“Calling All Cell Phones . . .”: Collection, Reuse, and Recycling Programs in the US

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About INFORM
- 28-Year Non-Profit Organization
- Key Environmental Areas:
  - Chemical Hazards Prevention
  - Sustainable Transportation
  - Solid Waste Reduction

Cell Phones - Quantity
- Use: 340,000 subscribers in 1985; 154 million subscribers as of 1/2004
- Over 100 million cell phones per year will be retired in the US by 2005
- Approximately 50,000 tons of cell phones waste per year

Average Lifespan = 18 months
Emergence of “Smart” Phones
- Internet and E-mail
- Calendars
- Photo, Video and Music Options

Cell Phones - Toxicity
- Persistent and bioaccumulative hazardous substances
  - Antimony, arsenic, beryllium, cadmium, copper, lead, nickel and zinc
- Brominated flame retardants
- Batteries
  - Nickel, cadmium, cobalt

Waste Reduction Strategies
- Incorporate “Extended Producer Responsibility” or take-back provisions in contract.
- Establish cell phone collection programs for used cell phones.
Extended Producer Responsibility (EPR)

- Extended Producer Responsibility is defined as “the extension of the responsibility of producers for the entire product lifecycle, and especially for their take-back, recycling, and disposal.”
- Manufacturers are held physically or financially responsible for products when consumers are done with them.

Key US Cell Phone Collection Programs

- The Wireless Foundation/Donate a Phone
- Verizon’s HopeLine Program
- AT&T Wireless
- CollectiveGood
- Charitable Recycling

Key US Cell Phone Collection Programs

Since early 1999:

- Collected over 2.5 million used phones
- Donated 40,000 phones to individuals in need
- Raised over $6.5 million for charity

Cell Phone Collection Programs

- Only a tiny fraction of wireless waste collected – therefore, minimal impact on wireless waste
  - 2.5 million phones during a period where hundreds of millions of phone were retired
- Public awareness limited
- Minimal promotion

Methods of Collection

1) Permanent collections at retail stores (e.g., Sprint, AT&T and Verizon)
2) Short- or long-term phone drives
3) Collections at large events (e.g., football games)
4) Direct shipment by donors to program

Case Studies

- Verizon: SF gov’t agencies partnership collected 3,000 cell phones in 2001. CO gov’t agencies collected 1,200 to 1,500 phones in 2002.
- Sprint: One-day Federal agency collection in 2003 collected hundreds of cell phones.
- Business Collections: Thousands of phones collected via business partnerships.
### Cell Phone Collection Programs – Shipment of Phones Abroad
- Over two-thirds of refurbished phones end up abroad
  - Latin America
  - Asia
  - Africa
  - Eastern Europe

### Cell Phone Collection Programs: Impediments to Reuse/Recycling
- **Impediments to Refurbishment**
  - Durability of phones
  - External parts
  - Internal software
- **Impediments to Recycling**
  - Ease of Disassembly
  - Toxics
  - Mixed contents (e.g., plastics)

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### More Information Available About Electronic Waste on INFORM’s Web Site:

www.informinc.org