

Why Recycle?

Mercury containing lamps are an energy efficient source of lighting. According to energystar.gov, energy star qualified CFLs use up to 75 percent less energy than incandescent light bulbs, last up to 10 times longer, cost little up front, and provide a quick return on investment.

In order to achieve this level of efficiency all fluorescent, metal halide, neon, low pressure sodium, and UV lamps contain a certain amount of mercury. The amount of mercury varies according to the type and size of bulb as well as the date of manufacture. Older fluorescent bulbs typically contain more mercury than their more recent incarnations. According to the EPA, the amount of mercury in lamps varies widely, depending on the type of lamp. Some fluorescent lamps have as little as 3.5 mg mercury, but some neon lights have as much as 100 mg.

According to the Journal of the Air & Waste Management Association, in the U.S., two to four tons of mercury are released annually from the disposal of approximately 620 million fluorescent lamps. Proper packaging and recycling of spent lamps greatly reduces the mercury dilemma, creating a much safer environment. When disposed of properly, mercury is captured through extraction techniques and reused in other manufacturing processes.

Lamps that Contain Mercury

- Fluorescent lamps
- Compact Fluorescent lamps
- Low Pressure Sodium lamps
- Metal Halide Lamps
- Neon Lamps
- UV Lamps
- Any Lamps labeled (Hg)
- Tanning Lamps

Mercury Facts

Mercury is a silvery, heavy, odorless liquid metal.

Mercury is a naturally occurring element that can be found throughout the environment. Mercury is the only metal that exists as a liquid at room temperature. Mercury expands and contracts according to temperature changes, combines easily with other metals, and conducts electricity.

Mercury is a *poison*. It can be absorbed into the body through air passageways (breathing vapors) or through the skin. It causes irritation to the skin and eyes. If inhaled, the vapor can cause irritation to the lungs, causing cough, chest pain, and shortness of breath.

Repeated exposure, even to low quantities, can cause mercury poisoning. Symptoms include tremors, memory loss and inability to concentrate, gum problems, and changes in mood.

Methyl mercury is highly toxic and accumulates in body tissues. The developing fetus is the most sensitive to the effects of mercury, so women of childbearing age are the population of greatest concern.

According to the Environmental Protection Agency's 1999 National Emissions Inventory, coal-fired electric power plants are the largest source of human-caused mercury air emissions in the United States. Fluorescent lamps save energy over incandescent lamps, therefore reducing the mercury emission output of coal burning power plants. Over its lifetime a compact fluorescent lamp operating on coal power plant energy will prevent a greater quantity of mercury entering the environment than it contains itself.

More Mercury Information

- <http://www.epa.gov/mercury/>
- <http://earth911.org/mercury>
- <http://www.epa.gov/hg/about.htm>
- <http://www.almr.org/>

Recycling Program

The City of Lawrence/Douglas County Household Hazardous Waste Facility is able to accept mercury containing lamps from businesses in Douglas County. Recycling of all business generated mercury lamps from Douglas County is available for a nominal fee. This cost is the same as that assessed by the City's lamp recycling contractor plus an additional 15% handling and administrative fee to help cover cost of equipment and staff time.

The City of Lawrence Waste Reduction and Recycling Division is also able to accept other Douglas County business wastes such as paint, motor oil, solvents and corrosives through the **Small Quantity Generator (SQG) Program**. These are all items that should not be poured down the drain or put in the trash. In fact, by law, the State of Kansas requires that they be disposed in an environmentally sound manner.

Common Small Quantity Generator items for disposal:

- Motor Oil
- Antifreeze
- Cleaners
- Aerosol Cans
- Photo Chemicals
- Mercury Lamps
- Pesticides
- Latex Paint
- Oil-Base Paint
- Varnishes
- Paint Thinners
- Adhesives

Acceptance of pre-qualified SQG hazardous waste is on an appointment basis only. To schedule an inventory appointment please call 785-832-3030.

More information at:
www.LawrenceRecycles.org

How to Recycle

For small to medium quantities of mercury lamps, call the City of Lawrence/Douglas County Small Quantity Generator Program at 785-832-3030.

For large quantities of mercury lamps contact one of the following contractors directly.

- HTR Group - www.htr-group.com
- A-Tec Recycling Inc. - www.a-tec-recycling.com
- Fluorecycle, Inc. - www.fluorecycle.com

Handling Broken Lamps

- www.epa.gov/mercury/spills/index.htm
- <http://www.maine.gov/dep/rwm/homeowner/cflbreakcleanup.htm>
- http://www.energystar.gov/ia/partners/promotions/change_light/downloads/Fact_Sheet_Mercury.pdf

Handling Mercury Spills

(Quantities greater than a thermometer and less than two tablespoons)

Don't vacuum a mercury spill.

1. Have everyone else leave the area; don't let anyone walk through the mercury on their way out.
2. Open all windows and doors to the outside.
3. Turn off any internal ventilation systems.
4. Shut all doors to other parts of the building, and leave the area.
5. Call the Kansas Department of Health and Environment at (785) 296-1679.

Spills of More than Two Tablespoons (One Pound)

Any time one pound or more of mercury is released to the environment, it is mandatory to call the National Response Center (NRC). The NRC hotline operates 24 hours a day, 7 days a week. Call (800) 424-8802. *Note that because mercury is heavy, only two tablespoons of mercury weigh about one pound.

Revised 01/09



P.O. Box 708
Lawrence, KS 66044
785.832.3030

www.LawrenceRecycles.org

Printed on 30 percent post-consumer recycled content paper

Business Mercury Lamp Recycling



City of Lawrence
PUBLIC WORKS
WASTE REDUCTION & RECYCLING

More information at:
www.LawrenceRecycles.org