

Mercury Containing Lamp Recycling

All mercury lamps contain small amounts of mercury. An electric current passes through the lamp and vaporizes the mercury to generate light. Recycling mercury containing lamps protects human health and our environment from heavy metal contamination.

Mercury lamp recycling separates a number of materials for further use in new products.

- The mercury is reused in new lamps and other mercury devices.
- The glass is recycled into new lamps and other glass products.
- The aluminum end caps are shipped to an aluminum smelter to be transformed into new aluminum billets for making a variety of products.
- The phosphor powders that turn ultraviolet light into visible light are separated and cleaned for reuse in new lamps.



Some type of mercury containing lamps recycled by EH&S include:

- Circular and U-tube Lamps
- Compact Fluorescent Lamps
- Fluorescent Lamps
- High Intensity Discharge (HID) Lamps
- High Pressure Sodium Lamps
- Mercury Vapor/UV Lamps
- Metal Halide Lamps
- Neon Lamps

Recycling Procedures

Packaging and labeling:

Place the mercury containing lamps in a sturdy box or container. Label the container as "Universal Waste – Mercury Containing Lamp" and include the date when the waste was first generated.

Accumulation Time:

Used mercury containing lamps must be transferred to EH&S for recycling within 9 months of being generated.

Request Universal Waste Pickup Service via the Internet:

- Visit www.ehs.uci.edu/programs/enviro/
- Fill out the "Universal Waste Collection" form
- EH&S will pick up your waste within 1-3 days.

Broken Lamp Spill Cleanup

1. Do not throw mercury containing lamp tubes or high intensity discharge lamps, broken or unbroken, into the regular trash.
2. Open a window or door for cross ventilation and leave the area for 15 minutes.
3. Wear appropriate PPE. At a minimum wear gloves appropriate for broken glass and safety glasses.
4. Take the usual precautions for collection of broken glass.
5. Cleanup residual powder with a suitable means (i.e. wet rag) that avoids dust and mercury vapor generation. If the lamp breaks on a carpeted area, sticky tape (such as duct tape) can be used to pick up small pieces of broken glass and powder. Do not vacuum with a household machine.
6. Place all cleanup materials in a plastic bag and seal. Place the plastic bag into a cardboard box.
7. Label the container as "Universal Waste – Mercury Containing Lamp", include the date when the waste was first generated, and follow the disposal procedures listed above.
8. Wash your hands after disposing of the bag.

If at any time you feel the lamp breakage is too large for an individual to cleanup, please contact your supervisor and call Environmental Health and Safety at (949)-824-6200 for assistance.

