This Morning’s Topics

- Why Does California Care About E-waste?
- Legislative and Regulatory History
- The Electronic Waste Recycling Act
- The Covered Electronic Waste Program
Electronic Waste: What’s the Problem?

Fastest growing part of the waste stream? Really?

CalRecycle’s 2008 Data:

<table>
<thead>
<tr>
<th>Material</th>
<th>Est. Percent</th>
<th>+ / -</th>
<th>Est. Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics</td>
<td>0.5%</td>
<td></td>
<td>216,297</td>
</tr>
<tr>
<td>Brown Goods</td>
<td>0.2%</td>
<td>0.1%</td>
<td>76,725</td>
</tr>
<tr>
<td>Computer-related Electronics</td>
<td>0.1%</td>
<td>0.1%</td>
<td>32,932</td>
</tr>
<tr>
<td>Other Small Consumer Electronics</td>
<td>0.1%</td>
<td>0.0%</td>
<td>34,588</td>
</tr>
<tr>
<td>Video Display Devices</td>
<td>0.2%</td>
<td>0.1%</td>
<td>72,053</td>
</tr>
</tbody>
</table>
Electronic Waste: What’s the Problem?

Toxic Materials

- Lead
- Mercury
- Cadmium
- Arsenic
- Chromium
- Copper
- Halogenated Polymers
- Brominated Flame Retardants
Electronic Waste: What’s the Problem?

Export Concerns
Electronic Waste: What’s the Problem?

Wasted Resources
Legislative and Regulatory History

• **2001** – State clarifies that cathode ray tube (CRT) devices are in fact hazardous when disposed

• **2002** – California’s universal waste rules prohibit disposal of electronics (household exception until 2006)

• **2003** – Electronic Waste Recycling Act (SB 20)

• **2004** – Cell Phone Recycling Act

• **2005** – Covered Electronic Waste (CEW) recycling program is initiated
Electronic Waste Recycling Act

**Senate Bill (SB) 20**

- Result of frustration with NEPSI (National Electronic Product Stewardship Initiative)
- **Stakeholders** included local governments, environmental interests, manufacturers, retailers, consumers, etc
- Several previous unsuccessful legislative efforts
- State had experience with “bottle bill” model
- Governor was on verge of recall…
Electronic Waste Recycling Act

**Intent**

- Provide financial relief to Local Jurisdictions
- Foster convenient recycling opportunities for consumers throughout the state
- Reduce illegal dumping
- Eliminate the consumer stockpile of waste monitors/TVs
- Decrease amount of hazardous materials in covered devices
Electronic Waste Recycling Act

Components

• Consumer recycling fee on retail sales of covered electronic devices (CEDs)
• Recovery / recycling payments to qualified handlers of covered electronic wastes (CEWs)
• Manufacturer requirements:
  – labeling, reporting
  – product design: ROHS
  – consumer information
• State purchasing guidelines: EPP
• Statewide public education campaign
Electronic Waste Recycling Act

Government Administration:

- Department of Toxic Substances Control (DTSC)
  - Regulates all hazardous waste, including electronics
- Department of Resources Recycling and Recovery (CalRecycle)
  - Administers “covered electronic waste” system
- Board of Equalization (BOE) – handles revenue
- State Controllers Office (SCO) – issues payments
- Department of Justice (DOJ) – investigates
Covered Electronic Devices

- *Covered electronic devices* (CEDs) are just a subset of all electronics

  - Bur remember: all electronics are presumed hazardous when disposed

- **DTSC determines what is a CED**
  - Video display device with a screen > 4”
  - Tested and added to DTSC regulations -- Title 22 CCR, Chapter 11, Appendix X
Covered Electronic Devices

Currently include:

– Cathode ray tube (CRT) television or monitor
– Liquid crystal display (LCD) television or monitor
– Laptop computers with LCD display
– Plasma television
– Portable DVD players

– Tablet devices? Maybe yes, maybe no…
– Large-screen smart phones? Not yet…
Covered Electronic Waste (CEW) Recycling System

- **California Consumer**
  - Fee Paid at Purchase
  - New CED Purchased

- **Retailer**
  - Remits Fee
  - Deposits Fee
  - Fee Collection Services

- **BOE**
  - Electrics
  - $\$$

- **Electronic Waste Recovery and Recycling Account (EWRRA)**
  - Inspections & Compliance Activities
  - CEW System Administration

- **CalRecycle**
  - Payment Claim
  - Combined Recycling & Recovery Payment

- **Collectors**
  - Recovery Payment

- **Recyclers**
  - CEW & Documentation

- **CED Discarded (CEW) by California Source**

- **CED: Covered Electronic Device**
- **CEW: Covered Electronic Waste**

CEW Recycling Payment System Claim Volumes

- ~1.4 billion pounds of CEW claimed since program inception (as of July 2013)

Volume fluctuations due to infrastructure changes, legacy stockpile depletion, CRT glass market disruptions and claim timing. Recyclers are supposed to submit claims within 45 days after the end of a reporting month.
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