Implementing Product Stewardship in Maine

February 2015

Contact: Melanie Loyzim, Director
Bureau of Remediation and Waste Management
Phone: (207) 287-7890
Executive Summary

The Maine Department of Environmental Protection (Department) is submitting this report in accordance with 38 M.R.S.A. § 1772(1), which requires the Department to provide an annual update on the performance of existing product stewardship programs, as well as product or product categories that when generated as waste may be appropriately managed under a product stewardship program.

From 1992 to 2013, Maine enacted six laws that require producers to establish collection and recycling programs for dry mercuric oxide and rechargeable batteries, mercury auto switches, electronic waste, mercury thermostats, mercury lamps, and architectural paint. In addition, Maine also has a product stewardship law for cellular telephones; that law makes retailers responsible for the collection and recycling of unwanted cell phones rather than the manufacturers.

The following trends have been observed under the existing programs:

- Collection rates for covered products have varied since each program began, but have generally increased following program inception.
- Rechargeable battery collection rates increased 31% since 2009.
- The amount of consumer electronics collected reached the highest levels in 2013 since the program began in 2006.
- Mercury-added lamp collection also reached the highest levels since program inception in 2011.
- The amount of mercury auto switches and mercury thermostats declined in 2013.
- The market for used cellular telephones remains robust, with so many participants that collection rates cannot be measured, indicating that the government mandated recycling program for unwanted cell phones is unnecessary to drive recycling and could be repealed.

The Department will review product stewardship program plans for architectural paint in 2015, and will continue to support voluntary efforts to divert post-consumer carpet and other products from landfilling.
I. Introduction

The product stewardship programs at the Department of Environmental Protection are defined at 38 M.R.S.A. § 1771(5), as “producer’s taking responsibility for managing and reducing the life cycle impacts of the producer’s product, from product design to end-of-life management,” in order to support the State’s solid waste management hierarchy (38 M.R.S.A. § 2101). This hierarchy prioritizes the management of solid waste, through various actions, the highest being reduction in volume and toxicity of waste at the source to the lowest being land disposal of waste. Product stewardship, which also may be referred to as “extended producer responsibility,” shifts the cost of the end-of-life management of products from municipalities and taxpayers to the producers and the consumers who purchase the products that are included in that program.

Product stewardship programs can be an effective tool to encourage the diversion of materials from disposal to recycling, and to encourage manufacturers to alter product design to support the recovery of materials from the products, and to invest in management systems to ensure the recycling of their products at the end of life. This reduces the costs of recapturing commodity materials from products, and ideally results in a positive commodity value when products reach the end of their useful life. As the concept of product stewardship has become more familiar, manufacturers of some products are proactively developing preferred model programs for recycling their products.

In accordance with 38 M.R.S.A. § 1772(1), this report includes updates and evaluations on the performance of Maine’s existing product stewardship programs, focusing on data from the last five years, with recommended next steps to improve program performance and evaluation. The report also addresses future product strategies under development.

II. Performance of Existing Product Stewardship Programs

From 1992 to 2013, Maine enacted six laws that require producers to establish collection and recycling programs for dry mercuric oxide and rechargeable batteries, mercury auto switches, electronic waste, mercury thermostats, mercury lamps, and architectural paint. In addition, Maine also has a product stewardship law for cellular telephones; that law makes retailers responsible for the collection and recycling of unwanted cell phones rather than the manufacturers.

A. Rechargeable batteries program performance

In the early 1990’s, several states enacted laws requiring rechargeable battery manufacturers to provide a system for the recycling of nickel-cadmium and sealed lead acid rechargeable batteries, including Maine (38 M.R.S.A. § 2165). The rechargeable battery manufacturers established the non-profit Rechargeable Battery Recycling Corporation (RBRC), now known as Call2Recycle (C2R) to fulfill their legal obligations. C2R’s program is a revenue positive enterprise, so it provides containers for collecting and shipping collected rechargeable batteries at no cost upon request. C2R annually provides the Department with Maine specific data on the numbers and types of collection sites (business, retail, manufacturing, government) registered with their program as well as the amount of rechargeable batteries recycled from each. The amount of batteries collected and

...
recycled by C2R from Maine increased from 26,193 pounds in 2009 to 34,337 pounds in 2013, remaining at a relatively stable amount over the past four years).

**Figure 1 – Pounds Rechargeable Batteries Recycled**

![Graph showing pounds of rechargeable batteries recycled from 2009 to 2013.](image)

### B. Mercury auto switches program performance

Maine law established a mercury auto switch recycling program in 2001. In 2003, American automakers discontinued the use of elemental mercury in convenience light, automatic braking system, and active ride control system switches. The National Vehicle Mercury Switch Recovery Program (NVMSRP) received funding to operate through 2022 from a U.S. Bankruptcy Court Order.

The NVMSRP is administered by End-of-Life Vehicle Solutions (ELVS), a non-profit stewardship organization established by the mercury auto switch manufacturers to manage both their required and voluntary mercury switch recycling programs throughout the U.S. ELVS provides auto dismantlers with free buckets, shipping and recycling for all collected switches, and pays the incentives to the dismantlers as required by Maine law (38 M.R.S.A § 1665-A). ELVS provides Maine DEP with quarterly reports and access to monthly reports on the number of mercury auto switches turned in for recycling from identified locations in Maine.

Pounds of mercury collected from switches in Maine reached its second highest level in 2012 since program inception, then declined significantly in 2013.

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1 *Stipulation and Agreed Order entered 6/29/11 by Motors Liquidation Company GUC Trust and 12 states, entered into through the U.S. Bankruptcy Court Southern District of New York.*
Table 1 - Mercury Auto Switch Recycling 2009-2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of switches recycled</th>
<th>Percentage of estimated number of switches available</th>
<th>Pounds of Mercury collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>6868</td>
<td>33%</td>
<td>15</td>
</tr>
<tr>
<td>2010</td>
<td>5685</td>
<td>27%</td>
<td>13</td>
</tr>
<tr>
<td>2011</td>
<td>2236</td>
<td>12%</td>
<td>5</td>
</tr>
<tr>
<td>2012</td>
<td>7139</td>
<td>40%</td>
<td>16</td>
</tr>
<tr>
<td>2013</td>
<td>1647</td>
<td>11%</td>
<td>4</td>
</tr>
</tbody>
</table>

Along with furnishing a very convenient collection system, ELVS provides the dismantlers with training videos (via YouTube), listings of vehicles with mercury switches and ABS sensors, and photo-based guidance documents showing where to find and how to remove the switches. In addition, the Department has sent postcards to vehicle dismantlers to remind them about the ELVS program, the availability of payment for switches recycled, and to send their mercury switches in for recycling. Also, staff from the Department’s Response Services, Hazardous Waste Enforcement, and Stormwater Management programs all check on the auto dismantlers’ implementation of the switch collection program when they visit auto dismantlers’ yards on business related to their respective programs.

