



# Managing Electronic Waste: *A Contractor's Perspective*

Northwest Hazardous Waste Conference for Household and  
Small Business Programs

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Sue Bruning

Regional HHW Program Manager



PSC

# Agenda

- ★ Realities of Collecting E-Waste
- ★ Collection Methodologies
- ★ Choosing a Management Facility
- ★ Policy Implications
- ★ California's Story





# Realities of Collecting E-Waste

- ✱ Training Staff
- ✱ Associated Hazards
- ✱ What's "E-Waste"?
- ✱ Collection Location – LOTS OF SPACE!
- ✱ Combine with HHW Operations?
- ✱ How to Handle CESQGs?

# Collection Methodologies

## Types of Collection Programs

- ✦ Permanent Facilities (HHW, Landfill, Transfer Station)
- ✦ Temporary Events
- ✦ Door-to-Door

## Options for Packaging

- ✦ Palletize / Gaylords
- ✦ Trailers
- ✦ Roll-Offs

# Palletize



# Palletizing / Gaylords

- ✦ Requires Forklift
- ✦ Least Efficient Transportation \$/pound
- ✦ Good for Low Volume, Limited Space
- ✦ Will Minimize Breakage
- ✦ Labor Intensive
- ✦ Requires Additional Packaging Materials
- ✦ Recycling Facilities Prefer It

# Trailer



# Trailer

- ★ Loosepack E-Waste in 48" – 53" van
- ★ Try to Minimize Breakage
- ★ Most Efficient Transportation
- ★ Reduces Amount of Time & Labor for Packaging
- ★ Requires Considerable Space
- ★ Good for High Volume, Short Term
- ★ Rental Charges for Long Term Storage

# Roll-Off



# Roll-Off Bin

- ✱ Loosepack E-Waste in 40 Yard Bin
- ✱ Try to Minimize Breakage
- ✱ Transportation Less Than Pallet, More Than Trailer
- ✱ Simplifies Packaging
- ✱ Requires Considerable Space
- ✱ Good for Moderate-High Volume
- ✱ Rental Charges for Long Term Storage

# Choosing a Management Facility

- ★ Reuse, Refurbish, Resale
- ★ Demanufacturer
- ★ Recycler
- ★ End of the Line Facilities
- ★ Auditing a Facility
- ★ Tracking Procedures
- ★ Certificate of Recycling

# Policy Implications

- ✱ Regulatory Policies will Change the Realities of Collecting E-Waste
- ✱ Affect Collection Methodologies
- ✱ Limit Management Facility Options
- ✱ Affect Contracting Structures
- ✱ Change the Marketplace

# California's Story: SB20

- ✦ Electronic Waste Recycling Act of 2003 (Byron Sher)
- ✦ Statewide Program to Promote and Fund the Collection and Recycling of Hazardous Electronic Devices
- ✦ Begins July 1, 2004

# Key Components of SB20

- ✦ Electronic Waste = Universal Waste
- ✦ Advanced Disposal Fee
- ✦ Reimburses “Collectors” & “Recyclers”
- ✦ Covers CRTS, Flat Panel Screens, other similar devices that DTSC determines to be hazardous
- ✦ LCD Monitors and Laptops added
- ✦ Notification & Annual Report

# Key Components of SB20

- ★ Small & Large Quantity Handler Standards
- ★ Labeling & Marking
- ★ Export Notification
- ★ Transporter Standards

# SB20 Implications

- ✱ Changing the Marketplace
- ✱ Use of in-state recyclers
- ✱ Changes in contracting structure
- ✱ Effect on reuse/resale
- ✱ Distribution of ADF monies



Contact:

Sue Bruning

Regional HHW Program Manager

PSC

[Sbruning@contactpsc.com](mailto:Sbruning@contactpsc.com)

(800) 870-6233 office