

Shock to the System

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Got batteries? Studies show that many people have a desk drawer full of them, not because they have an emotional attachment to them, but because they inherently know they have value and should not be disposed in the trash. It's time to provide consumers with a convenient way to recycle those batteries and put that valuable resource back into the economic mainstream, creating jobs in the process. Like most used products, batteries should be seen as a commodity and a business opportunity, not a waste.

Rechargeable batteries contain valuable metals such as cadmium, cobalt, iron, lead and nickel, and some states have banned them from disposal. Alkaline batteries are banned from disposal in California and local governments are spending about 10 times the cost of regular municipal solid waste (MSW) to manage them through household hazardous waste (HHW) programs. The [California Product Stewardship Council](#) (CPSC), a non-profit organization that promotes extended producer responsibility (EPR) policy for problem waste products, has supported projects and legislation to test collection methods and develop a new producer responsibility program to manage leftover batteries that will impact every battery purchaser and user in California, while serving as a model for other states.



A yearlong pilot project in the San Gabriel Valley region of Los Angeles County is teaching battery producers how to design a statewide stewardship program. Household batteries are a very costly problem for local governments across California and in most states. When the City of Los Angeles passed a resolution in support of EPR in 2008, it stated that batteries collected in the HHW program cost the city \$1,000 per ton.

CPSC is the primary grant partner to the San Gabriel Valley Council of Governments (SGVCOG) on a statewide grant from the Department of Resources, Recovery and Recycling ([CalRecycle](#)). The six grant objectives are:

1. Assess public attitude, consumer motivation, and consumer knowledge level and understanding of the U-waste disposal ban in the San Gabriel Valley in order to develop an appropriate, viable producer managed and financed system;
2. Test and document financial and publicity value to retailers of providing take-back programs;

3. Build knowledge among community members and others about the benefits of “cradle-to-cradle” producer responsibility by engaging in a public awareness campaign;
4. Develop battery take-back program models based on the data collected. Identify and, leveraging local government networks, engage manufacturers and local retailers in implementation of producer managed and financed programs;
5. Support expanded take-back and assist local governments in amending procurement policies to include EPR for batteries; and
6. Encourage local businesses to become certified as “retail product stewards” to provide battery take-back services.

The Producer Responsibility Solution

How big is the battery problem in California? According to a study conducted almost 10 years ago by California Integrated [Waste Management](#) Board (now CalRecycle) and documented in a report titled “Household Universal Waste Generation in California,” more than 500 million batteries (alkalines and rechargeables) were sold each year in the state, and only one-half of one percent are recycled through city and county HHW programs at a cost to ratepayers and taxpayers projected to exceed \$31 million per year.

EPR is a policy approach to managing problem waste products such as batteries. It transfers the cost of product waste management to the producers, which ultimately pass those costs on to the consumers. This means disposal costs are no longer born by the general public through increased taxes or garbage rates. The approach is used around the world as a way to stop socializing the costs of expensive waste products while allowing consumers to see the full cost of a product and better determine if it is the right purchase for them.

While some retailers sell a lot of batteries, very few collect them for recycling. Consumers are left with the message, “Don’t throw them in the trash, but good luck finding a place to recycle them.”

So What Does the Public Think?

The pilot project sought to address the inconvenience of recycling batteries, so more current and localized information was gathered in regards to public knowledge of batteries and recycling. As part of the grant project, in April 2010, two major studies were completed:

1. A phone survey conducted by EMC Research on Battery and CFL Recycling.
2. Focus groups for both retailers and consumers facilitated by Elliot Benson Research.

These studies and all grant project work are publicly available at www.calpsc.org/projects/SanGabriel-HD18.html. In short, the key findings were:

- 59 percent of those surveyed knew that household generated batteries should not go in the trash.
- 56 percent of those surveyed said they still threw them in the trash.
- A majority of those surveyed said that a grocery store would be the most convenient location for them to recycle.
- 69 percent of those surveyed said they are more likely to recycle if they are offered an economic incentive such as a coupon off future purchases.

As one focus group participant suggested, “Make it so that discarding them would be part of people’s regular process. For example, the place to get rid of it could be at the supermarkets you go to get them to begin with.”



Additional findings were that both consumers and retailers would be willing to properly dispose of batteries if they knew they were banned from disposal, where to take them and if it was convenient. Very few were aware of locations to recycle batteries (or any HHW).

The big question always is who should pay for recycling. A key component of EPR programs is that the producer and consumer cover this cost. When asked who should pay for the proper handling of hazardous product recovery, a majority of consumers said the fairest approach is to add the cost of end-of-life management to the price of the product rather than spread it across all tax and rate payers.

Retailers also concluded that cost of disposal should be added to the cost of the product rather than spread over all tax or rate payers. Some retailers focused on the ethical responsibility of manufacturers to clean up the hazardous products they produce while taking responsibility for making safer products. Some assumed only a few cents would need to be added to the price of the products and consumers would willingly pay the modest price increase.

