



# ● EWASTE IN NH

Tara Mae Albert, M.S.

SWOT Coordinator

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# DISCUSSION POINTS

- What is electronic waste:
  - As defined by NH Statute
  - As defined by NH facilities
- Statutory Ban
- BMPs
- Types of Recyclers
- Markets



# WHAT IS ELECTRONIC WASTE?

## Statutory Definition

- RSA 149-M: VIIIa
- Includes computer monitors containing a cathode ray tube, laptop computers, liquid crystal display (LCD) computer monitors, plasma and LCD televisions, printers, cell phones, copiers, fax machines, and video display media recorder/players.

## How Facilities Identify It

- TVs, Computers, and Computer equipment
- Electronics with a screen
- “Anything with a cord”
- ...anything else?





# EWASTE STATUTORY BAN

RSA 149-M: 27, IV

# STATUTORY BAN

- Some electronic wastes have been banned from landfill or incineration since 2007.
  - Video display devices
  - Central Processing Unit (CPU)
  - Non-mobile video display media recorder/player
- These devices contain heavy metals such as lead, cadmium and mercury.
- **Fun fact:** Each CRT contains 4 - 8 pounds of lead.



# FACILITY REQUIREMENTS

- Landfills and incinerators must:
  - Post signs regarding the ban;
  - Provide written notification to the facility customers; or
  - Have agreements with the customers.
- It is the responsibility of SW facilities to ensure that these items are not landfilled or incinerated.





# BMPS FOR EWASTE

For collecting, storing and transferring.

# BEST MANAGEMENT PRACTICES

## Step 1: Educate Yourself!

- If you are going to talk-the-talk, you need to walk-the-walk!

## Step 2: Educate your residents & customers

- Most importantly, give them an alternative!

## Step 3: Collection

- Determine what type of collection works best for your facility.





# 1. EDUCATE YOURSELF!

- Vendors: Near you or used by your neighboring towns.
- Partner with businesses who have a take back program.
- Who are the local and national recycling associations?



# TAKE BACK PROGRAMS

- Staples
- Best Buy
- Goodwill/Dell Reconnect
- Call2Recycle
  - Cell phones & batteries
- Wireless Carrier Stores
- Brand owner mail back
- Other options (ever changing):
  - Lowes
  - Staples
  - Radio Shack
  - Sears
  - Home Depot
  - Ace Hardware



# 2. EDUCATE YOUR RESIDENTS & CUSTOMERS

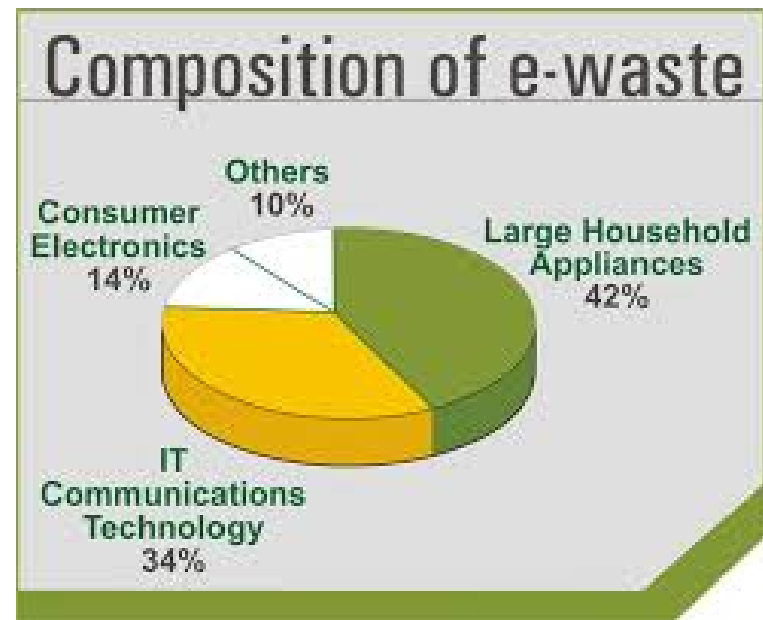
- Let them know why these items are banned
- Donate items that are still viable
- Offer information on take-back programs
- Data Destruction
- Have options



