

Electronic Waste Management Update

Hazardous Waste Handler Seminar

Best Management Practices for County & Municipal Recycling Centers

May 15, 2014

**New Jersey State Police Forensic Sciences Center
Robbinsville, New Jersey**

**New Jersey Department of Environmental Protection
Division of Solid and Hazardous Waste
Bureau of Recycling and Hazardous Waste Management
<http://www.nj.gov/dep/dshw/ewaste/index.html>**



AGENDA

1. Review of the Electronic Waste Management Act, N.J.S.A. 13:1E-99.94 et seq

Responsibilities of:

Government

State, County, Municipal

Original Equipment Manufacturers

Recyclers

Handlers

Retailers

2. Results and Achievements

Concerns and Issues

3. CRT Glass

4. FAQs and Common Misconceptions

5. Questions



Review of the Electronic Waste Management Act, N.J.S.A. 13:1E-99.94 et seq

- The law requires that manufacturers set up a **FREE** and environmentally sound recycling program for “covered electronic devices”(CEDs) CEDs are computers, televisions, laptops, notebooks, eReaders, tablets, etc. generated by New Jersey residents and/or New Jersey based small businesses (fewer than 50 full-time employees). CEDs do NOT include printers, faxes, peripherals, etc.).

FYI: DISPOSAL BAN EFFECTIVE JANUARY 1, 2011
Beginning January 1, 2011 computers, monitors, laptops,
portable computers and televisions
CANNOT be disposed of in the garbage.



A1459

- Went into effect on December 21, 2012
http://www.njleg.state.nj.us/2012/Bills/AL12/79_.HTM
- A television manufacturer's recycling responsibility is now measured in terms of the weight of televisions manufactured, not units.
- Now, manufacturers who sell less than 100 televisions in New Jersey are no longer subject to the registration fee provisions of the Act.



A1459 CONTINUED

○ Update to Credit Trading

- Previously, there was no cap on the number of recycling credits that could be used in the ensuing program year.
- Now manufacturers can use up to **25%** of their obligation for any program year with credits generated in a prior program year.
- No manufacturer or group of manufacturers may cease implementing its recycling plan during any program year by using credits.



A1459 CONTINUED

○ Compliance Update

- Increases the maximum penalty to violators from \$1,000 to \$25,000.
- Allows the NJDEP to enforce the Act through an administrative enforcement order as opposed to having to go Superior Court.
- The Act may now also be enforced by every certified local health agency, as well as by the Department.



RESPONSIBILITIES OF GOVERNMENT

- County and Municipal Government:
 - A number of county and municipal sites are included in approved manufacturer plans.
 - Local governments: By promoting the program to local residents and small businesses, you can educate them about the importance of e-cycling and help them locate participating collection sites.



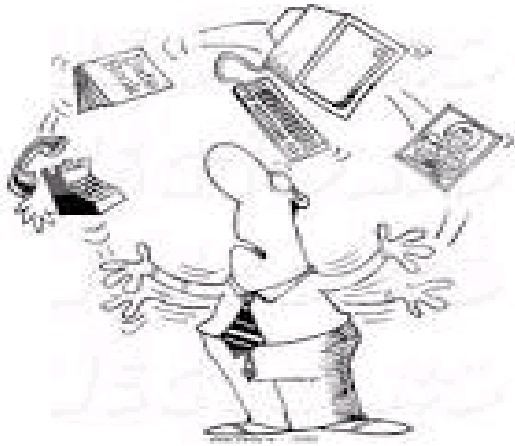
RESPONSIBILITIES OF GOVERNMENT

- NJ Department of Environmental Protection:
- Each year the Department will determine the collection obligation for each manufacturer of covered electronic devices to be used for the following program year.
 - The Department determines IT manufacturer obligations based on RETURN SHARE
 - The Department determines TV manufacturer obligation based on MARKET SHARE
- The Department will review each submitted plan for the collection of covered electronic devices to ensure the plan includes all the information required pursuant to N.J.A.C. 7:26A-13.6, and that implementation of the plan could reasonably be expected to result in the attainment of the manufacturer's or group of manufacturers' collection obligation.



