

Compact Fluorescent Light Bulbs

Lisa Evenson, Sustainable Greater Green Bay Task Force Member

February, 2009

Purchasing compact fluorescent light (CFL) bulbs and using them instead of incandescent light bulbs, is an inexpensive, sustainable way for people to use less electricity, prevent greenhouse gases, and save money. From ENERGY STAR's Frequently Asked Questions (FAQ) fact sheet, it states, "If every home in America replaced just one incandescent light bulb with an ENERGY STAR qualified CFL, in one year it would save enough energy to light more than three million homes. That would prevent the release of greenhouse gas emissions equal to that of about 800,000 cars ¹." An ENERGY STAR qualified CFL will comparatively use up to 75% less energy and last 10 times longer.

Nonetheless, many people are concerned with the mercury that is contained inside a CFL. While understandable, CFLs contain very small amounts of mercury and it is sealed within a glass tube. Mercury from a CFL is only released if it is broken. By comparison, an incandescent light bulb may not contain mercury; however, it consumes more energy than a CFL bulb. The Environmental Protection Agency (EPA) estimates that in the US, coal fired plants are responsible for the majority of the mercury that is released in the atmosphere. An incandescent light bulb will emit about four and half times more mercury from electrical production than a CFL.

So what happens if I break one? The EPA recommends:

1. Before cleanup, air out room for at least 15 minutes and shut off heating and cooling systems.
2. Carefully scoop up glass pieces and powder using stiff paper or cardboard and place them in a glass jar with metal lid or in a sealed plastic bag.
3. Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder.
4. Wipe the area clean with damp paper towels or disposable wet wipes. Place towels in the glass jar or plastic bag.
5. Do not use a vacuum or broom to clean up the broken bulb.
6. Bring your sealed bag or jar to your local household hazardous waste facility (HHWF) for proper disposal. In Brown County, residents can bring them to the Brown County HHWF on Thursdays from 12 p.m. to 6 p.m. and Saturdays from 8 a.m. to 2 p.m.

For other cleanup recommendations for rugs, carpeting, clothing, bedding, and other soft material, visit EPA's website at (<http://www.epa.gov/mercury/spills/index.htm#fluorescent>).

How do I get rid of burned out bulbs?

ENERGY STAR recommends that you bring your CFLs to your local municipal solid waste facility or go to www.epa.gov/bulbrecycling or www.earth911.org for local recycling options. You can also bring your unbroken bulb in a plastic bag to your local Home Depot Store free of charge.

For more energy saving ideas or how to bring your talents to the Sustainable Greater Green Bay Task Force, please visit our website at: www.ci.green-bay.wi.us/SGB.

###