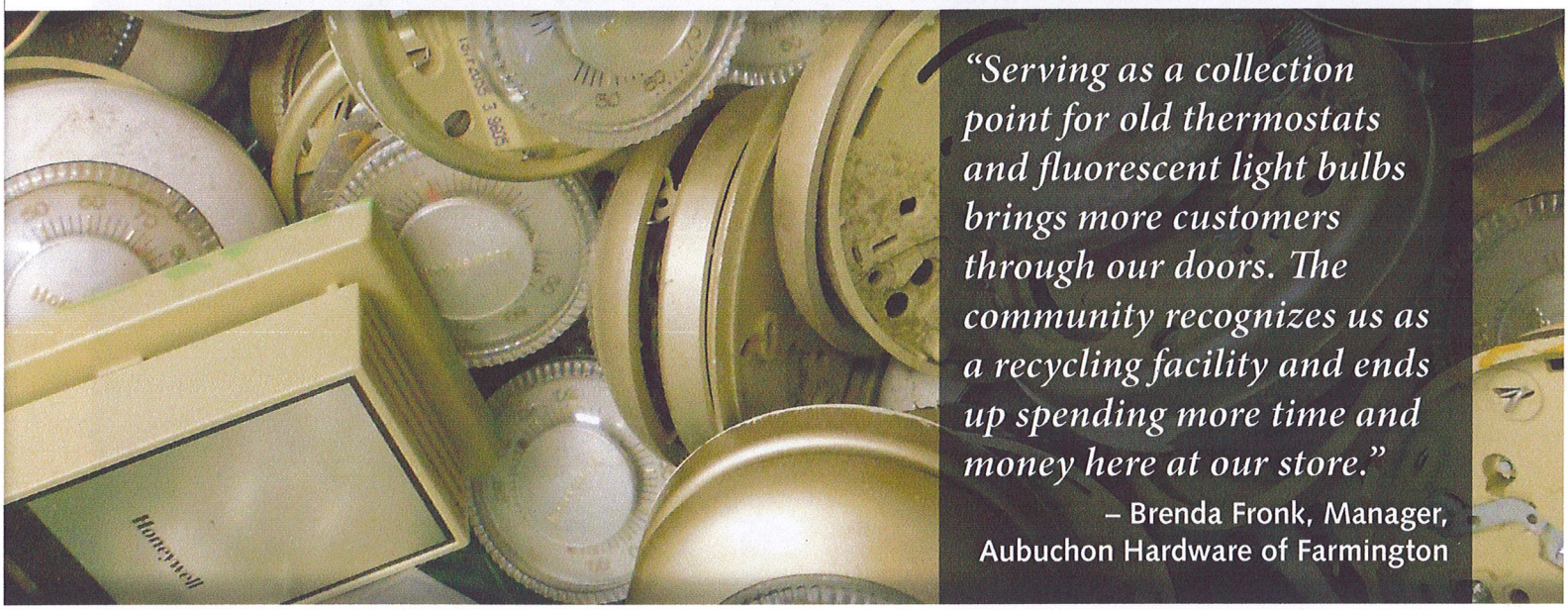
Product Stewardship A Success for Maine

Case Study #3 Mercury-Containing Household Products: Thermostats and Light Bulbs



"Serving as a collection point for old thermostats and fluorescent light bulbs brings more customers through our doors. The community recognizes us as a recycling facility and ends up spending more time and money here at our store."

– Brenda Fronk, Manager, Aubuchon Hardware of Farmington

Maine is a national leader in product stewardship laws that keep household products containing mercury out of the waste stream. Maine's producer-funded recycling programs for thermostats and fluorescent lamps benefit small business owners and Maine residents, and they reduce the environmental and health costs of mercury exposure. By signing up as collection sites, local hardware stores and other retailers have seen increased business to their stores. In addition, town solid waste facilities are collecting more and more mercury-containing products, while saving Maine residents money because the recycling programs are funded by thermostat and lamp manufacturers.

The Problem With Mercury

The Maine Legislature created product stewardship programs for mercury-containing products because mercury is a toxic heavy metal that causes brain damage and heart problems. Mercury persists and accumulates in the environment and in wildlife, where it causes developmental and neurological effects. Levels of mercury in Maine fish, loons, and eagles are among the highest in North America. All of Maine's inland waters have a fish consumption advisory due to mercury contamination levels.

