



Managing and cleaning up broken fluorescent and high-intensity discharge lamps

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Using fluorescent and high-intensity discharge (HID) light bulbs (or “lamps,” as they are called in the lighting industry) instead of incandescent light bulbs makes good sense because by doing so, you can save money on electric bills and help protect the environment.

Mercury is used in fluorescent lights of all types as well as in HID lamps. Visible light is produced when the mercury in these lights is energized electrically.

However, because they contain mercury, fluorescent and HID lamps must be handled and disposed of properly to avoid polluting the environment and posing a health threat.

Used fluorescent and HID lamps must be recycled.

Minnesota law says, because they contain mercury, fluorescent and HID lamps from households may *not* be placed in the trash, but must be recycled. This applies to fluorescent light bulbs of all shapes and sizes, including compact fluorescent light (CFL) bulbs, as well as to HID lamps, including mercury vapor, high-pressure sodium, and metal halide lamps.

Mercury makes these energy-efficient lights work and cannot be completely eliminated from them. And even though CFLs contain a small amount of mercury — 5 milligrams (mg) or less, or about 1/500 as much as is in a mercury fever thermometer — they must be recycled. The mercury, glass and metal from recycled lamps can be reused to make fluorescent light bulbs or other products.

Contact your county’s household hazardous waste program for information on where to take used fluorescent and HID lamps for recycling. To find the phone number and location of your county’s household hazardous waste facility and other collection sites, consult the household hazardous waste page at www.pca.state.mn.us/waste/hhw/index.html

or call the Minnesota Pollution Control Agency’s Household Hazardous Waste program at (651) 296-6300 or (800) 657-3864 (this toll-free number can be used only from outside the Twin Cities metro area). If a county program does not accept used lamps, it should be able to direct you to the nearest location that does

Handle with care.

Be careful when handling and transporting fluorescent and HID lights; do not drop or handle them roughly. If they become broken or crushed, the mercury in them will be released.

Store fluorescent and HID lamps in their original packaging somewhere inaccessible to children. It’s a good idea to keep the original packaging; it can be used to protect lamps during storage and when they are being transported for recycling.

When transporting fluorescent and HID lamps, carry them in the trunk of the car, if possible. Make sure there are no heavy items in the trunk that can shift or roll around and break or crush the lamps. As an added precaution, place used lamps in heavy-duty plastic bags that can be sealed.

Cleaning up a broken fluorescent bulb

When a fluorescent bulb is broken, about 20 percent of the mercury in it vaporizes immediately, and it is this mercury vapor that is the greatest health concern.

If you break one or two fluorescent bulbs, keep people and pets out of the room. Open the windows and exterior doors to vent the mercury vapor to the outside for about 15 minutes before you clean up the broken lamp(s).

If more than two fluorescent lights or an other mercury-containing device, such as a thermometer, is broken or if you are unsure what to do, call the Minnesota Duty Officer at (800) 422-0798 any time, day or night. The Duty Officer will put you in touch with someone who can advise you on cleanup.

Otherwise, follow these steps to clean up a broken fluorescent light after you have ventilated the room:

1. Wearing disposable rubber or plastic gloves (if available), carefully scoop up the glass shards and as much powder as possible with one or two pieces of stiff paper or cardboard. Do not use your hands; the shards are sharp and the powder contains mercury.
2. Wipe the area with a damp paper towel or a disposable wet wipe to pick up any very small shards and the powder residue. Sticky tape, such as duct tape, can also be used to pick up small shards and the powder. Do not use a vacuum until you have cleaned up all the visible powder and shards.
3. Place all the glass shards, powder, and materials you used in the cleanup (gloves, paper, towel, wet wipe, and tape) in a plastic bag that can be sealed. Then place this sealed bag inside another bag and seal it. Keep this in a safe outdoor storage location until you can take it to your county's household hazardous waste facility.
4. Wash your hands.
5. Now you can vacuum. Ventilate the room during and after you vacuum. When you are done, put the vacuum bag or the contents of the canister in double-sealed plastic bags. Place this bag in the trash outdoors until normal disposal.

If a fluorescent light breaks on a carpeted surface, follow the cleanup procedure above, using gloved hands and sticky tape to pick up as many shards and as much powder as possible before you vacuum.



Fluorescent light bulbs, which come in many shapes and sizes, may not be thrown in the trash. They, like HID lamps, must be recycled.

Cleaning up a broken HID lamp

High-intensity discharge lamps are often used outdoors to provide security lighting. For example, they are used along streets and alleys, in parking lots, in backyards, and on farmsteads.

HID lamps contain more mercury than fluorescents — from 20 to 100 mg. The mercury is sealed in a glass or quartz capsule that has wire leads. This capsule is protected by an outer glass covering. If the inner capsule is intact, the damaged lamp should be double sealed in plastic bags and taken to a household hazardous waste facility.

However, if the inner capsule has been broken and the mercury has ended up on the ground, it will be impossible to recover the mercury. In this case, just pick up the pieces of the lamp and put them in the trash outdoors.

If the capsule containing the mercury was broken above or on a hard surface, wear gloves to pick up the glass shards and wipe the mercury up with a damp cloth or tape. Place the debris and clean-up materials in a plastic bag that can be sealed, seal the bag, place it in another bag, seal the outer bag, and take them to your local household hazardous waste facility.