

## *Guide to Incorporating Extended Producer Responsibility (EPR) Principles into Purchasing and Procurement Documents*

updated Oct. 14, 2011

### FLUORESCENT LAMPS / MERCURY CONTAINING LIGHTING

#### Overview

##### **Why are Fluorescent Lamps a Disposal Issue?**

California government, environmental advocates and utilities have been promoting the purchase, and sometimes even subsidizing the purchase, of fluorescent lamps because they conserve energy by using a fraction of energy to produce light compared to incandescent lamps. However, fluorescent lamps contain a small amount of mercury which is a neurotoxin that can cause impaired neurological development. California banned residentially generated fluorescent lamps from landfill disposal in February 2006. While fluorescent lamps save energy up front, the back-end costs to manage are \$7,200 per ton as estimated by the [City of Los Angeles in their EPR resolution](#) adopted December 17, 2008 as compared to \$35 per ton for trash. Proper disposal is not only the law, but ensuring a cost-effective management system is in place at the point of purchase could save your jurisdiction a lot of money.

All fluorescent lamps and tubes are considered hazardous waste in California when they are discarded because they contain mercury. (Title 22, division 4.5, chapter 11, section 66261.50) This includes:

Fluorescent lamps and tubes:

- Fluorescent tubes, including low mercury tubes
- Compact fluorescents, including low mercury lamps

High Intensity Discharge (HID) Lamps:

- Metal halide lamps, such as floodlights for large indoor and outdoor areas and gymnasiums.
- Sodium lamps, such as those sometimes used as security lighting and outdoor floodlights.
- Mercury vapor lamps, such as those sometimes used for street lighting<sup>1</sup>.

In addition, certain policies such as the Energy Policy Act of 1992 and the National Energy Independence and Security Act of 2007 established energy efficiency standards for “general service” fluorescents and the unlawful manufacturing and selling of T12 ballasts in fluorescents all go into effect in 2012.

<sup>1</sup> <http://www.calrecycle.ca.gov/ReduceWaste/FluoresLamps/default.htm#AllLampsHaz>

### **How do I Control Fluorescent Lamp Waste?**

Reduce your costs and liability through smart procurement. Establish Environmentally Preferable Procurement policies that include Extended Producer Responsibility (EPR), or “take back” language for fluorescent lamps and other types of universal waste.

### **How do I Create Smart Procurement Policies?**

- **Review procurement specifications** to remove any provisions that may exclude the procurement of products from vendors who support fluorescent lamp Extended Producer Responsibility.
- **Amend your specifications** by adding Extended Producer Responsibility language into your procurement policies requiring take-back and management services for fluorescent lamps. This will reduce jurisdiction disposal costs and ensure proper disposal.

### **Sample Policy Language**

Producers must propose a program in which they agree to provide take-back and management services for end-of-life fluorescent lamps to (INSERT JURISDICTION), and therefore providing full-cost accounting from purchase to end-of-life cost for the consumer. This can be accomplished through a variety of contractual provisions whereby the Producer agrees to be responsible for taking back the fluorescent lamps and providing for appropriate reuse or recycling when Procurement no longer needs the fluorescent lamps. Such take-back methods and parameters may include, but are not limited to:

- One-for-one exchange of end-of-life products offered by, or previously purchased from the Producer, upon purchase of new products from said Producer.
- Collection of any end-of-life products by Vendor (or subcontractor) for reuse or recycling, preferably to also include provisions that ensure Vendor will continue the program should a subcontractor no longer be able to perform such activities.
- Requirement that vendor must manage all end-of-life collection of their products at a collection facility provided or funded by Vendor.
- Coupon system for pre-paid take-back at permanent regional collection centers
- Requirement that vendor must provide information to the agency on available take-back and end-of-life product management options.
- Requirement that product packaging and containers must clearly display information that the lamps contain mercury and on the Vendor’s environmentally preferable end-of-life recycling and disposal options for the product and its packaging, as applicable.
- Requirement that vendor must post the aforementioned consumer information on at least one clearly visible sign at the point-of-purchase for the end user of the product.



### Sample Proposal Language

**End of Life Management 1 [Mandatory]:** Vendors must propose a program in which they agree to provide take-back and management services for end-of-life Fluorescent Lamps at reduced cost to the Jurisdiction. This can be accomplished through a contractual provision whereby the seller agrees to be responsible for taking back the products and providing for appropriate re-use or recycling when the buyer no longer needs the products.

Take-back methods may include but are not limited to:

1. One-for-one exchange of equipment offered by, or previously purchased from the vendor, upon purchase of new equipment from said vendor.
2. Collection of any used mercury containing lamps by Vendor or sub-contractor for reuse or recycling, preferably including provisions to continue recycling operations should a sub-contractor no longer be able to perform such activities.

Any proposed programs must comply with the following:

- All fluorescent lamps and tubes must be recycled, or taken to a household hazardous waste disposal facility, a universal waste handler (e.g., storage facility or broker), or an authorized recycling facility (Title 22, division 4.5, chapter 23, section 66273.8. This is the law requiring that fluorescent lamps be recycled or taken to a household hazardous waste disposal facility, a universal waste handler, or an authorized recycling facility that has been in effect since February 9, 2006).
- If take-back provisions are proposed, agencies must follow applicable laws, procedures and guidelines relating to disposing of equipment prior to invoking disposal procedures. The proposed programs shall continue for the life of the product; e.g., beyond the product contract period.
- Meet the requirements of the [RoHS Directive](#) as amended for mercury content limits
- Be ENERGY STAR-rated where applicable:  
[http://www.energystar.gov/ia/partners/product\\_specs/program\\_reqs/Solid-State\\_Lighting\\_Program\\_Requirements.pdf](http://www.energystar.gov/ia/partners/product_specs/program_reqs/Solid-State_Lighting_Program_Requirements.pdf).
- Follow the [DOE's 2012 standards](#) for general-service fluorescents lamps

Vendor should also highlight if they are willing to take-back products other than their own.

Targets and Goals:

- Specify lamps with 5 mg of mercury or less and favor ones with less than 3 mg.

