Implementing Product Stewardship in Maine

2011 Report to the Joint Standing Committee on Natural Resources

Maine Department of Environmental Protection
17 State House Station
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Executive Summary

Product stewardship is a public policy that moves responsibility for the management of products at the end of life from local governments to the private sector. This shift provides local tax relief while bringing private sector innovation and drive for efficiencies to the goals of waste reduction, reuse and recycling.\(^1\) It also creates opportunities for establishing new businesses and expanding existing businesses in the state,\(^2\) and can provide enhanced environmental protection without significant growth in state government.

In 2010, the Maine Legislature unanimously passed a “product stewardship framework” law (see Appendix B). The Maine Revised Statutes Annotated, Title 38, chapter 18 (38 MRSA §1771-1775) establishes the promotion of product stewardship as a policy to support the reduction, reuse and recycling of materials in Maine’s solid waste stream. "Product stewardship" is defined to mean “a 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.” Implementing a policy of product stewardship moves the responsibility for the management of products at the end of life from taxpayers to manufacturers and consumers, and provides the means for significantly increasing recycling, with concomitant growth in jobs and businesses.

This is the first report submitted by the Department of Environmental Protection (the “Department) under section 1772 of the new law. That section authorizes the department to annually report to the Legislature on products that may be appropriately managed under a product stewardship program and recommend changes to existing stewardship programs. At its discretion, the Joint Standing Committee on Natural Resources may then introduce legislation based on this report.

This process provides all interested parties with a predictable process for the development of product stewardship legislation. It ensures that, for any product stewardship proposal, a certain amount of foundational work is performed by the Department and all interested parties have the opportunity to provide additional information to the Legislature for consideration along with the department’s report. As required by the law, the Department solicited comments on behalf of the legislature for 30 days by posting this report on its web site during the first week of December 2010 and notifying interested parties of the opportunity to comment.

From 1991 to 2009, Maine enacted five product-specific laws which require manufacturers to establish programs to recover their products from Maine’s waste stream and ensure proper handling and recycling or disposal of these products. These products include dry mercuric oxide and rechargeable batteries (38 MRSA §2165), mercury auto switches (38 MRSA §1665-A), e-waste (38 MRSA §1610), mercury-added thermostats (38 MRSA §1665-B), and mercury-added

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\(^1\) The January 2009 State of Maine Waste Management and Recycling Plan states that “In 2007, citizens, businesses, municipalities, and others spent an estimated $200 to $250 million to reuse, recycle, compost or dispose of the two million tons of municipal solid waste generated within Maine…Maine communities spend about 10% of their municipal budget to secure and provide necessary solid waste and recycling services.

\(^2\) See January 22, 2010 Submission to the Joint Standing Committee on Natural Resources in support of LD 1631-“An Act to Provide Leadership Regarding the Responsible Recycling of Consumer Products” from Mark Parent, Nova Scotia Minister of the Environment and Labour, included as Appendix A.
lamps (38 MRSA §1672). Although originally driven by the goal of reducing the release of toxics (e.g., mercury, lead) into Maine’s environment, product stewardship programs are now recognized as achieving additional environmental and economic benefits. These additional benefits include: decreased demand for disposal capacity, increased recycling resulting in lower cost materials to be used in the production of new products, and a reduction in the life-cycle impacts of products, including greenhouse gas savings and avoided environmental degradation from the extraction of new materials (e.g., metals mining, petroleum extraction). Product stewardship laws and programs have become commonplace in Canada and Europe, and are increasingly common in other states - 32 other states now have product stewardship laws. These laws and programs have driven the development of private sector businesses to perform the handling and recycling of products, and provided policymakers with the experience needed to identify critical components of successful product stewardship laws.

For more than ten years, the Legislature has grappled with the issue of how best to manage household hazardous waste (HHW). HHW is successfully managed by product stewardship programs in Canada, with a subset of HHW products also managed by product stewardship programs in Maine and other states. The Department has identified HHW, including architectural paint, unused pharmaceuticals, and medical sharps, as the first candidates for new product stewardship programs. New product stewardship programs for these components of HHW will significantly reduce municipal waste management costs by increasing recycling of paint, preventing crime, drug abuse and accidental poisonings related to unused drugs, and ensuring appropriate management of toxic wastes. Municipal solid waste managers have identified paint as a high priority for a new product stewardship program. In 2004, the Maine Drug Implementation Group reported a strong consensus among law enforcement, public health entities and the environmental community that Maine needs a permanent statewide program to collect unwanted medications. Since then there have been successful pilot collection programs, but no dependable funding for a comprehensive program. Creating a product stewardship program will provide dependable funding and help address the public safety and health and environmental issues created by the mishandling of unused pharmaceuticals. A product stewardship program for medical sharps will also address significant public health and safety issues.

To increase recycling rates and simplify some administrative processes, the Department is proposing changes to several of Maine’s existing product stewardship laws. The proposed changes include relief to small businesses from waste handling costs by allowing them to use the existing, producer-supported recycling systems for electronic waste (“e-waste”) and mercury-added lamps. The department also is proposing to clarify program standards and add performance incentives to encourage manufacturers to meet performance goals for the recovery of waste mercury-added lamps. Additionally, to help implement new product stewardship programs, the Department is proposing that the State’s existing authority to provide grants to public sector entities in support of the development of collection and recycling infrastructure be extended to include the private sector.

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3 According to the National Drug Intelligence Center, Maine has the highest per capita rate of prescription drug-related crime in the country.
I. Background

A. Maine’s product stewardship laws

In 2010, Maine became the first state in the U.S. to enact a “product stewardship framework” law. The Maine Revised Statutes Annotated, Title 38, chapter 18 (38 MRSA §§1771-1775) establishes the promotion of product stewardship as a policy to support the reduction, re-use and recycling of materials in Maine’s solid waste stream. This law defines "product stewardship" to mean “a 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.” (Using this definition “product stewardship” may also be referred to as “extended producer responsibility” or “EPR”.) Product stewardship shifts the cost of the end-of-life management of products from municipalities and taxpayers to producers and the consumers who buy their products. It provides producers with new opportunities to move toward sustainable production in which they design products so that materials can be recaptured and reused to make new products (“cradle-to-cradle” production).

Along with recognizing product stewardship as a critical tool to support solid waste reduction, re-use and recycling, Maine’s Product Stewardship framework law sets out a process by which the state can routinely improve upon and add to its extended producer responsibility programs. This process includes an annual report to the legislature by the Department of Environmental Protection (Department), in which the Department may propose new product stewardship programs and changes to existing programs. Prior to submitting this report, the Department must solicit comments from interested parties for 30 days, and provide these comments along with the report for legislative consideration. At its discretion, the Joint Standing Committee on Natural Resources may then introduce legislation based on the report. This process provides all interested parties with a predictable process for the development of product stewardship legislation. It ensures that, for any product stewardship proposal, a certain amount of foundational work is performed by the Department and all interested parties have the opportunity to provide additional information to the Legislature for consideration along with the Department’s report.

From 1992 to 2009, Maine enacted five product-specific laws which require producers to establish programs to recover their products from Maine’s waste stream and ensure proper handling and recycling or disposal of these products. These products include dry mercuric oxide and rechargeable batteries (38 MRSA §2165), mercury auto switches (38 MRSA §1665-A), electronic waste (38 MRSA §1610), mercury thermostats (38 MRSA §1665-B), and mercury lamps (38 MRSA §1672). Although originally driven by the goal of reducing the release of toxics (e.g., mercury, lead) into Maine’s environment, product stewardship programs are now recognized as achieving the additional environmental and economic benefits of providing lower cost commodities for production of new products, and reductions in life-cycle impacts of products, including greenhouse gas savings and avoiding environmental degradation from the extraction of new materials (e.g., metals mining, petroleum extraction).

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4 “A life cycle assessment … is a technique to assess each and every impact associated with all the stages of a process from cradle-to-grave (i.e., from raw materials through materials processing, manufacture, distribution, use,
<table>
<thead>
<tr>
<th>Amount of e-waste recycled (pounds)*</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4,160,574</td>
<td>4,688,552</td>
<td>5,274,419</td>
<td>7,912,292</td>
</tr>
<tr>
<td>Pounds of lead diverted from disposal**</td>
<td>436,075</td>
<td>520,645</td>
<td>584,075</td>
<td>872,970</td>
</tr>
<tr>
<td>Greenhouse gas savings in MTCEs***</td>
<td>31,745</td>
<td>35,774</td>
<td>40,244</td>
<td>60,371</td>
</tr>
</tbody>
</table>

* Televisions and computer monitors only; consolidators estimate 20% increase in weight if include computers (computers are not within the scope of program due to positive commodity value at end of life).
** Assumes an average of 5 pounds of lead per unit.

