

MANAGING WASTE LAMPS

Jaime Rodriguez

New Mexico Environment Department

Hazardous Waste Bureau

(505) 476-6000

<http://www.nmenv.state.nm.us/hwb>

Waste Lamps of Potential Concern

- Fluorescent lamps
- High-intensity discharge lamps
- Mercury- and sodium-vapor lamps
- Metal halide lamps
- Neon lamps
- Incandescent bulbs
- Cathode ray tubes

Overview

- Hazardous waste determination
 - What are waste lamp characteristics?
- Management options
 - What regulations apply to the management of waste lamps?
- Universal Waste Rule

Hazardous Waste Determination

- Are your waste lamps hazardous?
- Analytical testing
 - Toxicity Characteristic Leaching Procedure (TCLP) for heavy metals, e.g., mercury, lead
 - Total metals concentration: 20 times rule
- Other acceptable knowledge (Knowledge of process)
 - Manufacturer or vendor data, e.g., MSDS

Solid Waste vs. Hazardous Waste

- Hazardous Waste

- Waste lamps exhibit Toxicity Characteristic

- TCLP results

- Mercury ≥ 0.2 mg/L (ppm) D009

- Lead ≥ 5 mg/L (ppm) D008

- Solid Waste

- Heavy metals concentrations $<$ TCLP limits

Waste Management Choices

- Non-hazardous Solid Waste
 - Manage as routine solid waste
- Hazardous Waste
 - Manage under full hazardous waste rules
 - Manage under Universal Waste Rule

Universal Waste Rule

- 40 CFR Part 273
 - NM adopted 10/1/2003 (20.4.1.1000 NMAC)
- Two-tiers based on amount of all UW accumulated at any one time:
 - Must count all universal waste types handled
 - Small Quantity Handler: <11,000 lb (5,000 kg)
 - Large Quantity Handler: >=11,000 lb

UW Handling Requirements

- Handle in manner to prevent releases / breakage
 - Ventilate, clean up, and package broken bulbs immediately
- No deliberate breaking / crushing = hazardous waste treatment

UW Storage Requirements

- Label as “Universal Waste – Lamps,” or “Waste Lamps,” or “Used Lamps”
- Must be in sturdy, closed containers
- Write the date on the box when the first waste lamp is put in the container
- One-year storage limit

UW Record Keeping Requirements

- Track time in storage
 - Inventory logs, start dates on packages, etc.
- LQH & Destination Facilities must track shipments sent or received
 - Logs, manifests, bills of lading
 - Destination Facility, quantity and date per shipment
 - Keep records for 3 years

UW Training Requirements

- SQH must inform employees of proper handling and emergency procedures
- LQH must ensure employees are thoroughly familiar with proper handling and emergency procedures

Misc. UW Requirements

- LQH must notify NMED and obtain EPA ID#
- Send to UW Handler or Destination Facility
 - Must agree to accept UW
- Shipments must follow DOT rules
 - Uniform Hazardous Waste Manifest not required
 - Transporters do not need EPA ID#
- UW Handlers can self-transport

Advantages of UW Rule

- Less stringent management requirements
- Hazardous waste managed as UW does not count toward HW generator status
- Conditionally Exempt Small Quantity Generators are exempt from UW Rule

Pollution Prevention / Waste Minimization

- Use long-life bulbs
- Recycle all waste bulbs
- Use non-hazardous bulbs
 - e.g., low-mercury fluorescents

Hazardous Waste Bureau's Role

- Enforce hazardous waste rules, including universal waste
- Conduct compliance evaluation inspections
- Technical Assistance Program
 - Phone consultations
 - Site visits
 - (505) 476-6000