C. Electronic waste program performance

Maine’s legislated extended producer responsibility (EPR) program for certain covered electronic devices (CEDs) began in 2006 for households, and for K-12 schools and businesses with 100 or fewer employees in 2011 (see 38 M.R.S.A. § 1610). CEDs include consumer products with video displays greater than 4” diagonal (TVs, monitors, laptops, digital picture frames, tablets, e-readers), game consoles and desktop printers. In addition to the CEDs recycled through the EPR program, some CEDs as well as other electronics from Maine are recycled through independent programs or in conjunction with the EPR program. In 2010, Goodwill and Dell began accepting computer-related electronics through their ReConnect program at all Goodwill locations in Maine. Both Best Buy and Staples have instituted free electronics recycling at their retail locations. Table 2 shows the total and per capita weights of electronics recycled each year from 2009 through 2013, plus voluntarily reported weights recycled from other programs.

Table 2 - Electronic Waste Recycling in Maine

<table>
<thead>
<tr>
<th></th>
<th>Maine Program - total pounds</th>
<th>Maine Program Per Capita</th>
<th>Goodwill-Dell ReConnect - pounds</th>
<th>Other non-program e-waste</th>
<th>Total pounds reported</th>
<th>Total Pounds Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>7,912,292</td>
<td>5.99</td>
<td>N/A</td>
<td>Not reported</td>
<td>7,912,292</td>
<td>5.99</td>
</tr>
<tr>
<td>2010</td>
<td>5,368,467</td>
<td>4.06</td>
<td>1,151,997</td>
<td>Not reported</td>
<td>6,520,464</td>
<td>4.93</td>
</tr>
<tr>
<td>2011</td>
<td>6,931,248</td>
<td>5.24</td>
<td>1,160,233</td>
<td>Not reported</td>
<td>8,091,481</td>
<td>6.12</td>
</tr>
<tr>
<td>2012</td>
<td>7,310,495</td>
<td>5.62</td>
<td>989,819</td>
<td>1,253,748</td>
<td>9,554,062</td>
<td>6.57</td>
</tr>
<tr>
<td>2013</td>
<td>8,218,434</td>
<td>6.19</td>
<td>1,462,587</td>
<td>2,017,233</td>
<td>11,698,254</td>
<td>8.81</td>
</tr>
<tr>
<td>Totals</td>
<td>41,015,355</td>
<td>--</td>
<td>4,764,636</td>
<td>3,270,981</td>
<td>49,050,972</td>
<td>--</td>
</tr>
</tbody>
</table>
The amount of electronic waste collected in Maine for recycling continued to increase, with the highest amounts achieved in 2013 since the program began. Maine’s overall collection and recycling rate of 8.81 pounds per person in 2013 compares favorably with data reported by other states, with only a few other states reporting a higher per capita rate (see data collected by the Electronics Recycling Coordination Clearinghouse at www.ecycleclearinghouse.org/Content.aspx?pageid=59).

D. Mercury-added thermostat program performance

38 M.R.S.A. §1665-B, Maine’s Mercury-added Thermostats law, was enacted in 2005 to establish extended producer responsibility for the collection and recycling of mercury-added thermostats. This law requires that the program be designed and implemented to achieve a maximum rate of collection [38 M.R.S.A. § 1665-B(2)(A)(1)], and it sets collection and recycling goals by weight, of at least 125 pounds of mercury within two years of implementation of a collection program for contractors and service technicians, and 160 pounds per year within three years of implementation of a program for homeowners. The law also requires manufacturers to “provide a financial incentive with a minimum value of $5 for the return of each mercury-added thermostat”. In the program’s beginning, collection rates were below 10%, despite the availability of collection boxes at all HVAC wholesalers.

In 2007, the Thermostat Recycling Corporation (TRC), a non-profit organization that facilitates and manages the collection and proper disposal of mercury-containing thermostats, began implementation of the incentive program, where five dollars was provided to the deliverer of each mercury containing thermostat at a collection point, with HVAC wholesalers continuing participation as mandatory collection sites; voluntary retail participation to serve residents began in 2008.

Estimated recycling rates in 2013 declined to 17.65%, from a steady rate of approximately 25% since rates peaked in 2009. The Department does not have data on the actual number of mercury-added thermostats still available for collection, and only has estimates of the number that would be removed each year in Maine. Recycling rate estimates are based on an estimated 27,200 mercury thermostat removals per year in Maine.

| Table 3 – Mercury Thermostat Recycling Rates |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | 2009            | 2010            | 2011            | 2012            | 2013            |
| Number of t-stats | 7029            | 6693            | 6872            | 7012            | 4802            |
| Recyling rate    | 25.84%          | 24.6%           | 25.26%          | 25.78%          | 17.65%          |

The 2014 Implementing Product Stewardship in Maine report includes a discussion of the uncertainty in the numbers used to establish the statutory recycling goals and the estimated number of mercury thermostats available for recycling.

The Mercury-added Thermostats law also requires manufacturers to “provide a financial incentive with a minimum value of $5 for the return of each mercury-added thermostat.” Thermostats can be
returned via the TRC program at wholesalers (any wholesaler that primarily sells heating, ventilation and air conditioning equipment to contractors is required to act as a collection site for mercury thermostats) and some contractors, as well as at voluntary retail and municipal locations (designated as “HHW” – household hazardous waste collection sites). In addition, the Department receives data from hazardous waste manifests on mercury thermostats recycled outside of the TRC program. Figure 2 shows thermostat collection numbers by collection site type.

In 2012, there was a significant increase in the number of thermostats turned in through municipal household hazardous waste (HHW) collections. It appears that this increase was primarily due to a temporary program in which ecomaine (a non-profit waste management company owned and operated by 21 municipalities in Southern Maine) supplemented the TRC $5 incentive with an additional $5 incentive (providing a $10 incentive) for each mercury-added thermostat turned in to their facility in Portland. In 2013, TRC undertook a national outreach and education campaign aimed at contractors.

E. Mercury-added lamps program performance

Manufacturers of mercury-added lamps utilize the National Electrical Manufacturers Association (NEMA) to implement their product stewardship responsibilities for household mercury-added lamps. This program provides free containers, shipping and recycling services to voluntary retail and municipal collection sites.

NEMA reports that 97,743 mercury-added lamps were recycled through its product stewardship program in Maine in 2013. Based on historic sales data, NEMA estimates that there were 844,576 residential mercury-added lamps available for recycling in Maine in 2013. Based on that estimate, 11.6% of available lamps were collected and returned for recycling through the manufacturers’ program in 2013, compared to 7.1% in 2012.
Municipal collections sites utilizing the NEMA program have indicated they find the program easy to use and appreciate the cost savings it provides to them.

In the fall of 2013, NEMA contracted with Critical Insights, a market research firm in Portland, to conduct a consumer awareness survey. This survey revealed that 47% of Mainers polled knew they could recycle their light bulbs, but 58% responded that they threw their light bulbs away. In 2014, NEMA continued a coordinated marketing campaign to educate Maine consumers on their free recycling program and about the disposal ban on fluorescent light bulbs. This included: print ads in Uncle Henry’s, Downeast Magazine, Bangor Daily News, Portland Press Herald and some local weeklies; distribution of a radio public service announcement (PSA) to 95 area-specific radio stations; internet ads based on terms searched; and an expansion of its print, signage, and live read broadcasts advertising at University of Maine Black Bear sporting events.

