



Disposal Facility Guidelines for Mercury-Containing Devices

FACT SHEET

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) Universal Waste Rule and Subtitle C 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 Session Law 2010-180 (G.S. 130A.06(c)), 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.

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1639 Mail Service Center
Raleigh, NC 27699-1639

(919) 733-1398
(877) 623-6748

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 919-733-1398, or visit our website at www.p2pays.org.

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

Joseph Fitzpatrick
1639 Mail Service Center
Raleigh, NC 27699-1639
Phone: 919-715-6499 Fax: 919-715-6794

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 at (919) 733-1398 or toll free at 877-623-6748, or e-mail nowaste@p2pays.org for assistance with issues in this fact sheet or any of your waste reduction concerns.



Session Law 2010-180 Resource Sheet

Each State agency, including the General Assembly, the General Court of Justice, universities, community colleges, public schools, and political subdivisions using State funds for the construction or operation of public buildings shall establish a program in cooperation with the Department of Environment and Natural Resources and the Department of Administration for the collection and recycling of all spent fluorescent lights and thermostats that contain mercury generated in public buildings owned by each respective entity. The program shall include procedures for convenient collection, safe storage, and proper recycling of spent fluorescent lights and thermostats that contain mercury and contractual or other arrangements with buyers of the recyclable materials.

Each State agency, including the General Assembly, the General Court of Justice, universities, community colleges, the Department of Public Instruction on behalf of the public schools, and political subdivisions shall submit a report on or before December 1, 2011, that documents the entity's compliance with the requirements of subsection (a) of this section to the Department of Environment and Natural Resources and the Department of Administration. The Departments shall compile the information submitted and jointly shall submit a report to the Environmental Review Commission on or before January 15, 2012, concerning the activities required by subsection (a) of this section. The information provided shall also be included in the report required by G.S. 130A 309.06(c). Recycling required by public Agencies Effective July 1, 2011

CONTACT INFORMATION

Person's responsible for the implementation of a recycling program need to provide contact information to DENR. The contact information will be used to collect reporting information before December 1, 2011. Contacts can be entered at the following web links.

State agencies enter contacts here;

<http://www.surveymonkey.com/s/HNLYJTX>

Local governments enter contacts here;

<http://www.surveymonkey.com/s/JG93HYW>

STATE CONTRACT RECYCLING VENDOR CONTACTS

To view or download Contract 926B visit <http://www.doa.state.nc.us/PandC/926b.pdf>

Contractor Name	Address / Federal ID	City, State, Zip	Contact, Phone, Fax
Cleanlites Recycling	195 Ben Abi Road Fed. ID 31-1400474	Spartanburg, SC 29307	Ryan Rogers ryan@cleanlites.com 864-579-4800 864-579-4802 Fax
Southeast Recycling Technologies	906 Chase Drive Fed. ID 62-1624867	Johnson City, TN 37604	Stephen Barnett www.recyclebulbs.com 423-282-2022 423-282-5151 Fax Or: Tony Ruston 423-477-2961 423-791-4073 (cell) 423-477-3081 (fax) If any problems, contact: Stephen Gross 423-477-2961 (ext. 209)

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DIVISION OF WASTE MANAGEMENT, HAZARDOUS WASTE SECTION CONTACT

For questions regarding the Universal Waste Rule and hazardous waste disposal

Lebeed Kady
401 Oberlin Rd, Suite 150
Raleigh, NC 27605
Tel. 919 508 8546
Email. lebeed.kady@ncdenr.gov

WASTE REDUCTION PARTNERS CONTACT

For questions regarding lighting efficiency and alternate lighting

Russ Jordan
Energy Program Manager
Waste Reduction Partners
339 New Leicester Highway, Suite 140
Asheville NC 28806
828-251-7477 Asheville M, W
828-863-2917 Tryon
russjordan.wrp@windstream.net
www.wastereductionpartners.com

DIVISION OF ENVIRONMENTAL ASSISTANCE AND OUTREACH CONTACTS

For regarding state convenience contract reporting procedures, recycling programs and options

Joseph Fitzpatrick
1639 Mail Service Center
Raleigh, NC 27699-1639
Tel. 919 715 6499
Email. joseph.fitzpatrick@ncdenr.gov

Scott Mouw
1639 Mail Service Center
Raleigh, NC 27699-1639
Tel. 919 715 6512
Email. scott.mouw@ncdenr.gov

STATE AND LOCAL AGENCY ENVIRONMENTAL SUSTAINABILITY CONTACTS

NC Project Green: <http://ncprojectgreen.com/>

Rachel Eckert
NC Division of Environmental Assistance and Outreach
Rachel.eckert@ncdenr.gov
919-715-6505

Claudia Powell
NC Division of Environmental Assistance and Outreach
Claudia.powell@ncdenr.gov
919-715-6532

STATE AND LOCAL AGENCY ENVIRONMENTAL SUSTAINABILITY CONTACTS

Copies of today's presentations can be found at the following web link;

<http://www.p2pays.org/webshare/FluorescentLights/>

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 at (919) 733-1398 or toll free at (877) 623-6748, or e-mail nowaste@p2pays.org for assistance with issues in this fact sheet or any of your waste reduction concerns.