B. Other product stewardship laws and programs in the U.S. and Canada

The first state product stewardship laws in the U.S. were adopted by Maine and five other states in the 1990’s, and required producers to establish collection systems and recycle dry cell mercuric oxide and rechargeable batteries. In 1994, the non-profit Rechargeable Battery Recycling Corporation (RBRC) was established to fulfill producers’ responsibilities in these states, but went even further by offering the free collection and recycling program throughout the U.S and Canada. In 2008, RBRC added cell phones to its collection program, and in 2009 renamed its program as “Call2Recycle” to reflect its commitment to recycling a broader array of products. Since 1994, Call2Recycle has diverted 50 million pounds of rechargeable batteries from the solid waste stream, and currently has over 30,000 collection locations (mostly at retailers and municipal waste collection sites) in North America.5

With the enactment in 2001 of An Act to Prevent Mercury Emissions when Recycling and Disposing of Motor Vehicles (requiring automakers to collect and recycle mercury switches from junked vehicles), Maine became the first U.S. state to require manufacturers of a product other than batteries to establish a product stewardship program. Since then, 14 additional states have laws requiring the auto industry to recycle mercury-added switches from their vehicles at the end of life. Through a collaborative effort of US EPA, states, environmental organizations and the steel and auto industries, a voluntary National Vehicle Mercury Switch Recovery Program (NVMSRP) was offered in all states beginning in 2006. Collection of mercury switches is significantly lower in states where the program is voluntary; collections are highest in states like Maine where a bounty is paid for each switch collected.6

In 2004, Maine enacted the first U.S. electronic waste (e-waste) recycling law requiring television and computer monitor manufacturers to be responsible for recycling their products at the end of life. Twenty-two other states have since enacted producer responsibility laws for various e-waste products. This patchwork of laws has created a confusing compliance challenge

5 http://www.call2recycle.org/annualreport/; November 8, 2010
6 http://www.elvsolutions.org/mercury_home.html; November 8, 2010
for producers, and has served to highlight the advantages of harmonizing the various aspects of product stewardship programs between jurisdictions. To this end, the Department has been working with other states and producers through the Electronics Recycling Coordination Clearinghouse to identify priorities for, and work toward harmonization of, state e-waste product stewardship laws.

Additional product stewardship laws in the U.S cover mercury-added thermostats (9 states including Maine), mercury-added lamps (Maine, Massachusetts, and Washington State), paint (Oregon and California), and pesticide containers (California).

Figure 1 – State Product Stewardship Laws

In Canada, product stewardship requirements have been initiated at the provincial level. After over 50 different EPR programs were legislated in Canada, the Canadian Council of Ministers of the Environment (CCME) approved the Canada-wide Action Plan for Extended Producer Responsibility on October 29, 2009. The “Action Plan” provides a blueprint to provinces to create a harmonized approach to EPR across Canada, “…with common coordinated policies and

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commitments for government action and common key elements for …identified priority products”. This includes two lists of products, with “Phase 1” products to be meaningfully managed through EPR programs within 6 years (no later than 2015) and “Phase 2” products within 8 years (no later than 2017). Phase 1 products include: packaging, printed materials, mercury-containing lamps, other mercury-containing products, electronics and electrical products, household hazardous and special wastes, and automotive products. Phase 2 products include: construction materials, demolition materials, furniture, textiles and carpet, and appliances. Through this plan, the provinces also committed to re-examining existing programs to identify and implement reforms which will increase harmonization across jurisdictions.

Based on the experiences gained by EPR programs in Maine, other states and the Canadian provinces, we have identified key components to address in legislation to ensure a successful product stewardship program. These key components, with explanatory notes, are delineated in Appendix C. As Maine seeks to strengthen existing programs and create successful new programs we can utilize this knowledge to ensure that all key components are addressed and to evaluate whether additional performance drivers and funding for state oversight may be needed to encourage successful programs.

II. Candidates for New Product Stewardship Programs

38 M.R.S.A §1772.2 sets out criteria that the Department may use “…to identify a product or product category as a candidate for a product stewardship program if the department determines one or more of the following criteria are met:

A. The product or product category is found to contain toxics that pose the risk of an adverse impact to the environment or public health and safety;
B. A product stewardship program for the product will increase the recovery of materials for reuse and recycling;
C. A product stewardship program will reduce the costs of waste management to local governments and taxpayers;
D. There is success in collecting and processing similar products in programs in other states or countries; and
E. Existing voluntary product stewardship programs for the product in the State are not effective in achieving the policy of this chapter.”

Department staff has informally polled municipal solid waste officials at several forums to obtain their thoughts and ideas on which products in the waste stream are most problematic for them and/or would most readily lend themselves to a product stewardship program. Product management programs for some of these products exist or are under development by producers and/or other states in the U.S., Canada and the European Union. A consistent concern expressed by municipal solid waste managers is that the Department and legislature consider the potential impact on operations and operational costs at municipal waste management facilities in the development of any proposal for a new product stewardship program in Maine.

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Based on the list of criteria in Title 38 Chapter 18 and the feedback from municipal solid waste managers, the Department has identified household hazardous waste (HHW), including paint, unused pharmaceuticals, used medical sharps, and other HHW, as a candidate for new product stewardship programs in Maine. In addition, carpet and other difficult to manage products in the solid waste stream have been identified as potentially good candidates; however, the Department is not recommending new programs for these products at this time.

A. Household hazardous wastes (HHW), including paint, unused pharmaceuticals, and used medical sharps

Household hazardous waste (HHW) meets all five of the criteria - A, B, C, D, and E - identified in 38 M.R.S.A. §1772 for candidate products for new product stewardship programs. HHW includes products that are flammable, corrosive, toxic or explosive. When generated as wastes by businesses, these products must be handled and disposed of in accordance with hazardous waste laws and regulations. An Issue Profile: Household Hazardous Waste Management is included as Appendix D.

For more than a decade, the Maine Legislature has been grappling with the issue of how best to support the development of a statewide collection system for HHW. In 1999, the State enacted laws which banned the disposal of mercury-added products (1999 P.L. c. 779, §2), and directed the Department to adopt rules governing the management of “universal wastes” (1999 P.L. c. 340 §1) (mercury-added products are a subset of universal wastes, which are hazardous waste that are commonly generated by both businesses and households). Recognizing that these new laws would require changes in how these wastes were handled, 1999 P.L. c. 779 also directed the Maine State Planning Office (SPO) to “within available resources, award grants to eligible municipalities, regional associations, sanitary districts and sewer districts for household hazardous waste collection and disposal program…to…fund capital improvements and operating expenses to facilitate the development of collection programs throughout the State for hazardous waste that is universal waste” (see 38 M.R.S.A. §2133.2-B).

In March 2001, the Department and SPO provided the Legislature with a Plan for the Statewide Collection of Household Hazardous Waste, and in January 2003 A Proposal for Providing State Cost Share Support for the Operation of Municipal and Regional Household Hazardous Waste and Universal Waste Collection Programs. The 2001 report identified subcategories of HHW and recommended preferred management options for these subcategories. “EPR” as a collection option is defined in the 2001 report as a manufacturer takeback program, with the other management options assumed to be government-funded. In fact, producers implementing EPR programs may choose to utilize any of the other “management options” included in this table as the collection system(s) for their products. Table 2 is a reproduction of “Table 1” from the 2001 report.
Table 2
PREFERRED MANAGEMENT OPTIONS FOR INDIVIDUAL HOUSEHOLD WASTES
This is reproduced from a 2001 report to the Natural Resources Committee.
The most preferred option is “A”, then “B”, “C”, and “D”.

