

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

Second Quarter 2018

Overview

The Electronic Waste Recycling Act of 2003 (Act), as amended and 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. A fee paid by consumers of covered electronic devices (CED) at the time of retail purchase funds the program. Retailers remit collected fees to the California Department of Tax and Fee Administration (CDTFA), who deposits the funds in the Electronic Waste Recovery and Recycling Account (EWRRA). Approved recyclers and collectors of covered electronic waste (CEW) subsequently receive payments to offset the average net cost of appropriate recovery, processing, and recycling activities.

Intent of the Act

- Provide financial relief to responsible parties for managing CEW.
- Foster cost-free recycling opportunities for consumers throughout the state.
- Reduce illegal dumping; increase compliant management and disposition.
- Eliminate the stockpile of waste computer monitors/TVs.
- Decrease amount of hazardous materials in covered devices.

Major Components of the Act

- Assesses an electronic waste recycling fee on retail sales of CEDs.
- Tasks the Department of Resources Recycling and Recovery (CalRecycle) with administering a payment system for collectors/recyclers to cover the average costs of recovering/recycling CEW.
- Authorizes the Department of Toxic Substances Control (DTSC) to develop regulations for the proper management (collection, storage, 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

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

- Cathode Ray Tube (CRT) devices
- Televisions and computer monitors containing CRTs
- Televisions and computer monitors containing liquid crystal displays (LCDs)
- Laptop computers with LCD screens (including most "tablet" computers)
- Plasma televisions
- Personal portable DVD players with LCD screens

Revenue and Payment Status

CalRecycle has the statutory obligation to adjust the consumer fee to maintain fund solvency.

CalRecycle acted in July 2016 to increase the consumer recycling fee to maintain solvency and adequate fund reserves. This change took effect January 1, 2017.

Annual Gross Revenue from Consumer Fees (from Governor's FY 16/17 Budget & Projections)

FY 2015/16 est. ~ \$62.3M

FY 2016/17 est. ~ \$76.7M

FY 2017/18 proj. ~ \$86M

- Consumers pay fee to retailers at time of new device purchase based on the screen size.
- In July 2016, CalRecycle acted to adjust the consumer recycling fee to maintain fund solvency. Effective January 1, 2017, the fee is \$5, \$6, and \$7, depending on screen size.
- Retailers remit collected fees to the CDTFA and retain 3% for administrative costs.
- Manufacturers are required to notify retailers regarding which products are subject to the fee.

Covered Electronic Waste (CEW) Payment System Participants (as of June 2018)

Approved Collectors: ~370

Approved Recyclers: ~26

- Growth in California's electronic waste collection and recycling infrastructure has been fostered by the Act and the CEW recycling payment system.
- Voluntary participation includes a diverse group: non-profit organizations, solid waste management companies, local governments, and traditional e-waste collection and recycling businesses.
- 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, the handling of which is not directly funded by the CEW payment system.

CalRecycle pays approved recyclers the combined recovery and recycling payment; approved recyclers are required to pay collectors the recovery payment.

As of May 2018, CalRecycle established separate combined recovery and recycling payment rates for CRT CEW and non-CRT CEW. Effective July 1, 2018, the CRT CEW rate remains \$0.49 per pound as established July 1, 2016 and the non-CRT CEW payment rate was set to \$0.60 per pound. The recovery payment due to Approved Collectors remains \$0.19 per pound for all CEW.

