

Information for . . .

Specifiers of Energy-efficient Lighting

Overview

Any designer or engineer who specifies energy-efficient lighting for buildings can assist owners with lamp recycling decisions. Since you interface with building owners, contractors, and electrical distributors in the course of your design and commissioning work on buildings, it is important for you to have an understanding of the regulations that apply to these groups, and to the end-of-life management of the energy-efficient lamps you specify.

In the US, most States have adopted a less burdensome set of regulations for dealing with hazardous waste lamps (typically mercury-containing fluorescent and HID types), by including them in the Universal Waste Rule (UWR.) If lamps are sent for recycling, this rule simplifies the storage, record keeping and transportation requirements compared to handling them as hazardous wastes.

Distributors, contractors, and distributors may have some level of involvement in the disposal of used (spent) mercury-containing lamps. For example, the wholesale distributor who purchases and supplies lamps for your projects may offer lamp recycling “box programs” to the contractor or building owner. The contractor not only installs lamps, but also may be involved in the ongoing maintenance and disposal of those lamps at end of life. The building owner may employ a facility manager who oversees the final disposition of used lamps.

Lighting Retrofits

As a Specifier, you are frequently involved in the selection of efficient lamps for retrofits. Any lighting retrofit will generate a large number of waste lamps. These components contain some combination of mercury, cadmium, antimony and lead. Environmental considerations demand that everyone involved in a lighting retrofit project pay close attention to proper disposal.

In the US, if these products classify as hazardous waste, it is the responsibility of the *owner* to manage the waste correctly; and any *contractors* involved share that *legal responsibility*. While Specifiers have no specific legal responsibility for end-of-life management of the lamps they recommend (except for lamps in their own facilities), you can be influential in assisting customers with recycling options.

Lamp Breakage

The major exposure to mercury in lamps arises from lamp breakage. As the old lamps are removed for their sockets, they should be carefully packed to avoid breakage. The cartons supplied with the new lamps can be re-used for this purpose; alternatively, the lamp recycling service may be able to provide larger containers that will minimize the labor and handling involved. States have different requirements regarding the number of broken lamps that can be accepted by recyclers and still qualify the shipment as a Universal Waste. Careful handling of waste lamps will therefore minimize disposal costs.

The services of a competent, properly licensed, recycling service for both lamps and ballasts is highly recommended for any retrofit project. It should be noted that the most significant environmental enforcement actions concerning incorrect handling of waste lamps and ballasts have involved lighting retrofits.

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

For more information, see www.lamprecycle.org or www.almr.org.

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