

## FACT SHEET ON THE SAFETY AND USE OF COMPACT FLUORESCENT LIGHTS (CFLs)

This fact sheet is intended to answer the most common questions about the safety and use of CFLs:

### How much mercury is in Compact Fluorescent Lights?

A CFL contains a small amount of mercury that is necessary to produce the light, roughly the equivalent of the tip of all ballpoint pen or about one-fifth of the mercury found in a wristwatch battery. The chart below compares the mercury content in a CFL to other household items.

Product	Amount of Mercury	Number of Equivalent CFLs
Compact fluorescent lamp	5 milligrams	1
Watch battery	25 milligrams	5
Home thermometer	500 milligrams - 2 grams	100 - 400
Float switches in sump pumps	2 grams	400
Older manual home thermostat	3 grams	600

### Should I be concerned about using CFLs in my home?

CFLs are safe to use in your home. No mercury is released when the bulbs are in use and they pose no danger to you or your family when handled properly.

### Does the mercury contained in CFLs make incandescent bulbs better for the environment?

No. Although CFLs do contain small amounts of mercury, they are far more energy-efficient than incandescent bulbs. They reduce greenhouse gas emissions from electrical generating stations powered by fossil fuels. As CFLs last about 8 times longer, fewer bulbs and far less packaging end up in landfills.

### What is the correct way to dispose of CFLs?

Just like paint, batteries, thermostats and other household chemicals, compact fluorescent bulbs should be disposed of safely. In the City of Guelph, they will be accepted at the City's Household Hazardous Waste depot once the required approvals for acceptance of this waste is received from the Ministry of the Environment, expected shortly. The depot is located at 100 Dunlop Drive. Check out the City of Guelph website at: <http://www.guelph.ca/living.cfm?itemid=46464&smocid=1488>.

### How does the City of Guelph dispose of CFLs?

The CFLs will be shipped to a recycling company, Fluorescent Lamp Recyclers (FLR), where the mercury will be safely extracted from the bulbs. Over 98% of the bulb will be recycled. Products recovered include glass, aluminum and brass. The mercury is separated from the phosphor powder, ensuring that it is not landfilled. FLR's distillation process purifies the mercury, thereby making it eligible for reuse. To learn more about FLR you can visit their website at: <http://www.flr.ca/>

### What is my health risk should a CFL break in my home?

Your greatest health risk is getting cut from glass shards. As there is such a small amount of mercury in CFLs, research indicates that there is no immediate health risk to you or your family should a bulb break. In the unlikely event your bulb breaks, be certain to sweep up - don't vacuum - all of the glass fragments and phosphor powder. Place the broken pieces in a plastic bag and wipe the area with a damp paper towel to pick up any stray shards of glass or fine particles. Put the used towel in the plastic bag as well.

### How does a CFL do in areas where power surges occur, such as rural areas?

CFLs may not hold up to the stress of power surges, so using them in areas such as workshops may not be advisable.

### What happens when the CFL burns out?

Normal end-of-life for CFLs may include smoke, an odour, and the plastic base may become discoloured, charred or deformed. Certification agencies have indicated that this failure does not present a shock or fire hazard for approved products.