RESPONSIBILITIES OF GOVERNMENT:

- Maintain list of all registrants
- Organize and coordinate public outreach
- Maintain list of recycling locations
- Implement credit trading program
- Enforcement
- Report to Legislature



MANUFACTURER RESPONSIBILITIES:

○ REGISTRATION

- On or before January 1st of each calendar year, each manufacturer of covered electronic devices sold for delivery in New Jersey on and after December 1st of the previous year must register with the Department and pay an annual registration fee. The annual registration fee for a television manufacturer is \$5,000.00. The annual registration fee for a manufacturer of other covered electronic devices is also \$5,000.00. A company that manufactures both televisions and other covered electronic devices must pay an annual registration fee of \$10,000.00.



MANUFACTURER RESPONSIBILITIES:

Manufacturers please note:

- The NJDEP now requires **online renewals** of eWaste Registrations. Each registered manufacturer must renew its registration by January 1st of the calendar year immediately subsequent to the calendar year of its initial registration, and by January 1 of each calendar year thereafter.

To renew your company's registration:

- Logon to NJDEP Online via the myNewJersey Portal at <http://www.nj.gov/> or via <http://njdeponline.com>.
- Note: If you haven't already created an NJDEP Online account, configured your NJDEP Online services and added your facilities/companies, please see the NJDEP Online New User Instructions found here

<http://www.nj.gov/dep/dshw/ewaste/rspinstructions.pdf>



MANUFACTURER RESPONSIBILITIES:

○ ANNUAL REPORT

- Electronics Manufacturers (either individually or as part of a group) must submit an annual report to the Department by February 1 of the year following a calendar year in which it had a collection obligation. Please note that a television manufacturer's annual report shall include the total number and weight of all new televisions sold in the State in the previous program year.



MANUFACTURER RESPONSIBILITIES:

○ COLLECTION PLANS

- Electronics Manufacturers (either individually or as part of a group) are required to submit Collection Plans each year for the Department's review and approval. Generally, Collection Plans are required to be submitted by June 1 to describe the Manufacturer's (or group's) collection of electronics waste for the following calendar year (Example: 2014 Collection Plans are due June 1, 2013). These Plans are now required to be submitted electronically via NJDEP Online.
- A manufacturer that chooses to submit a collection plan as part of a group shall, at least 20 days prior to the submittal of each group collection plan, participate in the preparation and submission to the Department of a Group Designation Form.



COLLECTORS, TRANSPORTERS AND AUTHORIZED RECYCLERS:

- Performance requirements for collectors, transporters, and authorized recyclers
 - Comply with the United States Environmental Protection Agency's "Plug-In to eCycling Guidelines for Materials Management," incorporated herein by reference and available at <http://www.epa.gov/waste/partnerships/plugin/pdf/guide.pdf>.
 - Collectors of covered electronic devices participating in a manufacturer's or group of manufacturers' approved collection plan shall comply with the Department's requirements applicable to universal waste handlers at N.J.A.C. 7:26A-7.4 and 7.5



COLLECTORS, TRANSPORTERS AND AUTHORIZED RECYCLERS

- Transporters of covered electronic devices participating in a manufacturer's or group of manufacturers' approved collection plan shall comply with the Department's requirements applicable to universal waste transporters at N.J.A.C. 7:26A-7.6
- An authorized recycler shall comply with "Responsible Recycling (R2) Practices for Use in Accredited Certification Programs for Electronics Recyclers," as supplemented or amended, and incorporated herein by reference, available at <http://www.epa.gov/waste/consERVE/materials/Recycling/r2practices.htm>. An authorized recycler of covered electronic devices located in NJ shall also comply with the requirements for Class D recycling facilities at N.J.A.C. 7:26A-3.



