

Information for . . .

The Solid Waste Industry

Basic Information

Solid waste managers are in a position to understand the dangers to public health and the environment of disposing of mercury-containing devices in the trash. They can also implement change through the creation and support of mercury lamp recycling programs.

In working to effect these changes, solid waste managers need some basic information to help in persuading audiences that they would target for mercury-containing lamp collection and recycling.

Mercury is an essential ingredient for most energy efficient lamps. Fluorescent lamps (including compact fluorescent) and high intensity discharge (HID) lamps are the two most common types of mercury-containing lamps. Fluorescent lamps provide lighting to most schools, hospitals, office buildings and stores. HID lamps include mercury vapor lamps, metal halide and high-pressure sodium lamps, and are used for streetlights, floodlights, parking lots, and industrial lighting.

Fluorescent and HID lamps can contain enough mercury to be considered hazardous. Since these lamps are fragile, they occasionally break during collection and disposal. This raises issues regarding potential employee exposures and water quality issues from discharges from containers that store these broken lamps. In addition, the quantities of mercury that end up in landfills due to regulatory exemptions or decisions not to recycle can result in small quantities of mercury in the leachate and landfill gas.

Federal and State Rules

According to the Subtitle C portion of the Resource Conservation and Recovery Act (RCRA) and the Code of Federal Regulations, 40 CFR Part 260-273, it is a violation to transport and dispose of certain mercury-containing lamps in a municipal solid waste facility (landfill, MRF, WTE facility or transfer station). The lamps can, according to these same regulations, be recycled with less stringent requirements, under the Universal Waste Rule. If mercury-containing lamps are improperly disposed of in municipal solid waste systems, there are liabilities for the facility that accepts this material and for the party collecting and transporting the material.

The regulatory framework regarding recycling and disposal of mercury containing lamps is confusing because states have different (and potentially stricter) regulations, and lamps have different mercury contents. There are also exemptions from the hazardous waste disposal requirements under the Federal law and regulations for households and Conditionally Exempt Small Quantity Generators (CESQG). So, just because lamps are found in a load arriving at a solid waste facility does not necessarily mean that a violation has occurred.

It's difficult to keep hazardous lamps out of the MSW waste stream because enforcement is difficult, distinguishing hazardous lamps is difficult and exemptions to Subtitle C handling do exist. The easiest way to manage mercury-containing lamps is to recycle them according to the Universal Waste Rule provisions, as applicable in each State.

The Universal Waste Rule makes lamp recycling easier on at least two levels. First, it creates less stringent standards for storing and reporting. Second, because of the reduced level of regulation, Bill of Lading and common carriers can be used to transport intact lamps to recycling facilities. ***This creates an opportunity for solid waste haulers to provide a new service to existing customers.***

What to Do?

Solid waste haulers/collectors:

Solid waste haulers/collectors can encourage recycling of mercury-containing lamps. To accomplish this, haulers need to comply with the Universal Waste Rule and applicable state standards, which means that they should not collect and transport lamps to municipal solid waste facilities. They should consider establishing a lamp collection for recycling program as a service - either picking up or establishing a drop off (a fee can be charged). Once this is established, they can train sales representatives on how to educate customers, provide them with suggestions on how to handle lamps in their workplace, and give them options for recycling their lamps. This could include providing lamp containers for solid waste customers and a collection service to meet with customers' schedules.

Facility Operators:

One of the more important things that facility operators can do is to ensure that the facility's protocols for screening each load include information about identifying mercury-containing lamps. These protocols describe what should be done if a hazardous load arrives at the facility. If the type and quantity of lamps places the load in this category, these protocols should be followed. The key is to communicate to haulers who bring the materials to the facility that mercury containing lamps are not accepted and should be recycled rather than being brought to the solid waste facility.

Solid Waste Agencies:

Solid waste agencies that are responsible for managing solid waste have an obligation to make sure that the laws pertaining to mercury-containing lamps are being complied with through permit requirements and inspections. But, they also have a responsibility to encourage recycling. This may be done through education and outreach or by providing recycling (either directly or through a private company) in compliance with the Universal Waste Rule and applicable state standards.

We also encourage you to set up recycling programs for the spent mercury-containing lamps in your own facilities.

For more information visit www.swana.org

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