<table>
<thead>
<tr>
<th>Waste stream</th>
<th>EPR</th>
<th>Door to Door</th>
<th>Periodic collection</th>
<th>Permanent Facility: Recycle/ reuse</th>
<th>Permanent Facility: Fuel Blend/ Disposal</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paints: oil</td>
<td>A</td>
<td></td>
<td></td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paints: latex</td>
<td>A</td>
<td></td>
<td></td>
<td>B</td>
<td></td>
<td>Non-hazardous</td>
</tr>
<tr>
<td>Paints thinner/stripper</td>
<td>A</td>
<td>C</td>
<td></td>
<td>B</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>Mercury lamps</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury switches</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury thermometers</td>
<td></td>
<td>B</td>
<td>A</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury thermostats</td>
<td>A</td>
<td>B</td>
<td></td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury/ white goods</td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury/ cars</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computers</td>
<td>A</td>
<td></td>
<td></td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV’s</td>
<td>A</td>
<td></td>
<td></td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell phones</td>
<td>A</td>
<td></td>
<td></td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other electronics</td>
<td>A</td>
<td></td>
<td></td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste oil</td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td></td>
<td>MORP</td>
</tr>
<tr>
<td>Pesticides</td>
<td>A</td>
<td>B</td>
<td>D</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Propane tanks</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Acids/bases</td>
<td>A</td>
<td>C</td>
<td></td>
<td>B</td>
<td></td>
<td></td>
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<tr>
<td>Solvents</td>
<td>A</td>
<td></td>
<td>B</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosives</td>
<td>A</td>
<td></td>
<td></td>
<td>A</td>
<td>Notify State Police</td>
<td></td>
</tr>
<tr>
<td>Antifreeze</td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammables/ gas</td>
<td>A</td>
<td></td>
<td></td>
<td>B</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Cleaning maintenance products</td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Personal care products</td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>A</td>
<td></td>
<td></td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Batteries/ alkaline</td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td></td>
<td>Non-hazardous</td>
</tr>
<tr>
<td>Batteries/ ni cad</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Batteries/ lithium</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Batteries/ lead acid</td>
<td>A</td>
<td></td>
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</tbody>
</table>
The January 2003 report was submitted in response to Resolves 2001, c. 93, which directed the Department and SPO to submit a report “on the feasibility and design of a long-term funding mechanism to provide state cost-sharing support to municipalities and regions for the operational costs of a statewide household hazardous waste and universal waste collection program.” The directive in the Resolve and the funding recommendation in that report were based on the assumption that municipalities would continue to bear primary responsibility for the management of HHW, including capital investment and operating costs. With the implementation of product stewardship programs, this assumption is no longer valid as producers take on the responsibility for management of products in the solid waste stream.

When producers are given full responsibility for end-of-life management of their products, they may choose to utilize both private and/or public collection facilities. In fact, the product stewardship programs for electronics, mercury-added thermostats, mercury-added lamps, and rechargeable batteries (all subsets of HHW) in Maine utilize both public (municipal) and private (solid waste management businesses, retail and wholesale locations) collection sites. The enactment of additional product stewardship programs for HHW will drive the need for additional convenient regional collection locations and capital investments in infrastructure and equipment; this new investment may occur at public and/or private facilities.

The need to develop additional infrastructure to support efficient collection for product stewardship programs provides new opportunities for public-private partnerships. For example, the state may work with researchers at its universities to define locations for a network of regional facilities that meet convenient service targets based on percentage of population within a certain distance of collection sites (e.g., Nova Scotia has established a network of privately-operated environmental depots within 30 kilometers of at least 95% of the rural and urban populations). This information can be used by private sector businesses involved in implementing product stewardship programs to help them utilize existing facilities and/or support the development of new facilities to provide efficient convenient collection as needed for EPR programs. In addition, 38 M.R.S.A. §2133, sub-§2-B could be amended to support grants for both public and private recycling infrastructure development as revenues allow.

Proposal: Enact new product stewardship programs for paint, unused pharmaceuticals and used medical sharps, direct the Department to plan product stewardship proposals for the remaining components of household hazardous waste not covered by Maine’s laws, and amend 38 M.R.S.A. §2133, sub-§2-B to allow for grants to businesses for infrastructure and equipment investments in support of waste collection and management.

1. Paint

Unused paint meets four of the criteria (A, B, C, and D) identified in 38 M.R.S.A. § 1772 for candidate products for new product stewardship programs. The waste paint stream contains toxics (VOCs, heavy metals), latex paints are readily recyclable and oil-based paint can be blended for fuel value, paint recycling costs are currently borne by municipalities on a voluntary

9 October 6, 2010 e-mail from Gerard MacLellan, Atlantic Canada Electronics Stewardship, to Carole Cifrino, Maine DEP.
basis through HHW collections (although many HHW collection exclude latex paint), and other jurisdictions have successful product stewardship programs for paint (Oregon and Canada).

When asked to identify products for product stewardship programs, municipal representatives name paint as a priority. Waste paint is problematic for solid waste facilities to handle: liquid waste is prohibited from disposal in the solid waste stream so residents are instructed to allow waste paint to dry out or to bulk it with kitty litter or sawdust before disposal. Municipal waste facility operators frequently receive inquiries from consumers wanting to recycle their waste paint. Waste paint (including latex) makes up more than 50% of the waste collected at household hazardous waste (HHW) collection events. The Department estimates that Maine consumers generate at least 200,000 gallons of waste paint each year. Currently, it costs more to recycle latex paint and dispose of oil-based paint than is recouped from the selling of recycled paint. In Maine, this cost is borne by municipalities operating the HHW collections, and commonly funded by a combination of taxpayers and user fees at collection.

In 2003, the paint industry began working with representatives of state and local governments and non-governmental organizations through the Product Stewardship Institute on a Paint Product Stewardship Initiative (“PPSI”). One of the main goals of the paint industry in engaging in this process is to develop a product stewardship program that can be implemented consistently across the country, avoiding the variation that has developed in state e-waste EPR laws. Based on the work of the PPSI, Oregon passed the first paint product stewardship law in the U.S. in 2009, with implementation of this “pilot program” starting in July 2010. California subsequently enacted a paint product stewardship law in September 2010. Both these laws provide funding for the producer responsibility programs by imposing a fee per gallon on manufacturers, with the fee specifically reflected on invoices to the retail level, and in California charged to customers and shown as a separate item on their sales receipt. The monies raised by these fees are directed to producers to fund their paint stewardship program. This is similar to the way some product stewardship programs have been funded in Canada. Recently, Ontario rescinded retail fees as a funding mechanism for some of its product stewardship programs (see October 12, 2010 statement by John Wilkerson, Ontario Minister of the Environment, in Appendix E).

Similar paint EPR legislation was considered in 2009 in several other states, including Vermont and Connecticut. The Vermont legislation was passed by the Vermont Senate and the House Natural Resources Committee, but was rejected by the Ways & Means Committee. The proposed legislation imposed a fee per gallon at retail sale, with the monies raised by this fee directed to the manufacturers to fund their paint recycling program. The Vermont legislature’s Ways & Means Committee rejected imposing the fee at retail because it was perceived to be a new government-imposed fee and it could create an incentive for Vermont residents to buy their paint in New Hampshire.

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Since failure of the Vermont legislation in the 2010 legislative session, Department staff has consulted with other state and local governments to develop paint product stewardship legislation. The goal of this effort was to address the concerns with imposing a fee at retail sale while respecting the manufacturers’ desire to maintain as much consistency as possible with existing paint product stewardship laws. The Department’s proposed legislation (Appendix F) is based on these discussions. It includes provisions that address all the key components delineated in Appendix C, with language to ensure that any assessment charged by manufacturers through their sales chain is accurately attributed and not mischaracterized as a government-imposed fee or tax.

2. Unused Pharmaceuticals

Unused pharmaceuticals meet four of the criteria - A, C, D and E - identified in 38 M.R.S.A. §1772 for candidate products for new product stewardship programs. Since 2004 when the governor-appointed Maine Drug Implementation Group issued its report, there has been a strong consensus among law enforcement, public health entities and the environmental community that Maine needs a permanent statewide program to collect unwanted medications. There has also been uniform agreement that neither the State nor local governments can fund a pharmaceutical collection program over the long-term.

Following are recommended components for a pharmaceutical product stewardship program.

1. Develop a product stewardship program for the collection and proper disposal of unwanted pharmaceuticals from residential sources that will service both urban and rural areas of the state.

2. Establish a transitional program to be funded by the pharmaceutical manufacturers and operated by the state until January 1, 2013 when the manufacturers would finance and take over management of the product stewardship program.

3. Define the scope of products covered to include prescription and over-the-counter drugs, both generic and name brand.

4. By July 1, 2012 require the pharmaceutical manufacturers, either individually or collectively, to submit a stewardship plan for approval by the state.

5. Require the manufacturers to submit an annual report, and a reporting fee to cover ongoing state administration and oversight.

6. Require pharmaceutical wholesalers to annually provide the Department with a list of manufacturers whose products they have sold in or into the state during the previous year.

7. Require pharmacies and health care settings that distribute or provide patients with prescription drugs, including samples, to post and provide program information and pre-paid mailers. Materials must be provided by the manufacturers at no cost.
Legislation to implement this proposal is included in Appendix G.

**Discussion on unused pharmaceuticals.**

The issue of unused pharmaceuticals has earned the intense concern of three interest groups: law enforcement, public health and environmental advocates.

A. Unused pharmaceuticals pose significant risks to the public safety, public health or the environment. The facts speak for themselves.

**Public Safety**

- Maine holds the dubious distinction of being **Number One** in the country for prescription drug related crime per capita (break-ins, assaults, murders, robberies etc.). Societal costs related to prescription drug abuse and crime are extremely high and significant. Costs associated with drug related crime in Maine communities were estimated at $214.4 million in 2005 and have only increased since then.

- Compared to the rest of the country, in 2010 Maine has the most law enforcement agencies reporting prescription drugs contributing to property crime (51%) and reporting that prescription drugs contribute to violent crime (63.2%).

