

# Disposal Facility Guidelines for Mercury-Containing Devices



N.C. DIVISION OF ENVIRONMENTAL ASSISTANCE AND OUTREACH

1639 Mail Service Center Raleigh, NC 27699-1639

(877) 623-6748

Mercury-containing device (MCD) disposal is regulated by state and federal laws that affect public and privately owned municipal solid waste facilities, transfer stations and construction and demolition landfills. MCDs include lights containing mercury, mercury thermostats and thermometers. Examples of lights containing mercury are fluorescent lights including compact fluorescent lamps, ultraviolet lights, neon lights and high intensity discharge lights. The following guidelines will help disposal facilities with acceptance and disposal of MCDs

# REGULATIONS AFFECTING THE DISPOSAL OF MCD

The management and disposal of MCDs is regulated under the federal Resource Conservation and Recovery Act (RCRA) <u>Universal Waste Rule</u> and <u>Subtitle C</u> hazardous waste regulations. RCRA regulations apply to MCDs from commercial, industrial and institutional facilities. Household waste is exempt from RCRA hazardous waste management requirements.

In North Carolina, the management of MCDs is further regulated by <u>Session Law 2010-180 (G.S. 130A.06(c))</u>, which imposes a disposal ban on fluorescent lights and thermostats that contain mercury in unlined landfills.

### MUNICIPAL SOLID WASTE LANDFILLS

According to the Subtitle C portion of the RCRA (Code of Federal Regulations, 40 CFR Part 260-279), it is a violation to transport and dispose of certain mercury-containing devices in a municipal solid waste (MSW) facility (i.e., landfill, material recovery facility, waste-to-energy facility or transfer station). Through their knowledge of the waste or by testing the waste, generators must determine whether a waste exhibits any of the four characteristics of hazardous waste. Mercury-containing devices are unlikely to exhibit ignitability, corrosivity or reactivity characteristics. However, testing indicates that MCDs usually exhibit the toxicity characteristic.

When considering MCDs, and in particular fluorescent lamps, the U.S. Environmental Protection Agency requires a waste generator to determine whether or not a lamp exhibits hazardous characteristics by using the Toxicity Characteristic Leaching Procedure (TCLP) to test the lamp. If a generator has not tested fluorescent lamps to prove them non-hazardous, a disposal facility must assume they are hazardous and handle them accordingly. This standard should apply to low-mercury or "green end cap" lamps as well as all mercury-containing lamps.

Operators of MSW landfills must ensure MCDs are not improperly disposed of in municipal solid waste systems. There are liabilities for facilities that accept any material containing mercury and for the party collecting and transporting the material. Under the Universal Waste Rule, which is designed to streamline hazardous waste management standards for common materials with hazardous properties, MCDs can be recycled with less stringent requirements than are applied to other hazardous wastes.

In summary, a MSW landfill cannot accept mercury-containing devices from any commercial source that exceeds hazardous waste limits. Devices from households are, however, exempt from these regulations, though facility operators may choose to further restrict the acceptance of MCDs from households if they so choose. Operators of MSW landfills have the right to refuse any waste.

#### TRANSFER STATIONS

Regulations affecting MSW landfills also apply to transfer stations.

#### CONSTRUCTION AND DEMOLITION LANDFILLS

Effective July 1, 2011, no person is allowed to dispose of mercury-containing fluorescent lights and thermostats into an unlined sanitary landfill for the disposal of construction and demolition debris waste or in any other unlined landfill. As noted previously, the disposal of MCDs generated by commercial, industrial and institutional facilities, whether in lined or unlined landfills, has long been restricted under RCRA.

NC Session Law (G.S. 130A.06(c)) also requires demolition contractors in North Carolina and/or any owner of a building or structure to be demolished to remove all fluorescent lights and mercury-containing thermostats from the building or structure prior to demolition. Facility operators will need to screen loads from demolition projects and reject loads with fluorescent lights and mercury-containing thermostats not removed prior to demolition. Households are not allowed to dispose of fluorescent lights and mercury-containing thermostats in unlined landfills.

## **BEST MANAGEMENT PRACTICES**

The following practices can be used to help disposal facilities adhere to the regulations affecting mercury-containing devices.

- •Communicate with your customers Inform haulers who bring materials to your facility that mercury-containing devices are not accepted. Fluorescent lamps and mercury-containing thermostats should be recycled rather than brought to the solid waste facility. See recycling options below.
- Improve signs if you operate an unlined landfill, ensure that signs clearly communicate that fluorescent lamps and mercury-containing devices are not accepted at your facility. Signs should be posted at facility entrances as well as scale houses.
- Improve screening Ensure that your facility's screening protocol includes information about identifying mercury-containing devices. Weigh masters should visually inspect incoming loads and communicate with haulers about unacceptable materials. Screeners should be trained to identify MCDs and have an established procedure for managing contaminated loads.
- Plan to reject loads When an unacceptable load arrives at your facility, have a plan in place to reject the load. Facility operators should encourage the recycling of mercury-containing devices by educating customers about recycling options. Consider establishing a recycling drop-off for universal wastes. A fee can be charged for this service.

#### RECYCLING OPTIONS

To learn about options for recycling MCDs including lights containing mercury, please call the Division of Environmental Assistance and Outreach toll free at 877-623-6748, or visit our website at http://www.ncenvironmentalassistance.org/.

For more information from the Division of Environmental Assistance and Outreach:

Joseph Fitzpatrick 1639 Mail Service Center Raleigh, NC 27699-1639

Phone: 919-707-8121

The N.C. Division of Environmental Assistance and Outreach provides free, non-regulatory technical assistance and training on methods to eliminate, reduce or recycle wastes before they become pollutants or require disposal. Telephone DEAO toll free at 877-623-6748 for assistance with issues in this fact sheet or any of your waste reduction concerns.