MESSAGE FOR LIGHTING SPECIFIERS

We encourage specifiers to review the "Message for All.doc."

OVERVIEW

Any designer or engineer who specifies energy-efficient lighting for buildings can assist owners with lamp recycling decisions. During the course of your business, you have significant interaction with building owners, contractors, and electrical distributors. Therefore, it is important for you to have an understanding of the regulations that apply to these groups. It is also important to have an understanding of the end-of-life management of the energy-efficient products you specify.

FEDERAL AND STATE RULES

Most states in the U.S. have adopted a less burdensome set of regulations for dealing with hazardous waste lamps and several other hazardous waste items. These regulations are known as the Universal Waste Rule (UWR). If lamps are sent for recycling under the UWR, there are less stringent requirements for storage, record keeping and transportation as compared to managing them under the full Subtitle C hazardous waste requirements.

Distributors and contractors may have some level of involvement in the disposal of 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. A box program is when an empty box with shipping labels is supplied, the user takes as long as needed to fill it and when full, the pre-paid box is shipped to the recycler of choice. The contractor may not only install lamps, but may also 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. All of these parties can help.

Specifiers should include end-of-life considerations when lighting is chosen for buildings. In addition to life-cycle costs of lamps, energy savings and fixtures, mercury lighting disposal/recycling costs should be considered in the overall economics of using energy-efficiency lighting. Remember, owners and contractors are responsible for regulatory compliance. Specifiers can assist by providing them with information about the fact that lamps are hazardous waste, that owners and contractors have legal responsibilities, and that there is a network of local resources for recycling.

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 lamps may contain some combination of mercury, cadmium, antimony and lead. Environmental considerations call for everyone involved in a lighting retrofit project to pay close attention to proper disposal of this waste. 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.

In the U.S., if the lamps classify as hazardous waste, it is the responsibility of the *owner* to manage the waste correctly; and *contractors* involved may 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), specifiers can be influential in assisting customers with recycling options by providing the information included here as well as the resources and links for their local area.

OTHER JURISDICTIONS

The Canadian provinces have similar concerns about environmentally responsible lamp disposal. Lamp recyclers are also available in Canada. The <u>www.lamprecycle.org</u> website has information on lamp disposal and recyclers in Canada. Mexico has passed a version of the U.S. UWR, which includes mercury-containing lamps. Implementation is the responsibility of the 31 states. Details are not yet available.

LAMP BREAKAGE

The major exposure to mercury in lamps arises from lamp breakage. As the old lamps are removed from their sockets, they should be carefully packed to avoid breakage. Federal rules suggest using the cartons supplied with the new lamps 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 included in a shipment of universal waste lamps. Careful handling of waste lamps will, therefore, minimize disposal costs.

For more information specific to your state, consult the State-by-State Stringency Comparison Table. We also encourage you to set up recycling programs for the spent mercury-containing lamps in your own facilities. For more specific information see the "How to" section in the "Message for Building Owners and Managers."

SETTING UP RECYCLING SERVICES

Recycling services are provided by Association of Lighting and Mercury Recyclers (ALMR) member companies <u>anywhere</u> in the United States and its territories, Mexico and Canada. Services are available to large lamp users, small businesses, contractors, municipal government agencies and they are also available to households and the public through household waste collection programs. Either directly or through a network of transportation contractors, material can be picked up in any U.S. community. There are also a number of lighting, maintenance and other building contractors who will collect spent lamps and get them recycled for their customers.

Lamp collection programs can be designed for all generators:

- Small users can participate by using a "box program", where a container is provided and when full it can be sent to any recycler via ground mail shipment. This is a prepaid program and labels and shipping papers are provided.
- For larger users, recyclers can arrange milk-run pick-ups and common carriers will transport lamps to accumulation facilities throughout the country, where they are consolidated for shipment to destination facilities.
- For very large generators, materials can be picked up in trailer loads as needed.
- There are numerous collection locations around the country that ship large quantities of lamps to recycling "Destination Facilities" (state authorized recyclers) every day.
- Recyclers typically provide customer services and containers, and will also arrange all aspects of getting lamps recycled for anyone who is interested.
- Individuals and small users can also take lamps to any locally operated household waste facility in their community. For a list of community programs see www.earth911.org.

"Lamp Recycling. The Responsible Thing To Do." ©

For more information visit <u>www.lamprecycle.org</u> or www.almr.org