

Which is worse-- mercury from coal burning or CFL (Compact Fluorescent) bulbs?

Excerpted from: <http://www.msnbc.msn.com/id/17831334/#storyContinued>

...Wal-Mart said it estimates a third less mercury will be used in the production process of the bulbs it buys, effectively removing an average of 360 pounds of mercury per 100 million CFLs sold in its stores.

"People concerned about the environment and their health can buy these CFLs with a clear conscience," Noah Horowitz, senior scientist with the Natural Resources Defense Council, said in a statement released by Wal-Mart. "In fact," he added, "the energy savings delivered through the use of CFLs will actually reduce more mercury pollution from coal-fired power plants than is added through manufacture of the bulbs."

How much mercury content in CFL Bulbs?

...The mercury content in the average CFL — now about 5 milligrams — would fit on the tip of a ballpoint pen, according to the Environmental Protection Agency, and manufacturers have committed to cap the amount in most CFLs to 5 milligrams or 6 milligrams per bulb. The majority of Philips Lighting's bulbs contain less than 3 milligrams, and some have as little as 1.23 milligrams, said spokesman Steve Goldmacher.

What is proper disposal?

....To prevent mercury from getting into landfills, the EPA, CFL makers and various organizations advocate recycling.

Besides commercial recyclers and some municipal waste collection services, some retailers accept used CFLs. IKEA, the Swedish home furnishings chain, has free drop-off programs at all of its 234 stores, 29 of which are in the United States. Spokeswoman Mona Astra Liss said response was slow at first, but has since picked up.

Challenges for recycling:

Larry Chalfan, executive director of the Zero Waste Alliance environmental group, said the value of the metal, glass and mercury reclaimed from recycling fails to offset the cost of the process. "Someone has to pay," he said. Costs can range from 20 cents to 50 cents per bulb — not a paltry sum when some CFLs sell for less than \$2 at Wal-Mart.

But, compared with the overall lifecycle cost of buying and using a bulb, recycling would be less than 1 percent, said Paul Abernathy, executive director of the Association of Lighting & Mercury Recyclers, "a small price to keep the mercury out of the environment."

...The U.S. government has no single recycling plan in mind, said Matt Hale, director of the EPA's Office of Solid Waste. Among the alternatives are special curbside collections by municipalities, mail-back programs by manufacturers and drop-off programs at various places, including retail stores that sell CFLs, he said.

Factsheet on CFL bulbs from Energy Star-- U.S. Dept. of Energy:
http://www.fypower.org/pdf//Fact_Sheet_Mercury.pdf

Does using CFLs offset enough mercury emissions from coal-burning power plants to make their use worthwhile? Excerpted from:
http://www.homepower.com/article/?file=HP120_pg12_ATE_1

A CFL uses 75 percent less energy than an incandescent light bulb and lasts at least six times longer, so the mercury emissions that result from the coal-fired electricity used to power it are considerably lower. If you're relying on coal-fired electricity, over a bulb's lighting lifetime, using a CFL produces an additional 2.4 mg of mercury emissions. Contrast this with the 10 mg of emissions produced by using a conventional incandescent bulb over the same five-year life span. Incandescents produce more mercury contamination than CFLs, and this is only gaseous emissions from a typical coal-fired power plant. You also need to consider the mercury leachate from coal mine waste and fly ash disposal. More coal needed for electricity translates into more coal mined—resulting in more mercury pollution.

Where do I recycle CFL bulbs in my local area?

There are no universal programs for recycling. Consumers have to make a concerted effort to find out what local disposal/ recycling methods are available and follow their procedures. Here is a website that contains the various state regulations and contacts: <http://www.lamprecycle.org/>

Compiled by the [Catholic Coalition on Climate Change](#)