

Fluorescent & HID Mercury Containing Lamps

What are the concerns about mercury?

Mercury is a highly toxic heavy metal that is released into the environment when mercury-containing lamps are broken or discarded. Although lamps contain a relatively small amount of mercury, the high volume of spent lamps generated in Vermont each year contributes to mercury contamination, particularly in fish and wildlife. State and federal fish advisories restrict consumption of certain freshwater and marine fish (see: www.mercvt.org).

What kinds of lamps contain mercury?

Fluorescent lamps (linear and compact fluorescent) and high intensity discharge (HID) lamps contain mercury. HID is a term used to describe mercury vapor, metal halide, and high pressure sodium lamps.

How are mercury-containing lamps regulated?

Spent lamps, whether generated by businesses or households, cannot by law be disposed in the trash, and if possible, should be recycled. Spent lamps generated by businesses and institutions are subject to Universal Waste Management Standards contained in the Vermont Hazardous Waste Management Regulations (VHWMR) ([Subchapter 9](#)). See the fact sheet on [Universal Waste](#) for more information.

What are the options for recycling mercury-containing lamps?

The following recycling options are available to homeowners and businesses:

- Contact your local solid waste district or municipality for information about the availability of nearby collection sites or household hazardous waste collection events. Many hardware stores and other retailers offer free collection programs for smaller quantities of lamps from households and small businesses.
- Some electrical wholesale suppliers accept lamps from their customers for recycling.
- Businesses that already use a permitted hazardous waste transporter to pick up hazardous wastes may be able to ship spent lamps using that same transporter.
- Lamp recycling facilities (out-of-state) have pick-up and mail-back programs for spent lamps.

Check www.mercvt.org for more recycling information.

Are there special storage requirements for businesses?

Yes. Under the Universal Waste Management Standards, businesses are required to package lamps in structurally sound containers (boxes) that prevent breakage. Boxes or containers must be:

- Kept closed and sealed with tape once full (Do not tape lamps together);
- Labeled with words like "Universal Waste Lamps" or "Waste Lamps;"
- Stacked no higher than five feet; and
- Stored on site for no more than one year. Businesses may self-transport mercury-containing lamps to a Universal Waste Handler without a manifest.

Can the so-called "green tip" or low mercury lamps be disposed in the trash?

No. Even though some manufacturers now make lamps that are low in mercury, these lamps are also prohibited from disposal as solid waste in Vermont.

Environmental Fact Sheet: Fluorescent & HID Mercury Containing Lamps

Is crushing an acceptable method of managing spent lamps?

No. Vermont regulations prohibit the intentional breaking or crushing of mercury-containing lamps since studies have shown that even enclosed crushing devices designed specifically for lamps release a significant amount of mercury vapor. Although lamp crushing devices are commercially available for the purpose of increasing lamp storage space (decreasing lamp volume), the use of such devices is prohibited without full certification under the VHWMR. Lamps that are intentionally broken must be managed as hazardous waste.

What if a lamp accidentally breaks?

If a lamp breaks during routine handling, collect the residue (see below for safe clean-up instructions) into a container and evaluate the residue to determine if it is subject to regulation as hazardous waste under the VHWMR. If the residue exhibits the toxicity characteristic for mercury (see [VHWMR section 7-208](#)), it must be managed on-site and disposed of as hazardous waste according to applicable VHWMR requirements.

If a lamp is broken after being placed in a shipping container (e.g., box, drum, etc), the lamp should be left in the shipping container, and the container should be sealed immediately. The sealed container may still be managed as Universal Waste.

You can safely clean up a broken lamp by following the directions below:

- ✓ **DO NOT VACUUM OR SWEEP** – up the broken lamp, as this may spread any mercury vapor that is present to other rooms. Keep all people and pets away from the breakage area.
- ✓ Ventilate the room by closing all interior doors and vents, opening windows and any exterior doors in the room and leaving the room (restrict access) for at least 15 minutes.
- ✓ Remove all materials you can, and don't use a vacuum cleaner.
 - Wear disposable gloves if available
 - Carefully scoop up the glass fragments and powder with a stiff paper or cardboard (such as playing cards or index cards)
 - Pick up any remaining small pieces of glass and powder using sticky tape (such as masking or duct tape)
 - Wipe the area clean with a damp paper towel or disposable wet wipe
- ✓ Place all cleanup materials (cardboard, gloves, tape, etc.) into a glass or rigid container with a lid.
- ✓ Wash your hands.
- ✓ Leave windows in the affected room open as long as practical (weather permitting).

If the residue is determined to be hazardous waste, it must be disposed properly in accordance with the VHWMR.

For more information contact:

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