



054: Lighting Waste Disposal

Lamp disposal facts

Americans dispose of nearly 600 million lamps each year. Most industrial lamps contain toxins, notably mercury and lead. Fluorescent, metal halide, and sodium lamps all contain mercury.

Mercury vapor from broken lamps can escape into the air and damage people's lungs, brains, kidneys, skin, eyes, and nervous systems. Environmental problems occur when mercury seeps into the earth and settles into ground and surface waters. Humans later ingest this mercury through the food chain.

It's common to find old lamps in trash bins, often broken. Ignorance about proper disposal is so pervasive that one trade magazine (geared toward plant people) ran an article advising readers how to smash a fluorescent tube "safely" with old hose and hose clamps before tossing it in the regular trash. You cannot smash a used lamp safely. The moment you smash it, you release the lead and mercury inside it.

You do not save your company money by breaking the lamp disposal laws. These laws carry steep fines and prosecutors go to great lengths to bring those fines to bear on the guilty parties. You may be held personally and criminally liable for improper disposal.

Low-mercury lamps are not exempt from disposal rules. They have less mercury, but still enough that they are dangerous and toxicity is a risk.

Lamp disposal rules

Don't crush or break old lamps. Don't tape lamps together—they can easily implode.

Store used lamps in a manner that prevents breakage. If the original containers are available, store used lamps in those. Disposal companies won't accept wet or badly damaged boxes for transport. Keep boxes in a secure, dry area. If you can't find a good storage method, see your foreman.

Store broken lamps in a closed container marked "Broken Mercury-Containing Lamps." If there is no such container, make one or contact your foreman. A 55-gallon drum works well for this purpose.

Broken lamps must go to a facility with special permits for handling them. This may or may not be the same facility that handles your unbroken lamps, or the facility may need to handle the two types separately. Store them separately and mark them clearly.

Wash your hands with soap and water before taking a break, and upon completion of the work which required you to handle the lamps.

You must avoid tobacco materials, food, or beverages while working with mercury lamps.

Mercury vapors

Inhaling the vapor from a bead of mercury is more dangerous than if you ate the same bead—which is extremely harmful. The vapors from mercury are even more harmful than the actual metal beads.

Mercury is the only heavy metal that is liquid at room temperature, where it vaporizes readily into an invisible poison you can't smell or taste.

Discussion leader duties for this session:

Read your company's lamp disposal policy.

What this Safety Talk covers:

Disposing of lamps and ballasts safely.

Discussion notes :

