

Responsible Recycling (R2) Practices for Electronics Recyclers

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Federal Electronics Challenge
Partner Education Series
December 8, 2009

Why Have the Responsible Recycling (R2) Practices?

- Electronics recyclers want a way to highlight environmentally sound recyclers;
- Customers want an easy way to find recyclers who use sound practices.
- EPA wants to promote R2 practices to protect human health and the environment

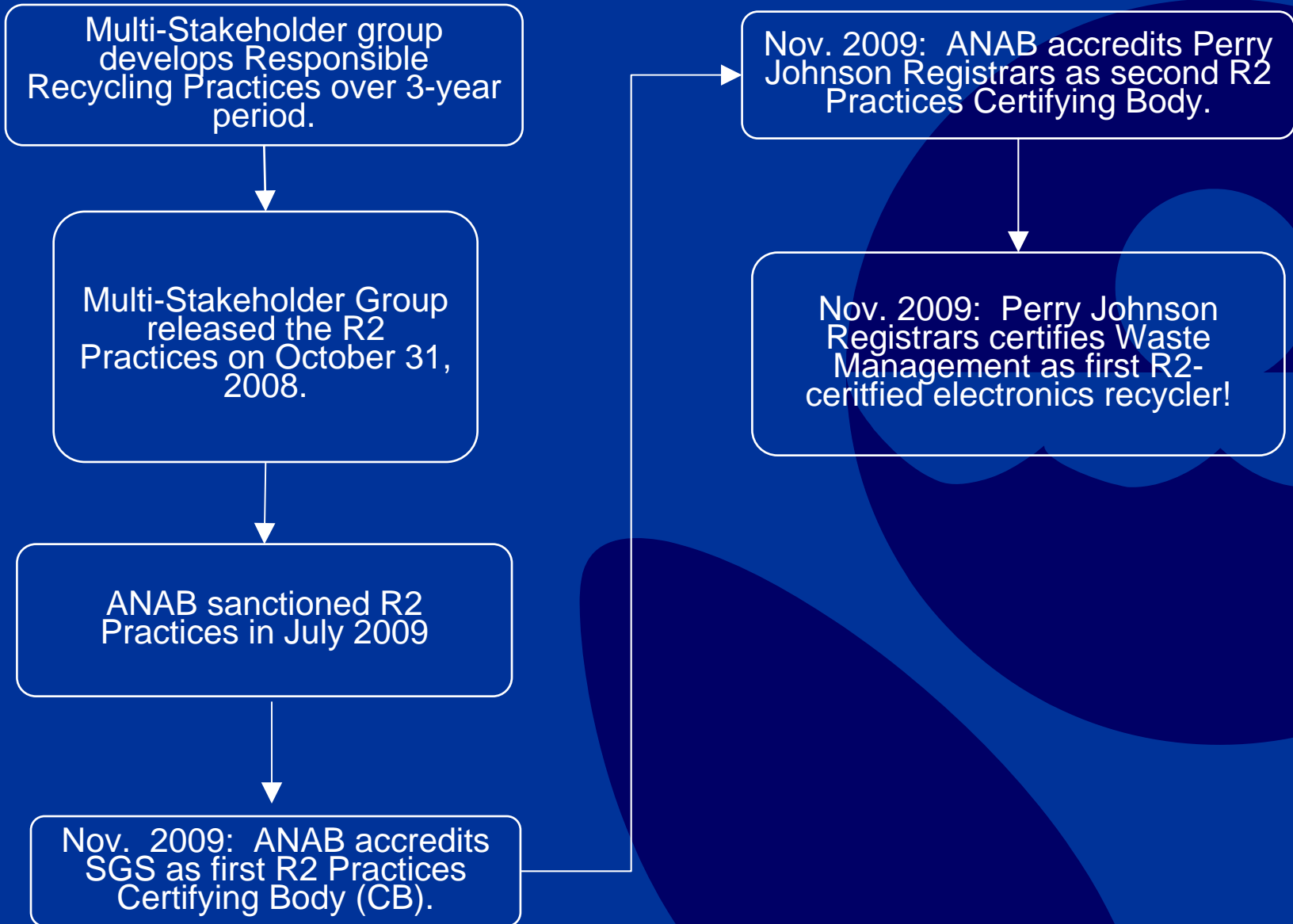
What are the R2 Practices?

- 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
- The R2 Practices are the basis of a voluntary, third-party certification program.