### F. Cell phone recycling program performance

The recycling of cellular telephones is encouraged in Maine by a product stewardship law. However, unlike other product-specific programs, the law assigns recycling requirements to retailers and reporting requirements to cellular telephone service providers, rather than producers.

Continuing a long-term trend, unwanted cell phones have market value, and a free collection system, offered by retailers and varying organizations, for recycling cell phones is very widespread in Maine. The collection network includes 100 locations offered by the five cellular telephone services providers and their authorized dealers and 675 additional sites offering the Call2Recycle® program (371 retail and 304 municipal, public agency and business locations, including many local solid waste and recycling facilities). Retailers utilizing the Call2Recycle® program include several of the larger retail chains (Rite Aid, RadioShack, Best Buy and Wal-Mart).

In addition to these physical collection sites located across the state, there are many internet-based non-profit organizations soliciting donations of cell phones, as well as for-profit businesses offering to purchase cell phones from consumers. A quick Google search for “cell phone recycling for cash” finds over 2 million “results” and 11 paid advertisers on “page 1” offering to buy cell phones directly from consumers. The strength and success of these various programs in capturing unwanted cell phones should be celebrated, and indicates that, due to the robust recycling opportunities available through the private sector, the government mandated recycling program for unwanted cell phones could be repealed.

#### Table 4 – Household Mercury-added Lamp Recycling Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>NEMA collection sites</th>
<th># lamps recycled by NEMA</th>
<th># lamps recycled by others</th>
<th># lamps available for recycling</th>
<th>Household lamp recycling rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>149</td>
<td>6,634</td>
<td>163,196</td>
<td>688,000</td>
<td>24.68%</td>
</tr>
<tr>
<td>2012</td>
<td>263</td>
<td>50,492</td>
<td>155,159</td>
<td>708,889</td>
<td>29.01%</td>
</tr>
<tr>
<td>2013</td>
<td>293</td>
<td>97,743</td>
<td>149,191</td>
<td>844,576</td>
<td>29.24%</td>
</tr>
</tbody>
</table>
Although the collection network in Maine is robust, data are not available to develop a quantitative assessment of program performance, i.e., a recycling rate. The plethora of internet outlets for the recycling of cell phones makes it infeasible to collect complete and accurate data on the number of cell phones recycled from Maine each year. Consistent reporting to the Department by the cellular telephone service providers over the past six years highlights their commitment to making cell phone recycling easy and even financially beneficial for their customers. However, this reporting provides limited useful data as cellular phone service providers are only one commonly used outlet for cell phone recycling.

III. Evaluation of the Performance of Maine’s EPR Programs and Recommendations

The Department is required to report annually to the legislature on the performance of Maine’s product stewardship programs, and include any recommendations for improvements to the programs. Recommendations for improvement may be warranted when there is evidence that a program is underperforming.

A. Rechargeable Batteries Program

The rechargeable battery recycling program has established a robust collection system, but there is insufficient information to accurately assess actual program performance, i.e., what percentage of batteries available for recycling are collected each year?

The first step needed to understand how much change, if any, is needed in the current EPR program for rechargeable batteries is to gather additional information on program performance. Missing key performance indicators include the collection rate (number of batteries collected/number of batteries available for collection), recovery rate (amount recycled/amount collected), and recycling rate (collection rate x recovery rate). The Department is evaluating options for obtaining and/or estimating these data points, and may provide recommendations in the future.

B. Mercury-Added Thermostats

The mercury-added thermostat program has not achieved the statutory capture rate in pounds. In the 2014 *Implementation of Product Stewardship in Maine* report, the Department identified the uncertainty in both the average number of mercury-added thermostats available for recycling each year (this is determined based on the average lifespan) and in the number of thermostats in each home and business.

An independent survey is now being conducted in Maine to estimate the current number of mercury thermostats still available for recycling, which could inform future program assessments and recommendations.
C. Cell Phones

Maine has a robust collection network for used cell phones provided in large part by voluntary participants. Used cell phones have sufficient market value to effectively incentivize their collection and recycling. The Department recommends the Legislature repeal the unnecessary requirements of 38 M.R.S.A. §2413, which add administrative burdens to the Department to ensure compliance, and to track and report on publicly available data.

IV. Future Product Strategies

A. Architectural Paint

P.L. 2013, ch. 395 directs manufacturers of architectural paint to work with a stewardship organization to submit a program plan to the Department by April 1, 2015, to establish a paint stewardship program in Maine. (38 M.R.S.A. § 2144). This law also authorized the Department to conduct rulemaking as needed to allow for collection of some paint otherwise regulated as hazardous waste. The Department posted proposed changes to the hazardous waste rules on September 17, 2014 to allow oil-based paint from businesses to be treated as universal waste, and expects to complete the rule-making process in February 2015.

PaintCare, a non-profit organization established by the American Coatings Association, implements product stewardship programs on behalf of paint manufacturers in 6 states. In preparation for submitting a proposed program plan in Maine, PaintCare reached out to municipalities to integrate the PaintCare recycling program into municipal household hazardous waste collection programs.

B. Carpet

In the Department’s 2013 Implementation of Product Stewardship in Maine report, the Department identified carpet as a difficult to manage product to focus future diversion strategies on. During 2014, the Department participated in a regional meeting of representatives from state agencies, local solid waste and recycling programs, retail associations and the Carpet America Recovery Effort (C.A.R.E.), and initiated two meetings to discuss carpet stewardship efforts in Maine with representatives of carpet manufacturers, distributors, and handlers of post-consumer carpet.

Current efforts to divert carpet waste from landfills include carpet suppliers in Maine working with Maine’s waste-to-energy facilities, and the installation of equipment at a cement manufacturing facility to replace some fuel with carpet recycling by-products. In addition, carpet sales and installation companies in Maine have agreements with some supplying manufacturers to return a select portion of used carpet to the manufacturers for recycling.

To encourage increased carpet recycling, Department staff presented information on the economics and available outlets for carpet recycling in Maine at a workshop for solid waste facility managers and operators. Staff also provided input into a successful grant application by the Product Stewardship Institute to develop best management practices for rural waste management facilities to
collect carpet for recycling. In 2015, the Department will continue to facilitate the growing connections between carpet manufacturers, installers and recyclers, and Maine’s waste transfer and processing facilities to encourage and support increased carpet recycling. The Department will also continue to work with regional partners to develop practical guidance for collection sites to ensure the maximum quality and value of carpet collected for recycling, and will consult with the Division of Purchases on environmentally preferable purchasing of carpet that meets minimum recycled content specifications.

C. All consumer batteries

The Department regularly receives inquiries on how to recycle consumer batteries. In recent years, the major manufacturers of single-use batteries have explored implementing a product stewardship program for their products that could be operated similarly to the rechargeable battery recycling program implemented by Call2Recycle. A product stewardship law on single-use batteries was adopted in Vermont in 2013, and legislation is expected in Connecticut in 2015. The Department will continue to monitor efforts in other states and evaluate opportunities to increase battery recycling in Maine.