# 3. COLLECTION

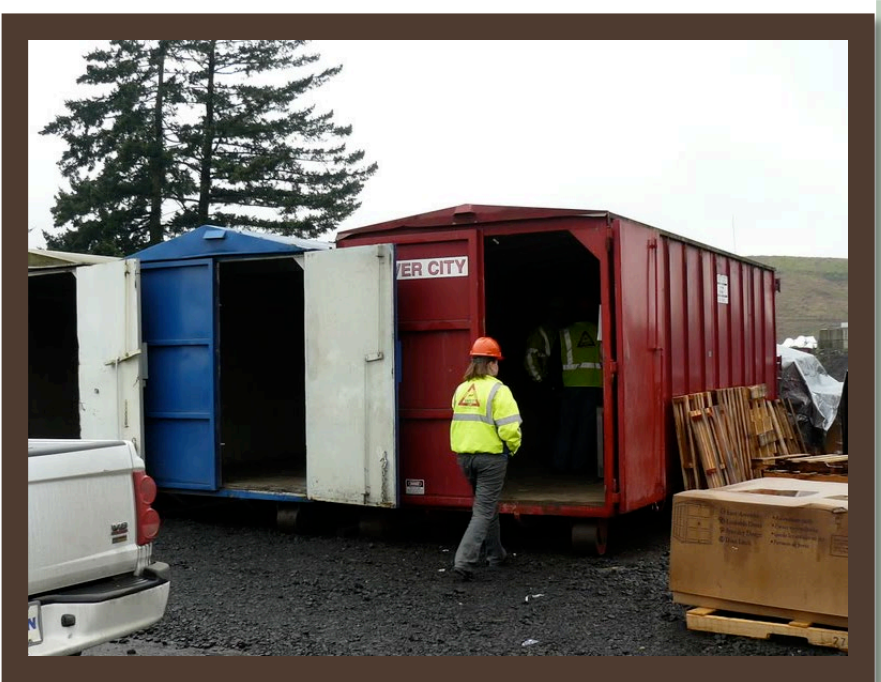
Determine what makes the most sense for YOU!

- One time event
  - HHW Days
  - Partner with vendors and neighboring towns
  - Fundraiser
  - School/Eagle Scout Project
- Permanent Collection
  - All about the storage...



### 3. COLLECTION & STORAGE

- Under cover
- Clearly marked designated area
- Prevent breakage
- Comply with the Universal Waste Rules, as applicable



# BE MINDFUL OF SAFETY

## Operators

- Ergonomics
- Electric Shock
- Hazardous Materials:
  - Lead dust
  - Mercury
  - Other heavy metals
- Bruises, scrapes, cuts

## Everyone Else

- Traffic flow
- Container placement
- Data Security
- No dumpster diving!!!





# TYPES OF RECYCLERS

The Good, the Bad & the Ugly

# RECYCLING COMPUTERS

## ADVANTAGES

HEALTH BENEFITS

ECONOMIC BENEFITS

MORE JOBS

CONSERVES RESOURCES

SUPPORTS THE COMMUNITY

PREVENTS ABUSE OF RESOURCES

## DISADVANTAGES

SORTING

TOXIC MATERIALS

PREVENTING DONATION

IDENTITY THEFT





# TYPES OF RECYCLERS

- Asset Recovery
- Reuse/Repair/Remanufacture
- Demanufacturing
- Shredding
- Broker

**Regardless of the Type of Recycling, you need to use a Certified Company.**



# CERTIFIED RECYCLER

A facility that has received a 3rd party audit that verified that it meets the requirements of either the R2 or e-Stewards Standard.

- Worker health & safety
- Regulatory & permitting compliance
- Data security
- Hazardous waste management
- Insurance
- Closure plans
- Financial assurances





# CURRENT RECYCLING MARKETS FOR ELECTRONICS

# MARKETABLE MATERIALS

- Plastic
  - Reused or burned for energy
- Metal: Al, Cu, Precious metals
  - Recovered & Reused
- Circuit Board
  - Reused, Repaired, Smelted
- Non-CRT Glass
  - Repurposed as asphalt, abrasives, industrial applications



# MARKETABLE MATERIALS

- Batteries
  - Reused or recycled
- Hazardous Components
  - Reused or Recycled
- CRT Glass
  - Lead – smelters
  - Copper – metal recovery
  - Glass-to-Glass recycling
  - Reused or resold
  - Exported