Year to Year Comparison (based on claim reporting month*):

2005 total 216 claims submitted; \$ 31 M (~ 64 M pounds)
2006 total 283 claims submitted; \$ 61 M (~ 127 M pounds)
2007 total 350 claims submitted; \$ 88 M (~ 184 M pounds)
2008 total 403 claims submitted; \$ 96 M (~ 220 M pounds)
2009 total 300 claims submitted; \$ 72 M (~ 185 M pounds)
2010 total 251 claims submitted; \$ 75 M (~ 194 M pounds)
2011 total 297 claims submitted; \$ 77 M (~ 198 M pounds)
2012 total 314 claims submitted; \$ 83 M (~ 212 M pounds)
2013 total 274 claims submitted; \$ 79 M (~ 202 M pounds)
2014 total 269 claims submitted; \$ 77 M (~ 183 M pounds)
2015 total 242 claims submitted; \$ 77 M (~ 175 M pounds)
2016 total 208 claims submitted; \$ 72 M (~ 153 M pounds)
2017 total 221 claims submitted; \$ 62 M (~ 127 M pounds)
2018 total 108 claims submitted; \$ 26 M (~ 52 M pounds) [through June 30, 2018]

**Please note that as of January 2018, the tracking of these values was standardized to remove claims that were rejected due to regulatory deficiencies or claimant request.*

Payment Statistics 2005 through June 2018

- Approximately 3,741 claims submitted by recyclers for payment
- Approximately \$ 976 million (representing nearly 2.3 billion pounds of recycled CEW) have been claimed through the CEW payment system since January 2005

CalRecycle has annually denied between 1% and 12% of moneys claimed in the CEW system due to non-compliant or "significantly inconsistent" documentation (see 14 CCR 18660.30...). Total payment adjustments from the start of the program through 2017 is about \$28 million (~ 2.8% of claimed).

Compliance Assurance and Fraud Prevention

- CalRecycle works closely with DTSC to ensure material handling compliance. The departments have a Memorandum of Understanding that delineates cooperation on regulatory and enforcement responsibilities.
- CalRecycle has statutory authority to impose administrative civil liabilities (penalties) against any person for false statements or representations made in documentation transferred or maintained for the purpose of compliance with the Electronic Waste Recycling Act and associated regulations, including those related to the CEW program.
- CalRecycle maintains an Interagency Agreement with the Department of Food and Agriculture's Weighmaster program to ensure accurate and legal measurements within the electronics recycling industry.

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 applicable 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 cancelled (dismantled) 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" outside the formal CEW system by approved recyclers and collectors exposes system participants to increased risk of faulty and/or falsified collection documentation.

Uncertain Markets for Residual CRT Glass

- Residual cathode ray tube (CRT) glass must be managed as a universal waste or as a hazardous waste depending on ultimate disposition of the glass; the burden of compliance is on the California CRT glass handler.
- Historical markets for residual CRT glass have largely disappeared or have been disrupted; new markets are unclear and involve more complex regulatory consideration.
- Incidents of residual CRT abandonment elsewhere in USA further raise market concerns.
- New recycling dispositions should be explored but must be vetted; meanwhile, well-regulated disposal has become a last choice option for residuals without feasible markets.

Costs of Managing Non-CRT CEW

- Program is seeing increase in volumes of non-CRT devices being cancelled and claimed for payment, which have different recycling economics.
- In the first 6 years of the program, less than 1% (by weight) of CEW claimed were non-CRT devices.
- In 2013, non-CRT exceeded 2% for the first time and the volume has grown an average of 30% each year and 2017 made up about 14% (18M pounds) of the volume of CEW claimed.
- In 2018, CalRecycle promulgated emergency rules to bifurcate the combined recovery and recycling payment rate made to Approved Recyclers to establish separate rates for CRT and non-CRT CEW.

The Future of Electronic Waste Management in California?