V. Conclusion

Maine continues to have one of the highest number of product stewardship programs established by law in the country. Information collected by and reported to the Department under these programs indicates they are successfully diverting materials from disposal in Maine, and that diversion rates are increasing for many of the affected products.

The Department will continue efforts to update information regarding the numbers of rechargeable batteries in Maine’s market, and will evaluate new information as it becomes available to estimate the number of mercury-added thermostats that are removed and available for recycling in Maine each year.

The Department will complete the rule-making needed to allow for collection of oil-based architectural paints under a stewardship program, and will continue to work with manufacturers to support voluntary product stewardship efforts for the recycling of carpet.
February 13, 2015     Sent Via Email: melanie.loyzim@maine.gov

Melanie Loyzim
Director, Bureau of Remediation and Waste Management
Maine Department of Environmental Protection
17 State House Station
Augusta, ME  04333-0017

Re:  CEA Comments on Implementing Product Stewardship in Maine February 2015 Report to the Joint Standing Committee on Environment and Natural Resources, 127th Legislature, First Session

Dear Ms. Loyzim:

On behalf of the Consumer Electronics Association® (CEA), I am writing to provide two comments on the Implementing Product Stewardship in Maine 2015 Report (report) to the Joint Standing Committee on Environment and Natural Resources.

CEA is the preeminent trade association promoting growth in the U.S. consumer electronics industry. CEA represents more than 2,000 corporate members involved in the design, development, manufacturing, distribution and integration of audio, video, in-vehicle electronics, wireless and landline communications, information technology, home networking, multimedia and accessory products, as well as related services that are sold through consumer channels. For many years, CEA has supported and advanced electronics recycling as part of the industry’s broader commitment to environmental sustainability. CEA’s comprehensive approach to electronics recycling includes industry initiatives related to public policy, consumer education, research and analysis, and industry standards.

**Concern on Cost of E-Waste Program.** CEA remains concerned about the economic inefficiency of the electronic waste program (Section II C, pages 4-5). Specifically, CEA is concerned that the rate per pound charged by Department of Environmental Protection- (DEP) approved recyclers in Maine for recycling electronics is double, and in some cases triple, the national rate observed in other state markets. The principle of allowing private companies to choose their business partners using market forces is important to CEA and one for which CEA and our member manufacturers strongly advocate.

**Support for DEP Recommendation to Repeal Cell Phone Program.** CEA supports and commends DEP’s recommendation in Section III C (page 9) of the report to repeal the cell phone
recycling mandate under the product stewardship law. CEA agrees with DEP’s analysis that robust recycling opportunities for used cell phones exist and are thriving in Maine. It is therefore unnecessary for DEP to continue to operate the cell phone product stewardship program when the market already incentivizes and succeeds in recovering used cell phones.

Thank you for the opportunity to comment on this report. If you have any questions, please do not hesitate to contact me at 703-907-7631 or aschumacher@ce.org.

Sincerely,

THE CONSUMER ELECTRONICS ASSOCIATION

/s/
Allison Schumacher
Senior Manager, Environmental Policy and Sustainability

cc: Carole Cifrino
    George McDonald
January 20, 2015

George MacDonald
Maine DEP
Division of Sustainability
17 State House Station
Augusta, ME 04333-0017

Re: Maine DEP’s February 2015 report, “Implementation of Product Stewardship in Maine”

Dear Mr. MacDonald:

Thank you for inviting the public to review and comment on DEP’s Report to the Joint Standing Committee on Environment and Natural Resources, “Implementing Product Stewardship in Maine,” (February 2015). The Container Recycling Institute (CRI) would like to commend the Department on preparing a thoughtful and comprehensive report. Maine’s impressive, and growing, list of EPR programs is a tribute to your ongoing commitment to product stewardship and responsible materials management.

As I am sure you are well aware, Maine’s groundbreaking container deposit law was enacted in 1976, which predates the development of EPR terminology. Maine’s original Bottle Bill (beverage container redemption law) required deposits on beer, soft drinks, mineral water and wine coolers. Several changes have been implemented since. The law was expanded in 1989 to include wine, liquor, water and non-alcoholic carbonated or non-carbonated drinks. To prevent out-of-state redemption fraud, rules were added in 2009, requiring people wishing to redeem more than 2,500 beverage containers at a time to provide their name, license plate number, and address each time they return containers in bulk, with exceptions made for nonprofit organizations. Other changes made at this time include a limit on the number of redemption centers in a municipality, based on population, and a requirement for dealers or redemption centers to accept plastic wrap used for beverage containers. This comprehensive system relies on sharing the container recycling costs between the beverage manufacturers and distributors and the beverage retailers and redemption centers, ultimately shifting the cost from the taxpayers to producers and consumers.

The program’s 90% recycling rate\(^2\) for beverage containers far outperforms Maine’s average recycling rate of 38.7\% for other recyclable materials. According to a report prepared by Planning Decisions in 2011, 753,307,153 beverage containers were redeemed in 2010\(^3\). Similarly, in our 2010 Beverage Market Data Analysis, CRI estimated that 987,000,000 containers were returned in 2010, or approximately 65,660 tons\(^4\). If this material was included in Maine’s currently reported recycling numbers, this would provide a boost to the state’s overall recycling rate.

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\(^2\) Ibid.

\(^3\) Planning Decisions, “Interim Analysis of the Operating Costs of Proposed Changes to Maine’s Beverage Redemption Law,” April, 15, 2011

Using data compiled by Maine’s State Planning office in 2012:

<table>
<thead>
<tr>
<th>Recycled Material (Maine definition, CDD included)</th>
<th>Municipal Solid Waste (Maine definition, CDD included)</th>
<th>Recycling Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>692,098</td>
<td>1,745,920</td>
<td>39.6%</td>
</tr>
</tbody>
</table>

Adding 65,660 tons of redeemed beverage containers to both the numerator and the denominator:

<table>
<thead>
<tr>
<th>Recycled Material</th>
<th>Municipal Solid Waste</th>
<th>Recycling Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>757,758</td>
<td>1,811,580</td>
<td>41.8%</td>
</tr>
</tbody>
</table>

Similarly, if 65,660 tons of redeemed beverage containers were added to the 234,797 tons of “municipal/public efforts” recycling tonnage for 2010, that would increase the municipal/public efforts recycling tonnage by 27.9%.

**CRI would like to make the following recommendations to the report:**

- CRI would like to see the container deposit program included as one of the product-specific laws enacted from 1976 – 2009, adding to the listed products [Beverage containers (MRS Title 32, Chapter 28, §§1861-1873)].

- CRI further recommends the consideration of transferring the administration of Maine’s bottle bill from the Department of Agriculture, Conservation and Forestry to Maine’s Department of Environmental Protection to help achieve better program performance and integration with Maine’s other recycling and product stewardship programs—all of which are housed at the DEP. Ten other US states have bottle bills, yet Maine is the only state where the bottle bill is administered within the state’s agricultural agency. Maine residents, communities, and lawmakers would be able to gain a more comprehensive understanding of the overall performance of all of Maine’s product stewardship programs by including beverage container recycling in the same department and the same annual report.

