

Update on California's Covered Electronic Waste Recycling Program Implementation of the Electronic Waste Recycling Act of 2003 (SB 20, Sher)

January 2011

All program responsibilities of the former California Integrated Waste Management Board (CIWMB) have been transitioned to the Department of Resources Recycling and Recovery (CalRecycle)

Overview

The Electronic Waste Recycling Act of 2003 (Act), as amended and as codified in the Public Resources Code (PRC) 42460, et seq, 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.

Intent of the Act:

- Provide financial relief to responsible parties for managing covered electronic waste
- Foster cost-free recycling opportunities for consumers throughout the state
- Reduce illegal dumping
- Eliminate the stockpile of waste computer monitors/TVs
- Decrease amount of hazardous materials in covered products

Major Components of the Act:

- Assesses an electronic waste recycling fee on retail sales of covered electronic devices (CED).
- Tasks the Department of Resources Recycling and Recovery (CalRecycle) with administering a payment system for collectors/recyclers to cover the costs of recovering/recycling CEW.
- Authorizes the Department of Toxic Substances Control (DTSC) to develop regulations for the proper management (storage, collection and recycling) of discarded electronic devices.
- Requires DTSC to adopt regulations, consistent with the European Union's Restriction of Hazardous Substances (RoHS) directive, limiting the concentration of hazardous metals in covered electronic devices offered for sale in California.
- Establishes certain manufacturer responsibilities: consumer information, brand labeling, annual reporting, product design for recycling, and reduction of hazardous materials

Covered Electronic Devices (CED)

CEDs are video display devices that have been determined by the Department of Toxic Substances Control (DTSC) to be hazardous when disposed. Covered devices must have screens greater than four inches on the diagonal. Unless excluded by PRC 42463(f)(2), current covered devices include:

- Cathode Ray Tube devices
- Televisions and computer monitors containing cathode ray tubes (CRTs)
- Televisions and computer monitors containing liquid crystal displays (LCDs)
- Laptop computers w/ LCD screens
- Plasma televisions
- Personal portable DVD players w/ LCD screens

Revenue and Payment Status

CalRecycle is charged with statutory obligations to adjust the consumer fee in order to maintain fund solvency. In June 2008, the then-California Integrated Waste Management Board (CIWMB) acted to increase the fee to maintain fund solvency. That change took effect January 1, 2009.

In July 2010, CalRecycle acted to lower the consumer recycling fee to reduce excess fund reserves. This change took effect January 1, 2011.

Annual Gross Revenue:

FY 07/08 ~ \$77M; FY 08/09 ~ \$100M; FY 09/10 projected ~ \$140M; FY 10/11 projected ~ \$100M

- Consumers pay fee to retailers at time of new device purchase based on the screen size (**fee adjusted to \$6, \$8, and \$10 effective January 1, 2011**).
- Retailers remit collected fees to the Board of Equalization (BOE) at least quarterly.
- Retailers are allowed to keep 3% of fee for administration.
- Manufacturers are required to notify retailers regarding which products are subject to the fee.

Covered Electronic Waste (CEW) Payment System (as of January 2011):

Approved Collectors: ~600

Approved Recyclers: ~60

- Growth in California's electronic waste collection and recycling infrastructure has been fostered by the Act and the CEW recycling payment system.
- Voluntary participants represent a diverse group: non-profits organizations, landfills, local governments and traditional e-waste collection and recycling businesses.
- Participant turnover of 10% to 20% annually.
- DTSC inspections of recycling facilities and compliance with environmental standards are required for participant approval and eligibility to receive payments.
- The infrastructure to recover CEW also recovers substantial quantities of miscellaneous electronic waste not covered by the CEW payment system.

**CalRecycle pays approved recyclers; approved recyclers are required to pay collectors.
The current combined recovery and recycling payment rate is \$0.39 per pound.**

Payment Statistics to Date:

- Over 1,815 total claims submitted to CalRecycle by recyclers for payment
- Over \$ 412 million (representing about **940 million pounds** of recycled covered electronic waste) have been claimed through the CEW payment system since January 2005
- Mean claim size: ~\$230,000; Median claim size: ~\$130,000

Year to Year Comparison:

- 2005 total 225 claims submitted: \$31 M (64.8 M pounds)
- 2006 total 298 claims submitted: \$61 M (~128 M pounds)
- 2007 total 351 claims submitted: \$89 M (~185 M pounds)
- 2008 total 411 claims submitted: \$96 M (~218 M pounds)
- 2009 total 315 claims submitted: \$73 M (~186 M pounds)
- 2010 thus far ~215 claims; ~\$ 63 M (~161 M pounds) – *Not a complete year*

CalRecycle has annually denied between 2% and 12% of moneys claimed in the CEW system due to non-compliant or significantly inconsistent (and possibly fraudulent) documentation. Total payment denial of about \$20 million (average 5% of claimed) thus far.