Product stewardship programs are one way to help reduce the levels of mercury in our environment. Mercury-containing products that are tossed in the trash end up in landfills or waste incinerators, where the mercury can end up in our land and water, contaminating people and wildlife. Maine's programs have removed hundreds of pounds of mercury from the waste stream.



Mainers get a $5 coupon at the store when they return old thermostats that contain mercury.

What is "Product Stewardship"?

Product Stewardship is an advanced recycling strategy that requires manufacturers to share responsibility for the safe collection and recycling or disposal of their products and packaging. Product stewardship shifts recycling and disposal costs from taxpayers to producers and consumers.

Product Stewardship Protects Maine's Environment



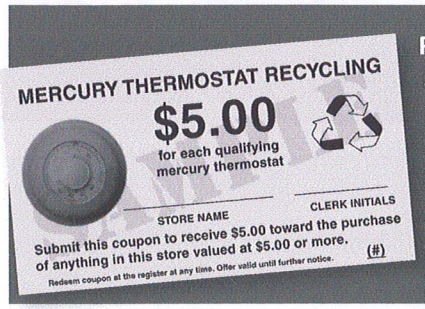
Aubuchon Hardware, Farmington

Aubuchon Hardware in Farmington, which serves people throughout Franklin County, is one of 125 Aubuchon hardware stores in New England. Aubuchon participates in Maine's product stewardship program as a retail collection point for used thermostats from residents and service professionals, as well as spent fluorescent lamps and CFLs from residents.

"We see ourselves as more than just a place for our customers to buy things," says Store Manager Brenda Fronk, of Farmington, who has managed retail operations at Aubuchon since 1988. "By participating as a collection point for mercury-containing household products we are helping to protect the environment and we are adding to the services we provide to our customers. It makes them more likely to visit the store and spend money here."

In addition to improving customer service and increasing foot traffic, the thermostat collection program brings in more sales for Aubuchon by providing a $5.00 instant store-credit coupon for anyone who returns a thermostat there. Thermostat manufacturers fund this credit and customers usually use the coupon for a purchase that totals more than $5.00, so the thermostat program actually fuels more business for participating retailers.

THERMOSTATS: Discarded mercury-containing thermostats have been a substantial source of mercury in Maine's solid waste stream. Each unit contains about four grams of mercury (about a thimbleful). To keep thermostats out of the trash, in 2006 Maine enacted the first comprehensive, incentive-based mercury thermostat collection law in the nation. The law requires manufacturers of these products to fund and operate the collection program, which serves residents and heating, ventilation, and air conditioning (HVAC) professionals. More than 70 wholesalers and 60 retail stores around the state now serve as collection points. The program offers a $5 incentive for every qualified thermostat brought to one of these locations for recycling, which keeps mercury out of our landfills, incinerators and environment.


MERCURY THERMOSTAT RECYCLING

$5.00

for each qualifying mercury thermostat

STORE NAME

CLERK INITIALS

Submit this coupon to receive $5.00 toward the purchase of anything in this store valued at $5.00 or more.

Redeem coupon at the register at any time. Offer valid until further notice. (#)

Reducing Mercury in the Environment: The thermostat recycling program has established Maine as a national leader in reducing mercury pollution. Maine now has one of the highest per capita mercury thermostat collection rates in the country – almost 10 times higher than the national average. Since the thermostat industry began offering the $5 incentive for returned thermostats, more than 30,000 units containing more than 220 pounds of mercury have been recovered. After its launch in 2007, returns more than doubled compared with the same period the previous year.

Product Stewardship Helps Small Businesses



Oak Hill Ace Hardware, Scarborough

> *"When customers come to our store to recycle, they buy new products here too."*
>
> – Anne Johnson, Co-owner, Oak Hill Hardware

Founded in 1972, Oak Hill Hardware has been serving Scarborough for 40 years. Oak Hill now collects mercury-containing thermostats; mercury-containing light bulbs, including compact-fluorescent lights (CFLs); rechargeable batteries; and cell phones for Scarborough's 18,000 residents and those in neighboring towns. "Participating in Maine's stewardship program for products that contain mercury was an easy choice," says Anne Johnson, co-owner of two Scarborough hardware stores. "It's the right thing to do and it grows our business by keeping people coming into the store. Customers who are recycling items are also usually purchasing items."

