



Responsible Recycling (R2) Practices for Electronics Recyclers

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November 5, 2008



Why is EPA Involved?

- Electronic recyclers want a way to highlight environmentally sound recyclers
- Customers want an easy way to find recyclers who use sound practices
- EPA believes in the environmental benefits of SAFE reuse and recycling



What are the R2 Practices?

- Stakeholder effort to develop **one** set of practices
- Based mostly on environmental, worker safety, and public health practices
- Includes 13 general principles, and specific practices for recyclers to follow
- Practices will be the basis of a voluntary certification program or programs



What is the Status of R2?

- Development is largely complete, ready for distribution
- It will be posted on the internet at <http://www.decideagree.com>
- EPA will encourage recyclers to conform their practices to the document
- Working group will identify mechanisms to certify recyclers to the practices



What does R2 Cover?

- E-Waste: electronic equipment includes computers, peripherals, cell phones, televisions
- Materials getting specific “focus” include
 - Cathode Ray Tubes
 - Circuit boards
 - Batteries
 - Items containing mercury/PCBs



What's in the R2 practices?

- Environmental, Health and Safety Management System Is Needed
- Reuse and Recycling are preferred over disposal
- Comply with all Federal, State, Local Laws and make sure Exports of Focus Materials are Legal



R2 Practices Continued...

- On-Site Health and Safety
- Refurbishing, Testing and Packaging of Materials going to reuse
- Exercise due diligence for Focus Materials going to downstream recyclers and processors, throughout the downstream recycling chain



R2 Practices Continued...

- Ensure that focus materials are not incinerated or landfilled
- Exercise due diligence, ensure that downstream recyclers and processors manage focus materials appropriately throughout the recycling chain



R2 Practices Continued...

- Destroy, purge or sanitize data from memory;
- Track throughput and recordkeeping;
- store and transport materials securely and safely; and
- possess insurance, closure plans and financial mechanisms to cover the potential risks of the facility.



Details on Export

- Recycler's responsibility extends to conducting due diligence to international markets; and
- Recycler must show documentation that export of any focus material is legal to non-OECD country of import
 - Law or court ruling;
 - Letter from the competent authority; or
 - Request documentation from EPA.



EPA's Assistance

- Open to all recyclers seeking information on exports to foreign countries being legal
- Contact at EPA is Frank McAlister
 - mcalsiter.frank@epa.gov
- Request should include:
 - Name of country/ facility name and address
 - Type of material and form (i.e., whole and shredded circuit boards, used desk top computers, cleaned/processed CRT glass)
 - Manner in which it will be processed (reuse, refurbished, recycled)



Stakeholder Process

- Document was drafted by neutral facilitator
- Versions were discussed by working group and revised by facilitator
- R2 was reviewed by 4 auditors to assure auditability
- R2 was field tested at 6 recyclers
- EPA's assistance in getting documentation from foreign countries was tested



Other information

- EPA expects to replace the Plug-In to eCycling guide with R2 practices
- R2 does not preclude the use of prison labor in electronic recycling
 - Instead it wants anyone who recycles to follow the same practices
- BAN and ETBC have embarked on their own effort to put together practices and certification program



Certifying to R2

- Workgroup is turning its attention to implementation - third-party organizations taking on role of certifying conformance
- A number of organizations are poised to certify recyclers to the practices
- Challenge: what is the appropriate level of oversight?
 - Auditors, certifying boards, recordkeeping



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