

**NORTHWEST
PRODUCT
STEWARDSHIP
COUNCIL
POLICYMAKERS'
BULLETIN**

The Northwest Product Stewardship Council endeavors to integrate product stewardship principles into the policy and economic structures of the Pacific Northwest. This is one of a series of bulletins to brief you about policy issues of importance to policymakers, business leaders, and citizens. For more information, please visit our website at www.productstewardship.net

Battery Facts

- Types of rechargeable batteries include: Nickel-Cadmium, Lead-Acid, Nickel Metal Hydride, Rechargeable Alkaline, Lithium Ion, and Zinc-Air.
- Every year, more than 3 billion batteries are used and then thrown away by American households.
- Batteries contain heavy metals such as mercury, cadmium, and lead.
- Nearly 350 million units of Nickel-Cadmium batteries are used each year.

-- from the RBRC
Battery Lesson Plan

Contact information:

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1-800-8-BATTERY
<http://www.rbrc.org>

NW PSC

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The Rechargeable Battery Recycling Corporation (RBRC) - Manufacturer Take Back Program for Rechargeable Batteries

Rechargeable batteries, particularly those containing heavy metals such as cadmium, are toxic and should not be disposed in landfills or incinerators. If managed improperly, toxic constituents from rechargeable batteries can be released into the environment causing damaging health effects. Reducing the amount of batteries in the waste stream alleviates these problems.



In 1994 the Rechargeable Battery Recycling Corporation (RBRC) was formed and funded by manufacturers in the rechargeable power industry to collect and recycle rechargeable batteries from consumers. This industry-run program is a good illustration of a product stewardship program whereby the manufacturer of a product takes responsibility for managing the waste at the end of the product's useful life. This bulletin summarizes the RBRC program and highlights the strengths and weaknesses of this product stewardship program.

BATTERIES, CADMIUM, AND THE RBRC

In the early 1990s several states independently moved toward regulation of nickel-cadmium (Ni-Cd) rechargeable batteries to address potential air and groundwater contamination from incineration or landfilling of cadmium. Largely in response to the patchwork of Ni-Cd regulations, manufacturers of rechargeable batteries established the RBRC as an alternative to individual states implementing separate disposal diversion systems, as well as to pre-empt future legislation in other states.

The RBRC's Charge Up to Recycle!® program offers a recycling plan to communities, public agencies, and retailers -- who pay nothing to participate -- and businesses -- who pay only transportation costs. The rechargeable power industry funds the program by licensing the RBRC's Battery Recycling Seal. Licensees pay a fee to place the RBRC Battery Recycling Seal on their Ni-Cd and small sealed lead batteries and/or battery-powered products. Currently, there are more than 350 RBRC licensees whose companies represent more than 90% of the rechargeable power industry.

The Charge Up to Recycle!® program is supported by many national retailers, including: Best Buy, Black & Decker, Cingular Wireless, Circuit City, GTE Wireless, The Home Depot, RadioShack, Sears, Target, U.S. Cellular, Verizon Wireless, and Wal-Mart. These comprise over 30,000 drop-off locations in the U.S. and Canada.

Strengths and Weaknesses of RBRC

Program Strengths

- Incentives for better design. With the industry paying for the costs of processing the batteries, manufacturers in the rechargeable power industry have a clear financial incentive for redesign. They can reduce toxicity and redesign the batteries and battery-containing products to allow for easy disassembly, battery removal and recycling of the components.
- Batteries and their toxic components are being recycled properly. Since 1994, RBRC has recycled more than 20 million pounds of rechargeable batteries at International Metals Reclamation Company (INMETCO), a recycler in Pennsylvania. Only process waste goes to disposal.
- RBRC is a product stewardship program. RBRC demonstrates an important advance in the waste management policy arena - manufacturers are taking responsibility for the products they produce and provide environmentally sound waste management solutions.

Listing of NWPSC Steering Committee Agencies

King County
Department of Natural
Resources and Parks

Kitsap County Solid
Waste Division

Local Hazardous
Waste Management
Program in
King County

Metro Waste
Reduction and
Outreach Division,
Portland, OR

Seattle Public Utilities

Snohomish County
Solid Waste
Management Division

City of Tacoma Public
Works Solid Waste
Management

U.S. Environmental
Protection Agency,
Region X

Washington State
Department of
Ecology

Program Weaknesses

- Potentially low retailer awareness of the program. Despite national commitment, there appears to be low retailer awareness by several major retailers at the local level. For example, one reporter contacted more than 70 stores across the country in order to recycle a used rechargeable battery. Fewer than half of the clerks contacted were aware of the program for drop off at the store.
- Difficult to track and measure success. Another challenge facing RBRC, though not unique to this waste stream, is the difficulty of tracking and measuring success. Intricacies include the number of individual battery cells produced versus the number that are put into a single pack; complications of tracking where the battery cells are produced versus where they are put into a product; and the life expectancy of specific batteries. These factors make it difficult to establish a baseline for the number of batteries that can be expected to be recycled in a given year. RBRC does not provide an annual recycling rate estimate.

EVOLVING MANUFACTURER RESPONSIBILITY

The RBRC is making good progress in developing a product stewardship approach to establishing producer responsibility for rechargeable batteries.

- RBRC demonstrates an important advance in the waste management policy arena -- manufacturers are taking responsibility for managing the impacts of the products they produce.
- The environmental costs to dispose of rechargeable batteries have been ultimately shifted from local and state governments to the manufacturers and users of rechargeable batteries. Manufacturers should thus have a direct financial incentive to redesign their products to reduce these costs.
- The structure of RBRC and its licensing system could be adapted to other industries. Licensing provides an equitable and efficient method of allocating costs when it is not feasible for each manufacturer to take back its own product.

RBRC's efforts are to be commended and local governments should work with RBRC to encourage their communities to make use of these programs.

Actions for Governments

- Help promote private-sector RBRC programs in your community by working directly with RBRC. Collaborate with participating collection sites to expand retailer participation and increase customer awareness and use of the program. To locate a drop-off in your community, call 1-800-8-BATTERY or visit www.rbrc.org.
- Make sure your agency and community are participating in RBRC programs to recycle discarded rechargeable batteries.