COLLECTORS, TRANSPORTERS AND AUTHORIZED RECYCLERS:

- An authorized recycler of covered electronic devices located in a state other than New Jersey shall also comply with the receiving state's rules and regulations, including any requirements for the maintenance of any permit or approval.



HANDLERS:

- A collector, transporter or recycler must ensure that covered electronic devices are recycled in a manner that is in compliance with all applicable federal, State, and local laws, regulations, and ordinances, and shall not be exported for disposal in a manner that poses a significant risk to the public health or the environment.



RETAILERS:

- Retailers can only sell products that are labeled with the manufacturers brands.
- A retailer can only sell compliant or pending compliant manufacturer products.
- Retailers must consult the manufacturer compliance list, found here

<http://www.nj.gov/dep/dshw/ewaste/compliancelist.pdf>



RETAILERS:

- Retailers must provide printed information, at point of sale, regarding e-waste recycling opportunities in New Jersey.
- NJDEP suggested outreach template.
<http://www.nj.gov/dep/dshw/ewaste/retailertemplate.pdf>
- Internet or catalog sellers must include this information in an **easily visible location on their website and in their hard copy.**



REGULATORY TIME FRAMES

- Registrations are due January 1
- Annual Reports are due February 1
- Preliminary obligations issued March 1
- Manufacturer comments/disputes due April 1
- Final obligations issued May 1
- Collection Plans due June 1



PARTICIPATION 2013

- 70 Registered OEMs/92 OEMs were given obligations
- 14 Authorized Recyclers
- 800 + Collection Sites throughout New Jersey
 - <http://www.nj.gov/dep/dshw/ewaste/collectionsites.pdf>



PARTICIPATION 2014

- 58 Registered OEMs/100 OEMs were given preliminary obligations
- *Collection plans are arriving now!



PROGRAM RESULTS AND ACHIEVEMENTS

| PROGRAM YEAR | RETURN SHARE GOAL (MILLION POUNDS) | MARKET SHARE GOAL (MILLION POUNDS) | TOTAL GOAL (MILLION POUNDS) | ACTUAL COLLECTED (MILLION POUNDS) |
|--------------|------------------------------------|------------------------------------|-----------------------------|-----------------------------------|
| 2011 | 20 | 28.7 | 48.7 | 46.2 |
| 2012 | 20 | 32.6 | 52.6 | 48.1 |
| 2013 | 16.3 | 32.6 | 48.9 | 38.6** |
| 2014 | 41 | 14 | 55 | |



PROGRAM RESULTS AND ACHIEVEMENTS

Successes:

- Keeping the ewaste out of landfills



- Ewaste collection has gone from just over **1lb/capita** before the law to over **5 lbs/capita** after the law was passed.



ISSUES AND CONCERNS

- Manufacturer Compliance:



Many smaller manufacturers have slipped under the radar and still owe us plans, fees and reports.



ISSUES AND CONCERNS

- Some recyclers collect covered electronic devices without having contracts in place with the manufacturers.



- The increased cost of recycling Cathode Ray Tubes (CRTs) is also driving up the cost to recycle the material.



ISSUES AND CONCERNS

- DEP lacks the staff for enforcement.



A list of compliant manufacturers can be found
<http://www.nj.gov/dep/dshw/ewaste/compliancelist.pdf>



ISSUES AND CONCERNS

- Scavenged Items and Illegal dumping:

Serious concerns of syphoning off the valuable material.



The DEP strongly suggests NO CURBSIDE COLLECTION of these materials.