Compliance Assistance and Fraud Prevention:

- CalRecycle works closely with DTSC to enhance the material handling compliance and enforcement portion of the program.
- CalRecycle and DTSC have an existing MOU regarding fraud investigation responsibilities.
- CIWMB worked with the Department of Finance to develop an external audit function in the program. DOF auditors reviewed documentation protocols, provided suggestions and assistance to staff, and have participated in auditing cost reports submitted by the participants in the system.

Current System Challenges

- CalRecycle must ensure that payment is made in a timely manner only for eligible and properly documented CEW; specifically through complete and verifiable payment claims, including appropriate source, collection, transfer, processing, and residual disposition documentation.
- The program must accommodate continued use (resale, reuse) as a possible destination for recovered CEW, but only pay for recycled CEW.
- The program must allow for certain instances of otherwise eligible (California-sourced) covered electronic wastes resulting from illegal abandonment and load check activities to enter the payment system while simultaneously not creating a portal for fraudulent activities.
- The use of “handlers” not directly approved in the CEW system by approved recyclers and collectors has exposed system participants to increased risk of falsified collection documentation.

Future System Challenges

Future CRT Glass Markets Uncertain:

- CRT glass managed under universal waste rules in CA has restricted options for ultimate disposition; feedstock to new CRT manufacturing or feedstock to primary/secondary smelting.
- Glass-to-glass recycling has limitations since CRT technology is being replaced by flat screens.
- Smelter flux continues to be option; limited domestic destinations, higher cost.
- New options for CRT glass disposition are likely needed; industry must engage with DTSC.

Non-CEWs: How to Manage Rest of E-waste Stream and Who Pays?

- Mixed e-waste (non-CEW) volumes are substantial and have little value.
- CEW collectors and recyclers are expected by consumers to handle mixed e-waste at no cost; most are able to accommodate.
- No State-level restrictions exist on wholesale export of miscellaneous e-waste; however substantial domestic processing and “de-manufacturing” is occurring.
- All e-waste handlers/processors are required to report activities, including exports, to DTSC.
- The Federal government must play a role to further limit/control international flow of miscellaneous electronic waste, if that is desired.

Other Program Implementation Activities

Regulations:

- Any CalRecycle adjustment to payment rates or fee structures is considered a regulation and requires adherence to the provisions of the Administrative Procedures Act.
- The Office of Administrative Law (OAL) approved CalRecycle “print only” filing on regulations to govern the recovery and recycling payment rates in June 2008.
- CalRecycle submitted emergency regulations affecting fee level changes in October 2008, with new fees effective January 1, 2009. It will file emergency regulations again based upon recent fee reduction decisions, with new fees taking effect January 1, 2011.

Recent Legislation:

- There is no active State legislation pertaining to electronic waste management.
- Bills in recent legislative sessions to alter the definition of covered electronic devices and to grant funds to the Conservation Corp were withdrawn or redirected.

Annual Net Cost Reporting

- Program participants must report annually on costs to handle and process CEWs if so directed by CalRecycle. This information is used to inform CalRecycle in fulfilling its obligation to adjust payment rates. These rates were originally set at \$.28 per pound to recyclers and \$.20 per pound to collectors, but are now set at \$.23 per pound to recyclers and \$.16 per pound to collectors.

- The California Integrated Waste Management Board (CIWMB) acted in November 2009 to require that reports be submitted to cover 2009 operations, which were due to CalRecycle on or before March 1, 2010. Data from these reports was used to maintain existing payments rates.
- CalRecycle determined in December 2010 that Net Cost Reports will again be required from all participants and are due on or before March 1, 2011.

Public Education/Outreach

- CalRecycle maintains a public oriented website (www.eRecycle.org) to inform the public on environmental matters associated with the management of electronic waste, including a directory of reuse and recycling opportunities throughout California.

Other States and Federal Government:

California is closely monitoring activity on the national level. Approximately two dozen other states have passed legislation, all taking more of a producer responsibility approach. As mentioned above, the largest program challenge -- ensuring payment only for California material -- would be minimized or eliminated by a national-level program. However, any national system should provide cost relief to local governments and not contradict the stringent hazardous waste/universal waste management standards adopted by DTSC. The Act specifically describes conditions under which a national program would preempt the implementation of the Act (Public Resources Code 42485 (a)).

Outreach and Other Resources:

- www.eRecycle.org is a consumer-friendly central website for information relating to the Electronic Waste Recycling Act. The site includes information on recycling locations, links to PSAs, and public education materials including downloadable point of purchase ads and banners.
- A list of approved covered electronic waste collectors and recyclers is available at: www.calrecycle.ca.gov/Electronics/Act2003/Recovery/Approved/
- The Board of Equalization website contains Frequently Asked Questions, registration information and registration forms. (www.boe.ca.gov/sptaxprog/ewaste.htm)
- The Department of Toxics Substances Control website contains information on covered devices, hazardous waste management standards, and regulatory requirements. (<http://www.dtsc.ca.gov/HazardousWaste/EWaste/>)