- Prescription drug abuse in Maine and throughout the U.S. is increasing at an alarming rate. On September 29, 2010 Congress recognized the prescription drug abuse crisis and unanimously passed changes to the Controlled Substances Act to allow for easier drug collection.

- Several police departments in Maine, in recognition that unwanted drugs contribute to crime, have established local collection programs, currently funded at taxpayer expense.

- The US Drug Enforcement Agency, in recognition of the growing prescription drug problem and public concern, organized a national one-day take-back event (September 25, 2010) and collected 151 tons of unwanted drugs. Over 7 tons came from Maine communities, one of the highest per capita collection rates for the country. MidCoast Hospital in Brunswick, Maine holds a 4 hour collection event twice a year and routinely collects almost 1 ton of material during each event. At the June 2010 event 16,489 doses of narcotics were collected, with an estimated street value over $100,000.

“We’re seeing people desperately and aggressively trying to get their hands on these pills,” said Janet T. Mills, the attorney general in Maine. “Home invasions, robberies, assaults, homicides, thefts — all kinds of crimes are being linked to prescription drugs.”

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1. National Drug Intelligence Center; presentation by David Pavlik (NDIC), October 2009.
Public Health

- Studies show that a majority of abused prescription drugs are obtained from family and friends, including from the home medicine cabinet. Among Maine students in grades 6 to 12, 11% have used prescription drugs for a reason other than its intended purpose; 5% misused prescription drugs within the last 30 days.\(^{15}\) The presence of unused drugs in the household is significantly contributing to increasing rates of prescription drug abuse among teens who believe they are safer than “street” drugs such as heroin or crack cocaine.

- According to a national survey of general hospitals performed by the Substance Abuse and Mental Health Services Administration (SAMHSA), in 2008 children age five and younger made up 68.9 percent of an estimated 100,340 emergency room visits for accidental drug consumption. The survey did not include children's or other specialty hospitals.

- In Maine, deaths from drugs now exceed those from motor vehicle accidents, with prescription drugs playing a leading role. In 2008 Maine had 168 drug related deaths. Of those, 155 deaths, or 92% were caused by accidental or intentional abuse of prescription drugs, more than from car accidents!\(^{16}\) (153 total fatalities from auto accidents in 2008). An additional 30 deaths are attributed to illegal drugs use in the same year, highlighting the fact that prescription drugs are the drugs of choice to get high.

- In the United States, there are more current non-medical users of prescription controlled substances than the number of abusers of cocaine, heroin and hallucinogens (other than marijuana) combined.

- 1 in 7 teens report using pills to get high in the past year.

\(^{15}\) 2008 MYDAUS.
\(^{16}\) Dr. Marcella Sorg, Margaret Chase Smith Policy Center, e-mail 2/1/10.
Outpatient admissions, hospitalizations and poisoning deaths related to medications cost Maine an estimated $33 million a year and costs are rising.

**Figure 2**

*First Specific Drug Associated with Initiation of Illicit Drug Use among Past Year Illicit Drug Initiates Aged 12 or Older: 2009*

<table>
<thead>
<tr>
<th>Drug</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Relievers</td>
<td>17.1%</td>
</tr>
<tr>
<td>Inhalants</td>
<td>9.8%</td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>8.6%</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>2.1%</td>
</tr>
<tr>
<td>Stimulants</td>
<td>2.0%</td>
</tr>
<tr>
<td>Sedatives</td>
<td>1.0%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>0.3%</td>
</tr>
<tr>
<td>Heroin</td>
<td>0.1%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>59.1%</td>
</tr>
</tbody>
</table>

3.1 Million Initiates of Illicit Drugs

**Environmental Issues**

- There are thousands of drugs on the market. The increasing number of prescriptions, expanding drug uses, an aging population and other factors are contributing to a dramatic rise in drug sales each year. The US accounts for about half the worldwide sales of ethical pharmaceuticals, including veterinary and over-the-counter sales. Without action, environmental degradation caused by inappropriate disposal such as flushing or landfilling is a problem that will only get worse.

- Quantities of drugs entering the environment are only one factor. How a drug is metabolized, how rapidly it degrades in the environment and the toxicity of the drug or its metabolites are a few other factors complicating the picture.

- Drugs are designed to be biologically active. Studies have shown detrimental impacts on non-target organisms at very low concentrations, such as male fish producing eggs. Worms have been shown to bioaccumulate pharmaceuticals from land-spread sludge. The body of evidence on negative environmental impacts is constantly growing as more research is done.

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Aquatic organisms may be exposed to pharmaceuticals continuously, in what has been termed a “pseudo-steady state”. For some drugs, breakdown may be balanced by replacement and others are truly persistent, creating this continuous exposure.

Little is known about the additive and synergistic effects of continual, long-term exposure on non-target aquatic organisms.

Disposing of unused pharmaceuticals in the trash leads to release of pharmaceuticals to the environment. A Maine study done in 2009 found pharmaceuticals in landfill leachate. Most leachate goes to wastewater treatment plants which are not designed to remove pharmaceuticals before discharge to Maine surface waters.

B. A product stewardship program for the product will increase the recovery of materials for reuse and recycling.

At the present time, unwanted pharmaceuticals can not be reused because of uncertainty about their efficacy and safety after they have been stored in peoples’ homes. Recycling of pharmaceuticals is not cost effective or desirable for a variety of reasons.

C. A product stewardship program will reduce the costs of waste management to local governments and taxpayers.

Management of unused pharmaceuticals is particularly problematic under current drug enforcement and waste regulations. Some pharmaceuticals are listed hazardous wastes and some are hazardous by characteristic. Additionally, some pharmaceuticals are regulated as controlled substances under federal law, and when generated as waste must be in law enforcement possession until destroyed. The logistics of complying with all requirements have proven difficult and costly for voluntary community collection programs.

There are three types of collections that have taken place in Maine: one-day collection; ongoing collection at drop boxes in police stations, and consumer mail-back to the Maine Drug Enforcement Agency (DEA). Each has unique costs. All necessitate the involvement of law enforcement, and result in the expenditure of taxpayer money.

MidCoast Hospital is the only known one-day collection event in the state that has quantified the cost of running their 4 hour collection event. Costs include event advertising, overhead, personnel, (law enforcement and a pharmacist, and general help) and disposal. MidCoast estimates that each collection event costs over $10,000. Although they have received generous grants and significant volunteer help to date, these grants are not a sustainable
funding mechanism. Voluntary programs have no consistent funding, are expensive, and do not provide for a coherent and comprehensive collection system.

D. There is success in collecting and processing similar products in programs in other states or countries.

Pilot collection programs have operated in Maine, Washington State and several other states. Maine’s mail-back pilot has been so successful it has been adopted as a permanent program by the U.S. Veterans Administration for certain regions of the country. When a veteranfills a prescription, they may be provided with a pre-paid mailer to send any unwanted medications for proper destruction. This program is paid for by taxpayers.

In addition, permanent product stewardship programs funded and run by the pharmaceutical industry exist in Canada and in several European Union (EU) countries. France, Portugal, Spain and Sweden all have national programs that allow consumers to return unwanted pharmaceuticals to local pharmacies. The funding for each program except Sweden includes or is exclusively provided by the pharmaceutical manufacturers.

British Columbia has had a pharmaceutical product stewardship program since 1996, funded by the manufacturers. Nova Scotia has a similar existing program, and Manitoba’s program will begin in January 2011. Canadian provinces as a whole are moving towards comprehensive product stewardship programs, all of which will include pharmaceuticals.

E. Existing voluntary product stewardship programs for the product in the State are not effective in achieving the policy of this chapter.

There is no existing voluntary product stewardship program for collecting unwanted pharmaceuticals in the State. The state has held nine stakeholder meetings to discuss the need and possible structure of a collection program, at the culmination of which the pharmaceutical manufacturers were still in opposition to any action that would address this complex issue.

Legislative History

Public Law 2003, Chapter 679 authorized the Unused Pharmaceutical Disposal Program and established the Maine Drug Return Implementation Group. The legislation gave program administration to the Maine Drug Enforcement Agency, but did not include any funding. The implementation group was formed during the fall of 2004, with appointment of two members of the House, one member of the Senate, representatives of Maine police chiefs, pharmacies, pharmaceutical manufacturers, an association of medical professionals, the Office of the Attorney General, the Department of Health and Human Services, the Department of Environmental Protection and the Maine Drug Enforcement Agency. It was charged with working on implementation issues for a program, specifically addressing postal regulations, methods and requirements for packaging for mailing, minimizing drug diversion and theft, public education and encouraging the development of turn-in events.
The implementation group held 4 public meetings to receive briefings on all pertinent issues and to reach consensus on recommendations for a legislative report due in March 2005. In that report the Implementation Group recommended that the Legislature establish a product stewardship approach for collecting unwanted pharmaceuticals, with a manufacturer funded program to begin by July 2007. At that point in time the Legislature did not take action and the manufacturers did not step forward voluntarily with funding.

