

What Should I Do When a Fluorescent Bulb Burns Out?

Recycle

Drop-off

Local recycling opportunities available are the best option. Some communities have household hazardous waste programs that collect fluorescent bulbs. To find out if your community has a program, contact the county solid waste department or the city public works department. If your community does not have a program, this could change with some input from you. Let your local officials know that diverting household hazardous wastes, such as fluorescent bulbs from the landfill, is important to you.

Other options include contacting a local hardware store such as Home Depot or Ace Hardware, who sometimes have collection programs open to the community.



Mail-in

You can also return fluorescent bulbs using a mail-in program which usually charges a fee.

This is not an all-inclusive list of fluorescent bulb mail-in programs. DEQ does not endorse any specific program. Verify each company's recycling practices before using it.

Waste Management, Inc. – Think Green From Home
www.thinkgreenfromhome.com

EcoLights
www.ecolights.com

Bethlehem Apparatus Company
www.bethlehemlamprecycling.com

Partners in Planet Protection
www.4pipp.com

Disposal

If no other options are available, seal the bulb in two plastic bags or in a disposable container and put it in the trash or other protected outside location for trash collection.

For More Information

Idaho Department of Environmental Quality
Boise, ID 83706
(208) 373-0502

Boise Regional Office
(208) 373-0550
toll-free: (888) 800-3480

Coeur d'Alene Regional Office
(208) 769-1422
toll-free: (877) 370-0017

Idaho Falls Regional Office
(208) 528-2650
toll-free: (800) 232-4635

Lewiston Regional Office
(208) 799-4370
toll-free: (877) 541-3304

Pocatello Regional Office
(208) 236-6160
toll-free: (888) 655-6160

Twin Falls Regional Office
(208) 736-2190
toll-free: (800) 270-1663

Idaho Department of Health and Welfare
Environmental Health Education and Assessment Program
(208) 334-5508

Idaho Office of Energy Resources
(208) 287-4891

On the Web

Mercury in the Environment

www.deq.idaho.gov/waste/prog_issues/haz_waste/mercury_new.cfm

What to do if you have a mercury spill

www.deq.idaho.gov/waste/prog_issues/haz_waste/mercury_spill.cfm

Lamp Recycling Resources

DEQ's Online Recycling Directory
www.deq.idaho.gov/waste/recycling/recycle_home.cfm

LampRecycle.org
www.lamprecycle.org

RecycleABulb.com
www.recycleabulb.com



Printed on recycled paper, June 2009. Costs associated with this publication are available from the Department of Environmental Quality in accordance with Section 60-202, Idaho Code.

There's Mercury in That?

The Big Picture of Fluorescent Light Bulbs



Idaho Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706
(208) 373-0502
www.deq.idaho.gov

The Benefits

Whether it's home, school, or business, updating light fixtures is usually the number one recommendation for improving energy efficiency. Replacing incandescent bulbs with fluorescent bulbs is simple, affordable, and effective.

According to the U.S. Environmental Protection Agency (EPA), lighting accounts for close to 20 percent of the average home's electric bill.

Fluorescent light bulbs can use up to 75 percent less energy than incandescent light bulbs, last up to 10 times longer, cost little up front, and provide a quick return on investment.

Fluorescent bulbs help reduce greenhouse gas emissions, pollutants associated with electricity production, and landfill waste (because the bulbs can be recycled). EPA projects that if every American home replaced one incandescent bulb with a fluorescent, we would save enough energy to light more than 3 million homes for a year, save more than \$600 million in annual energy costs, and prevent greenhouse gas emissions equivalent to those produced by more than 800,000 cars.



The Downside

Although fluorescent bulbs provide significant energy efficiency benefits, they also contain small amounts of mercury, an average of 20 milligrams in regular fluorescent tubes and 4 milligrams in compact fluorescent light bulbs (CFLs) used in standard household light sockets. Mercury is the essential part of a fluorescent bulb that allows the bulb to be an efficient light source. Mercury is an element found naturally in the environment. When liquid mercury is spilled, it forms droplets that can emit toxic vapors into the air. Exposure to high levels of mercury can cause permanent health damage.

It is important to note that health risks from mercury vapors exist only if the bulb is broken. No mercury is released when the bulb is intact and in use, properly disposed of, or recycled once it's spent. Additionally, due to the small quantities of mercury in fluorescent bulbs, if proper precautions are taken after a bulb is broken, no health impacts from exposure should occur. Broken glass is an injury risk and should be handled carefully.



The Big Picture



According to EPA, the benefit of energy savings provided by a fluorescent bulb outweighs the risk of exposure or environmental contamination from the mercury it contains. This is true because a large portion of the nation's energy comes from coal-fired power plants, which emit mercury into the environment, and fluorescent bulbs

use 75 percent less energy than incandescent bulbs. So, although fluorescent bulbs contain mercury, they use less energy and provide a net benefit to the environment. If fluorescent bulbs are properly handled to prevent mercury spills and are recycled or properly disposed of so mercury does not end up in our landfills, the benefit is even greater.

What if a Fluorescent Bulb Breaks?

Accidents happen—don't panic. Here is a list of actions you should take:

1. Open windows.
2. Have people and pets leave the room for at least one hour.
3. Don't let anyone walk through the spill or breakage area.
4. Shut off heat or cooling to the affected area.
5. Don't vacuum or sweep.
6. Carefully pick up glass and discard outside in the trash.
7. Log on to DEQ's Web site at www.deq.idaho.gov for more step-by-step mercury cleanup instructions.
8. If several bulbs break at one time, contact the Idaho State Communications Center at (800) 632-8000.

You can continue to use fluorescent bulbs with the knowledge that you are doing your part for the environment—just be mindful when handling or disposing



of them. Currently no substitutes for mercury can be made in fluorescent bulbs, but manufacturers are taking steps to reduce the amount of mercury required to maintain the same level of energy efficiency. If you prefer, you can even look for "low-mercury" fluorescent bulbs.