

Background Information

The choice to use fluorescent light bulbs are smart from both an economical and ecological standpoint. These bulbs use only one-third of the energy required by standard incandescent light bulbs, which means that they save energy and help the environment, while reducing the consumer's electricity bill. In addition, they can last up to 10 times longer than incandescent bulbs.

We must however be aware that with this technology, there comes an environmental toxic of concern, mercury. All fluorescent lighting contains mercury as do sodium, neon, metal halide and high intensity discharge (HID) lamps. Mercury is toxic to the environment and to people. Mercury never goes away, becoming more toxic when allowed to break down in the environment as methylmercury. Mercury contamination has been found in ocean fish all over the world. Although mercury can serve an important purpose in energy savings it must be handled carefully once the light burns out or breaks.

Guidance for Generators Utilizing Lamp Crushing Units

- Obtain an EPA I.D. number as a hazardous waste generator by completing the EPA Form 8700-12. Each EPA I.D. number is site specific.
- Crush lamps on generator site. Crushed lamps must be managed as hazardous waste. (NOTE: Lamp crushing events must be in accordance with Occupational Safety & Health requirements: ventilated area, personal protective equipment (PPE), etc.)
- Filters from the crusher units and PPE may also be a hazardous waste. The generator must determine if the filters and/or PPE are a hazardous waste through proper laboratory testing or knowledge application of the process.
- Manage, label and store hazardous waste drum at generator site until drum is full and/or ready to be shipped off-site. Please note that once the 55-gallon drum is full, the generator has 180 days to dispose of its hazardous waste drum. (NOTE: Drum of crushed lamps cannot be taken off-site to a different location for more crushing or for storage beyond 10 days).
- Certain lamp crushing units have an open feed chute. If drum contains any amount of crushed lamps and the feed chute is still attached to the drum and not in operation, the feed chute must be secured with caps or similar devices to prevent the release of mercury vapors to the air.
- Drum of crushed lamps that is shipped off-site must be accompanied with a Uniform Hazardous Waste Manifest.

Guidance for Transporters Utilizing the Lamp Crushing

- Transporters, intending to crush lamps at the generator's site, must obtain an EPA I.D. number by completing the EPA Form 8700-12. Transporters must ensure that the site generator has an EPA I.D. number prior to crushing event. (NOTE: Transporters who possess a current EPA I.D. are not required to apply.)
- Certain lamp crushing units have an open feed chute. If drum contains any amount of crushed lamps and the feed chute is still attached to the drum and not in operation, the feed chute must be secured with caps or similar devices to prevent the release of mercury vapors to the air. (NOTE: Lamp crushing events must be in accordance with <u>Occupational Safety & Health</u> requirements: ventilated area, personal protective equipment (PPE), etc.)
- The generator is responsible for the management and security of its hazardous waste. Once the transporter removes the drum of hazardous waste (i.e., crushed lamps) from the generator site, the transporter has 10 days to ship the drum to a treatment, storage and disposal facility (TSDF).

For questions please contact: State of Hawaii, Department of Health, Solid & Hazardous Waste Branch (808) 586-4226