In 2007 the US EPA funded a pilot mail-back program administered by the University of Maine’s (UMaine) Center on Aging. The mail-back pilot has been very successful and has become a national model for providing convenient collection (e.g. some regional Veterans Administration services make mailers available to collect unused pharmaceuticals – however, this is funded by taxpayers). Using the knowledge and experience gained from the UMaine pilot, Representative Anne Perry introduced LD 821, An Act to Support Collection and Proper Disposal of Unwanted Drugs during the first session of the 124th Legislature. The act called for a permanent program, designed and funded by the pharmaceutical industry. The bill was carried over by the Health and Human Services Committee with a request that the sponsor hold stakeholder meetings over the summer. Five very well attended meetings were held, with broad support for a manufacturer-funded collection program from law enforcement, the medical and environmental communities but continued opposition from the pharmaceutical representatives. In the 2nd regular session, the bill was brought back and was passed by the House but did not come to a vote in the Senate. This bill was supported by the Department as well as the Departments of Public Safety and Health and Human Services, and the Attorney General. The bill was opposed by pharmaceutical manufacturers.

3. Medical sharps

Used medical sharps meet four of the criteria - A, C, D and E - identified in 38 M.R.S.A. §1772 for candidate products for new product stewardship programs. Following are recommended components for a used medical sharps product stewardship program.

1. Establish a product stewardship program for the collection and proper disposal of used medical sharps from residential sources that will service both urban and rural areas of the state.

2. Require medical device manufacturers who produce medical sharps and pharmaceutical manufacturers who make or fill medical sharps to share in the program funding.

3. Define the scope of products covered to include pen needles, syringes and lancets.

4. By July 1, 2012 require the medical device and pharmaceutical manufacturers, either individually or collectively, to submit a stewardship plan for approval by the state.

5. Require the manufacturers to submit an annual report with a reporting fee to cover ongoing state administration and oversight.
6. Require pharmaceutical wholesalers to annually provide the Department with a list of manufacturers whose medical sharp products they have sold in or into the state during the previous year.

7. Require pharmacies and health care settings that sell or provide patients with medical sharps to make program information available to patients.

8. Establish performance metrics based on annual collection quantity, public awareness and convenience.

Legislation to implement this proposal is included in Appendix H.

**Further discussion on used medical sharps.**

A. Medical sharps may contain hazards that pose the risk of an adverse impact to the environment, public health and safety.

The U.S. EPA estimates that over 3 billion disposable needles and syringes and an additional 900 million lancets (collectively called “medical sharps”) enter the municipal solid waste (MSW) stream each year in the United States. There are three main sources: those managing their own or their pet’s health care at home by testing blood sugar levels and/or injecting medication, and intravenous drug users. Although diabetics generate a majority of these sharps, self injection of medications is becoming an increasingly popular mechanism for drug delivery for patients with a wide variety of other medical conditions. The Maine Center of Disease Control and Prevention considers diabetes to be a growing epidemic in Maine. An estimated 115,000 Maine people have diabetes and approximately one-third, or 38,000, use sharps in the management of their disease. As the number of diabetics grows, the number of home medical sharps generated is expected to increase significantly.

Those using medical sharps routinely discard them in the trash at home or in public settings, or down the toilet. These disposal methods create the potential for injury or for the transmission of infectious diseases to homeowners, sanitation workers, sewage treatment plant operators, and waste management personnel at transfer stations, recycling plants, and disposal facilities. Used sharps are also a hazard for hospitality workers at restaurants, hotels, airports, and other locations. In addition, since people dispose of needles almost everywhere, sharps can pose a basic hazard to the general public. The Product Stewardship Institute writes in their medical sharps report:

“Medical sharps in the waste stream – or discarded in a public place – have the potential to “stick” someone who comes in contact with the product either through the course of their work or in other ways, such as in stories of used needles washing up on beaches or being found in parks or playgrounds. Any such event represents the potential transmission of bloodborne pathogens, but is at minimum a costly and potentially emotionally-difficult experience. (Even) If no disease is transmitted, the individual will most likely receive extensive testing and vaccinations, and may suffer psychological trauma from the fear of the potential for disease
transmission…Regardless of secondary impacts, the individual will have a puncture wound or abrasion which will vary in severity depending on the location (e.g. hand vs. eye) and treatment.”

Data shows that many sharps users dispose of their needles in the trash because they are not aware of, or can’t afford or access other convenient disposal options.

B. A product stewardship program for the product will increase the recovery of materials for reuse and recycling.

At this time there is little potential for medical sharps to be recycled although one company claims to have developed a processing methodology in which used sharps and their plastic packaging can be made into a commercial fuel source.

C. A product stewardship program will reduce the costs of waste management to local governments and taxpayers.

The cost of managing waste medical sharps varies considerably depending on the type of disposal program or services used. Still, no matter what the system is, the service is usually provided by local or state agencies or by a local medical facility as a public safety and disease prevention service.

In Maine there is no state-funded sharps collection program and it is not typically a service provided by local governments. Other entities, such as hospitals, may provide this service on a voluntary basis and with their own funding sources. It is clear though that Maine collection programs are very limited and that the most common disposal route is through the trash. Maine biomedical rules require household generators to place discarded household generated sharps in a rigid, puncture and leak resistant container. The rules go on to say that these containers may then be placed into the trash or managed as a biomedical waste. Unfortunately even if a patient follows the requirements, injuries to sanitation workers and the public may still occur because the containers are crushed through compaction in the garbage truck, on a tipping room floor or at a landfill.

The societal costs associated with needle-caused injuries are high. One study estimated up to $6,300 for initial testing and care for a needle “stick” incident and up to hundreds of thousands of dollars if a disease is contracted. If

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18Most of section A is either sourced from or directly quotes the Product Stewardship Institute “Product Stewardship Action Plan for Medical Sharps”, June 27, 2008.

someone is injured, medical care may be provided either directly or indirectly at taxpayer expense.

D. There is success in collecting and processing similar products in programs in other states or countries.

Recently several state legislatures have passed laws that require the separation and collection of home generated sharps, usually at taxpayer or health care program expense. Several states have also included a disposal ban in their law. In Rhode Island and individual localities in other states, pharmacies are participating as collection sites. The Massachusetts Department of Public Health has 60 collection sites in state and local health departments, community health centers and HIV/AIDS prevention centers. In Maine, some hospitals and a few local fire departments with EMT staff will accept waste sharps from the public. As previously noted this is voluntary on the part of Maine hospitals and is not advertised because of concern that if advertised, hospitals could be overwhelmed and associated disposal costs unmanageable.

In Rhode Island pharmacies have successfully collected over a million syringes each year since 2000 without incident.

E. Existing voluntary product stewardship programs for the product in the State are not effective.

In Maine and elsewhere in the U.S. there are no existing voluntary product stewardship programs that include the pharmaceutical or medical device manufacturers. The voluntary collection programs that exist are done with either taxpayer dollars or private funds from pharmacies, waste management businesses or health care programs.

In 2008 the Product Stewardship Institute began a national dialogue on medical sharps. Three stakeholder meetings were held with the goal of developing a nationally coordinated system that is financially sustainable and would maximize the safe and environmentally sound collection and disposal of waste sharps. Although very valuable research was conducted and there was general agreement on many points of discussion by stakeholders, the dialogue did not result in consensus on responsibilities and future actions.

Maine is fortunate in having an in-state biomedical waste facility in Pittsfield, owned by the Maine Hospital Association (MHA). Oxus Environmental LLC is the designated operator. The facility treats and disposes of all medical sharps from Maine hospital members, affiliated community clinics and medical wastes from other health care sources. Oxus acts as the medical waste transporter and routinely visits up to 500 health care facilities throughout State. In addition, the Pittsfield facility is underutilized and has ample capacity to add additional waste materials. This system helps member hospitals to minimize waste disposal costs. This in-place collection program provides manufacturers an opportunity to work with MHA to utilize their existing system to minimize the cost of collection for their product stewardship program.

20 New Hampshire, California, Massachusetts and Louisiana have legislated disposal bans. Mississippi has proposed a ban.
Legislative History

During the Second Regular Session of the 124th Legislature, the Health and Human Services Committee (Committee) considered LD 1600, Resolve, To Allow for the Proper Disposal of Medical Supplies. The Committee did not vote in favor of the Resolve, rather it voted to ask the Department of Health and Human Services to convene a working group, including the Department of Environmental Protection (DEP) and representatives of Maine’s health care community,21 to explore and address the issue of the disposal of medical supplies, including needles and to report back to the Committee by October 15, 2010. As part of their report, the working group recommended that the Department include consumer-generated sharps as a candidate for a new product stewardship program in this report.

