

fact sheet

COMPACT FLUORESCENT LAMPS (CFL) DISPOSAL

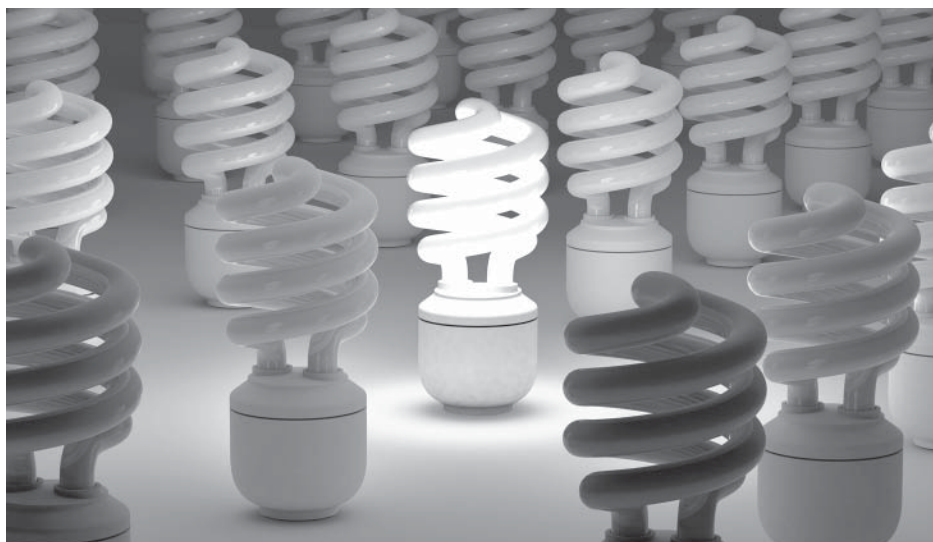


overview...

NorthWestern Energy encourages its customers to install compact fluorescent lamps (CFLs) in high use locations. Choosing the CFL that is rated for the location for which it will be used helps assure energy savings over a long life of the CFL. When a CFL burns out, it should be disposed of properly with other household hazardous waste products such as paint, batteries and thermostats. They contain electronic components and an extremely small amount of mercury. The amount of mercury is so small that it does not pose a health risk to you or your family. However, this document helps you to appropriately dispose of CFLs.

CFLs contain a very small amount of mercury sealed within the glass tubing – an average of 4 milligrams. By comparison, older thermometers contain about 500 milligrams of mercury – an amount equal to the mercury in 125 CFLs. No mercury is released when the bulbs are intact (not broken) or in use.

Most makers of light bulbs have reduced mercury in their fluorescent lighting products. Thanks to technology advances and a commitment from members of the National Electrical Manufacturers Association, the average mercury content in CFLs has dropped at least 20 percent in the past year. Some manufacturers have even made further reductions, dropping mercury content to 1.4 – 2.5 milligrams per light bulb. ■



What precautions should I take when using CFLs in my home?

CFLs are made of glass and can break if dropped or roughly handled. Be careful when removing the bulb from its packaging, installing it, or replacing it. Always screw and unscrew the light bulb by its base (not the glass), and never forcefully twist the CFL into a light socket. If a CFL breaks in your home, follow the clean-up recommendations (see back). Used CFLs should be disposed of properly. ■

What should I do with a CFL when it burns out?

The Environmental Protection Agency (EPA) recommends that consumers take advantage of available local recycling options for compact fluorescent light bulbs. EPA is working with CFL manufacturers and major U.S. retailers to expand recycling and disposal options. Consumers can contact their local municipal solid waste agency directly, or go to www.epa.gov/bulbrecycling or www.earth911.org to identify local recycling options.

In Montana, you are permitted to put used or broken CFLs in the garbage. The EPA recommends that you seal the bulb in two plastic bags and put it into the outside trash, or other protected outside location, for the next normal trash collection. Never send a fluorescent light bulb or any other mercury-containing product to an incinerator.

If your ENERGY STAR qualified CFL product burns out before it should, look at the CFL base to find the manufacturer's name. Visit the manufacturer's Web site to find the customer service contact information to inquire about a refund or replacement. Manufacturers producing ENERGY STAR qualified CFLs are required to offer at least a two-year limited warranty (covering manufacturer defects) for CFLs used at home. In the future, save copies of your receipts to document the date of purchase. ■

How should I clean up a broken fluorescent bulb?

Because CFLs contain a small amount of mercury, EPA recommends the following clean-up and disposal guidelines:

1. Before Clean-up: Air Out 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 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 pieces and powder.
- ◆ Wipe the area clean with damp paper towels or disposable wet wipes. Place towels 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 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 thrown away. 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 are 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.
- ◆ Check with your local or state government about disposal requirements in your specific area. Some states do not allow such trash disposal. Instead, they require that broken and unbroken mercury-containing bulbs be taken to a local recycling center.

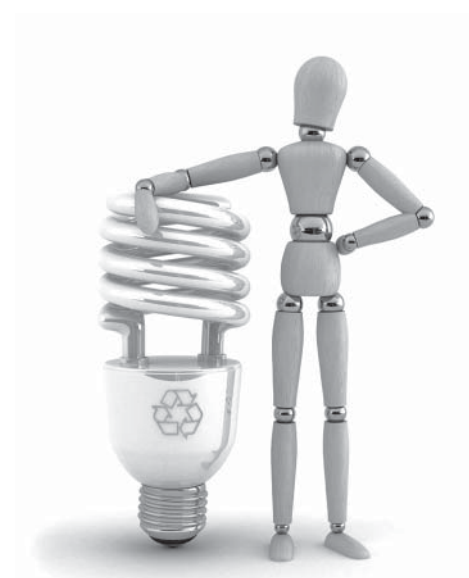
6. Future Cleaning of Carpeting or Rug: Air Out the Room During and After Vacuuming

- ◆ The next several times you vacuum, shut off the central forced-air heating/air conditioning system and open a window before vacuuming.
- ◆ Keep the central heating/air conditioning system shut off and the window open for at least 15 minutes after vacuuming is completed.

contact

For more information on all sources of mercury, visit
<http://www.epa.gov/mercury>

For more information about compact fluorescent bulbs, visit
<http://www.energystar.gov/cfls>



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