- The provisions of the existing beverage container deposit law do not include reporting requirements. In contrast, the laws in California, Hawaii and many Canadian provinces require annual reports on several program parameters. CRI recommends that the State of Maine consider adding such requirements to increase transparency and accountability. Please refer to [www.bottlebill.org](http://www.bottlebill.org) for examples of these reports.

- Finally, many product stewardship programs charge a nominal fee to stewards to pay for government administration of their programs. Maine may want to consider such a funding mechanism to pay for administration of the beverage container program.

We sincerely appreciate the opportunity to provide input on the important work the Department is doing to promote Extended Producer Responsibility. We would be pleased to answer any questions you may have on our comments.

Sincerely,

Susan V. Collins,
President
CONTAINER RECYCLING INSTITUTE

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[http://statedocs.maine.gov/dep_docs/23](http://statedocs.maine.gov/dep_docs/23)
Appendix 1

Product Stewardship: A Success for Maine

The bottle bill, or container deposit law, is Maine’s oldest “product stewardship” program. With hundreds of millions of qualifying beverage containers recycled annually in Maine, the economic, job creation, and environmental benefits of Maine’s original product stewardship law are widespread. Since 1978, beverage manufacturers and distributors have been responsible for sharing a portion of container recycling costs with beverage retailers and redemption centers.

Maine’s bottle bill is the most effective recycling law in the state. Its 90% recycling rate for beverage containers far outperforms Maine’s average recycling rate of 35% for other recyclable materials. During the 35 years our bottle bill has been in effect, Maine has kept tens of billions of containers out of landfills, incinerators, and off of roadsides.

Maine’s bottle bill supports more than 1,000 jobs at hundreds of redemption centers and spurs millions of dollars in direct and indirect economic activity. At the same time, it reduces costs to towns and taxpayers for litter collection, container collection, transportation, and recycling. It also helps schools, churches, and sports groups raise money through bottle drives. Maine is one of ten states with a container deposit system and the law has become an integral part of how we handle plastic, glass, and aluminum beverage containers. It is often mystifying to Mainers visiting states that don’t have a bottle bill to see containers thrown into the trash or allowed to litter the streets. For Mainers, the bottle bill has been a big success.

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.

How it Works

Producers charge a 5¢ deposit for each container delivered to retailers.

Producers pick up the empties from collection sites and pay them 5¢ plus a 3.5¢-4¢ handling fee per container.

Collection Sites return the 5¢ to consumers when they return empties.

Retailers charge the 5¢ deposit to consumers upon purchase.
Product Stewardship Creates Jobs in Maine

CLYNK, South Portland

Product stewardship policies spur innovation and job creation, and the example of CLYNK's operations in Maine is a case in point. CLYNK is a beverage container recycling company that provides an innovative and easy way for customers at Hannaford grocery stores to drop off their returnable containers and get the redemption amount credited directly to their account or passed on to a designated charity. CLYNK's operations are straightforward: their trucks collect empty containers from participating Hannaford grocery store locations and bring them to a central facility in South Portland. There, the materials are tracked, sorted, baled, and housed to await pickup for recycling. The beverage manufacturers or their contracted agents then retrieve the materials from the facility, and pay 3.5c to 4c per container to cover the recycling and sorting costs.

Since its founding in 2004, CLYNK has processed more than 300 million beverage containers at its 46 collection locations throughout Maine. The eight-year old company, employing 30 full-time employees, is the largest redeemer and processor in the state. As a relatively new company operating under a 30-year old product stewardship program, CLYNK turns a profit and creates jobs in Maine while providing a valuable service to beverage consumers and retailers.

“Because we've made it really easy for people to recycle, and since our operation is highly streamlined, the company has thrived in just a few years of operation,” says CLYNK CEO Clayton Kyle. “By sharing the costs of collection and sorting with beverage distributors, our company has had room to create a lean and efficient system that works well for Maine.”

A Maine Employer

Mary Wood, a resident of South Portland, has worked at CLYNK for two years. After thirty years working as a waitress and a bank teller engaging with the public, Mary is pleased with the change of pace that her job provides on the floor at CLYNK's processing facility.

“I love working at CLYNK,” says Mary. “There are usually sixteen of us here who track and sort containers, and make sure the equipment runs properly.” Mary is responsible for the accurate tracking and sorting of containers dropped off in CLYNK bags. She is one of 50-70 employees at CLYNK (summer months bring more work to the company), and one of 30 who are employed full-time.

At a Glance

- 30 Full-time employees
- 12 In the office
- 18 In trucking or processing
- 20 additional part-time employees in the winter
- 40 additional part-time employees in the summer
- Most of CLYNK’s full-time employees have been with the company more than 2 years
- All full-time workers get health and retirement benefits and dental, disability, and life insurance
Product Stewardship Protects Maine's Environment

Old Mill Redemption Center, Kingfield
Paul Coburn and his two employees have been operating the Old Mill Redemption Center for 25 years. Residents of Kingfield, Stratton, Eustis, Salem, Carrabassett Valley, and visitors to Sugarloaf Mountain Resort visit the facility throughout the year. The 1,500 residents of Kingfield, residents in surrounding towns, and 15 to 20 local community groups provide a steady flow of customers to the facility. In 2011, the Old Mill Redemption Center collected and sorted about 2.2 million beverage containers. “People live in and visit our area to enjoy its natural beauty. Our business helps protect the beautiful land in this area,” says Coburn.

Cleaner Land
States with bottle bills have less litter than those without them. By sharing the cost of collection and recycling with manufacturers and providing an incentive for consumers to recycle, the bottle bill keeps Maine a cleaner, environmentally responsible state. More than half of the beverage containers recycled at Old Mill and other redemption centers would end up on roadsides or in landfills if the law did not provide consumers, retailers, and redemption centers with incentives to recycle. One government-funded study showed that Maine’s beverage container litter was reduced by 69-77% as a result of the container-deposit system. Studies conducted in eight other states showed that bottle bills reduced total litter by 30% to 65%.

Cleaner Air
Recycling of beverage containers also saves energy and materials, and reduces environmental impacts associated with energy generation and mining. Cans made from recycled aluminum require 95% less energy input than those made from new aluminum. Recycling plastic bottles cuts energy use by 90%, and recycling glass cuts energy use by 30% compared with containers made from virgin materials. By recycling beverage container materials and reducing the amount of energy required for production, Maine’s bottle bill has prevented as much climate-changing pollution as is produced by more than 19,000 cars in a year.
Product Stewardship Boosts Maine’s Economy

Saves Taxpayer Money
Maine’s bottle bill saves taxpayers money because manufacturers, distributors, retailers, and consumers share the responsibility for recycling beverage containers. The system increases the efficiency of the market for recyclable materials by requiring commercial beverage manufacturers to assume some responsibility for managing materials. Local governments save money that they otherwise would spend on collection and landfill operations, including landfill expansion costs that might be triggered in part if Maine people were simply throwing their cans and bottles out with their trash—as happens in many of the 40 states without a bottle bill.