4. Other HHW

Although Maine has several product stewardship laws which address some components of HHW, the range of products included in the category of HHW is very broad. Components of HHW that are not addressed by Maine’s existing laws or the proposals for new product stewardship programs above include:

- Pressurized containers – e.g., small gas cylinders, aerosol containers
- Pesticides (herbicides, fungicides, insecticides) and their containers
- Fertilizers and their containers
- Oils, coolants, antifreeze, and their filters and containers
- Flammables – e.g., gasoline, kerosene, fuel additives, transmission fluid, adhesives, thinners, solvents, sealers, barbeque starters, etc.
- Explosives – e.g., ammunition, emergency flares
- Corrosives (acids & alkalines) – e.g., drain openers, tire cleaners, paint remover, masonry products, battery acid
- Reactives - e.g., pool chemicals, isocyanate foams, metal powders
- Irritants – category referenced in Ontario in the Consumer Chemical and Container Regulations, 2001
- Smoke detectors

This listing reflects the complexity of categorizing HHW, with many products falling into overlapping categories. At this point in time, it is unknown how many producers might be affected by new product stewardship programs for HHW that is not currently covered by product

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21 The working group included representatives from Maine General Hospital, the American Legion, Cary Medical Center, the Maine Hospital Association, Steven’s Memorial Hospital, Maine Municipal Association, Maine DEP, Maine-CDC, and the Maine Environmental Health and Testing Laboratory.
stewardship laws in Maine. Additional groundwork must be done to create a clear and comprehensive plan to manage other HHW products through new product stewardship programs. This work includes: clearly defining the scope of HHW products for new product stewardship programs, identifying likely affected manufacturers, developing a comprehensive product stewardship program proposal for HHW, and determining the resources needed for the state to oversee any new program passed by the legislature.

To address the remainder of HHW, the Department is proposing the legislature direct the Department to develop a plan for a product stewardship program for major components of the household hazardous waste (HHW) stream not already subject to product stewardship programs. The plan should delineate household hazardous waste product categories, include an implementation schedule, propose a mechanism to provide funding for private and public infrastructure development, and include legislation to establish additional HHW product stewardship programs. This plan should be included in the Department’s 2012 report to the legislature submitted in accordance with 38 M.R.S.A. §1772. Legislation to implement this proposal is included in Appendix F.

B. Carpet

At this time, the Department is not recommending legislation to require a product stewardship program for carpet, but is continuing to work with the carpet industry in support of its voluntary product stewardship initiative. However, the need for product stewardship legislation may change if significant progress is not made by the industry to establish affordable carpet recycling in Maine.

Carpet meets four of the criteria (B, C, D, and E) listed in 38 M.R.S.A. §1772.2 to identify products that are likely candidates for a new product stewardship program. A product stewardship program for carpet will increase the recovery of materials for reuse and recycling, will reduce the costs of waste management to local governments and taxpayers, there is success in collecting and processing carpet in programs in other states, and existing voluntary product stewardship programs for carpet are not currently effective in Maine. Carpet is readily recyclable, but only two municipal waste management programs in Maine reported to the State Planning Office that they recycled carpet in 2009. However, due to on-going industry-led efforts to achieve sustainability in the production of carpet in part through carpet recycling, the Department is not recommending legislation this year to establish a mandatory comprehensive product stewardship program for carpet.

In 2002, the carpet industry entered into a ten-year Memorandum of Understanding for Carpet Stewardship (“MOU”), which it negotiated with seven states and several environmental non-governmental organizations (NGOs) to support the recycling of end-of-life carpet. Maine is now
one of 21 states which have signed onto the MOU. This MOU delineates the roles of industry, government and NGOs in supporting the development of new technologies and infrastructure as well as environmentally preferable purchasing to increase carpet recycling. The MOU includes goals for diversion from disposal and recycling, as well as timeframes for setting new goals. The MOU is non-binding on all signatories. Department staff is currently engaged in national negotiations to update the MOU; a revised MOU is expected to be agreed upon sometime in 2011.

As a result of the 2002 MOU, the carpet industry established a third-party organization, the Carpet America Recovery Effort (CARE), to help implement the MOU. CARE’s mission “is to facilitate the carpet industry-lead initiative to find market driven solutions to the diversion of post-consumer carpet from landfills to meet the time sensitive goals of the Memorandum of Understanding (MOU) for Carpet Stewardship.” Its vision is “To bring value to the emerging post-consumer carpet recycling industry through reuse, recycling into carpet and non-carpet products and other diversion technologies.”

Over the past eight years, CARE has been successful in establishing systems to track the diversion and recycling of carpet, as well as in providing information and forums to encourage the development of additional infrastructure and technologies to support recycling. However, the industry has not achieved the diversion and recycling goals set by the MOU. Although carpet manufacturers have worked to develop product that can be readily recycled and/or is made with recycled content, the costs of collecting, transporting, sorting and processing used carpet from Maine has to date exceeded the market value of the commodities recovered. However, there is at least one Maine business that has recently connected with CARE and is actively exploring establishing a used carpet consolidation and sorting operation in Maine. If there is enough value in dry sorted carpet and transportation costs are not too high, this could change the economics enough to make voluntary carpet recycling in Maine cost less than disposal. The Department is continuing discussions with this Maine business to determine if there are any legislative steps that could be taken to support establishment of this new business enterprise and make voluntary carpet recycling the norm in Maine.

C. Other products

Several other products are currently being managed by product stewardship programs in other jurisdictions, or have been identified by solid waste managers and operators in Maine as possible candidates for product stewardship programs. These include the following:

- Packaging and printed paper - Packaging has been managed by producers in Germany since 1991, with the European Union adopting a directive in 1994 applying product stewardship for packaging to all member countries. Canadian programs for packaging include new printed materials, and in 2010 EPA began a dialogue with representatives of producers, states

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and non-governmental organizations on developing product stewardship for packaging and printed paper in the U.S.

• Alkaline batteries - Solid waste personnel for Maine municipalities report that consumers frequently ask to recycle their alkaline batteries (rechargeable batteries are collected for recycling at more than 475 retail and municipal locations in Maine). Battery manufacturers are working with the Rechargeable Battery Recycling Corporation to institute a product stewardship program for all household batteries throughout Canada.

• Plastic bags – On November 9, 2009, a coalition of business leaders, grocery and retail associations, and government officials announced the start of the *Got Your Bags, Maine?* campaign. The aim of this campaign is to reduce the use of single-use checkout bags by 33% by 2012 through a public education and outreach effort which encourages Mainers to use reusable bags rather than single use paper or plastic. Other state and local governments have considered bans on single-use plastic bags and other approaches to reducing the generation of waste plastic bags.

• Phone books – About 660,000 tons of waste telephone books are generated each year in the U.S. Phone books can be challenging to recycle because they are made with a low grade of paper, and are sometimes distributed with materials that become contaminants in the recycling process (e.g., magnets and plastics). Because recycling opportunities are limited and expensive, and local governments bear the costs of recycling and/or disposal, source reduction has become an attractive approach to minimizing phone book waste. Several jurisdictions in the U.S. have considered legislation to require that residents either “opt-in” or “opt-out” of receiving phone books. Seattle, Washington recently enacted an “opt-out” ordinance.

• Mattresses, furniture, and construction and demolition debris - These are bulky waste which can be difficult to handle and expensive to manage as part of the general solid waste stream. In Connecticut, solid waste facilities have recently started charging $35 when residents dispose of mattresses. Product stewardship programs for mattresses (in the category of “furniture”) and construction and demolition debris are slated for implementation in Canadian provinces no later than 2017.

Department staff will continue to track developments in voluntary and legislated programs to manage these difficult wastes. As appropriate, the Department will provide the Joint Standing Committee on Natural Resources with proposals for product stewardship programs for these items in accordance with the provisions of Maine’s *Product Stewardship* framework law.

### III. Existing Maine product stewardship programs and proposed changes

As the Department performs its administrative oversight and compliance activities for Maine’s product stewardship programs, staff is able to identify provisions of the laws that are particularly problematic to implement, that manufacturers or others identify as particularly burdensome, or that offer opportunities for harmonization with other states’ programs without compromising
program performance. The Department also routinely assesses the results of Maine’s EPR programs to identify if adjustments are needed to improve program performance.

To increase recycling rates, simplify some administrative processes, and provide additional incentives for producers to comply, the Department is proposing the following changes to Maine’s existing product stewardship laws.

A. Motor Vehicle Components

Proposal. The Department is proposing two additions to Maine’s Motor Vehicle Components law: 1) allow end-of-life vehicle handlers to receive the $4 bounty if they log either the vehicle identification number (“VIN”) or the year, make and model; and 2) improve enforceability by adding a definition for “manufacturer” and a financial disincentive for non-compliance that also ensures a manufacturers’ stewardship organization does not bear costs related to non-participating manufacturer non-compliance. The statutory changes needed to implement this proposal are included in Appendix I.

