
Missouri Electronic Waste Management (E-waste) Stakeholders Group

Guidance and organizational
parameters from the “Framing
Committee”

Overview: E-waste continues to grow

- Used/obsolete electronics are growing component of residential, institutional and business solid waste in Missouri/nation
 - Two million tons of used electronics, including computers and televisions, are discarded each year, according to USEPA
 - National Safety Council reported that by 2005, 63 million personal computers are projected to be retired/obsolete
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E-waste continues to grow

- Electronics rate of growth continues to increase rapidly due to new products, lower costs, rapid technology changes that make older units obsolete, more wireless/mobile products
 - 1.5 million new televisions sold prior to last month's Super Bowl
 - 130 million cell phones available for recycling; average cell phone user has 2.4 obsolete phones in their possession
 - 56% of teenagers 13-17 have a cell phone
 - Television technology changes go into effect in several years that will result in millions of new TV purchases, old TVs to be discarded
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Who is the Framing Committee and What is Their Role?

- MO DNR Staff
 - MO Hazardous Waste Management Commission Members
 - Representatives from electronics recycling industry, waste management industry, local government
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Framing Committee

- Purpose: To set parameters for stakeholders group in evaluating future management practices for electronic waste in Missouri
 - Define terms
 - Identify structure for discussion, recommendations
 - Set timeframe
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Definitions

- Demanufacture- take apart into components that can be sold or used as a marketable commodity
 - Disposition- ultimate destination of e-waste and its components within a recycling or disposal process that meets regulatory requirements
 - Reuse- refurbish, repair/donate or sale of used electronics as a working or restorable unit
 - Recycle- Recover/reprocess usable components to make another marketable product
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Purpose/mission statement

“ To put in place a framework for disposing, reusing, and recycling e-waste in Missouri in an economically sustainable fashion without threatening the environment.”

Overriding Issues for all Stakeholders to Consider

- Efficient and effective collection of e-waste is most challenging task
 - Education/awareness is vital and cannot be unfunded or under-funded
 - Determining costs and sharing/allocating costs for e-waste system is critical
 - Consumer
 - Industry/manufacturer
 - Retailer
 - Government
 - Incentives may lower costs
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Framing Committee (cont.)

- While landfill disposal of end of life electronics continues to be the current primary management method for e-waste in Missouri, the consensus is of the framing committee was :
 - ❑ **Landfill ban not an option**
 - ❑ Alternative management (recycling, reuse, remanufacture) to be encouraged where feasible to protect the environment
 - ❑ Development of infrastructure needed to support economically sustainable e-waste recycling industry
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Parameters for Defining E-Waste in Missouri

WHAT'S INCLUDED:

- ✓ Computers (desktop, notebook)
 - ✓ Computer peripherals (printers, copiers,scanners, mouse etc.)
 - ✓ Television monitors
 - ✓ Cell phones
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Parameters for Defining E-waste in Missouri (cont.)

WHAT'S EXCLUDED:

- ✓ Medical Equipment
 - ✓ Microwave Ovens/Appliances
 - ✓ Smoke Alarms
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Parameters for Defining E-Waste in Missouri

- **POSSIBLE INCLUSION:** (Left open for the Task Force to Consider)*
- ✓ Radios
- ✓ Stereo Equipment

* states with enacted electronics legislation have largely targeted computers and televisions only

Subgroups

Stakeholders to consider e-waste management issues based on the four following organizational subgroups:

- **Collection**
 - **Transport**
 - **Processing**
 - **Disposition**
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5 Discussion Framework Items within each Subgroup

- **Barriers**
 - **Incentives**
 - **Economic impacts/issues**
 - **Educational needs**
 - **Regulatory/policy issues**
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Collection subgroup

- Goal: Collection of e-waste that achieves:
- Safety
- Affordability
- Convenience
- Geographically accessible to all businesses, residents, public entities

Workable collection system is key to development of any successful statewide electronics recovery program

Transport Subgroup

Regulatory/accountability issues are key:

- Transport defined as “ how to assure accountability that materials taken from Pt. A to Pt. B arrive at their intended destination.”
 - Record keeping system important
 - Further define transport into two categories
 - Transport of whole electronic item
 - Transport of individual components once the product has been de-manufactured into various parts for recycling, reuse, or disposal
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Processing Subgroup

Parameters:

- ❑ Legal Operation
 - ❑ Storage of e-waste units and components in a manner than doesn't pose a hazard and is environmentally sound
 - ❑ NO Speculative Accumulation
 - ❑ NO Releases to the Environment
 - ❑ Best Management Practices to be developed as guidance for processing/demanufacture
 - ❑ Consideration should be given to time limits on accumulation of whole units, state certification, minimum financial assurance
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Disposition Subgroup

- Includes both disposal and recycling
 - Recycling should include market development opportunities- economic development for demanufacturing/recycling reuse
 - Development of new, value added downstream uses for recoverable components (i.e. plastics)
 - Goal is to maximize resource recovery, maximize economic gain of what can be recovered, and minimize the cost for disposal of residual materials that have no recoverable value
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Timetable

- Five to six one day meetings during 2006 (every other month)
 - Specific recommendations/coarse of action by end of year
 - Legislative/policy initiatives (if any) for 2007 legislative session
 - Next Stakeholders Meeting Tentatively scheduled for April 19th
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A few final thoughts from the Framing Committee

- Stakeholders meeting process presents an opportunity for constructive, proactive dialog regarding:
 - ❑ best management practices for collection, transport, processing, disposition
 - ❑ coordinated infrastructure development,
 - ❑ foster economic opportunity development
 - ❑ protection of the environment
 - ❑ education of Missourians
 - ❑ equitable cost allocation for e-waste management
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QUESTIONS??????