- Mixed e-waste (non-CEW) volumes are substantial and in aggregate have nominal value.
- CEW collectors and recyclers are handling more complex and lower value materials.
- Will the current model that has worked well for over a decade work for another ten years?
- CalRecycle initiated a project in 2016 to examine current conditions and future options for electronic waste management in California and engage stakeholders in exploring how to address future challenges.
- CalRecycle approved a policy document in 2018 regarding future management of electronic waste. For more information, please see: www.calrecycle.ca.gov/docs/cr/Electronics/Future/EWasteFuture.pdf

Other Program Implementation Activities

Regulations:

- DTSC readopted emergency regulations in September 2016 for residual CRT glass management (originally adopted October 2012) that creates pathways to recycling alternatives and the possibility of proper disposal, as well as establishes more stringent disposition documentation.
- In August 2015, CalRecycle enacted emergency rules pursuant to the Act to address changes in CRT market conditions and CRT management rules promulgated by DTSC; CEW recyclers may pursue all otherwise legal dispositions for residual CRTs/CRT glass derived from claimed CEW. CalRecycle initiated the formal rulemaking process to make these rules permanent in August 2017 with finalization expected by 2018.
- In October 2015, CalRecycle enacted emergency rules to implement administrative authorities to impose civil liabilities (penalties) on persons who make false statements in documents maintained or transmitted for compliance purposes relative to the Act (PRC 42474(d)). CalRecycle initiated the formal rulemaking process to make these rules permanent in August 2017 with finalization expected by 2018.
- In March 2017, CalRecycle enacted emergency rules that modify requirements for the Designated Approved Collector provision of the CEW recovery and recycling program. This provision allows Local Governments to designate an approved collector to act on its behalf. It is expected that CalRecycle will initiate a formal rulemaking process to make these rules permanent in 2018.
- In February 2018, CalRecycle proposed emergency rules to provide a structure for pursuing multiple recycling payment rates. Those regulations were approved on May 9, 2018 and established the structure to have bifurcated payment rates for CRT CEW and non-CRT CEW. The rates will continue to be informed by the Net Cost Report and be reviewed at the same interval as prior to these emergency regulations.

Recent Legislation

- For more legislative information, see: www.leginfo.legislature.ca.gov

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 pursuant to PRC 42477 and 42478.
- Net Cost Reports covering 2017 operations were required to be submitted by all CEW program participants on or before March 1, 2018.
- Failure to submit a Net Cost Report is a leading cause of participant approval revocation.
- Effective July 1, 2018, the combined recovery and recycling payment rate for the newly established non-CRT CEW category increased from \$49 to \$60 cents per pound. The rate for the CRT CEW category remains \$49 cents per pound. The recovery payment rate, which is not categorized by the type of CEW, remains \$19 cent per pound.

Other States and Federal Government

California is monitoring activity on the national level. Approximately two dozen states have passed legislation, all taking more of a producer responsibility approach. A large CEW 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 hazardous waste/universal waste management standards adopted by DTSC. The Act specifies conditions under which a national program would preempt the Act (PRC 42485 (a)).

Outreach and Other Resources

- For current program actions and information, view the E-Waste newsletter archives: [Aug 2004-present](#).
- CalRecycle maintains a public oriented web address (www.eRecycle.org) to inform the public on environmental matters associated with the management of electronic waste, including a directory of recycling opportunities throughout California.
- The California Department of Tax and Fee Administration website contains Frequently Asked Questions, registration information and registration forms. (www.cdtfa.ca.gov/taxes-and-fees/electronic_waste_recycling_fee.htm)
- The Department of Toxics Substances Control website contains information on covered devices, hazardous waste management standards, and regulatory requirements. (www.dtsc.ca.gov/HazardousWaste/EWaste)