Supports Good Works
Over the past thirty years, bottle drives have become critical fundraisers for community organizations statewide. For schools, sports teams, non-profit organizations, clubs like Girl Scouts and Boy Scouts, and many others, annual bottle drives can raise thousands of dollars to support their programs and good works in our communities.

Stockton Springs Community Library
The Stockton Springs Community Library raises over $6,000 per year, about half of its annual budget, from their Bottles for Books Drive. “We keep the bottle drive going every day of the year,” says Patricia Curley, Library Director. “Local schools, clubs, businesses, and residents get involved by returning containers, and then stay involved as library patrons and volunteers. It’s engaging for the community and it’s an absolutely critical source of funding for us.”

The program has run smoothly for ten years. Library users contribute redeemable containers to a homemade shed outside the library, and a volunteer makes a daily delivery to the nearby Bucksport Redemption Center. The funds raised are used to purchase books and audiovisual materials, help pay for library programs, and maintain the facility that serves the residents of Stockton Springs and patrons of the library from surrounding towns.

For Further Information:
NRCM’s Product Stewardship Project: www.nrcm.org/productstewardship.asp
Container Recycling Institute: www.container-recycling.org/
Help support sustainable materials policies by joining NRCM’s Action Network: www.nrcm.kintera.org/Action_Network_signup
DATE: February 13, 2015

TO: George MacDonald, Director
Division of Sustainability
Maine Department of Environmental Protection

FROM: The National Electrical Manufacturers Association (NEMA)


The National Electrical Manufacturers Association (NEMA) is the primary trade association representing the interests of the US electrical products industry. Our 450 member companies manufacture products used in the generation, transmission, distribution, control, and end-use of electricity, constituting the very foundation of the worldwide infrastructure for supplying power.

Most electro-industry products are long lived and used in commercial and industrial settings. Some, however - such as household lamps, batteries, and thermostats - are consumer oriented and sold primarily for residential applications. Several of these have been the focus of product stewardship laws in Maine and our members have a long history of working with Maine legislators and regulatory authorities on the development of these laws and the programs they authorize.

Once again, NEMA appreciates the opportunity to comment on the latest version of the Maine Department of Environmental Protection’s (DEP) report on “Implementing Product Stewardship in Maine.” We look forward to continuing discussions with DEP staff on how best to maintain the success of our stewardship programs going forward. Our comments on the report are presented below.

General Comment

In its introduction to the report, DEP again states that product stewardship “...also may be referred to as 'extended producer responsibility.' ...”. NEMA reminds the department, as we have done repeatedly in the past, that these terms are not synonymous. In April 2012, arguably the three most prominent non-government organizations that promote product stewardship issued a joint statement to clarify the distinction between the two concepts.¹ The statement is important because it acknowledges the more rigid, mandatory aspects of EPR as compared with product stewardship, which NEMA supports.² We are puzzled that DEP

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¹ See http://productpolicy.blogspot.com/2012/04/consensus-definitions-for-epr-and.html
insists on avoiding this distinction when the industry leaders issued a public statement to declare it.

Comments on Section II.D - Mercury-added thermostat program performance

Collection Rate Determination
This year’s version of the report restates some mistaken observations concerning the industry-funded Thermostat Recycling Corporation (TRC). DEP is still citing the program’s “collection rate” even though, by its own admission, the data needed to establish the underlying stock of thermostats against which to measure collections do not exist. Once again the department makes use of the figure of 27,200 “estimated mercury thermostat removals per year in Maine,” but provides no explanation or source for this number.

Program Performance
In responding to last year’s report, NEMA expressed support for DEP’s plan to “explore methods to improve available data . . .” as a means of evaluating the appropriateness of program goals. We still support this objective and believe legislative amendments aimed at acquiring data from and increasing accountability on HVAC contractors would be a useful step in this direction. Contractors and technicians in most cases have direct control over the disposition of mercury thermostats removed from service. Policy changes intended to increase collections must emphasize this channel to be effective.

Impact of $10 Incentive
NEMA cautions the department on its interpretation of the impact on thermostat collections of $10 incentive payments that Ecomaine provided to contractors from mid-2011 through 2012. In fact, Ecomaine itself in its report of the project states frankly that “. . . we cannot say definitively that the increase in financial incentive (from $5 to $10) and fast payment stimulated greater participation by the technicians.”

While it’s true that during the Ecomaine project the number of thermostats collected from contractors increased substantially, overall collections within the state improved very little (to 6679 units from 6616). What appeared to occur is that the higher incentive diverted a large number of technicians from their usual drop-off site to Ecomaine’s location in Portland.

That facility lies directly across the street from a leading HVAC wholesaler that is an avid participant in the TRC. It is reasonable to assume that many HVAC contractors in Cumberland County who do business with that wholesaler and ordinarily would recycle mercury thermostats there suddenly learned they could cross the street and receive a higher bounty payment in a shorter period of time. For those contractors, the $10 payment led to no significant change in behavior and rewarded them for something they were already doing.

Another noteworthy point gleaned from collection bin receipts is that many of the thermostats were returned not by individual contractors or technicians, but by municipal government authorities such as the Towns of Bridgeton, Lyman, and Freeport. In fact, the largest contributor during the project period by far was the Portland Housing Authority, which delivered 432

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3 From page 6 of the report: “The Department does not have data on the actual number of mercury-added thermostats still available for collection, and only has estimates of the number that would be removed each year in Maine.”

4 Ecomaine, “Mercury Thermostat Report based on A Supplemental Environmental Project – Enhanced Thermostat Recycling Program for Contractors and Service Technicians of Ecomaine Communities; March 4, 2013, pg 17
thermostats – a full 25% of the total collected in Cumberland County during the period. The City of South Portland added another 115 units. NEMA questions whether it is necessary or appropriate to pay municipal authorities in Maine to comply with state law with regard to proper disposal of mercury. This was not the goal of the project but evidently became an unintended outcome.  

Comments on Section III.B – Evaluation of Performance and Recommendations

Mercury-Added Thermostats
As noted above, NEMA concurs that more data are needed to assess the existing stock and disposal rates of mercury-added thermostats and we believe the most accurate and relevant information is to be found within the contractor sector. We encourage the department to support legislative amendments designed to increase accountability among the contractors and technicians who handle the devices and are principally responsible for complying with the statutory mandate to recycle.

Please contact us at your convenience if you have questions or concerns about these comments.

Contact

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5 Breakdown of collection data will be supplied upon request
February 13, 2015

Melanie Loyzim  
Director, Bureau of Remediation and Waste Management  
Maine Department of Environmental Protection  
17 State House Station  
Augusta, ME 04333-0017

Comments on the Maine Department of Environmental Protection’s 2015 Report to the Legislature, Implementing Product Stewardship in Maine

Dear Ms. Loyzim,

Thank you for the opportunity to submit comments on the Department of Environmental Protection’s 2015 Report to the Legislature, Implementing Product Stewardship in Maine. The Natural Resources Council of Maine (NRCM) is the state’s leading environmental advocacy organization. Over the past decade, NRCM has worked with the DEP, Maine State Legislature, businesses, trade associations, and other interested parties to help craft, monitor, and promote product stewardship programs that have helped reduce mercury pollution to Maine’s environment, divert millions of pounds of waste from Maine’s landfills and incinerators, save money for taxpayers and municipalities, and create jobs here in Maine. We have worked with the DEP and many of these same parties to identify ways to continually improve implementation of Maine’s nationally recognized product stewardship programs, and we have monitored product stewardship laws across the nation to determine whether additional product categories deserve consideration for possible new product stewardship programs here in Maine. It is with this knowledge and experience relevant to the laws and programs referred to in this report that we submit these comments.