***Comments on Quarterly Claim Chart (Next Page)**

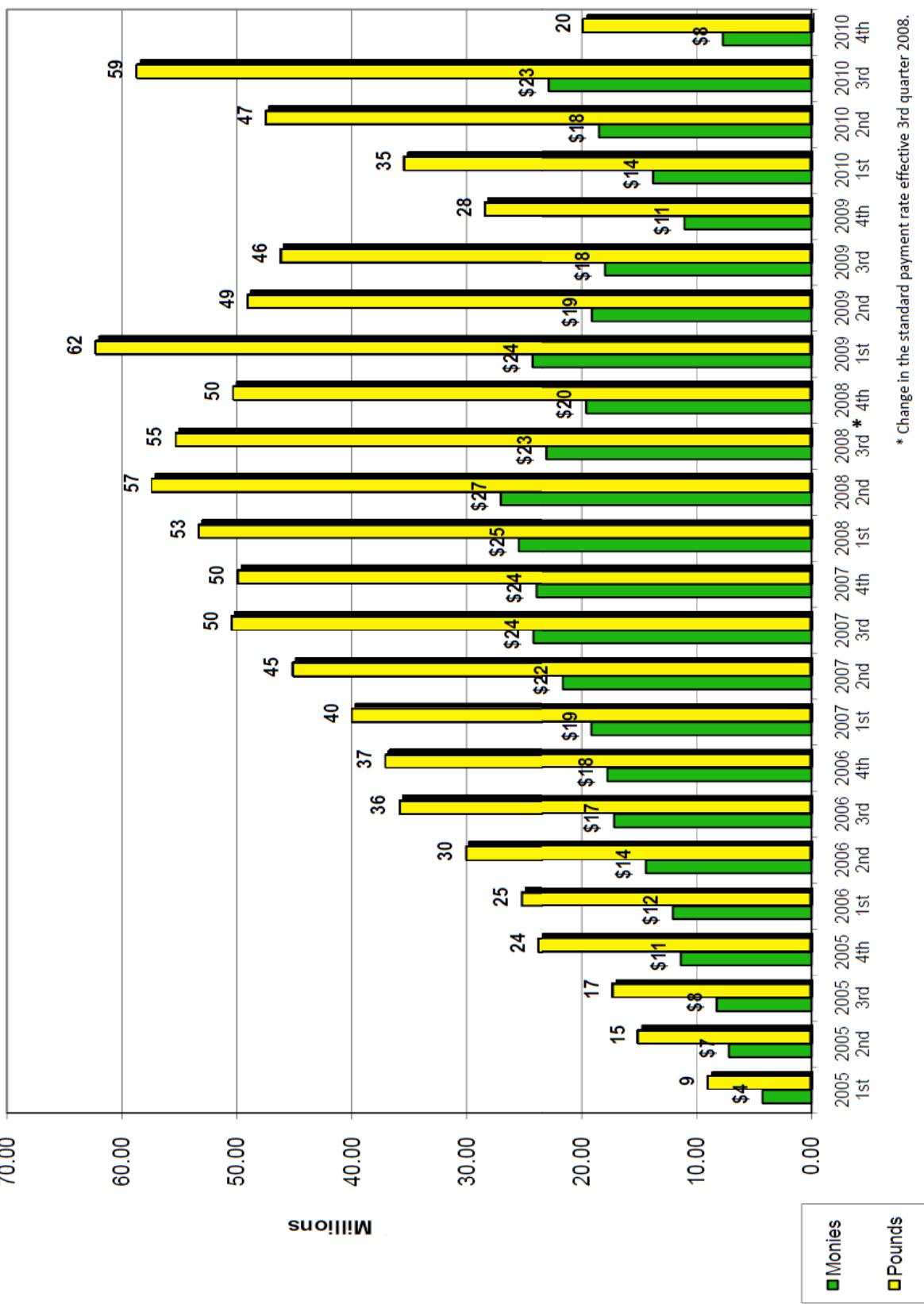
The depiction of claim volumes in the chart reflects the general growth of the program since its inception in January 2005. Factors affecting the fluctuating volumes in recent quarters include a lowered payment rate (effective July 2008), economic uncertainty, the digital television transition in first half of 2009, and the widespread availability of recycling opportunities over the past five years that may have cleaned out much of the available stockpile.

Recyclers must ship CRT glass to qualifying destination prior to submitting a claim. CRT glass market disruptions beginning October 2009 involving Mexican destinations dramatically impacted claims submittals beginning 4th quarter 2009. The industry is still rebounding.

Recyclers are supposed to submit claims within 45 days of the end of a claim reporting month, which leads to a delay in the tracking of program volumes. For instance, November 2010 claims aren't due until January 15, 2011. Recyclers often encounter market conditions that may delay a claim submittal.

(* See Chart Comments on Previous Page)

**Covered Electronic Waste Recycling Payment System
Quarterly Monies and Pounds Claimed
(as of December 30, 2010)**



Covered Electronic Waste (CEW) Recovery & Recycling Payment System

