

USE but DON'T TRASH energy-efficient fluorescent bulbs!



FACTS

- → FLUORESCENT AND HID* LAMPS CONTAIN MERCURY. When broken, incinerated, or buried in a landfill, they release mercury into the air, water and soil.
- Due to high mercury levels, Rhode Island has a fish advisory restricting the amount of fish pregnant women and children should eat.
- All mercury-containing lamps, including low mercury "green ends" MUST be recycled or managed as a hazardous waste according to the Rhode Island Universal Waste Rule. See disposal options below.
- Improperly disposed lamps are a liability! Businesses improperly disposing of spent lamps may be held liable for contaminated waste sites under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Employees may be exposed to unsafe mercury levels from mismanaged lamps.
- → Fluorescent bulbs are 75% more efficient than incandescent bulbs and last 5-10 times longer. Using them will help lower your electric bill!

Disposal Options for Fluorescent and HID Bulbs

For Commercial/Institutional:

Dispose of fluorescent and HID lamps through one of the following sources:

Commercial Fluorescent Lamp Recyclers—

Advanced Environmental Recycling Corporation 2591 Mitchell Ave. Allentown, PA 18103 800-554-2372 http://www.aercmti.com/

Complete Recycling Solutions, LLC One Father DeValles Blvd. Fall River, MA 02723 Phone: 508-402-7700 or 866-277-9797 www.crsrecycle.com

Northeast Lamp Recycling, Inc. 250 Main Street PO Box 680 E. Windsor, CT 06088 860-292-1992 www.nlrlamp.com Onyx Superior Special Services 218 Canton Street Stoughton, MA 02072 781-341-6080 x232 www.onyxes.com

These four are nearby recyclers. For a complete list of recyclers and brokers serving the northeast see http://www.state.ri.us/dem/programs/benviron/assist/pdf/lamprecy.pdf

Electrical Distributors—

Some distributors provide recycling services, offering a convenient, one-stop shopping arrangement for lamp purchasing and spent lamp management. Ask your lamp distributor if he or she provides this service. Below are some distributors who will help customers recycle their lamps. This list is not comprehensive.

Major Electric Supply 123 High Street Pawtucket, RI 02860 401-724-7100 Electrical Wholesalers, 21 branch locations in Connecticut. For more information see http://www.ew-inc.com or contact Rick Schaller 1-800-522-3232

Mention of a company is not an endorsement by the Rhode Island Department of Environmental Management.

For More Information—

Contact Beverly Migliore, 401-222-4700 X7503 or at beverly.migliore@dem.ri.gov

Visit RI DEM Web site at http://www.state.ri.us/dem/topics/mercury.htm

Rhode Island Department of Environmental Management 235 Promenade Street Providence, RI 02908-5767

For Households:

Households are exempt from the regulations but strongly encouraged to recycle fluorescent and HID lamps. Recycle them through the Rhode Island Resource Recovery Corporation (RIRRC). Call 401-942-1430 X241 for more information.

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This is an EPA funded project.

^{*}HID (High Intensity Discharge) bulbs include metal halide, high pressure sodium, and mercury vapor used commonly in commercial indoor and outdoor lighting and other speciality lighting applications.

How to recycle fluorescents in 8 easy steps:

Highly efficient, fluorescent lighting is an excellent choice for both financial and environmental reasons. Fluorescent lamps contain mercury, however, and must be managed properly, especially when they become a waste. Tossing lamps in the trash is no longer a lawful option. Disposal of lamps as hazardous waste can be expensive. Recycling spent lamps, however, is a cost-effective disposal alternative.

1 Assess your facility

How many fluorescents do you use? How many do you dispose of each month, or each year? What do your employees do now with spent or broken lamps?

2 Choose a recycling company

See www.newmoa.org/lamprecycle for a list of recyclers operating in the Northeast. Your recycler will explain how to properly store spent fluorescents and prepare them for shipping, as well as provide storage containers, transportation and a certificate of recycling. See the back for alternatives to recycling companies.

