DISPOSAL AND CLEAN-UP PROCEDURE
(EPA PROTOCOL)
All compact fluorescent lighting (CFL) manufacturers are required to acknowledge the mercury component in their product and the need to follow appropriate disposal and clean-up procedures.
Breaking a CFL bulb inside the home requires slightly more clean-up care, but should not invoke panic. While toxic, remember that the amount of mercury involved equals the amount of ink on the tip of a ballpoint pen. The quantity of mercury in a CFL ranges from 1 to 25 milligrams; a household thermometer has between 500 and 3,000 milligrams of mercury. At CFL levels, a child’s exposure, even at the immediate point of breakage, would be highly unlikely to result in poisoning. Following these Environmental Protection Agency (EPA) guidelines, from an internet article, will virtually eliminate any CFL mercury risk in your home.

CLEAN-UP AND SAFE DISPOSAL OF COMPACT FLUORESCENT LIGHT BULBS
http://www.epa.gov/cfl/clfcleanup.html
Compact fluorescent lights (CFLs) are lighting more homes than ever before, and EPA is encouraging Americans to use and recycle them safely. Carefully recycling CFLs prevents the release of mercury into the environment and allows for the reuse of glass, metals and other materials that make up fluorescent lights.
EPA is continually reviewing its cleanup and disposal recommendations for CFLs to ensure that the Agency presents the most up-to-date information for consumers and businesses. Maine’s Department of Environmental Protection released a CFL breakage study report on February 25, 2008. The EPA had conducted an initial review of this study and, as a result of this review, we have updated the CFL clean-up instructions below.
Pending the completion of a full review of the Maine study, EPA will determine whether additional changes to the cleanup recommendations are warranted.

The Agency plans to conduct its own study on CFLs after thorough review of the Maine study. Fluorescent light bulbs contain a very small amount of mercury, sealed within glass tubing. EPA recommends the following clean-up and disposal. Please continue to read for information about what never to do with a mercury spill.

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.

CLEAN-UP STEPS FOR HARD SURFACES
- Carefully scoop up glass pieces 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 fragments 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.

CLEAN-UP STEPS FOR CARPETING OR RUG
- Carefully pick up 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.

CLEAN-UP STEPS FOR CLOTHING, BEDDING AND OTHER SOFT MATERIALS
- 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.

**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.

**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.

**WHAT NEVER TO DO WITH A MERCURY SPILL**
- Never use a vacuum cleaner to clean up mercury (but see the “What to Do if a Fluorescent Light Bulb Breaks” section below for more specific instructions about vacuuming broken fluorescent light bulbs). The vacuum will put mercury into the air and increase exposure.
- Never use a broom to clean up mercury. It will break the mercury into smaller droplets and spread them.
- Never pour mercury down a drain. It may lodge in the plumbing and cause future problems during plumbing repairs. If discharged, it can cause pollution of the septic tank or sewage treatment plant.
- Never wash clothing or other items that have come in direct contact with mercury in a washing machine, because mercury may contaminate the machine and/or pollute sewage. Clothing that has come into direct contact with mercury should be discarded. By “direct contact,” we mean that mercury was (or has been) directly on the clothing. For example:
  - you broke a mercury thermometer and some of the elemental mercury beads came in contact with your clothing, or
  - you broke a compact fluorescent bulb (CFL) so that broken glass and other material from the bulb, including mercury-containing powder, came into contact with your clothing.
- You can, however, wash clothing or other materials that have been exposed to the mercury vapor from a broken CFL, like 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 material from the broken bulb.
- Never walk around if your shoes might be contaminated with mercury. Contaminated clothing can also spread mercury around.

Mercury-Containing Light Bulb (Lamp) Recycling
[http://www.epa.gov/bulbrecycling/](http://www.epa.gov/bulbrecycling/)

This Web site is intended to increase awareness, provide resource tools, information to users, and to encourage the recycling of all mercury-containing light bulbs, including compact fluorescent light bulbs (CFLs) after they burn out. EPA is working with manufacturers and major U.S. retailers to develop, implement or expand recycling options. Household hazardous waste collection facilities usually accept these lamps. You can find more information about these collection and/or recycling programs at WhereYouLive or at Earth911.org.

Households and consumers can contact their state or local environmental regulatory agency for information about proper disposal options, such as disposal in your household garbage if no other options are available. If your state or local environmental regulatory agencies offer no other disposal options except your household garbage, place the fluorescent light bulb in two plastic bags and seal these before putting into the outside trash, or other protected outside location, for the next normal trash collection.