Managing Waste Cathode Ray Tubes

Background

Computer monitors, televisions, some camcorders and other electronic devices contain cathode ray tubes (CRTs), often called “picture tubes,” which convert an electronic signal into a visual image. A typical CRT contains between two and five pounds of lead. Lead is a toxic substance which may cause lead poisoning and can be especially harmful to young children. If products containing lead are disposed of to the trash, the lead can potentially contaminate the soil and our water supplies.

When tested, most CRT’s exceed the regulatory threshold for lead and are identified as hazardous waste when discarded. Waste CRTs are subject to hazardous waste regulations which went into effect August 3, 2001. The regulations protect the environment by promoting the safe collection and recycling of waste CRT’s. Disposing of CRTs to the trash or to a municipal landfill is prohibited. People should take their waste CRT’s to a collection facility for recycling.

This fact sheet provides general information about the regulations pertaining to CRT’s. People who handle waste CRT’s should consult the regulations before making any decision that may impact regulatory compliance. A table is provided to guide handlers to the applicable sections of the regulations. If you have questions about the requirements for managing CRT’s, contact the Department of Toxic Substances Control at 916-324-8286.

Frequently Asked Questions

Q: Who is affected by the new regulations?
A: Anyone who generates, handles, collects, transports, or recycles CRTs or CRT-containing devices in California.

Q: Where can I find a copy of the regulations?
A: The regulations can be found in Title 22 of the California Code of Regulations, section 66273. You may download them from the Internet at www.dtsc.ca.gov.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.dtsc.ca.gov.
Q: Are there any health risks associated with handling CRT’s?
A: No. There are no health hazards associated with handling intact unbroken televisions or CRT’s.

Q: What do the regulations do?
A: The regulations facilitate the collection and recycling of CRT’s. Under the Universal Waste rule, disposing of CRT’s to the trash or to a municipal solid waste landfill is still prohibited. Additionally, the regulations require generators and handlers of CRTs to manage them as universal wastes. However, many household and small business generators (who meet the definition of an Electronic Product Generator or EPG) are exempt from most of the management requirements.

Q: What is a Universal Waste?
A: A Universal Waste is a hazardous waste that is regulated under a section of the State’s hazardous waste regulations that deals with high volume, low-risk wastes such as batteries, fluorescent lamps and CRTs. Universal wastes are not subject to traditional hazardous waste requirements, but are subject to management requirements that are commensurate with the risks involved with handling these materials.

Q: Who qualifies for the Electronic Product Generator exemption?
A: Any person who produces five or fewer CRTs per calendar year may qualify for the electronic product generator exemption from the universal waste requirements for CRT’s.

Q: What does an Electronic Product Generator have to do?
A: An EPG must:
• Store their waste CRT devices in a manner that prevents breakage until they can take the television, monitor or other CRT device to a collection facility to be recycled or to a household hazardous waste collection facility.
An EPG must not:
• Dispose of a television, monitor or CRT; or
• Disassemble or break a television, monitor or CRT

Q: What should I do if I break a CRT?
A: Immediately sweep up the CRT glass and place it in a suitable container such as a bag or a box. Do not dispose of the glass in the trash. Instead, handle the glass as if it were a CRT and ensure it is taken to a collection center for recycling.

Q: Do I need an EPA I.D. number for CRTs?
A: No, under the new regulations CRT handlers are not required to obtain an EPA I.D. number. However, in lieu of obtaining an EPA I.D. number, handlers that generate 5,000 kilograms or more (about 200 monitors) of CRTs per year or that accept more than five CRTs from offsite sources must notify DTSC of their actions. Please refer to the regulations for more specific information about the notification. Of course, if they generate or manage other hazardous wastes, an EPA I.D. may be required for those activities.

Q: Do I have to fill out a hazardous waste manifest and use a registered transporter for shipments of CRTs?
A: No, under the new regulations CRT’s destined for recycling may be transported using a bill of lading. Neither a hazardous waste manifest, nor the services of a registered hazardous waste transporter are required.

Q: So, what do generators of waste CRT devices have to do?
A: Except for electronic product generators (five or fewer CRTs per year), CRT handlers must:
• Manage CRTs in a manner that prevents any release of CRT glass to the environment.
• Properly package or contain the CRTs when they are no longer in use.
• Label or mark the CRTs.
• Not accumulate CRTs for longer than one year.
• Ensure that employees who handle CRTs are trained to safely perform those operations.
• Immediately clean up any spills of CRT glass.
• Use a bill of lading for any shipments of CRTs and maintain records of such shipments.
• Comply with applicable regulations for exporting hazardous wastes if they export CRTs to another country.
In addition to the requirements for handlers as indicated in the table below, handlers that crush or break CRT glass (i.e., recyclers) must comply with all of the management standards in subsection 66273.83(c) of Title 22 of the California Code of Regulations. That section requires handlers to submit to DTSC documentation demonstrating financial assurance for liability and closure costs.

### Generator’s Guide to the CRT Regulations

<table>
<thead>
<tr>
<th>If You:</th>
<th>Submit an annual report to DTSC</th>
<th>Manage CRT’s in a manner that prevents releases</th>
<th>Label or mark and package the CRTs</th>
<th>Not store CRTs for greater than one year</th>
<th>Clean up any spills of CRT glass</th>
<th>Use a bill of lading for shipments of CRTs</th>
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<tbody>
<tr>
<td>Generate 5 or fewer CRT’s per year, you must:</td>
<td>22 CCR 66273.82</td>
<td>22 CCR 66273.83</td>
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<td>Generate less than 5,000 kg per year and do not accept CRT’s from offsite sources, you must:</td>
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<td>Generate 5,000 kg or more per year and do not accept CRTs from offsite sources, you must:</td>
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<td>Accept more than five CRT’s from offsite sources, i.e., a collection center, you must:</td>
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<td>Recycle CRTs (you break and/or crush CRT glass), you must:</td>
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See the discussion of EPG on page 2

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See also 66273.83 (c)