3 Establish a process for collecting and managing used lamps as Universal Waste

Designate a safe, dry storage area where the lamps won't be broken. Make sure employees know whom to call when a lamp burns out, or what to do if one breaks.

If your building generates small amounts of waste lamps, consider recycling through a "box program." In this type of program you collect spent lamps in a pre-paid, labeled shipping container, purchased from a recycler or distributor.

When the container is full, you simply mail it to the recycler.

Note: Maine does not permit box program recycling.

If your building generates large amounts of waste lamps, recyclers can make regular pick-ups. Also, consider re-lamping in bulk. This could save you money.

4 Store used lamps in Universal Waste-compliant containers.

Mark each container with "Universal Waste – Lamps," "Waste Lamps" or "Used Lamps," and the date accumulation began. Get lamps to the recycler within one year.

5 Properly manage broken lamps

Clean-up broken lamps promptly, placing shards and spilled powder in a puncture-resistant, sealed, plastic bag, or bucket. Wear gloves and use a damp cloth to sweep up the powder. Place all clean up materials in a separate sealed container. Never vacuum lamps; it will simply spread the mercury vapor. You may recycle broken lamps at the same facility as your intact lamps. Do not throw them in the regular trash.

6 Save records

Save recycling certificates and bills of lading or invoices that track your lamps, particularly if you do not work directly with a recycler.

7 Include recycling costs in your annual budget

See back for cost estimate.

8 Let your tenants know you are recycling

They'll appreciate your concern for the environment! Encourage them to recycle too.



"Recycling fluorescent bulbs is a simple and affordable practice that keeps mercury from contaminating our community. We proudly recycle the fluorescents in our property and encourage other property managers to do the same."

-Michael Quinn, Property Manager for Boston's Prudential Center

Choosing a recycler

Prices and services vary. Be sure to comparison shop. Find out whether the mercury is reclaimed on-site or shipped off-site for processing (generally more expensive). Consider these key factors when choosing a recycler:

- Responsive service
- Technical capability
- Experience and references
- Recycling verification provided in writing
- Environmental compliance history
- Up-to-date permits (facilties and transportation)
- Indemnity protection
 (insurance coverage should be for a minimum of \$5 million

Alternatives to recyclers

- Ask your lamp distributor if he or she can help you recycle your lamps. Many distributors now offer this convenient "one-stop shopping" service to their customers.
- Or, you can contract a licensed hazardous waste transporter, although this is often more expensive.

 You can also contract spent lamp management to a cleaning company or electrical contractor, but you must be sure that they are in compliance with federal and state regulations. You will be held liable if your subcontractor improperly disposes of your lamps.

Can I use a lamp crusher or "bulb eater"?

Lamp crushing is not recycling. It may be considered illegal treatment of hazardous waste in your state, subjecting you to administrative penalties. Check with your state hazardous waste program to see if lamp crushing is allowed in your state (bulb crushers are not legal in RI). See www.newmoa.org/lamprecycle (Note: crushed lamps must be managed as Hazardous Waste, which costs more than the recycling of intact lamps.)

For more information

Association of Lighting and Mercury Recyclers **www.almr.org**

National Electrical Manufacturers Association www.lamprecycle.org

Northeast Waste Management Officials' Association (NEWMOA)

www.newmoa.org/lamprecycle or call 617-367-8558 X305 or X302

How much does it cost to recycle lamps?

The average cost is 25 to 40 cents per 4-foot bulb.

Good Rule of Thumb: Expect to replace lamps at a rate of 1 lamp per 64 square feet per year

Average annual cost is therefore about \$406 to \$625 for every 100,000 square feet ..

Recycle **ALL** fluorescents, even the low-mercury ones.

One lamp alone may not make a difference, but millions are in use.

The cumulative impact **is** significant.