<b>Related Policies:</b>	<ul style="list-style-type: none"> <li>● <i>Public Health</i> [NCGS 130A]</li> <li>● <i>Environmental Protection Agency</i> [CFR 40 Parts 260-273]</li> <li>● <i>Resource Conservation and Recovery Act (RCRA) of 1976</i> [42 U.S.C. §6901 et seq.]</li> </ul>
<b>Contact for Info:</b>	Recycling Manager (910)-672-1431

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### I. PURPOSE

Mercury is recognized by national public health experts as one of the most significant environmental toxicants. Thus, in an effort to minimize hazardous and other waste disposal into the environment and comply federal and state laws and regulations regarding the disposal of such waste, Fayetteville State University has developed this policy and its accompanying procedures in an effort to provide guidance to the University community on the management and disposal of Mercury-Containing Devices (MCD).

### II. MERCURY CONTAINING DEVICE (MCD)

MCDs include batteries (non-lead acid), some pesticides, thermostats and thermometers, all fluorescent lamps to include compact fluorescent lamps (CFL's), high intensity discharge lamps (HID) i.e. metal halide, high pressure sodium lamps, mercury vapor lamps, projector lamps, UV lamps, neon lamps and any bulb that operates with a ballasted fixture. Because MCDs contain mercury, they may pose a hazard to human health or the environment when improperly managed.

### III. REQUIREMENTS FOR COLLECTING, REMOVING AND RECYCLING MCDs

#### A. Program Establishment

The University shall establish a program for the collection and recycling of all spent fluorescent lamps and thermostats that contain mercury generated in public

buildings owned by the University. The program shall include procedures for convenient collection, safe storage, training and proper recycling of spent fluorescent lamps and thermostats that contain mercury and include contractual or other arrangements with buyers of the recyclable materials. Additionally, the University shall be required to submit an annual report regarding its efforts to the North Carolina Department of Environment and Natural Resources.

**B. Responsible Unit**

The University's Electrical Shop shall coordinate the day-to-day activities related to managing mercury-containing devices. All spent or used-up MCDs shall be stored and prepared for off-site recycling and disposal through the Electrical Shop. The Electrical Shop shall maintain a service contract with a state approved MCD transporter/handler (recycler) and shall coordinate pickups as needed. The Electrical Shop shall maintain records generated through this process and forward copies to the Sustainability Office.

For building renovations or demolitions, the University or the contractor responsible for the project shall be required to remove and recycle all MCDs prior to demolition. If it is the contractor's responsibility to remove and recycle the MCDs, the contractor shall provide documentation supporting the removal or recycling to the University.

**IV. REQUIREMENTS FOR HANDLERS**

The University is considered a "handler" of waste MCDs it generates. More specifically, the University is considered a small quantity handler in that it accumulates less than 5,000 kilograms (approximately 11,000 pounds) of combined universal wastes on-site at any time. (Approximately 17,600 48-inch fluorescent tubes would weigh 11,000 pounds.)

A MCD will be considered "waste" on the date when it is removed from its fixture or taken out of service. An unused mercury-containing lamp becomes "waste" on the date the handler decides to discard it. As a "handler" the University is required to do the following:

**A. Release Prevention**

The University must manage waste MCDs in a way that prevents the release of mercury into the environment. This includes safely transporting the MCD from the point of use site, after it has been taken out of service, to the safe storage site. Additionally, all new MCDs must be stored in a location designated for such storage and must remain in the packaging they were shipped in prior to use.

**B. Labeling**

Each container of waste MCDs must be clearly labeled or marked with any one of the following phrases: “Universal Waste – Mercury-Containing Device(s),” or “Waste Mercury-Containing Device(s),” or “Used Mercury-Containing Device(s)”.

**C. Storage Containers**

Both intact and broken MCDs must be stored in containers that are compatible with the universal waste, in good condition, and closed at all times except when waste MCDs are being added to, or removed from the container.

Containers stored outside shall be covered to prevent precipitation from coming in contact with the waste. Containers must prevent release of any universal waste or component of universal waste to the environment.

**D. Accumulation Time Limits**

Waste MCDs should not be allowed to accumulate for longer than one year from the date the MCDs are generated or received from another handler. The length of time that the waste MCDs have been accumulated from the date the MCDs became waste or were received should be noted in writing. The handler may make this notation by (1) marking or labeling containers with the starting accumulation date; or (2) maintaining an inventory system on-site that identifies the earliest date that waste MCDs were added to a container or received from off-site.

**E. Training**

All employees who handle or have responsibility for managing waste MCDs must be trained and become thoroughly familiar with the handling of waste and emergency procedures. The training shall be incorporated into the University’s employee training plans, be documented and filed in the employee’s records.

**F. Managing Broken or Damaged Devices**

Broken waste MCDs must be managed as follows:

1. The broken or damaged MCDs must immediately be contained and all releases from broken, leaking or damaged MCDs must be cleaned up.
2. Any broken or damaged devices and any residue resulting from breakage or damage must be placed in a secure container.
3. The container must be closed and sealed, structurally sound and compatible with the broken devices. A plastic lined box, fiber or metal drum, or a plastic bucket with a lid that seals is recommended. The

contained must be clean because a container contaminated with other chemicals may cause those substances to negatively react with the mercury.

4. Mercury residue from broken devices must be handled in accordance with federal regulations. The residue may be sent to a recycling facility or a hazardous waste treatment, storage, or disposal facility authorized to accept the waste. A registered hazardous waste transporter and a uniform hazardous waste manifest shall be used.
5. Any release which poses a threat to human health or the environment must be reported immediately to the University's Environmental Health & Safety Office.

**G. Shipment of MCDs for Disposal by Recycling**

In order to comply with federal and state regulations regarding shipment of MCDs for disposal by recycling, which are listed below, the University shall enter into and maintain a contract with an approved MCD transporter/handler (Recycler). The University shall coordinate the pickup and recycling of all MCDs through this service contract.

The following govern the shipment of MCDs:

1. Handlers are prohibited from sending or taking waste MCDs to a place other than another universal waste handler, a MCD recycling facility, or an authorized hazardous waste facility.
2. Prior to sending a shipment of waste MCDs to another handler or destination facility, the originating handler must ensure that the receiving handler agrees to receive the shipment.
3. Shipments must meet all applicable United States Department of Transportation regulations for waste MCDs.
4. If a MCD shipment is rejected by an intermediate handler or destination facility, arrangements must be made by the originating handler to: (a) receive the waste back when notified that the shipment has been rejected or (b) send the device shipment to an alternate facility.