COLLECTION SITE BEST PRACTICES

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WHAT IS ERCC?

A membership organization:

- Launched in 2010 by National Center for Electronics Recycling (NCER) & Northeast Recycling Council (NERC)
- Forum for coordination & info exchange on state electronics recycling laws
- Voting and Affiliate Members
WHY ERCC?

- Reduce administrative overlap
- One-stop shop for information on state laws
- Coordinate data gathering & information sharing
- Formalize joint, non-binding, responses on key implementation issues
- Unique resources that streamline compliance
ERCC RECENT PROJECTS

- Developed test Website for manufacturer registrations: www.ecycleregistration.org
- Joint market share data purchasing
- Performance measures best practices
- Collection site best practices
WHO ARE COLLECTORS?

- Many entities: local government sites, non-profit donation centers, retailers, electronics repair stores, others
- Receive devices from public, sort, & prepare for shipment
- Number & type vary under state laws
Why focus on Collectors?

- May be sole point of contact for consumers
- Some reports of diversion of valuable items
  - Diverted devices may never get to qualified, certified recyclers
  - Diversion raises costs (less valuable items left), distorts true collection rates, & could lead to environmental harm
- State laws vary on collector requirements
COLLECTOR BEST PRACTICES

Solution?

- *Best Management Practices* baseline for collectors

- *Best Management Practices* intended for collection sites accepting electronics from covered entities under state electronics recycling laws

- May also be used by collection sites outside of state programs
Collector Definition:

- Entity offering site for receiving &/or consolidating electronics prior to sending to recyclers or consolidators.
- A collector is *not* involved in the disassembly, demanufacture, or recycling of electronics.
  - However, some consolidators, transporters, & recyclers may also offer collection sites.
  - Activities beyond collection beyond scope of this effort.
Best Management Practice Standards
Key Areas Addressed by Guidance

- Compliance
- Disposal
- On-site practices
- Data & reporting
- Downstream
Compliance

- Comply with all legal requirements—*not* limited to environmental, health, & safety requirements.
- Be willing to disclose fines & notices of violation to upstream/downstream partners.
Disposal

- No landfilling or incineration of whole electronics—both covered & non-covered items.
On-site Practices

- Staff the site during operating hours.
- Provide enclosed storage.
- Handle & store electronics to minimize breakage.
- Adhere to good housekeeping standards.
On-site Practices

- Label storage containers
- Label containers with predominant device type
- Train employees on proper handling & emergency procedures
- Ship all items collected in original form & without missing components
  - Do not disassemble, dismantle, shred, transform, or demanufacture electronics.
- Ensure safe stacking & packaging practices


**On-site Practices**

- **Computers & Laptops**
  - **Pallets:**
    - Place computer towers & laptops on pallets
    - Shrink-wrap stack (height of 5-7’)
    - Protect laptops with separate cardboard boxes, & put with computers
    - Use enough shrink wrap to ensure will not topple over
  - **Gaylords:**
    - Place units carefully, stacking efficiently
    - Reinforce with shrink-wrap as needed
    - Must be placed on pallets
COLLECTOR BEST PRACTICES

On-site Practices

- **Monitors**
  - Place with screen facing down on pallets with cardboard between layers
  - Largest units on bottom & to outside edges of pallet, & interlock units as possible
  - Keep flat screen units upright, with screen facing inward
  - Apply enough shrink wrap to ensure will not topple over
  - Use caution when lowering units into a Gaylord
  - Gaylords must be placed on pallets
On-site Practices

Television Sets

- Palletize uniform sized TV's together, with screens facing down on pallets with cardboard between layers
- Place flat screen units upright, with screen facing inward
- Place console televisions on lowest level of pallet with other units on top or around
- Use enough shrink wrap to secure units & prevent toppling
COLLECTOR BEST PRACTICES

Data & Reporting

- Document period of accumulation.
  - Up to three years
- Maintain bills of lading & documentation with # of containers delivered & approximate weight of each shipment.
- If reuse, document # of units/weight diverted.

BILL TO: 0283909
Oregon SCP
National Center for Electronics Recycling
115 Rosemar Rd, Suite 1
Parkersburg, WV 26104

Bill of Lading

Bill of Lading #: SCP1612
Date: 8/4/2010

SHIP FROM: 3rd Party Collector
SCP Collector #: 131
Waste-Pro Transfer Station
541-963-5469

SHIP TO: 0283910
SCP Recycler #: 129
IMS Electronics Recycling, Inc.
360-759-8883

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**COLLECTOR BEST PRACTICES**

**Downstream**

- Only send electronics to R2 or e-Steward certified recyclers
- Send all electronics to certified recycler or authorized consolidator *without diverting* any quantities or types of electronics to other vendors, brokers, recyclers, or other entities
How can best practices & strategies developed by the Electronics Recycling Coordination Clearinghouse be incorporated into e-scrapp collection programs?
COLLECTOR BEST PRACTICES

Suggestions for Implementation:

- Self-declaration from collector
  - Need to be combined with another option
- Pledge or written declaration?
  - No audit process for either of these
  - Perhaps a good first step
- Need database to store info on declared collectors
Options for Implementation:

- Recycler Verification
  - Recyclers would verify that collectors they are receiving materials from use best practices
  - Not true third party verification/audit
  - Some recyclers have little direct contact with collectors – i.e. 3rd party transport used
COLLECTOR BEST PRACTICES

Options for Implementation:

- Manufacturer commitment
  - Manufacturer would agree to only use collectors who follow these guidelines
COLLECTOR BEST PRACTICES

Options for Implementation:

- “Standard” or certification program
  - Viable for all collectors, even small ones?
  - Consistency with other state permits?
COLLECTOR BEST PRACTICES

Options for Implementation:

- State legislative revisions
- Some states already building into regulations/guidance

THE SENATE
TWENTY-FOURTH LEGISLATURE, 2008
STATE OF HAWAII

S.B. NO. 2843
S.D. 2
H.D. 3
C.D. 1

A BILL FOR AN ACT

RELATING TO ELECTRONIC DEVICE RECYCLING.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1. Available estimates suggest that over
2. 100,000,000 computers, monitors, and televisions become obsolete
3. each year, and this number is growing. If improperly managed,
4. these used electronics can harm the environment and human
Thank you!

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View Collector Best Practices Document at: www.ecycleclearinghouse.org
ADDITIONAL ERCC DETAILS
FOUNDING MEMBERS
2011-12 ERCC MEMBERS

STATE (VOTING) MEMBERS:

- CalRecycle
- Connecticut DEEP
- Hawaii DOH
- Illinois EPA
- Indiana DEM
- Maine DEP
- Maryland DE
- Minnesota PCA
- New Jersey DEP
- New York DEC
- North Carolina DENR
- Oregon DEQ
- Pennsylvania DEP
- South Carolina DHEC
- Vermont DEC
- Wisconsin DNR
2011-12 ERCC MEMBERS

AFFILIATE MEMBERS:
- Arrow-Intechra
- Best Buy
- Brother International
- Consumer Electronics Association
- Dell
- ecoATM
- ECS Refining
- Electronic Recyclers International
- Funai
- IMS Electronics Association
- Orion America, Inc.

- PA Recycling Markets Center
- R2 Solutions
- Rhode Island Resource Recovery Corporation
- Samsung
- Sims Recycling Solutions
- Technology Conservation Group
- Waste Management Recycle America
- WeRecycle! LLC