Discussion. Subsequent to implementing the first mercury switch collection program to comply with Maine’s Motor Vehicle Components law, manufacturers designed a voluntary program for the recycling of mercury switches from motor vehicles, and have made this program available in all other states. In 2008, manufacturers expressed a desire to transition their Maine switch collection program to be implemented in conjunction with their “National Vehicle Mercury Switch Recovery Program” (“NVMSRP”). To this end, the Legislature amended 38 M.R.S.A§1665-A, sub-§5, at the Department’s request to provide more flexibility in how the program can be implemented (see P.L. 2009, c. 277, enacting LD 1042, 124th Legislature), and has since been working with manufacturers to ensure a smooth start to the new program on January 1, 2011.

During this process of planning for the transition, manufacturers have proposed that end-of-life vehicle handlers in Maine be allowed to identify each switch’s source vehicle by recording the year, make and model (as is done in the NVMSRP) rather than by the 14-digit Vehicle Identification Number (as currently required under the Maine law). Manufacturers also expressed concern that their stewardship organization (End-of Life Vehicle Solutions, “ELVS”) could incur costs of managing mercury switches from manufacturers not participating in their program (this concern was heightened by the recent financial difficulties of General Motors).

To address the latter concern, we recommend that the auto switch law be amended to incorporate a provision modeled on existing enforcement language in Maine’s E-Waste law. Under that language [see 38 M.R.S.A. §1610(7)] a manufacturer who fails to meet its stewardship responsibility could be held liable for 3 times the amount of any costs incurred by the state as a result of the manufacturer’s failure to comply. The Department has found this provision to be effective in encouraging electronics manufacturers to meet their product stewardship responsibilities.
B. Electronic wastes

In its January 15, 2010 Report on Maine’s Household E-waste Recycling Program, the Department recommended two changes to Maine’s Electronic Waste law for the Legislature’s consideration: 1) expand the manufacturer recycling program to include recycling of e-waste delivered by small universal waste generators to collection sites, and 2) establish a de minimis waste amount for historic information technology (IT) manufacturer registration fees and a lower registration fee for manufacturers with de minimis market share. With some minor adjustments, we are proposing that the Legislature amend 38 M.R.S.A. §1610 to integrate these recommendations. The statutory changes need to implement this proposal are included in Appendix J.

1. **Proposal:** Extend Maine’s E-Waste Program to allow recycling of e-waste from small universal waste generators to qualify for manufacturer support.

**Discussion:** Maine’s e-waste law currently limits producers’ responsibility to covered electronic devices generated as waste by households. However, many small businesses in Maine utilize the same municipal waste collection systems that households use for managing their universal wastes, including electronics. This means that collection sites and events must implement procedures to distinguish between business and household e-waste, and that the consolidators working in the program must again distinguish the different generators when handling the units to ensure that the manufacturers are billed only for household units, with the collection site billed for the recycling of the business e-waste. This bifurcation in the system increases operating costs for both the municipal collection sites and the consolidators. Because of this, many municipal collection sites will not accept e-waste from small businesses, leaving small businesses to individually contact universal waste management companies to schedule and pay for a special pick up to recycle their e-waste.

As noted in the Department’s January 2010 Report, “Many states have included e-waste from small businesses within the scope of their programs. Allowing small business e-waste into the program will increase the amount of e-waste managed at collection sites, providing for more efficient transportation. It will also provide a greater volume of e-waste managed to the recyclers, which in other state programs has been cited as key to driving down the per pound cost of recycling.”\(^\text{23}\) This change will benefit Maine small businesses by reducing their costs for managing electronic waste.

The Department delineated two approaches to including small businesses in the producer responsibility program in the 2010 Report. The first is to add covered electronic devices from any Small Universal Waste Generator (SUWG) (i.e., any business that accumulates 200 or less universal waste items at a time or in any given month) to the program. The second is to limit manufacturer responsibility for recycling of business e-waste to the e-waste brought by SUWGs to the collection sites and events operated for the household e-waste recycling program. SUWGs would then have the option of transporting their e-waste to a municipal collection site.

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collection site or event that will accept it from small businesses as part of Maine’s EPR program, or of continuing to contract with a UW management company to recycle their e-waste outside of Maine’s EPR program. Municipal collection sites would retain their ability to limit the number of items they will accept at one time to ensure smooth operations at their facilities.

2. **Proposal.** Establish a de minimis waste amount that exempts historic IT manufacturers from the registration fees, and establish a lower registration fee for all manufacturers with de minimis market shares.

**Discussion.** A 2009 change in Maine’s E-Waste Law, requires manufacturers covered by Maine’s program to pay a $3000 annual registration fee to help support the Department’s administration and compliance oversight of the program. This fee applies to any manufacturer that has historically sold or is presently selling covered electronic devices into Maine. Both IT and TV manufacturers have suggested to the Department that Maine establish a trigger to exempt manufacturers from the registration fee and/or to provide a lower registration fee for manufacturers with small or de minimis sales.

Because the purpose of the fee is to support the Department’s work to implement the program, the fee should apply to any manufacturer whose involvement requires significant work on the part of the Department. For televisions and game consoles, this includes all manufacturers actively marketing product, but not manufacturers that sold in the past but were not in the market in the most recent full calendar year. Therefore, the Department proposes exempting television and game console manufacturers that are not currently producing and offering product for sale, and have not done so for the entire preceding calendar year from the annual registration and registration fee requirements.

Because both current and historic IT manufacturers are responsible for their products in the waste stream, the Department performs significant work to ensure compliance of both current and historic manufacturers. For IT equipment manufacturers, the Department proposes exempting monitor and printer manufacturers from paying the annual registration fee if they are no longer selling and there were 50 or fewer of their covered electronic products collected in the program in total during the previous three years. The annual registration requirement should continue to apply to all current and historic IT manufacturers to ensure recycling of any of their units that are collected by the program.

In the 2010 report, along with recommending the exemption of most historic manufacturers from the registration fee, the Department recommended a lesser registration fee for TV and game console manufacturers with less than 0.1% market share. To establish a proposed amount for a lesser registration fee, Department staff reviewed other states’ registration fees. There are several bases established for determining the amount of a lesser registration fee. Wisconsin’s fee system is the simplest, with the lower registration fee equal to ¼ of the fee for manufacturers with greater market shares. The Department recommends following this model to set a lower registration fee of $750 for all manufacturers with less than 0.1% market share for their covered electronic devices in the most recently reported year.
C. Mercury-added lamps

In 2010 the Department submitted a report, *Mercury-added Lamps: A Strategy for Improving Recycling Rates*,\(^{24}\) to the legislature. The report noted that the recycling rate for mercury-added lamps from both businesses and households remains very low despite extensive educational outreach efforts and a disposal ban. Much of the public appears to be unaware of the requirement to recycle waste mercury lamps, or where they can take them for recycling.\(^{25}\) When mercury-added lamps are thrown in the trash, they are inevitably broken and the mercury released to the environment. As relatively-newly purchased compact fluorescent lamps (CFLs) reach their end of life (incentives provided by Efficiency Maine resulted in Maine consumers purchasing 2.5 million CFLs from February 2003 to mid-April 2008), there is potential for an increase in mercury emissions from municipal solid waste incinerators, and thus the environmental harm caused by disposal of fluorescent lamps in the trash.

![Table 4 - Recycling rate for mercury-added lamps in Maine](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated number of lamps available for recycling in ME</th>
<th>Number of lamps shipped for recycling by ME</th>
<th>Recycling rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>3,000,000</td>
<td>732,645</td>
<td>24%</td>
</tr>
<tr>
<td>2005</td>
<td>3,000,000</td>
<td>819,689</td>
<td>27%</td>
</tr>
<tr>
<td>2006</td>
<td>3,000,000</td>
<td>671,349</td>
<td>22%</td>
</tr>
<tr>
<td>2007</td>
<td>3,000,000</td>
<td>962,685</td>
<td>32%</td>
</tr>
<tr>
<td>2008</td>
<td>3,250,000(^{26})</td>
<td>988,574</td>
<td>30%</td>
</tr>
</tbody>
</table>

The Department’s 2010 report included several recommendations for implementing strategies to improve recycling rates, including a recommendation to allow small universal waste generators (SUWG) to utilize the EPR household lamp recycling system. Based on subsequent discussions with manufacturers and municipal solid waste officials, the Department is proposing to modify this recommendation with a limitation on the number of lamps that a SUWG may deliver at one time to a program collection site. In addition, the Department is proposing changes to the EPR  


\(^{26}\) A trade association representing the lamp recycling industry estimated that 670 million mercury lamps were available for recycling in the United States in 2002 and 2003. Maine’s population-based share of that total is about 3 million. We have used this figure to calculate recycling rates for 2004 through 2007 in the absence of other industry estimates of lamps available for recycling in those years. See Association of Lighting and Mercury Recyclers, “National Mercury-Lamp Recycling Rate and Availability of Lamp Recycling Services in the U.S.”, November 2004.