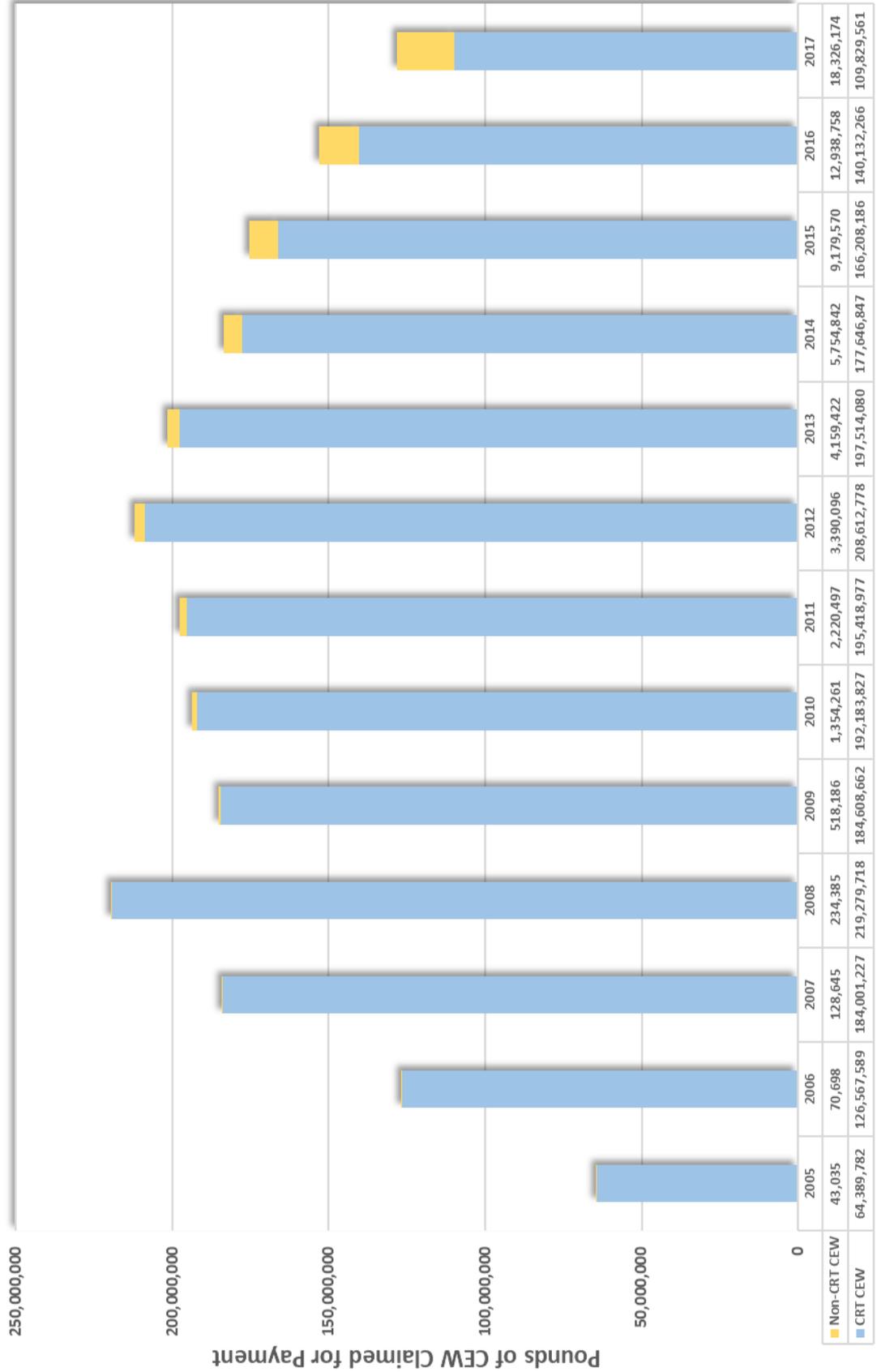
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*Comments on Quarterly Claim Chart (Next Page)

The depiction of claim volumes in the chart reflects the evolution of the program since its inception in January 2005 through 2017. Factors affecting the fluctuating volumes in the program include infrastructure development, the digital television broadcast transition in 2009, CRT glass market disruptions, and legacy stockpile depletion.

Question concerning this document may be directed to ewaste@calrecycle.ca.gov.

Covered Electronic Waste Recycling Payment System

2005-2017 Pounds of CRT and Non-CRT CEW Claimed for Payment



Flowchart of Material and Funds within the State of California's Covered Electronic Waste Recycling Program