Both consumers and retailers said that “producer responsibility” includes making products that are less toxic to the environment and that manufacturers have an obligation to help pay for the proper management of the product at its end of life. One retail focus group participant summed it up this way: “If they’re going to be manufacturing these things, they need to be responsible. It’s an ethical argument and ... they violate all [types of ethics] by not being responsible for their actions. They need to help with that...”

Retailers also were very clear: they are not going to bear the cost of recycling alone. Most were open to providing space for a collection bin for batteries, but none were willing to pay the additional disposal costs.

This baseline information was used to design a pilot battery EPR project that was convenient with adequate public outreach and retailer partnership in the form of collection sites.

The Call2Recycle Program

The good news is that there is already a battery stewardship program designed and managed by rechargeable battery producers: [Call2Recycle](#).

The bad news is that that program only accepts rechargeable batteries and omits alkaline batteries, which comprise about 80 percent of household batteries generated. Call2Recycle is the only free battery and cell phone collection program in North America. Since 1994, the program has diverted more than 60 million pounds of rechargeable batteries from local landfills and established a network of 30,000 recycling drop-off locations.

A 2006 California law requires retailers of rechargeable batteries to provide and advertise take-back options at no cost to the consumer. However, large chain supermarkets – the place consumers in the focus group said they wanted to bring batteries for recycling – were exempted from this legislation.

“While Call2Recycle had no real roadmap to guide us in developing our program, there is increasing evidence that both industry and government agencies are beginning to fully appreciate the approach we have taken,” says Call2Recycle Executive Director Carl Smith. “And no doubt, many others are going to embrace this approach in the very near future.”

Making Battery Recycling Much Easier

To start the project, the grant team needed producers to design a collection system and pay the end of life costs. Call2Recycle provides the collection boxes to the take-back locations, and is collecting data on how many more rechargeables are recycled when the public can bring all household batteries back for recycling instead of trying to sort out rechargeables. Its bins for rechargeables are regularly contaminated with alkalines from uninformed but well-meaning consumers, so the organization is curious about the feasibility of commingling the two and processing them together.

With battery producers paying the recycling costs, the grant team was able to recruit 40 businesses (not all retailers) to be battery collection locations. Some retailers stated that once an ad ran in the newspaper or on the radio, they might receive 100 phone calls in one day asking about battery drop-off. They love the program and have collected more than a ton of batteries in just six months.

To promote the 40 collection sites, the project team has done a lot of public outreach, including:

- Window clings as collection identifiers placed in store windows.
- “Battery brochures” distributed at locations across the SGVCOG area.
- A kick-off media event at collection sites on Earth Day 2011.
- Slides on local cable channels promoting battery project.
- Press release and article templates used by cities to promote collection sites.
- Three paid billboard spots and two free public service announcements.

The early results of retail collection are impressive, with some locations returning a full box every two weeks. Most have returned at least one. More than 1 ton of batteries has been collected in six months, with collection rates improving each month. Pilot organizers hope to collect 4 tons over the course of the one-year pilot.

Buying Batteries with Take-Back In Mind

Another major goal of the grant was to increase awareness and purchase of batteries from producers and vendors that provide take-back services. While almost all rechargeable battery producers are participating in the Call2Recycle program, we only found one alkaline producer that is currently taking back their batteries as a cost of doing business: [PerfPower Inc.](#), a division of EcoReady Corp.

PerfPower is the first and only U.S. alkaline battery producer pilot organizers found that offers a “cradle to cradle” solution for their alkaline batteries. The company has developed an alkaline battery made from recycled paper, plastic and steel. It solicits the return of its spent products for recycling at no added cost to the customer using a pre-paid shipping label via the U.S. Postal Service.

Under the grant, fact sheets were developed to show how to incorporate EPR language into procurement policies. Eight fact sheets were developed for various HHW products including batteries. Despite the push for alkaline recycling, rechargeable batteries are still posited as the preferred choice given their long useful life and established EPR system through Call2Recycle.

Is Battery EPR Legislation Coming?



In 2010, California became the first state to introduce EPR legislation for all household batteries. At first, battery producers balked. But after two years of negotiations, they have conceded that a take-back program is needed. While the current bill, SB 515 by Sen. Ellen Corbett, continues to be debated, alkaline battery producers have hired a consultant to develop a U.S. battery stewardship program, due to roll out nationally in 2013.

Partnership and Producer Responsibility Works

The partnership for this project developed between local governments, CPSC, Call2Recycle, local retailers, chambers of commerce and the media has seen early success. Lessons learned will yield models usable by battery producers and others to foster state or national efforts for battery stewardship. While household battery EPR legislation in California is debated, the battery industry is moving forward in hopes of achieving a nationally harmonized program. If the battery producers are successful at getting a national battery stewardship program rolled out in 2013, it would really be a win-win-win-win for consumers, taxpayers, the environment and the economy.