

# Fluorescent Lamps

A Guide to Doing it right in Lawrence and Mercer Counties



### What are fluorescent lamps?

Fluorescent lamps, also called fluorescent lights, come in two forms, linear and compact. They use a low pressure Mercury vapor with fluorescence to produce visible light. Fluorescent lamps have many applications and are more energy efficient than their incandescent counterparts. Compact fluorescent lights (CFLs) were developed as a replacement for regular household incandescent lights. Linear lamps are used in shops, buildings, basements, etc. Linear lamps may also come in different shapes such as round or U-shaped.

There are other forms of fluorescent lamps including: black and tanning lights, UVB medical, grow, infrared, bilirubin, germicidal, electrodeless, and cold-cathode fluorescent lamps.

### What are the concerns about improperly discarded Fluorescent lamps?

Fluorescent lamps contain Mercury. Mercury is an extremely toxic element that must be handled and managed carefully. Exposure to Mercury can severely damage (depending on the dosage) the brain, kidneys, and lungs and is responsible for several diseases. Exposure may occur when a lamp is broken resulting in the release of Mercury vapor.

The amount of Mercury contained in CFL's is extremely low. By comparison, the amount of Mercury contained in a single older style thermostat is the equivalent of 125 CFL's. Linear lamps generally contain higher amounts of Mercury that will vary with bulb size and manufacturer.

Although the amount of Mercury released from a bulb or two that you may put in your trash will be minimal, it is the cumulative effect that we need to be concerned about. Your bulb or two will add up with the thousands and tens of thousands of other households that did the same thing.

### Why should I use Fluorescent lights if they are potentially toxic?

Our trash has changed dramatically over the past two decades, becoming much more toxic. Items such as electronics and batteries contain potentially hazardous materials but are frequently tossed in the trash. Fluorescent lamps are no exception. Fortunately, these hazardous materials are recyclable.

Fluorescent lamp benefits far outweigh the hazards which are significantly reduced when the lamps are properly recycled. Fluorescent lamps are extremely energy efficient compared to their traditional incandescent counterparts. According to the U.S. Energy Star program, if every household replaced one incandescent with a Fluorescent light, it would be the equivalent of reducing the greenhouse gases from 800,000 vehicles. Energy saved reduces the amount of coal necessary to be burned for electricity generation. Power plants are the largest source of Mercury emissions in the U.S.

As a result of their energy efficiency Fluorescent lamps are cheaper to operate. They also give off one-fifth the heat of an incandescent lamp which can be beneficial in buildings with few windows and many lights.

### Where can I take my old Fluorescent lamps?

- Outlets for CFL's include: Lowes, Home Depot, ECS&R, and some HHW collections.
- Fluorescent tubes have limited options: ECS&R and special collection programs.
- Mail-in recycling options also exist for Fluorescent lights. There is a cost associated with mail programs that includes prepaid shipping labels and packaging.
- The Lawrence-Mercer Recycling/Solid Waste Department can provide you with the latest list of options.



Recycling/Solid Waste Department