

# And the fastest-growing waste stream is.....

---

 [toaks.org/Home/Components/News/News/10366/3338](https://toaks.org/Home/Components/News/News/10366/3338)

Guest contributor: Doug Kobold, Executive Director, [California Product Stewardship Council](#)

April 2021: A collection of old cords and electronics somewhere in the house is an all-too-familiar occurrence for many of us. According to the [2020 Global E-waste Monitor](#) higher consumption rates, short life cycles, and limited repair options have made electronic waste the world's fastest growing waste stream, and that stream is projected to nearly double by 2030 compared to 2014.

## **How does California regulate e-waste?**

Certain electronics have hazardous components such as leaded glass in Cathode Ray Tubes (CRTs), capacitors, fluorescent tubes, batteries, and particular precious and non-precious metals. Elements such as lead, cadmium, copper and chromium are found in many types of e-waste, such as televisions, computer monitors and other video display devices, computers, printers, videocassette recorders, cell phones, telephones, radios and microwave ovens, and can be toxic. Prior to 2001, the majority of e-waste generated was landfilled. The Department of Toxic Substances Control initiated a landfill ban on all CRTs in 2001, causing these materials to be diverted to hazardous waste landfills at a cost of \$200-\$300/ton or exported off-shore to countries without such strict regulation. This increased disposal cost (relative to \$30/ton for municipal landfills) and created an economic burden on jurisdictions.

## **Are there any programs in place to offset collection and recycling costs?**

SB 20, known as the Electronic Waste Recycling Act of 2003, created the Covered Electronic Waste (CEW) program to pay for the added disposal costs for both CRTs and the newly emerging LCD and LED monitors. The California Integrated Waste Management Board was originally tasked with managing this program, but after the passage of SB 50 in 2004, the program was expanded and became the responsibility of the Department of Resources Recycling and Recovery (CalRecycle) when it was formed in 2010. The CEW Program uses a Product Stewardship model (just like [paint](#)), whereby consumers who purchase a new monitor or TV pay a fee to the retailer based on screen size and the fees go to CalRecycle. As a result of this cost recovery, many of the CEW products are recovered and recycled today. (Click [here](#) to view the fees charged at the point of sale.)

Televisions, computer monitors and other video display devices, computers, printers, videocassette recorders, cell phones, telephones, radios and microwave ovens are classified as Universal Waste Electronic Devices (or UWED) and are not permitted at municipal landfills. However, many still are as there is no similar program to the CEW for UWED product disposal.



In California there is no Extended Producer Responsibility component for electronics, meaning electronics manufacturers are not financially responsible for managing their products at the end of the product's life.

### **What about anything else with a cord?**

Items such as small kitchen appliances, home care equipment, landscape equipment, vacuums, power tools, electronic toys, and other similar devices are not covered by any program at this point but many of them are recyclable through conventional e-waste recycling methods. A law passed back in 1991 (AB 1760) required landfill operators to recover large appliances (refrigerators, water heaters, washers, dryers, and air conditioners – aka “white goods”) if it was safe to do so. Proper removal of hazardous materials such as mercury-containing switches and temperature control devices, oils, PCB capacitors, and refrigerants from white goods prior to recycling the metal is required.

### **How are electronics recycled?**

Most electronics are shredded after removal of hazardous components. One company uses centrifugal force collisions to liberate materials, with some shredding at the end of the process for those components that could not be separated through the spinning process. CRTs, LED and LCD screens, laptops, and other similar devices are disassembled by hand due to the nature of the components contained within them. End materials are marketed to plastics reclaimers, smelters, etc., depending upon the types and conditions of materials released during the deconstruction/recycling processes.

While the condition of an electronic item is not necessarily important for recycling, many devices can be reused after only minor changes or repairs to make them marketable, thereby giving them a second life.

### **Privacy and personal data concerns (storage drives)**

Most, if not all, e-waste processors will shred a hard drive from a computer or laptop upon request, sometimes for an additional nominal fee. Hard drives can also be wiped in accordance with industry standards. Some companies offer the Department of Defense-equivalent level of data wiping upon request.

### **How can you recycle your e-waste?**

The City has several resources to help you. Use the [RecycleTO](#) app to find out where to recycle your item or visit the City's [Electronics Recycling](#) webpage for additional resources. Local e-waste drop-off locations include:

- Retail and donation centers (Goodwill, Staples, Best Buy, Waste Management's Simi Valley office, and the Gold Coast Recycling Center)
- City's Household Hazardous Waste (HHW) Facility
- PC Recycle, an electronics recycler here in Thousand Oaks

### **Business electronics – what do I do?**

Most facilities will accept business electronics though, unlike the typical free service for residents, there will likely be a charge for businesses at a solid waste or HHW facility. Businesses should look for a processor close to them or participate in the City's HHW program for qualifying businesses.

There are plenty of convenient, no-cost e-waste recycling options in Thousand Oaks so grab those old cords and e-waste you've been storing away and recycle them!