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ASSEMBLY COMMITTEE ON  
**ENVIRONMENTAL SAFETY AND TOXIC MATERIALS**

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To: Members, Committee on Environmental Safety & Toxic Materials  
Members, Committee on Natural Resources

From: Assemblyman Bob Wieckowski  
Chair, Assembly Committee on Environmental Safety & Toxic Materials

Assemblyman Wesley Chesbro  
Chair, Assembly Committee on Natural Resources

Subject: California regulation and management of electronic waste materials (E-waste)

The Assembly Environmental Safety and Toxic Materials Committee and the Natural Resources Committee is scheduled to hold a joint oversight hearing on the State regulation and management of electronic waste materials (E-waste) on Monday, February 28th beginning at 9:30 AM. The hearing will investigate the current E-waste program operated by the State which provides incentives for the collection and recycling of E-waste including the toxic components of modern electronics.

The hearing will gather information and take testimony on a range of policy issues related to E-waste including:

- ✓ E-waste overseas management – how do recyclers and manufacturers deal with maintaining high environmental standards for their E-waste in international markets?
- ✓ How do multiple state agencies both manage and regulate the hazardous elements of E-waste?
- ✓ Do California standards conform to existing international standards for toxic material in electronic devices?
- ✓ California is facing an increasing environmental hazard and waste management problems related to leaded glass in E-waste; and
- ✓ The future of E-waste regulations – Should the California covered waste system expand to include a wider range of electronic waste?

## Electronic Waste

The term E-waste is loosely applied to consumer and business electronic equipment that is near or at the end of its useful life. Depending on their condition and density, certain components of some electronic products contain materials that render them hazardous.

The use of electronic products has grown substantially over the past two decades. According to the Consumer Electronics Association, the average American household owns approximately 24 electronic products. Electronics contain hazardous substances such as lead, mercury, cadmium, and brominated flame retardants. Many of these substances have been identified by the state as causing cancer or reproductive toxicity, as listed by the requirements of Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986). The Global Futures Foundation reports that 70% of toxic heavy metals in landfills come from discarded electronic products.

In 2003, California adopted The Electronic Waste Recycling Act of 2003 (Act)<sup>i</sup>, which established the nation's first E-waste recovery and recycling program on computer monitors, laptop computers, televisions, and similar video display devices. The Act established a funding mechanism to improve and provide for the proper end-of-life management of certain hazardous electronic products. The program is funded through a fee paid by consumers of covered electronic devices (CED) at the time of retail purchase. Collected fees are remitted by retailers to the State and deposited in an account. Subsequently, payments are made to approved collectors and recyclers of covered electronic waste (CEW) to offset the net cost of appropriate waste recovery, processing, and recycling activities.

### E-Waste Export From California

California consumers are recycling their old electronics to prevent the environmental harm that can come from disposal. According to a 2008 Government Accountability Office report<sup>ii</sup> there are increasing concerns that some U.S. companies are exporting these items to developing countries, where unsafe recycling practices can cause health and environmental problems. Items with cathode-ray tubes (CRT) are particularly harmful because they can contain 4 pounds of lead, a known toxin.

According to the GAO the international rules for E-waste management are contained within the **Basel Convention**, an outgrowth of the United Nations Environment Programme. The Basel Convention established an international legal regime governing the import and export of hazardous wastes for disposal. Ratified by 170 countries—including virtually all industrialized countries except the United States—the Basel Convention stipulates that a country may ship hazardous waste only after receiving prior written consent from the receiving country. Although not a ratifying member of the Basel Convention, the United States is a member of the Organization for Economic Cooperation and Development (OECD) and therefore has agreed to be bound by OECD Council decisions.

The GAO report found that "while some exported used electronics can be handled responsibly in countries with effective regulatory regimes and by companies with advanced technologies, a substantial amount ends up in countries such as China and India, where they are often handled and disposed of unsafely. These countries often lack the capacity to safely handle and dispose of used electronics if the units are not in reusable condition when received, and the countries' extremely low labor costs and the reported lack of effective environmental controls make unsafe recycling commonplace."

**Current E-waste export limitations:** California law<sup>iii</sup> restricts the export of E-waste and requires that any person intending to export a covered electronic waste to a foreign destination do the following 60 days prior to the export:

- 1) Notify DTSC of the destination, contents, and volume of covered electronic waste to be exported.
- 2) Demonstrate that any applicable law or regulation of the country of destination does not prohibit the importation of covered electronic waste.
- 3) Demonstrate that the export is conducted only in accordance with international law.
- 4) Demonstrate that the management of the exported covered electronic will be handled within the country of destination in accordance with applicable rules adopted by the Organization for Economic Cooperation and Development for the environmentally sound management of electronic waste.
- 5) Demonstrate that the covered electronic waste is being exported for the purpose of reuse or recycling.
- 6) The conditions on export do not apply to component parts of a covered electronic device that are exported to an authorized collector or recycler and that are reused or recycled into new electronic components.