Overall Program:

Overall, we are pleased by the positive trends in each of Maine’s five existing product stewardship programs, but we have concerns regarding our beverage container law and the Chapter 858 DEP rules regarding the architectural paint stewardship program.

In the future, we urge DEP to include the beverage container program in their annual product stewardship report. This program was Maine’s first product-specific law and has resulted in recycling 90% of Maine’s beverage containers, which is more than double Maine’s average recycling rate for other materials.1 We would gain a more comprehensive understanding of the overall performance of all of Maine’s product stewardship programs, and recycling rate, by including beverage container recycling in this annual report. We understand that the Administration will be proposing legislation to transfer management of Maine’s beverage

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container program from the Department of Agriculture, Conservation and Forestry to the DEP. We anticipate supporting this bill, which would facilitate inclusion of the beverage container law’s performance in next year’s product stewardship report.

NRCM strongly supports the paint stewardship law (38 MSRA, §2144) enacted in 2013. We believe this law has the potential to be a highly successful addition to Maine’s existing product stewardship programs. If implemented well, the program will provide an easy and convenient way for Maine people to dispose of large volumes of unused and unwanted architectural paint and paint containers.

But the Chapter 858 rules developed by the Department include provisions that could prevent this program from getting off the ground. These rules depart significantly from the rules adopted in the seven other states with similar laws. To achieve a program that is convenient for Maine residents and businesses, we need to make it easy and attractive for paint, hardware, and home improvement stores to serve as drop-off sites. These sites should not be deemed hazardous waste facilities by virtue of participating in the program. Rather, DEP should ensure that procedures are adopted for proper handling, storage, and disposal of collected materials as part of the program plan approval process—as spelled out in the law.

For these reasons, we have requested that the Chapter 858 rules be amended so that architectural paint collection sites are not included in the definition of a “Central Accumulation Facility.” These collection sites should be treated as conditionally exempt small quantity generators, as allowed by the federal RCRA law. DEP can use the program plan process to ensure that appropriate operating standards are met, without capturing them as regulated hazardous waste facilities.

Maine does not need to reinvent the wheel here in a way that is more burdensome and costly. We urge the Department to follow the lead of the seven other states with paint recycling programs. None of those states has imposed a regulatory hurdle like the one in DEP’s rules.

**Maine’s Product Stewardship Programs:**

*Dry Mercuric Oxide and Rechargeable Batteries*

Call2Recycle, the non-profit established by the rechargeable battery manufacturers, reports a relatively stable battery collection rate. This is good news for Maine, but we lack sufficient data to measure program effectiveness such as the ability to compare the number of batteries available for collection with the number of batteries collected for recycling. If the Legislature decides that additional program performance standards are needed, we recommend requiring Call2Recycle to provide this information on an annual basis.

NRCM would also support product stewardship legislation in the future that included all single-use consumer batteries. Like the Department, NRCM also regularly receives inquiries on how to recycle alkaline batteries and we are unable to respond with an adequate solution. We urge DEP to continue to monitor similar legislation in other states, and encourage the battery industry to
work with the Department on legislative language that could be submitted next session that would increase recycling of all consumer batteries in Maine, not just the rechargeable type.

**Mercury Auto Switches**

The significant decline in mercury auto switches collected for recycling is cause for concern, but not unexpected. Mercury auto switches were no longer installed in new cars after 2003, and older vehicles may be taking longer to come out of service than originally projected. We have also learned that 2014 collection rates have risen to 20% from the drastically reduced 2013 level of 4 percent. To ensure that collection rates don’t take another nose dive, we urge DEP to continue their outreach strategy and consider setting up an automatic collection bucket replacement system for vehicle dismantlers.

**Electronic Waste**

NRCM is proud that Maine is among the top e-waste recyclers in the nation. More than 49 million pounds of e-waste have been collected in Maine since January 2006 through this manufacturer-funded product stewardship program, saving money for Maine taxpayers and communities and keeping a large volume of waste and toxic metals out of our landfills and waste-to-energy facilities. We applaud all of the collection sites in the state for removing a record amount of toxic heavy metals from our waste stream in 2014, and hope that through continued education and outreach strategies we can reach even higher levels in years to come.

**Mercury Thermostats**

The mercury thermostat collection program has established Maine as a national leader in reducing mercury pollution. Due to our incentive-based program that began in 2008, Maine had one of the highest per capita mercury thermostat collection rates in the country, and has prevented 45-50 lbs. of mercury from entering the waste stream each year. However, Maine is falling far short of the statutory goal of collecting 160 pounds of mercury annually. NRCM is concerned that mercury thermostat collection rates experienced a significant drop to 17.76% in 2013. Although more recent data indicates that collections have increased slightly in 2014, NRCM believes three things are needed moving forward to increase mercury thermostat recycling rates further and to ensure that mercury from out-of-service thermostats is not ending up in incinerators, landfills, or the environment:

1) **Preserve the integrity of our incentive-based program.**

The Thermostat Recycling Corporation (TRC) has had a long history of working against Maine’s incentive-based thermostat program. TRC opposed the original Maine law, has spent substantial sums in other states lobbying against proposed laws similar to Maine’s, advocated with DEP in

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2 Honeywell, for example, spent more than $90,000 in New York State alone to defeat legislation similar to Maine’s. [http://www.nypirg.org/pubs/enviro/toxics/2011.12.21_NYPiRG_Honeywell_Report.pdf](http://www.nypirg.org/pubs/enviro/toxics/2011.12.21_NYPiRG_Honeywell_Report.pdf)
2011 to repeal Maine’s incentive-based program, and made it difficult for contractors who return thermostats to wholesalers to get their incentive payments.

Despite TRC’s efforts to undermine Maine’s program, the data clearly shows that recycling rates increased with the adoption of the $5 incentive program in 2008. DEP’s 2014 report provides data that further substantiates the positive role of a financial incentive in boosting collection rates of mercury thermostats. Specifically, the report documents a significant increase in thermostat collections in response to a temporary program in which ecomaine (a non-profit waste management and waste-to-energy facility) supplemented the TRC’s $5 incentive with an additional $5 (for a total $10 incentive). This led to a significant increase in the number of thermostats turned in through municipal household hazardous waste collections in that region.

2) Set new annual performance standards based on current estimates of thermostats available for recycling.