Any Maine resident can bring his or her old mercury-containing thermostats, light bulbs, or other covered products to Oak Hill Hardware. When Oak Hill receives a thermostat, the company gives the customer a $5 in-store coupon. "We have a loyal customer base. They seem to be pleased that we offer these services and that there is a local place where they can recycle and it doesn't cost them a thing. The thermostat program is even more beneficial because they save real money immediately on purchases here," says Johnson.

Oak Hill also collects non rechargeable, alkaline batteries, for which Maine does not have a product stewardship program. This service costs the store money, but the store owners noticed customers requesting this service, too. "We love serving as a collection point for CFLs and other products because it's good for the environment and our community," says Johnson.



LIGHT BULBS: Fluorescent light bulbs, including long tubes and compact-fluorescents(CFLs), contain a small amount of mercury sealed inside the bulb. Throwing old bulbs in the trash can cause them to break and expose workers and the environment to mercury. In response to the threats from this mercury, in 2009 Maine passed a law to require manufacturers of mercury-containing light bulbs to operate and fund a collection and recycling system for used bulbs. The law requires lamp manufacturers to publicize and educate Maine people about lamp recycling, provide safe collection and storage containers for lamp retailers and municipal solid waste facilities, pay to ship the containers to a central facility, and ensure proper handling and recycling of the bulbs at no cost to the collectors or customers.

Convenient Collection: Since the CFL product stewardship program began, in January 2011, Maine residents have enjoyed free and convenient recycling of CFLs and other fluorescents at more than 240 collection locations throughout the state. Mainers can bring their old bulbs to town waste collection sites, or to one of 125 retail stores.

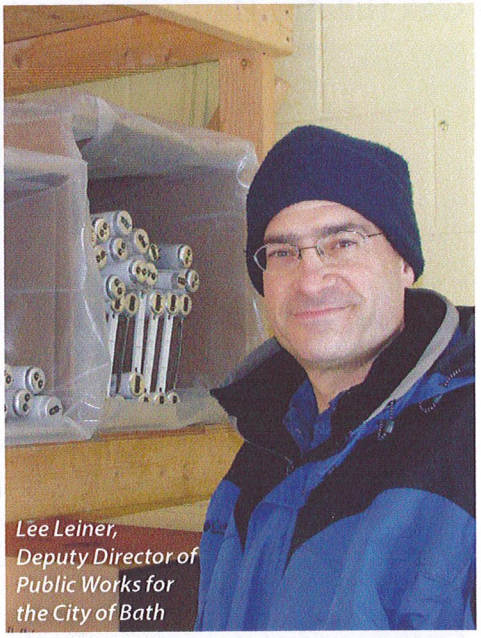
Product Stewardship Saves Money for Mainers



City of Bath

The City of Bath's municipal solid waste facility offers recycling for more than 35 different materials and, in June 2011, signed up to participate in Maine's product stewardship program for household mercury-containing lamps. The facility accepts fluorescent bulbs of all sizes for free from all 8,500 Bath residents, plus businesses in Bath and neighboring towns. The facility places the mercury-containing bulbs in special containers provided by lamp manufacturers. When the containers fill up, staff simply arrange for a pickup through a parcel service. The shipping costs are paid directly by lamp manufacturers and there is no charge for recycling the material. Shipments of lamps go to a central facility, where they are handled and recycled safely.

"I couldn't imagine a simpler system," says Lee Leiner, Deputy Director of Public Works for the City of Bath. "We've recycled more than 1,100 mercury-containing bulbs through the product stewardship program so far, which has saved us hundreds of dollars." Product stewardship for mercury-containing lamps saves money for Bath that otherwise would have been spent on shipping and recycling. The operating budget for the Bath Solid Waste and Recycling program is paid for by local residents, so this product stewardship program saves taxpayers real money.



Lee Leiner, Deputy Director of Public Works for the City of Bath

For Further Information:

NRCM's Product Stewardship Project: www.nrcm.org/productstewardship.asp

Help support sustainable materials policies by joining NRCM's Action Network: nrcm.kintera.org/Action_network_signup

The Maine Department of Environmental Protection's Universal Waste Collection Locations Map: www.maine.gov/dep/gis/datamaps/brwm_recycling/

The Thermostat Recycling Corporation: www.thermostat-recycle.org/

LampRecycle, Developed by The National Electrical Manufacturers Association: www.lamprecycle.org

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