

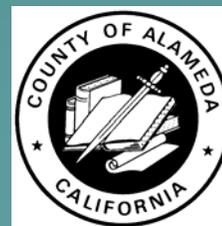
How to Purchase Green Lighting Equipment

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What are the New Lamp Recycling Rules in California?

Sarah Scott
Hazardous Substances Scientist

California Department of Toxic Substances Control



Background

- All fluorescent lamps contain mercury
- Some contain enough mercury to exhibit a toxic characteristic, making them hazardous waste.



Universal Waste Rule

Hazardous waste lamps may be managed under simplified regulations known as the Universal Waste Rule



Universal Wastes

Individual wastes pose a lower risk to people and the environment compared than other hazardous wastes.

- ✓ Reduced handling standards compared to other hazardous wastes.



Universal Waste Entities

- ◆ Handlers
 - Generators
 - Intermediate consolidation/accumulation points
- ◆ Transporters
- ◆ Destination facilities
 - For lamps: an authorized lamp recycling facility



Universal Waste Handler Classifications

- ◆ Large quantity handlers:
have 5000kg+ (5.5 tons) of universal waste on site at any time
(assuming one 4-foot T8 lamp weighs 200 grams, that's **25,000 lamps**)
- ◆ Small quantity handlers:
most handlers
- ◆ CESQUWG: (explained later)



Universal Waste Handler Standards

◆ Prohibitions:

- No disposal
- No treatment
(except to remove from a fixture)

◆ Notification

- Only Large Quantity handlers must notify to obtain U.S. EPA ID number



Universal Waste Handler Standards

Labeling/marketing:

each lamp, container or package should be labeled with:

“Universal Waste Lamp(s)”

“Waste Lamp(s)”

“Used Lamp(s)”



Universal Waste Handler Standards

Waste management

- Properly contain wastes
- Clean up releases, properly manage residuals
- No treatment of lamps allowed, other than removal from socket
“in a manner designed to prevent breakage”.



Universal Waste Handler Standards

Accumulation:

- Up to one year
- Document the accumulation start date
- Labels on containers
- Labels on individual wastes
- Label accumulation area
- Inventory system



Universal Waste Handler Standards

- ◆ Employee training
 - Small: Informal (poster, handout, etc.)
 - Large: Formal training/recordkeeping
- ◆ Tracking
 - Keep records of shipments and receipts for 3 years
- ◆ Follow export/import rules



Universal Waste Handler Standards

Response to releases

- Cleanup all wastes
- Manage residuals from UW as UW
- Properly manage other cleanup wastes



Universal Waste Handler Standards

Drum Top Crushers

- Not a handler activity in California
- Crushing is considered HW treatment
- Deliberately crushing requires a permit
- Permits are no longer issued
- Crushed lamps are not universal waste



Universal Waste Handler Standards

Broken Lamps

Lamps that are incidentally broken may be managed as universal waste.

Provided they are repackaged in a:

- Sealed
- Structurally sound
- Compatible container in good condition.



Universal Waste Transporters Standards

Transporters

- ✓ Do not need a hazardous waste hauler
- ✓ No manifest

Use: Your own vehicle
Common carrier
Mail or package service, or
Hazardous waste hauler



Universal Waste Transporter Standards

Prohibitions:

- No disposal
- No treatment
(except removal from fixture)

Accumulation time limits at a transfer facility:

- Ten days if zoned industrial
- Six days all other zoning



Universal Waste Transporter Standards

Response to releases

- Immediately cleanup universal wastes
- Handle damaged universal wastes as universal waste
- Properly classify and manage other wastes



Universal Waste Transporter Standards

- ✓ Transport only to a destination facility or another handler
- ✓ Use the proper U.S. DOT shipping papers and description
- ✓ Comply with export rules



Universal Waste Destination Facility Standards

Must be authorized to accept hazardous waste

- ✓ Hazardous waste disposal sites
- ✓ Hazardous waste recyclers

Note: Lamps must be sent to a destination facility that recycles them in order to qualify for universal waste management



Universal Waste Destination Facility Standards

- ◆ In-state:
Must have a hazardous waste facility *permit* or other authorization from DTSC
- ◆ Out-of-State:
Must have the appropriate *authorization* for that type waste in that state



Conditionally Exempt Small Quantity Universal Waste Generator

“CESQUWG”



CESQUWGs

◆ Generates:

- No more than 5 CRTs per year; and
- No more than 100kg (220 lbs.) of RCRA hazardous waste and universal waste combined (excluding CRTs) in a month; and
- No more than 1 kg acutely hazardous waste per month.



Temporary Disposal Exemptions

- ◆ True household
 - their own lamps only
- ◆ CESQUWGs: no more than 30 of their own lamps per month
- ◆ Exemption Sunset 2/8/2006
- ◆ Workshop held in October 2005



Permanent Exemptions:

- ◆ Exempt from all management standards
- ◆ Must properly recycle
- ◆ Exemption does not go beyond the household/CESQUWG to subsequent handlers



Managing Lamps Properly

Facilities that use fluorescent lamps should consider developing a lamp management plan that addresses:

- Lamp purchasing
- Relamping – contractors & frequency
- Procedures for managing used lamps generated during spot replacement or mass relamping
- Employee training and recordkeeping
- Regulatory compliance



More Information

Web resources on lamp recycling including directories of recyclers:

- Association of Lighting and Mercury

Recyclers: <http://www.almr.org>

- National Electrical Manufacturers Association (NEMA):

<http://www.lamprecycle.org>



More Information

- ◆ Web resources for the UWR:
 - Fact sheets and summary tables available on DTSC's Web Site:
<http://www.dtsc.ca.gov>
 - California Statutes:
<http://www.leginfo.ca.gov/calaw.html>
 - California Regulations:
<http://ccr.oal.ca.gov/>



Contact

Sarah Scott
Universal and Household
Hazardous Waste Section

Hazardous Substances Scientist
sscott@dtsc.ca.gov
916-324-3159