CRT GLASS

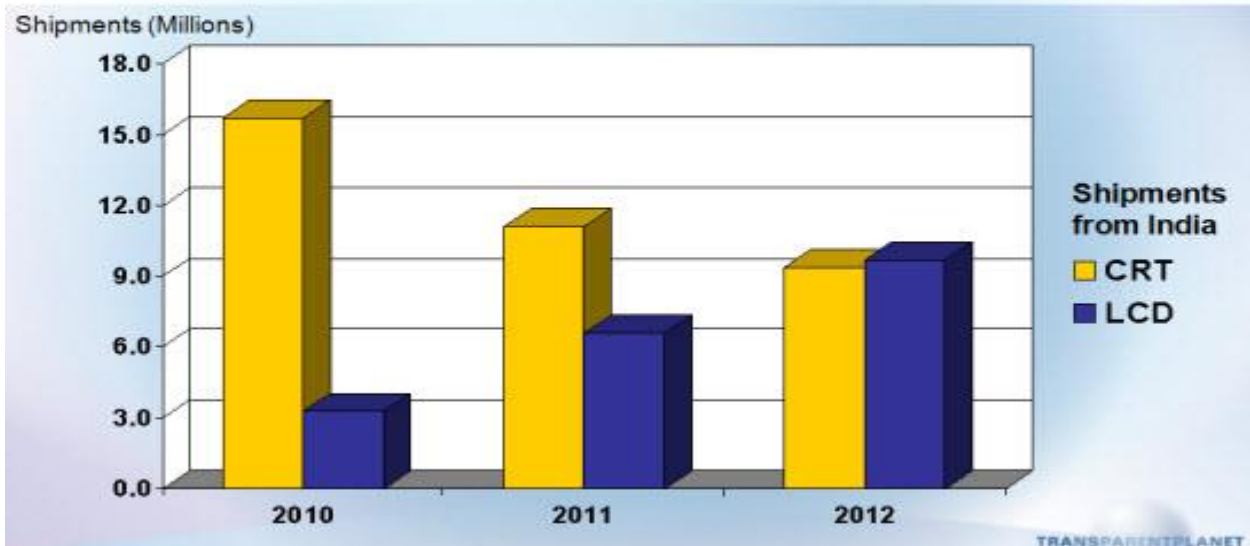


CRT GLASS

- 2 Major Issues with CRT Glass
 - Lead
 - Market

Factors Impacting CRT Recycling Market

India is one of the last markets producing new CRT products



CRT GLASS

- CRT TVs or monitors contain 4-8 pounds of lead in the glass tube. Under RCRA, CRTs are hazardous waste when disposed due to the presence of this lead.
- CRT glass can be recycled in two ways under EPA's regulations – sent to a lead smelter (to reclaim the lead and to use the silica as a flux agent) and to glass-to-glass recycling to be made into new CRTs.



R2 SOLUTIONS CLARIFIES CRT GLASS RULES

- R2 Solutions (R2S) is a non-profit organization established to house the R2 Practices.
- March 26, 2014 - The R2 Solutions Board of Directors voted unanimously to clarify that **R2:2013 prohibits the use of CRT glass that no longer is considered a Focus Material (FM) as Alternative Daily Cover at solid waste landfills.**



E-STEWARDS

- e-Stewards Standard (V2.0) emphasizes use of the waste management hierarchy (prefers recycling to final disposal)

“as a last resort, in a lined, leachate-controlled & monitored solid waste disposal facility if the cleaned glass has first been stabilized with a pre-treatment method in accordance with applicable laws and, as a result, passes the TCLP and thresholds found in the definition of Hazardous Electronic Waste (unless prohibited by law or facility)”



CRT GLASS

- California temporarily lifted its landfill ban to allow CRT glass to be sent to hazardous waste landfills.



FAQS AND COMMON MISCONCEPTIONS

- MYTH: I am an approved class D facility or Universal Waste Handler located in NJ and I collect spent electronics so that makes me an authorized recycler.
- FACT: You are considered an “authorized recycler” only if your company’s services are engaged under one or more collection plans submitted to the Department by an electronics manufacturer pursuant to the Ewaste law.



FAQS AND COMMON MISCONCEPTIONS

- **MYTH:** The Department of Environmental Protection is responsible for authorizing electronics recyclers for use in manufacturers' plans.
- **FACT:** Manufacturers work directly with recyclers and identify those "authorized recyclers" to be utilized in the collection plans they submit to the Department.



