

Electronics Legislation: International

Cate Berard
Office of Pollution Prevention and Toxics
USEPA

August 2, 2007

RoHS

- Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS); European Union (EU) Directive 2002/95/EC
- Applies to any electrical and electronic equipment put on the market in the EU on or after July 1, 2006
- Restricts the amount of hazardous chemicals and heavy metals used in the production of electrical and electronic equipment
 - Lead, cadmium, hexavalent chromium, mercury, polybrominated biphenyl (BPP), polybrominated diphenyl ether (PBDE)

WEEE

- Waste Electrical and Electronic Equipment (WEEE); EU Directive 2002/96/EC
- Applies to any electrical and electronic equipment put on the market in the EU after August 13, 2005
- Aims to raise the level of recycling of electrical and electronic equipment and encourage designers to create products with recycling in mind
- WEEE legislation requires manufacturers to arrange and pay for recycling/reuse of their products; no cost to the consumer

EuP

- Eco-design Requirements for Energy-using Products (EuP); EU Directive 2005/32/EC
- Applies to “energy-using products” that meet specific criteria, as of August 11, 2007
- Aims to encourage manufacturers to design and produce products with minimal overall environmental impact, including resources consumed in production and disposal (e.g., design for the environment)
- Implementing measures will define the mandatory “eco-design” requirements for specific products

REACH

- Registration, Evaluation, Authorization and Restrictions of Chemicals (REACH); EU Directive 2006/121/EC
- Applied to chemical substances as of June 1, 2007
- Require producers and their suppliers to examine and disclose the characteristics of the substances they use in the manufacture of, and/or are contained in, their electrical and electronic equipment and components

Electronics Legislation: Federal

Cate Berard
Office of Pollution Prevention and Toxics
USEPA

August 2, 2007

RCRA

- The Resource Conservation and Recovery Act (RCRA) of 1976 recognizes the importance of recycling, and the manufacture and purchase of products with recycled content
- RCRA Section 6002 requires Federal agencies to give purchasing preference to products and practices that conserve and protect natural resources and the environment
- Solid Waste
 - RCRA requires recycling of high-grade paper generated by office facilities
- Hazardous Waste
 - Electronic equipment sent for reuse or recycling is generally not hazardous waste
 - If Federal agencies require the destruction or disposal of their electronic equipment, they must comply with the RCRA hazardous waste regulations
- Universal Waste
 - RCRA specifies requirement for managing batteries, mercury-containing equipment and lamps

EPAct

- The Energy Policy Act (EPAct) of 2005 directs the Department of Energy to continue to identify and designate energy-efficient products
 - ENERGY STAR, FEMP
- EPAct also requires the acquisition and use of these products by all Federal agencies

Electronics Legislation: State and Federal (Proposed)

Clare Lindsay
Office of Solid Waste
USEPA

August 2, 2007

Takeback Overview

- 8 states have e-waste takeback legislation: CA, ME, MD, WA, MN, CT, OR and TX
- 4 of these states passed legislation in the past 3 months
- 2 more laws could pass this year; watch NC and NYC
- Two serious Federal proposals on table; one from manufacturers one from e-retailers
- No sign of Federal consensus yet; manufacturers and retailers can't agree
- Need a consensus to form quickly if there will be action on a bill this session; otherwise may not be action for a couple of years at Federal level

Bans on Disposal

- Several states have statewide CRT landfill bans: CA, MA, ME, MN , NH, RI (effective July 2008)
- Other states, such as VA, allow localities to ban CRTs from landfills so long as the locality has a CRT recycling program in place
- WA allows its counties to impose CRT landfill bans, but does not have a statewide ban in effect
- Arkansas has passed legislation authorizing its DEQ to ban CRTs from landfills, so long as it does so by January 1, 2008

State E-Waste Laws

- CA is the only law with visible fee at point of sale
- ME has a “shared responsibility” approach
- Most state e-waste laws “producer responsibility”; e.g., manufacturers pay all costs of management

California

- First e-waste takeback law in US
- Only state with visible fee at point of sale; applies to Federal agencies as well as businesses and citizens purchasing covered products
- Covered products:
 - CRTs and similar electronic devices with a certain screen size; may be expanded to cover additional products
- \$6 to \$10 recycling fee used to fund electronics recycling programs; state pays recyclers and collectors a set amount per pound to collect and process covered electronics
- “RoHS-equivalency” measures:
 - Prohibit sale of electronic products in the state that would be prohibited in EU because of the presence of heavy metals
- CA Cell Phone Recycling Act of 2004:
 - Cell phone retailers must provide free collection of used cell phones

Maine

- Municipalities must collect and consolidate TVs and computer monitors
- Manufacturers pay consolidators for the costs of handling, transporting and recycling their own TVs and computer monitors plus a pro rata share of orphan products
- Consolidators must account for products by manufacturer (or rely on the recycler to do so) and provide an annual accounting to the state
- Consolidation facilities are also responsible for shipping only to recyclers that meet Maine's Environmentally Sound Management Guidelines, and for billing manufacturers for allowable costs

Washington

- All computer and television manufacturers must provide free recycling of their products throughout the State
- Manufacturers must register with the State and either participate in a standard plan, which will be developed by the Washington Materials Management and Financing Authority, or petition the State to operate an independent recycling program
- Manufacturers are financially responsible for covering all collection, transportation, and recycling costs associated with the recycling of their electronic products (plus their share of orphaned ones)
- As of January 1, 2007:
 - All manufacturers of computers and televisions must label their products with their brand name
 - Collection services must be provided in every county/city with a population of over 10,000
 - Services must be provided to households, charities, school districts, small businesses and small government

Minnesota

- MN's requires electronics manufacturers to help pay for collection and recycling of e-waste from households
- Covered devices:
 - Computers, peripherals, faxes, DVDs, VCRs, and video devices sold to households
- First law to set targets for the amount of e-waste that producers must collect and recycle - each electronics manufacturer that sells products in MN must collect and recycle an amount proportional to the weight of the products sold in the state during the previous year
- Manufacturers must pay a yearly fee to the state, and, if they do not meet their yearly collection and recycling target, they must pay an additional fee for each pound they come up short; the money is then distributed to counties and private haulers to support e-waste collection and recycling efforts

EIA Proposal

- Framework for bifurcated financing approach:
 - One financing system for TVs; one for desktops, laptops and computer monitors
- TV collection and recycling to be conducted by an industry-sponsored third party organization and initially supported by a small fee at point of purchase
- For IT, producers must collect/recycle their products in manner convenient and no cost to consumer
- Recycling to be environmentally sound
- Products to meet RoHS
- Congress to require Feds to buy environmentally preferable IT equipment, such as EPEAT registered products

E-Retailers Proposal

- Manufacturers of computer monitors, desktop computers, laptop computers and televisions must have a program in each state to collect and recycle covered electronic devices from households or retailers cannot sell their products
- Those states with existing laws will have the opportunity to 'opt in' to this federal legislation, or, if applicable, find that their existing laws will sunset upon passage of the federal legislation
- In other states, manufacturers must establish EPA-approved recycling programs
- Recycling must be done in an environmentally sound manner and be protective of worker health and safety
- Federal agencies must require in purchases or leases of electronics that the vendor take-back and recycle the used electronics at the end of the lease or when no longer wanted
- Federal agencies must participate in the Federal Electronic Challenge program to address reuse or recycling of currently owned electronics

FEC Resources

- Federal Legislation and Executive Orders Relevant to the FEC
 - http://www.federalelectronicschallenge.net/resources/docs/fec_regs.pdf
 - Currently being revised to link legislation to FEC best practices and add information about E.O. 13423