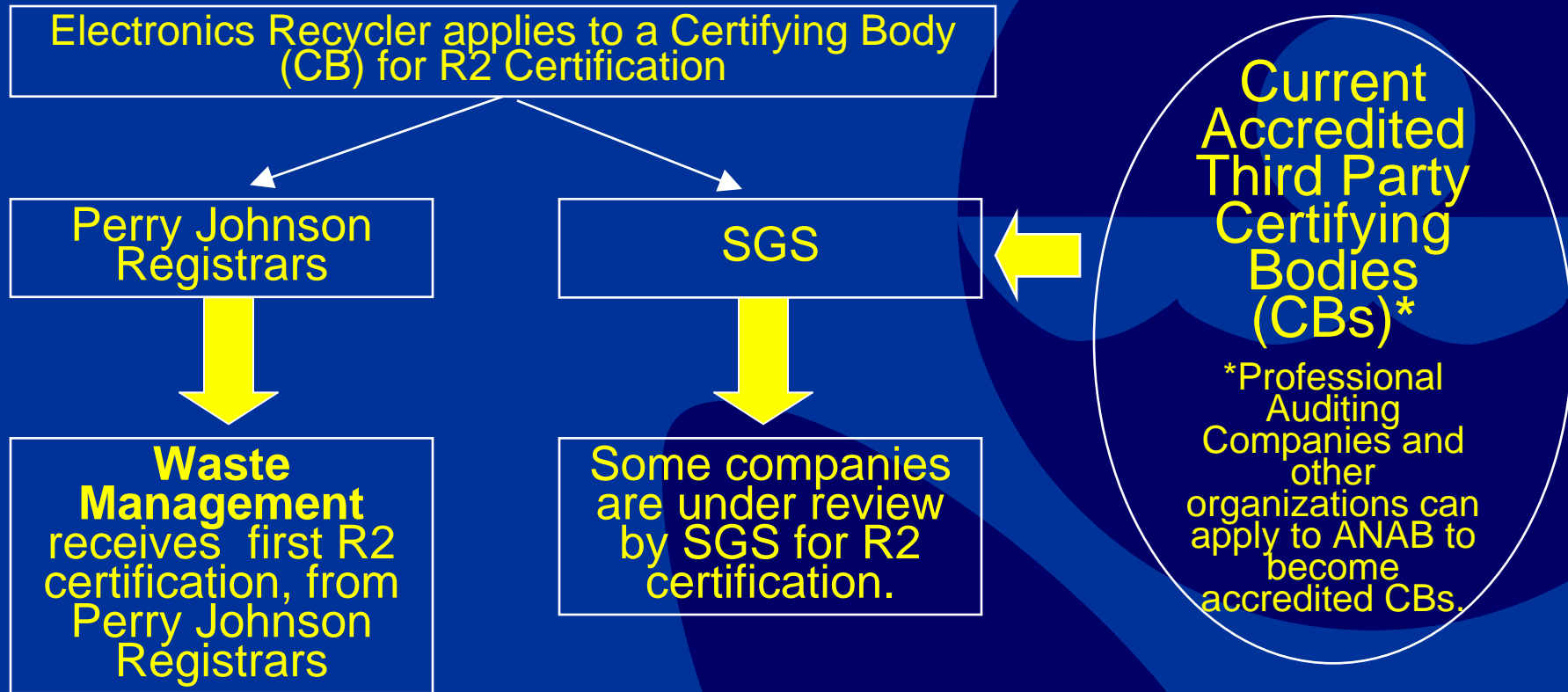
What is the Status of R2?

- It is posted on the internet at <http://www.decideagree.com> or go to www.epa.gov/epawaste/consERVE/materials/ecycling/r2practices.htm for a summary of the document
- .
- EPA is encouraging recyclers to conform their practices to the document
- There are currently two Certifying Bodies (CBs) and one R2-certified electronics recycler. WM Recycle America eCycling Services, L.L.C. of Minnesota (Waste Management) became the first R2-certified electronics recycler in Nov. 2009!

R2 Practices Development and Implementation



R2 Certification Process



To Become R2-Certified:

➤ Electronics Recyclers Must Apply to a Certifying Body (at present, must apply to either SGS or Perry Johnson Registrars, Inc.

➤ **AND**

➤ The Electronics Recycler Must Meet the R2 Requirements.

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

R2 Practices Continued...

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

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
 - » mcalister.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 electronics recycling
 - » Instead it wants anyone who recycles to follow the same practices
- BAN and ETBC have embarked on their own effort to put together a practices and certification program, called the “E-Stewards” certification.

R2 Information

- The R2 Practices document can be found at:
<http://www.decideagree.com/R2%20Document.pdf>
- The website for SGS, the first R2 Practices Certifying Body accredited by ANAB, can be found at: http://www.sgs.com/clients/certified_clients.htm
- The website for Perry Johnson Registrars, the second R2 Practices Certifying Body accredited by ANAB, can be found at:
<http://www.pjr.com/faq.htm>
- The website for the ANSI-ASQ National Accreditation Board (ANAB) can be found at:
<http://www.anab.org/>
- The EPA Plug-In to eCycling Website can be found at:
<http://www.epa.gov/epawaste/partnerships/plugin/index.htm>
- The EPA-Region 3 eCycling Website can be found at:
<http://www.epa.gov/reg3wcmd/eCycling/index.htm>

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