

Weekly Safety Meeting

Protect Yourself from Mercury in Fluorescent Bulbs

There are dangers inherent in working with or around tubular and compact fluorescent bulbs. These kinds of bulbs contain small amounts of metal mercury sealed inside. Metallic mercury poses health risks from both skin exposure/contact and inhalation of mercury vapor into the lungs.

Metal mercury is liquid at room temperature but can easily evaporate from a liquid to a vapor. The vaporous form of metal mercury is colorless, odorless, and extremely hazardous. If these bulbs break, it is important to follow safe cleanup precautions, which include evacuation, ventilation, and proper remediation and disposal.

Preventing Accidental Breakage

It is very important to package fluorescent bulbs in adequately padded (sturdy) packaging, store them in closed containers in an area away from activity and workers, and handle the bulbs carefully when it is time to replace them. Training should be provided to educate workers about safe practices.

Work Processes Involving Fluorescent Bulbs

Those who work with fluorescent bulb recycling or drum-top crushing machines must receive training on mercury exposure, how to work safely around the bulbs and equipment, and on how to make sure the equipment's air filtration systems and seals are functioning properly. Those who work directly with bulb recycling or crushing should be aware of the following potential situations for exposure:

- Bulbs are broken accidentally outside the machine;
- The machine's air filtration system is not working properly;
- The machine seals are not functioning properly.

Safe Clean-Up

If a break does occur, it is important to have a cleanup plan established that informs works how to safety clean up incidental mercury releases from broken bulbs. Significant precautions should be taken to reduce worker exposure to metallic mercury (liquid and vapors). Remember the following to stay safe:

- The area should be cleared of personnel and ventilated;
- A broom or vacuum should NEVER be used unless it is designed to collect mercury brooms will spread the mercury and the vacuum will become contaminated;
- Use a piece of cardboard to scoop up pieces of glass and powder;

- Avoid contact with broken glass;
- Use appropriate disposable chemical-resistant gloves when cleaning;
- Wipe down the area well after cleanup; and
- Dispose of the pieces in a sealed plastic bag or glass jar with lid according to EPA and state government regulations for mercury-contaminated waste.

Health Effects of Mercury Poisoning

Indications of mercury poisoning include mild tremors, subtle effects on mood, impaired memory and coordination, skin irritation and allergic reaction. Exposure to high levels of mercury can include coughing, chest discomfort, difficulty breathing, nausea, vomiting, diarrhea, sore gums, eye irritation, severe tremors, and changes in behavior and vision. Exposure to mercury can harm unborn children.

MERCURY VAPOR...SILENT BUT DANGEROUS!

Safety Meeting Sign-In Sheet

Supervisor:	Subject:
Location:	Date:
Conducted By:	Trainer Signature: