Compact Fluorescent Light Bulbs (CFLs)

What's the Big Deal?

Switching from traditional incandescent light bulbs to CFLs is an effective, immediate change that every Pennsylvanian can make to reduce their energy usage and electric bills. Lighting accounts for close to 20 percent of the average home’s electric bill. ENERGY STAR® qualified CFLs use 75 percent less electricity and last up to 10 times longer. The Environmental Protection Agency (EPA) estimates that a CFL will save the user about $30 or more over the life of the bulb. CFLs come in many shapes and sizes and can fit almost any fixture. There are three-way, dimmable, indoor and outdoor CFLs available. See www.energystar.gov for more information on selecting the right light bulb.

It is important to buy CFLs with the ENERGY STAR® logo. The ENERGY STAR® program is administered by the EPA and products with its seal of approval are randomly tested by a third-party to verify that they meet quality requirements. ENERGY STAR® products are also backed by a minimum two-year manufacturer warranty.

When choosing a CFL to replace an existing incandescent bulb there are some important things to consider. First, make sure you read the conversion information printed on the front of the packaging. That way you will be certain that your CFL puts out the same amount of light as the old incandescent. For example, if you want to replace a 60 watt incandescent bulb you would have to buy a 13- to 15-watt CFL. There are also different bulbs for indoor and outdoor uses. Finally, since CFLs come in different shapes and sizes, it is important to make simple measurements to ensure that the new bulb will fit in place of the old incandescent.

What about Mercury?

CFLs do contain a small amount of mercury that is sealed in the glass tubing – an average of 5 milligrams. By comparison, older thermometers contain about 500 milligrams of mercury. Currently, mercury is an essential component of CFLs but no mercury is released when the bulbs are intact or in use.

Precautions for Using CFLs

CFLs are made of glass and can break if dropped or roughly handled. Treat a CFL with the same care as any glass object. Always screw and unscrew the bulb by its base (not the glass) and never force the bulb into a socket. If a CFL breaks in your home, follow the clean-up recommendations on the back of this sheet.

CFL Disposal

Because CFLs do contain a small amount of mercury, the EPA recommends recycling the bulbs at your local municipal waste center or go to www.epa.gov/bulbrecycling or www.earth911.org to identify local recycling options. Home Depot has also announced that it will be collecting used CFLs in all of its stores.

January 2009
Clean-Up Suggestions from the EPA

1. Before Clean-Up: Ventilate the Room
   • Have people and pets leave the room, and don't let anyone walk through the breakage area on their way out.
   • Open a window and leave the room for 15 minutes or more.
   • Shut off the central forced-air heating/air conditioning system, if you have one.

2. Clean-Up Steps for Hard Surfaces
   • Carefully scoop up glass fragments and powder using stiff paper or cardboard and place them in a glass jar with a metal lid (such as a canning jar) or in a sealed plastic bag.
   • Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder.
   • Wipe the area clean with damp paper towels or disposable wet wipes and place them in the glass jar or plastic bag.
   • Do not use a vacuum or broom to clean up the broken bulb on hard surfaces.

3. Clean-Up Steps for Carpeting or Rug
   • Carefully pick up glass fragments and place them in a glass jar with a metal lid (such as a canning jar) or in a sealed plastic bag.
   • Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder.
   • If vacuuming is needed after all visible materials are removed, vacuum the area where the bulb was broken.
   • Remove the vacuum bag (or empty and wipe the canister), and put the bag or vacuum debris in a sealed plastic bag.

4. Clean-Up Steps for Clothing, Bedding, etc.
   • If clothing or bedding materials come in direct contact with broken glass or mercury-containing powder from inside the bulb that may stick to the fabric, the clothing or bedding should be discarded. Do not wash such clothing or bedding because mercury fragments in the clothing may contaminate the machine and/or pollute sewage.
   • You can, however, wash clothing or other materials that have been exposed to the mercury vapor from a broken CFL, such as the clothing you happened to be wearing when you cleaned up the broken CFL, as long as that clothing has not come into direct contact with the materials from the broken bulb.
   • If shoes come into direct contact with broken glass or mercury-containing powder from the bulb, wipe them off with damp paper towels or disposable wet wipes. Place the towels or wipes in a glass jar or plastic bag for disposal.

5. Disposal of Clean-Up Materials
   • Immediately place all clean-up materials outdoors in a trash container or protected area for the next normal trash pickup.
   • Wash your hands after disposing of the jars or plastic bags containing clean-up materials.

6. Future Cleaning of Carpeting or Rug: Ventilate the Room During and After Vacuuming
   • The next several times you vacuum, shut off the central forced-air heating/air conditioning system and open a window prior to vacuuming.
   • Keep the central heating/air conditioning system shut off and the window open for at least 15 minutes after vacuuming is completed.