

E-Waste Recycling Efforts Gather Momentum

Discarded electronics spark innovative state solutions

By Scott Richards



Concerned about mounting piles of discarded electronic devices, states are beginning to develop legislation that calls for the proper management of the garbage known as e-waste. The United States Environmental Protection Agency (EPA) reports that nearly 250 million computers will become obsolete over the next five years and 130 million mobile phones will be discarded annually by 2005. In addition to computers and cellular phones, wastes from a variety of electronic devices such as household appliances, office equipment, medical instruments, entertainment electronics and lighting are considered e-waste.

A number of state officials across the country are concerned that devices containing metals and other hazardous materials pose a significant risk to human health and the environment if they are not managed properly. When properly managed, these devices are a valuable source of reusable secondary raw materials.

Cadmium, lead, mercury, hexavalent chromium and brominated flame retardants are some of the most commonly identified hazardous materials associated with e-waste. Additionally, cell phones can often contain toxins such as arsenic, beryllium and copper. While the European Union has a directive in place to begin this year, currently no federal standard has been developed in the United States. A number of states—aware of the growing problem of e-waste—are developing e-waste legislation.

State Activities

California: Advanced Recovery Fee

Two years ago, California introduced the first e-waste legislation in the country. The Electronics Waste Recycling Act (SB 20), signed into law in 2003 and amended in 2004, requires consumers and businesses that purchase computer monitors, televisions and other video display devices to pay an “advanced recovery

fee” to support the cost of proper disposal. Depending on the size of the screen, the fee ranges from \$6 to \$10. The fee is collected by the retailer at the time of sale. On a quarterly basis, retailers remit collected fees to the state; these funds are then deposited into a special e-waste account. Payments are made from this account to recyclers to properly recycle the devices.

Maine: Shared Responsibility

In 2004, Maine became the second state in the nation to pass an e-waste law. However, Maine took a different approach than California. Maine’s legislation is unique because for the first time, manufacturers of computer monitors and televisions share the responsibility for end-of-life management of their products. Starting in January 2006, all waste televisions and computer monitors generated by households must be recycled.

Maine’s shared responsibility law establishes a system in which consumers, municipalities and manufacturers share responsibility for ensuring that these electronic items are properly recycled to reclaim all useable materials and prevent the release of toxins to the environment. Maine requires that towns collect and transport computer monitors and televisions to consolidation facilities. Once the devices arrive at the consolidation facilities, manufacturers become responsible for costs. Manufacturers have two options when the devices arrive at consolidation facilities: allow the facility to ship the devices to an

As of July, California collected \$15 million from retail outlets. Recyclers claimed \$6.1 million in fees, and the state approved an additional \$2 million to be paid out to recyclers.



accredited recycler and be billed by the facility, or take possession of their devices for recycling.

Leading up to the January 2006 deadline, manufacturers must develop a plan for the collection and recycling or reuse of these devices. At a minimum, manufacturers must pay for handling and recycling their share of the waste stream. Manufacturers are not required to establish or operate consolidation facilities in Maine, only to ensure that all geographic areas are conveniently served. By January 2006, manufacturers must implement and finance the execution of this plan. Manufacturers may participate in a collective recovery plan with other companies.

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Maryland: Legislation Gives Manufacturers Options

In May, Maryland joined California and Maine as the third state to enact an electronic waste law. Maryland's Statewide Computer Recycling Program (HB 575) is considered a hybrid of California's advanced recycling fee and Maine's shared responsibility law. Maryland's legislation calls for computer makers that have produced more than 1,000 computers on average each year since 2002 to register with the state and pay an initial fee of \$5,000. Manufacturers then have two options to comply with the law. The first option is to pay \$5,000 annually into the State Recycling Trust Fund. The fund then provides grants to counties to develop and implement computer recycling programs. The second option available to manufacturers is to take back their computers. The "take back" program must allow consumers to return computers at no cost. This option requires the initial \$5,000 fee and a \$500 annual registration fee.

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Innovative Response: Regional Approach to E-Waste Management

Since February 2005, The Council of State Governments' Eastern Regional Conference (ERC) has been working in cooperation with the Northeast Recycling Council (NERC) to establish a unified approach to end-of-life electronics management in the region. One of the project's principal objectives is to forge consensus among a variety of stakeholders—including state officials, manufacturers, retailers, recyclers and environmental groups—on a financing system for the collection and recycling of used computers and televisions. Establishing a coordinated regional strategy will enable states to avoid a

On the Web

For more information about e-waste, please visit:

California's Integrated Waste Management Board
www.ciwmb.ca.gov/electronics/Act2003/

Maine's Department of Environmental Protection
www.maine.gov/dep/rwm/ewaste/

CSG/ERC's Northeast Regional Electronics Management Project
www.csgeast.org/enrgwaste.asp

CSG/ERC's Summary of State Legislation
www.csgeast.org/pdfs/State_E-Waste_Legislation.pdf

EPA: eCycling
www.epa.gov/epaoswer/hazwaste/recycle/ecycling/index.htm

Maryland's Statewide Computer Recycling Pilot Program (House Bill 575)
www.mlis.state.md.us/2005rs/billfile/hb0575.htm

patchwork of laws and regulations that could increase compliance and management costs. The ultimate goal is to devise coordinated and consistent model legislation to be introduced throughout the region in 2006.

Throughout the spring and summer, the ERC has worked to develop draft legislation and consult with stakeholders. The final draft legislation is scheduled for release in October 2005 with the objective that it will be filed in 10 Northeastern state legislatures in 2006.

National Solution Is Best Choice for Consumer Electronics Association

During CSG's national spring meeting in June, members of the Environmental Task Force heard from Parker Brugge, senior director and environmental counsel for the Consumer Electronics Association (CEA). CEA represents more than 2,000 members, reflecting the entire range of consumer electronics. Regarding CEA's e-waste position, Brugge explained that CEA prefers a federal approach to e-waste management in order to avoid a patchwork of state rules. The association opposes initiatives mandating direct manufacturer financing and supports market-driven environmental design initiatives such as environmentally-preferable purchasing programs.

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