

NEMS Guidance Protocol: Light Tube (Universal Waste) Management

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Effective Date: July 13, 2026

Applicability: All NIH Facilities, Facility Managers, Housekeeping Staff, and Maintenance Contractors.

Lamp Type	Hazard Component	Regulatory Category	Disposal Track
Fluorescent Tubes (T8, T12, UV lamps)	Mercury Vapor	Universal Waste	Mandatory DEP Recycling Stream
Compact Fluorescents (CFL's)	Mercury Vapor	Universal Waste	Mandatory DEP Recycling Stream
High-Intensity Discharge (HID)	Mercury Vapor/lead	Universal Waste	Mandatory DEP Recycling Stream
LED Lamps	None	Non-Hazardous	Standard solid waste/E-Waste

Collection & Storage Standards:

The primary objective of light tube storage is preventing breakage, which releases hazardous mercury vapor into the facility.

UNIVERSAL WASTE - LAMPS
[X] Sturdy Cardboard Box / Fiber Tube
[X] Completely Sealed with Tape
[X] Accumulation Date: July 13, 2026

Container Specifications:

- **Sturdy Enclosures:** Tubes must be stored in structurally sound boxes or fiber tubes specifically designed for lamp recycling. Do not leave loose tubes leaning against walls.

- **Mandatory Taping:** Boxes must be kept completely closed and taped shut at all times, except when actively adding a lamp. Open boxes are an immediate EPA compliance violation.
- **Dry Equipment:** Store containers in a dry, indoor area to prevent the cardboard boxes from degrading or collapsing.
- **Time Limit:** Universal waste lamps can be stored on-site for a maximum of one (1) year from the date the first lamp is placed in the container.
- **Crushing Prohibition:** Mechanical bulb crushers are strictly prohibited across all NIH campuses unless explicitly operated by certified DEP hazardous waste personnel within a specialized negative-pressure containment facility.

Step-by-Step Labeling Protocol:

Every box or container containing light bulbs must be clearly identified from the time it first enters the NIH facilities.

- **Step 1: Approved Wording:** The container must be clearly marked with one of the following exact phrases:

"Universal Waste — Lamps"

"Waste Lamps"

"Used Lamps"

- **Step 2: Start Date:** Write the "Accumulation Start Date" clearly on the label. This marks the beginning of your 1-year compliance clock.

- **Step 3: Quantity Count:** Keep a running log or tally on the outside of the box indicating the total number of tubes enclosed (e.g., Count: 30 x 4ft T8 tubes).



Local Logistics & Pickup Execution:

Requesting Transit: When a box is full, or as it approaches the 10-month mark, submit a pickup request through the online Chemical Waste Service (CWS) portal or call CWS at (301) 496-4710.

Local Service Area: The local DEP transport network handles free pickup within 1 to 2 business days for the Bethesda Main Campus, Twinbrook, Rockville, and Gaithersburg sites.

Rejection Criteria: CWS drivers will reject boxes that are water-damaged, structurally compromised, structurally open, or contain broken glass.

Emergency & Mercury Spill Protocol:

If a fluorescent tube breaks, mercury vapor is immediately released. Housekeeping staff must follow the following emergency steps:

1. **Evacuate & Ventilate:** Immediately clear the room. Open any exterior windows, leave the area, and close the door.

2. **Wait:** Allow the room to ventilate for at least 15 minutes before re-entering to let the vapor(s) dissipate.

3. **Clean Up Safely:**

- Never use a vacuum cleaner or broom, as this spreads mercury vapor throughout the room and contaminates the equipment.
- Wear disposable gloves. Use stiff cardboard to scoop up large fragments.
- Use sticky tape to pick up small glass shards and powder.
- Wipe the area clean with a damp paper towel.

4. **Isolate the Debris:** Place all fragments, tape, and paper towels into a sealable plastic bag or glass jar, label it "**Broken Universal Waste Lamp,**" and contact DEP immediately for emergency pickup.