FAQS AND COMMON MISCONCEPTIONS

- MYTH: Now that I am being charged by my downstream markets to recycle CRTs and other electronics, I can pass that fee on to NJ residents.
- FACT: No fees or costs may be charged to residents to recycle their covered electronic devices. *If you are offering a premium service, a fee may be charged. FYI: “Premium service” means a collection service provided under an approved collection plan that exceeds the requirements in the Electronic Waste Management Act, (N.J.S.A. 13:1E-99.94 et seq.), for a convenient collection system, including, but not limited to the collection of a covered electronic device from a consumer’s residence.



FAQS AND OTHER ISSUES

○ Junk Yards

- There is nothing in the law that prohibits junk yards and scrap yards from taking in these materials.
- CEHA may like to pay these yards a visit and inform them that they must be operating in conformance with the Universal Waste Requirements unless they are only collecting CEDs from households

<http://www.nj.gov/dep/dshw/lrm/uwaste/uwelectr.htm>



FAQS AND OTHER ISSUES

- QUESTION: Do towns have to be “Universal Waste Handlers” if they are just a drop-off for computers? What is the difference between a convenience center vs. a large or small quantity handler?



FAQS AND OTHER ISSUES

ANSWER: PART ONE

A convenience center only applies to solid waste disposal and recyclable materials that would otherwise be solid waste.

E-waste falls under the hazardous waste rules and is exempt from these rules if they are generated by households.

Therefore if the drop-off centers run by the township/county accept **ONLY** household electronics (such as computers), then they are **NOT** regulated under the universal waste regulations, and thus not handlers of universal waste (large or small).



FAQS AND OTHER ISSUES

PART TWO:

However the Electronic Waste Management Act includes consumers **and small businesses** (fewer than 50 full-time employees) so if you are collecting devices from both of these generators then you are either a...

- Small Quantity Handler or a Large Quantity Handler;
 - A small quantity handler always has less than 5,000 kg (11,000 pounds) of total universal waste at their location at all times,
 - A large quantity handler is at or over that 5,000 kg limit. If the municipality has any other types universal waste on-site, the weight of those universal waste must be included in tally towards the 5000 kg limit.



FAQS AND OTHER ISSUES

- Small quantity handlers are the *least* regulated handler. They must:
 - label the unit (individual items or container) with the words (“universal waste – consumer electronics”);
 - place the universal waste in a sturdy closeable container if evidence of leakage or damage that could lead to a discharge;
 - take immediate steps to stop any discharge; clean up any discharge and manage/dispose of spill clean-up waste appropriately;
 - ship universal waste to another universal waste handler or authorized recycling facility within one year of acceptance or generation.
 - **There are no notification or annual reporting requirements for small quantity handlers.**



FAQS AND OTHER ISSUES

- Large quantity handlers are subject to the same labeling and management requirements of a small quantity handler.
 - They also must obtain a hazardous waste EPA ID number from the Department's Enforcement group and
 - file a notification of universal waste handler activity with the Department's Bureau of Landfill and Hazardous Waste Permitting.
 - Finally, they are required to file an annual report by March 1st with the Department.



FAQS AND OTHER ISSUES

- **Authorized Activities of Universal Waste Handlers**
 - a **Small Quantity Handler is allowed** to
 - demanufacture (break down the item into its individual components), in addition to collecting, consolidating and shipping off-site while.
 - A **Large Quantity Handler cannot**
 - demanufacture, but can only collect, consolidate, and ship off-site.



OPEN DISCUSSION AND QUESTIONS



E-CYCLE

New Jersey



CONTACT INFORMATION

Dana Lawson, Environmental Specialist III
Recycling and Hazardous Waste Management

Dana.Lawson@dep.state.nj.us

(609) 984-3438

Learn more about E-cycle New Jersey!

<http://www.nj.gov/dep/dshw/ewaste/index.html>

