



Massachusetts
Department
of
ENVIRONMENTAL
PROTECTION

fact sheet

Fluorescent Lamp Management for Businesses and Institutions

Using fluorescent lamps makes business and environmental sense because they consume one quarter as much electricity as incandescent lighting. At the same time, spent and broken fluorescent lamps need to be handled very carefully because they contain small amounts of mercury. Standard linear fluorescents, lamps with green end caps or green marking, compact fluorescents, high intensity discharge (HID) and high-pressure sodium lamps used in outdoor lighting all contain mercury.

The Mercury Management Act, enacted in 2006, prohibits all items that contain mercury, including low mercury fluorescent lamps, from being thrown in the trash effective May 1, 2008. As of this date, all mercury containing lamps must be recycled or managed as hazardous waste.

Why is mercury a problem?

Mercury is toxic to the human nervous system, kidneys, liver and immune system. When inhaled or ingested, it can cause a range of physical symptoms. Mercury that is released to the environment “bioaccumulates” in fish – that is, it builds up in their tissue over time – making them less healthful or even dangerous to eat. The Massachusetts Department of Public Health (DPH) has advised pregnant women, nursing mothers, women of child bearing age and children under 12 to avoid eating most freshwater fish from Massachusetts lakes, rivers and streams. DPH has also recommended that all Massachusetts residents avoid certain fish from those bodies of water where sampling has revealed a significant mercury problem.

When fluorescent lamps are broken, burned in a waste-to-energy plant, or buried in a landfill, mercury can be released into air. While air pollution equipment at waste-to-energy plants can capture over 90 percent of the mercury released at these facilities, the remainder is released into air, as is most of the mercury released by landfills and by bulbs that are broken in uncontrolled settings.

What are the risks of mercury exposure from handling lamps?

Mercury lamps only pose a hazard when they break. When they are handled properly to minimize breakage, there is little chance of mercury exposure. In fact, an active lamp recycling program can reduce the likelihood of an accidental mercury release by stressing the importance of handling lamps carefully.

Are there specific rules for handling spent and broken lamps?

To minimize the potential for mercury releases from broken fluorescent lamps, the Massachusetts Department of Environmental Protection (MassDEP) requires that all lamps be accumulated, stored, transported and disposed of as hazardous wastes, under the *Massachusetts Hazardous Waste Management Act* and the federal *Resource Conservation and Recovery Act (RCRA)*.

Fluorescent lamps may be recycled under the streamlined provisions of the *Universal Waste Rule* (found at 310 CMR 30.1000), which MassDEP adopted to encourage the recycling of products with specific toxic or hazardous constituents. To recycle fluorescent lamps, you should:

- Store unbroken lamps in a box or fiber drum to prevent breakage, and keep that container in a secure, protected area. If possible the storage container should be closed between uses and stored in a ventilated area that is not consistently occupied, in case the lamps break during storage.

- Label the container “Universal Waste - Mercury-containing Lamps(s)” or “Waste Mercury-containing Lamp(s)” or “Used Mercury-containing Lamp(s)” and mark it with the date on which you first began storing the lamps.
- Have these lamps collected by, or delivered to, an authorized lamp recycler, hazardous waste transporter or another universal waste handler within one year of the date marked on the container. If you have broken bulbs, follow the guidance in the next section of this fact sheet.

What do I do if a lamp breaks?

Never use a vacuum cleaner, which will only disperse the mercury over a wider area. If a lamp breaks in the universal waste storage container, do not empty the container; rather, have the container collected by or delivered to an authorized waste handler as soon as possible. If a lamp breaks outside of the universal waste container, see specific cleanup guidance at:

<http://www.mass.gov/dep/toxics/stypes/hgres.htm#dispose>

How can I dispose of spent or broken fluorescent lamps?

A number of companies recycle fluorescent lamps, several of which are listed below. You may wish to contact several to obtain price quotes. MassDEP cannot guarantee that recyclers listed – particularly those located outside of Massachusetts – are in full compliance with hazardous waste regulations.

Fluorescent Lamp Recycling Facilities

Advanced Environmental Recycling Corp.
Allentown, PA
610-797-7608

<http://www.aercrecycling.com/>

American Lamp Recycling
Wappinger Falls, NY
845-896-0058

www.americanlamprecycling.net

Bethlehem Apparatus
Hellertown, PA
610-838-7034

www.bethlehemapparatus.com

Complete Recycling Solutions
Fall River, MA
866-277-9797

www.crsrecycle.com

Northeast Lamp Recycling
East Windsor, CT
888-657-5267

www.nlr-green.com

Uni Waste
Dover, NH
603-422-7711

www.uniwaste.com

Veolia Environmental Services
Stoughton, MA
800-478-6055

www.veoliaes.com

A more complete list of mercury recyclers can be found at: www.lamprecycle.org

Sources of Information & Assistance

- **General information about mercury:** <http://www.mass.gov/dep/toxics/stypes/hgres.htm> or MassDEP Mercury Hotline toll-free at (866) 9-MERCURY or (866) 963-7287
- **Health effects of mercury:** <http://www.mass.gov/dph/topics/mercury.htm> or Department of Public Health at (617) 624-5757
- **Universal Waste Rule fact sheet:** <http://www.mass.gov/dep/recycle/hazardous/univrul.pdf> or MassDEP Business Compliance Assistance Line at (617) 292-5898
- **On-Site pollution prevention assistance:** <http://www.mass.gov/envir/ota/> Office of Technical Assistance & Technology (OTA) at (617) 626-1060

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