At present, TRC is falling far short of the statutory goal of collecting 160 lbs. of mercury annually from its mercury thermostat recycling program. This goal was based on a “best-guess” estimate of Maine’s mercury thermostat stock using 15-year-old census data. NRCM recommends that the Legislature revisit and update the performance standards in the law based on current, statistically significant data. DEP’s 2014 product stewardship report identifies the need to improve data so that the Department understands whether the statutory performance goal is appropriate. Similarly, TRC’s past annual reports have stated that they would welcome the opportunity to discuss ways of better understanding how well the program is doing, although they offer no proposal for doing so. To help address this issue, a study has been underway in Maine over the past four months to estimate the number of mercury thermostats still available for recycling, and how many are being retired annually. The results of this study will be extremely useful for setting new performance goals for Maine’s mercury thermostat collection program.

3) Include an improvement plan and enforceable penalties for violating the improvement plan in statute.

NRCM recommends that in any year that newly established thermostat collection performance requirements have not been achieved, DEP must include in its annual report to the Legislature proposed changes in program implementation that would help achieve the requirement. Recommendations could include communications, education, training, and financial incentives that would seek to ensure that the performance requirement for the next year shall be achieved. The Legislature should seek input from stakeholders and approve the proposed changes that the Legislature determines are necessary to meet the upcoming performance requirement.

NRCM recommends that if the thermostat manufacturers violates any provision of the annual improvement plan, or fail to perform any duty outlined in the improvement plan, that they be

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4 The additional incentive was provided by ecomaine pursuant to a Supplemental Environmental Project agreed to with DEP in response to an air emission violation by ecomaine.
liable for a civil penalty. There should be no penalty for failure to achieve the performance standards.

**Mercury Lamps**

We are glad to see that the number of collection sites for mercury-containing lamps in Maine is increasing. However, as indicated by the decent, but stagnant, 29% lamp recycling rate, we believe that a more robust education and awareness campaign is necessary to give collection rates a needed boost. We hope that the National Electronic Manufacturers Association (NEMA) and DEP continue to promote consumer awareness of recycling opportunities and establish additional convenient collection sites throughout the state.

**Cellular Telephones**

Consumers are becoming increasingly aware that their cell phones have a value and can be recycled. Maine has a robust collection network that makes it easy and convenient for people to sell or turn in their old cell phones. As indicated in the report, there is a general sense that a high percentage of used cell phones are being collected for recycling, resale, or reuse, but we can’t know for sure.

Keeping Maine’s law in place helps reinforce this retailer-led recycling system. However, we understand the difficulty in accurately quantifying the recycling rate for used cell phones, and the administrative burden of ensuring compliance of this widespread and seemingly effective program. NRCM could be supportive of statutory changes to the 38 M.R.S.A 2413 that kept mandates in place but reduced administrative responsibilities for DEP.

**Future Product Strategies for Carpets and Mattresses**

The 2014 Product Stewardship Report had mentioned both carpets and mattresses as potential candidates for future product stewardship strategies. We are pleased that the 2015 report indicated some initial research on the feasibility of a carpet program, but we would have liked to see some discussion of mattresses in this report as well. Solid waste facility operators in Maine frequently identify both of these bulky products as difficult to manage, and we believe that product stewardship programs for these materials have the potential to be effective.

Currently, there are limited carpet and mattress recycling facilities in the Northeast, none of which are located in Maine or New Hampshire, so we would support the idea of an integrated regional approach for these materials. California, Rhode Island, and Connecticut have enacted programs for carpets and mattresses, in some cases with the expectation that the programs will create in-state jobs for recycling these products. We support the idea of continued analysis to determine whether the volume of carpets and mattresses being disposed of in Maine is large enough to support economically feasible collection and recycling programs for these materials in hopes of relieving municipalities of the costs of managing them alone.

To ensure that these programs gain more traction here in Maine, we suggest that the Legislature require that both carpet and mattress manufacturers involved in any voluntary programs provide
an annual report detailing what they have done to increase recycling and develop collection systems in Maine specifically.

**Concluding Remarks:**

Overall, NRCM believes that DEP’s 2015 Product Stewardship Report to the Legislature strongly validates Maine’s product stewardship programs, demonstrating that these laws are succeeding and providing substantial benefits to Maine people and our environment. We hope DEP makes it more attractive for retail sites to participate in the architectural paint program, through rules that mirror the approach used in other states. We also hope the Legislature will transfer the beverage container program (aka “bottle bill”) to the DEP so that this program can be included in the list of existing product stewardship programs covered by this report. In so doing, future reports would include seven product stewardship programs for which Maine can be proud.

Although Maine’s thermostat collection program has been a national leader in removing mercury from the waste stream, we are concerned that collection rates during 2013 and 2014 are too low. NRCM supports legislative changes to help restore strong collection rates for mercury thermostats in future years, while also providing information that enables lawmakers to set appropriate performance goals based on a clear understanding of the baseline of thermostats still in Maine buildings and the number being removed annually. Thank you for the opportunity to provide these comments. We request that these comments be submitted to the Legislature with the 2015 report.

Sincerely,

Sarah Lakeman
Sustainable Maine Project Director
Natural Resources Council of Maine
February 10, 2015

George MacDonald  
Maine Dept. of Environmental Protection  
17 State House Station  
Augusta ME 04333-0017

Re: Implementing Product Stewardship in Maine Report - February 2015

Thank you for producing this report on such an important topic.

In my position as Deputy Public Works Director for the City of Bath, I offer the following comments on the report:

- Eliminate the recommendation to repeal the cell phone recycling rules. Times and the marketplace for used phones may change and the law may be needed in the future. Suggest instead simplifying the rules to reduce DEP administrative burdens and change the language to indicate state law will come into effect only if marketplace is not functioning.
- In Section II.A, suggest the numbers reflecting the pounds of rechargeable batteries collected at municipally-operated collection sites be added to the data presented. If these sites are shown to be contributing relatively small numbers of batteries compared to privately operated sites, municipal burdens could be reduced by eliminating these sites.
- In Section II.C, including Table 2 suggest the numbers reflecting the pounds of ewaste collected at municipally-operated collection sites be added to the data presented. If these sites are shown to be contributing a relatively small amount of ewaste compared to privately operated sites, municipal burdens could be reduced by eliminating these sites.
- In response to the sinking recovery rate of mercury thermostats, suggest the bounty offered for their return be increased to $10 from the current $5.
- In Section II.E, suggest the numbers reflecting the number of lamps collected at municipally-operated collection sites be added to the data presented. If these sites are shown to be contributing relatively small numbers of batteries compared to privately operated sites, municipal burdens could be reduced by eliminating these sites. Also suggest the rules require lamp retailers to accept for recycling all forms of mercury added lamps that they sell.
- Add to Section IV a discussion of the future of mattress/box spring product stewardship.
• Strongly support the addition of single-use consumer batteries to the existing rechargeable battery recycling system. Many people save these batteries and present them for recycling at our annual household hazardous waste collection or at the recycling center. At this time they are disposed of into the landfill, wasting the resource.

Please don’t hesitate to contact me to discuss these comments further. Thank you for the opportunity to provide this input.

Sincerely,

[Signature]

Lee Leiner, P.E.
Deputy Public Works Director