### **Manufacturers' Responsibility For Toxic Materials In Electronic Devices – International And California Standards**

**EU RoHS:** The “Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment” Directive 2002/95/EC (RoHS) was adopted by the EU in February 2003 and took effect on July 1, 2006. RoHS aims at controlling the use of hazardous substances in the production of new electrical and electronic equipment and prohibits the sale of those products that contain more than specified levels of mercury, lead, hexavalent chromium, cadmium and a range of flame retardants, such as polybrominated biphenyls and polybrominated diphenyl ethers. Currently, RoHS requirements only apply to products sold in the EU. As a result, other countries and states, including California, are examining RoHS-type standards consistent with the EU's requirements.

The EU RoHS is being implemented by the various member states and is encountering implementation and harmonization challenges that are common to such a comprehensive effort. As with other laws and regulations, it is anticipated that requirements may be amended from time to time, however nothing has indicated that the overall vision and scope of the effort will change.

**California and RoHS:** The cornerstone of California's E-waste laws was established by SB 20 (Sher, Chapter 526, and Statutes of 2003) and SB 50 (Sher, Chapter 863, Statutes of 2004). Along with collection and fee requirements, the California RoHS law required DTSC to adopt regulations prohibiting a covered electronic device from being sold or offered for sale in California if that device is prohibited from being sold or offered for sale in the EU due to the presence of lead, mercury, cadmium, and hexavalent chromium above certain maximum concentration values (MCVs). DTSC's regulations took effect January 1, 2007, and only apply to covered electronic devices (video display devices that have a screen 4 inches or greater). Therefore, many electronic products are not regulated under California's current RoHS laws.

### **Prior E-Waste Related Legislation**

AB 147 (Saldaña) 2009. Would have required manufacturers and producers of electronic devices to submit information about the hazardous characteristics of the device to the Department of Toxic Substances Control (DTSC). Vetoed.

AB 1535 (Huffman) 2007. Would have added personal computers to the list of items covered by the Electronic Waste Recycling Act of 2003. Held in the Committee on Environmental Safety and Toxic Materials

AB 48 (Saldaña), 2007. Would have prohibited the manufacture or sale of electronic products that are prohibited from sale in the EU pursuant to the RoHS Directive. Vetoed.

AB 218 (Saldaña), 2007. Would have expanded the prohibition on the sale of all electronic devices in California to all those that are prohibited from sale in the EU by the RoHS Directive. Held on the Senate Appropriations Committee suspense file.

AB 2202 (Saldaña), 2006. Would have prohibited the manufacture or sale of electronic products that are prohibited from sale in the EU pursuant to the RoHS Directive. Held on the Senate Appropriations Committee suspense file.

AB 3001 (Pavley), 2006. Would have added personal computers to the term "covered electronic device" after July 1, 2007, and would have placed a \$6 advanced recycling fee on the retail sale of such products. Held on the Assembly Appropriations Committee suspense file.

### **Current E-Waste Legislation (2011).**

AB 549 (Carter), 2011. Recycling: electronic waste. This bill would require, as a condition of making E-Waste payments by Cal-Recycle, that the covered electronic device for which the payment is claimed was used in California.

AB 583 (Knight), 2011. Electronic waste: administration. This bill would transfer the duties, powers, and authority of the DTSC under the E-waste recycling act to CalRecycle.

AB 794 (Wieckowski), 2011. Solid waste: hazardous electronic waste. This bill is an omnibus E-waste program proposal addressing enforcement, record keeping, and payment system.

AB 960 (Bonnie Lowenthal), 2011. Recycling: electronic waste export. This bill would revise the requirements imposed on exportation to additionally include a person who exports electronic waste or a previously used electronic device and would also include, in the provision, an export intended for reuse. The bill would repeal the existing exemption for exportation of component parts that are reused or recycled and would instead require DTSC to adopt regulations exempting materials or component parts of electronic waste or previously used electronic devices.

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<sup>i</sup> Public Resources Code (PRC) 42460, et seq

<sup>ii</sup> GAO, Electronic Waste: EPA Needs to Better Control Harmful U.S. Exports through Stronger Enforcement and More Comprehensive Regulation, August 2008. Washington D.C.

<sup>iii</sup> PRC 42476.5. and 42476.6.