

# Compact Fluorescent Lamp (CFL) Collection and Recycling

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# CFL Use and Mercury: EPA Efforts

- EPA encourages all Americans to reduce the amount of mercury that is released into the environment.
  - A coal-fired power plant will emit 13.6 milligrams of mercury to produce the electricity required to use an incandescent light bulb, compared to 3.3 milligrams for a CFL.
- Many manufacturers have taken and are currently taking significant steps to further reduce mercury used in their fluorescent lighting products.

# CFL Collection/ Recycling: Introduction

- In July 1999, US EPA added fluorescent lamps to the Universal Waste Rule (UWR).
  - EPA’s universal waste regulations streamline hazardous waste management standards for federally designated “universal wastes,” which also include batteries, pesticides, and mercury-containing equipment. The regulations govern the collection and management of these widely generated wastes, thus facilitating environmentally sound collection and proper recycling or treatment.
  - Most states adopted the UWR – some with increased stringency.
- Lamp recycling is mostly governed at the local or state level.

# Fluorescent Lamp Recycling Rate

- No requirements exist for industry to track or report recycling rates.
- According to the Association of Lighting and Mercury Recyclers (ALMR), only about 24% of spent mercury-containing lamps are recycled in the United States.
- Of the remaining 76% a small fraction are managed as hazardous waste, but the majority find their way into the municipal solid waste stream.

# CFL Collection/ Recycling: Services

- Lamp recycling services can be obtained anywhere in United States and are generally available to large fluorescent lamp users; small businesses; contractors; municipal governments; and, consumers.
- Mercury waste recyclers typically provide customer services and containers.
- Small users often participate in a "box program", using containers that can be sent to virtually any recycler via ground mail shipment using prepaid shipping labels.
  - Other individuals and small users can take lamps to locally-operated household hazardous waste facilities.
  - Larger users can arrange "milk-run" pick-ups using common carriers to transport the lamps to recycling facilities, and very large generator materials can be picked up in trailer loads and transported to destination facilities.

# CFL Collection & Recycling: EPA Efforts

- A cornerstone of EPA's efforts is to educate the American public on the hazards of mercury and the need to recycle their used CFLs.
  - Many Americans may not be aware of the use of mercury in fluorescent lamps, or of the hazards associated with mercury exposures.
- EPA is seeking to encourage local programs, and is also working with bulb manufacturers and retailers to promote both local and national recycling programs.
- EPA is working with USPS to scope out possible low-cost mail-back options for consumers.

# CFL Collection/ Recycling: Options

- Recycling options may include:
  - on-site programs at stores;
  - mail-back systems that allow bulbs to be sent directly to recyclers; or,
  - through special programs in some municipalities.
- EPA is working with the states and Regions to learn about successful collection and recycling programs to ensure that information regarding convenient CFL recycling options is available.

# Fluorescent Lamp Recycling Resources

- [www.almr.org](http://www.almr.org)
- [www.earth911.org](http://www.earth911.org)
- [www.lamprecycle.org](http://www.lamprecycle.org)
- [www.newmoa.org](http://www.newmoa.org)
- <http://productstewardship.us/displaycommon.cfm?an=1&subarticlenbr=271>
- <http://www.swana.org/www/AWARDS/LampRecycling/tabid/329/Default.aspx>
- <http://www.epa.gov/epaoswer/hazwaste/id/univwast/lamps/index.htm> - includes links to state waste authorities.