\(^{27}\) This number was derived by extrapolating from and then averaging two separate estimates of the number of mercury lamps available for recycling in the U.S. in 2008. See Massachusetts Department of Environmental Protection, *2008 Massachusetts Lamp Recycling Rate Calculation: Draft for Public Comment* (October 19, 2009); see also Elizabeth Saunders, *Comments of Massachusetts Clean Water Action and Mercury Policy Project on the October 2009 Proposed Massachusetts Mercury Lamp Recycling Rate Calculation,* December 2009.
law for mercury-added lamps due to changes in Maine statute related to responsibilities for energy efficiency programs and the need for additional definition of program goals and metrics. These items have created difficulties for the manufacturers as they have worked to develop their program plan to meet the current statutory requirements.

The following proposals are designed to improve fluorescent lamp recycling rates, provide additional recycling options for small businesses, and ensure adequate evaluation of the performance of the producer responsibility program. The statutory changes needed to implement these proposals are included in Appendix K.

1. **Proposal.** Expand the manufacturer recycling program to include recycling of up to 60 fluorescent and other mercury-added lamps delivered at one time from small universal waste generators to collection sites utilized by the extended producer responsibility program for household mercury-added lamps. Collection sites include solid waste and universal waste management facilities that accept all types of mercury-added lamps, and retailers voluntarily participating in collection of compact fluorescent lamps only. Depending on their storage capacity, collection sites may place more restrictive limits on the number or type of lamps they can accept at one time.

**Discussion.** Small businesses often buy their fluorescent lamps at the same retail outlets as households. Small businesses do not have the bulk buying power that larger businesses utilize to negotiate with lamp vendors and recyclers for lower lamp costs, including take back and recycling. Instead, their only options for recycling are to arrange for a universal waste management company to make a special trip to pick up a small number of lamps from them or to deliver their lamps to a private consolidator (or if they’re lucky to a municipal collection site), both at a relatively high cost per lamp. Maine’s lamp recycling rate could be significantly improved if small businesses are allowed to recycle their fluorescent lamps at no charge as part of the EPR program through the collection sites available to households. Small businesses that are currently complying with Maine’s hazardous waste laws can benefit from this change, reducing the amount they pay for recycling of fluorescent lamps by delivering their lamps to a local collection site.

Currently, 80 of the 164 solid waste collection facilities that collect spent fluorescent lamps from households also collect lamps from small businesses and institutions for a fee. These collection facilities then pay a universal waste management company to pick up and recycle the combined household and business lamps. When producer responsibility for household lamps becomes effective on January 1, 2011, these collection sites will have to change their operating procedures to manage business lamps separately from household lamps, or instead may cease offering this lamp recycling service to small businesses. However, if the producer responsibility program is required to recycle lamps from small businesses collected along with household lamps, the number of collection sites accepting lamps from both households and small businesses will likely increase significantly, thus making lamp recycling much more accessible to small businesses across the state.
2. **Proposal.** Further define the statutory standards of “convenient collection”, and “effective education and outreach” as used in the manufacturer responsibility provisions of Maine’s mercury-added lamp law, and include performance measures that directly relate to these standards in the annual reporting requirement.

**Discussion.** Title 38 §1672.4.A delineates the requirements for the producer responsibility program for lamp recycling:

A. The recycling program required under this subsection must include:

   (1) Convenient collection locations located throughout the State where residents can drop off their household lamps without cost, including but not limited to municipal collection sites and participating retail establishments;

   (2) Handling and recycling equipment and practices in compliance with the universal waste rules adopted pursuant to section 1319-O, subsection 1, paragraph F and all other applicable requirements;

   (3) Effective education and outreach, including, but not limited to, point-of-purchase signs and other materials provided to retail establishments without cost; and

   (4) An annual report to the department on the number of mercury-added lamps recycled under the manufacturer's program, the estimated percentage of mercury-added lamps available for recycling that were recycled under the program and the methodology for estimating the number of mercury-added lamps available for recycling, an evaluation of the effectiveness of the recycling program, recommendations for increasing the number of lamps recycled under the recycling program and an accounting of the costs associated with administering and implementing the recycling program.

Paragraph §1672.4.F provides guidance on one way in which the manufacturers can meet requirements (1), (2) and (4) for the compact fluorescent lamp (CFL) portion of the waste stream:

F. The department may determine that a manufacturer's recycling program is in compliance with paragraph A, subparagraphs (1), (2) and (4) for the collection of compact fluorescent lamps from households if the manufacturer provides adequate financial support for the collection and recycling of such lamps to municipalities and a conservation program established pursuant to Title 35-A, section 3211-A and implemented by the Public Utilities Commission.

Subsequent to enactment of this law, Title 35-A, section 3211-A has been repealed, and Efficiency Maine Trust has indicated that they will discontinue the retail-based CFL recycling program previously implemented by Efficiency Maine (within the PUC) on December 31, 2010. However, this provision does provide the basis for a quantifiable definition of “convenient collection” for this program. The statute provides no guidance or detail on how the manufacturers and Department may evaluate whether the manufacturers’ education and outreach is “effective”.
The Department is proposing changes to the statute to address these changed circumstances and the need for additional guidance, including:

- Add detail to subparagraph 1672.4.A(1) to define “convenient collection” at a minimum to include no-cost collection for all mercury-added lamps at municipally-designated collection sites and at least 200 other sites located to serve all areas of the state and that provide no-cost CFL collection and recycling at least 5 days per week on an on-going year-round basis. Include that manufacturers must allow any retailer that sells lamps to participate as a CFL collection location.
- Add detail to subparagraph 1672.4.A(3) to define “effective education and outreach” as achieving: after one complete year of program operations, at least 60% of Maine households are aware that it is illegal to dispose of fluorescent lamps in Maine and that they are aware of a location where they can recycle fluorescent lamps at no cost, with consumer awareness increasing to at least 70% after three complete years of program operations and at least 80% after 5 complete years of program operation.
- Modify the annual reporting requirements to include:
  - An annual report due date of June 30;
  - Documentation of the collection locations and the number or amount of lamps collected at each location, any changes in the collection location network in the previous year, and the percentage of Maine population located within 5 miles of collection locations that accept all types of fluorescent lamps and the percentage of Maine population located within 1 mile of CFL collection locations;
  - Documentation of the program’s compliance with the universal waste rules adopted pursuant to section 1319-O, subsection 1, paragraph F and all other applicable requirements; and
  - Beginning with the annual report due June 30, 2012, reporting of results from a biennial survey conducted by an independent third party market research firm contracted by the manufacturers to determine the percentage of Maine households that are aware it is illegal to dispose of fluorescent lamps in Maine and that are aware of a location where they can recycle fluorescent lamps at no cost.

In 2008 and 2010, Efficiency Maine contracted with Digital Research, Inc. to conduct a residential awareness and attitudes survey to determine Maine residents’ awareness of Efficiency Maine, their usage and interest in efficiency Maine programs and other energy efficiency measures, and their willingness to invest money in their homes for energy cost savings. This survey showed that the percentage of residents that knew “about a statewide recycling program where you can return used CFL bulbs to any of over 200 retail stores (such as hardware stores) across the state” jumped from 41% in 2008 to 54% in 2010. This survey provides a baseline for establishing the proposed consumer awareness goals. Along with measuring consumer awareness, the manufacturers can use this survey to assess consumer knowledge, attitudes, intentions and behaviors, all of which can help in targeting educational and marketing messages.
In accordance with the significant increase in awareness of Efficiency Maine, there was also a significant increase in the percentage of Maine residents who are aware of the CFL recycling program that includes more than 200 retailers from across the state.

Awareness of the CFL recycling program is significantly higher among Maine homeowners than it is among renters in the state, providing an opportunity for Efficiency Maine to reach out to renters to inform them of the program and the need to recycle CFL bulbs.

In conjunction with adding detail to better define convenient collection to subparagraph 4.A(1) and more specific reporting requirements to subparagraph 4.A(4), paragraph 4.F should be repealed, eliminating the outdated reference to a statute which has been repealed. Paragraph 4.E requiring biennial reporting by the Department to the legislature may also be repealed given the authority provided to the Department in 38 M.R.S.A. §1772 to report each year to the legislature on the performance of existing product stewardship programs and recommendations for any changes.

3. **Proposal.** Require manufacturers to biennially contract with an independent third party market research firm to survey and report on the percentage of Maine households that are aware it is illegal to dispose of fluorescent lamps in Maine and that are aware of a location where they can recycle fluorescent lamps at no cost, and provide manufacturers with a $100,000 performance incentive to achieve defined consumer awareness goals.

**Discussion.** Like mercury-added thermostat manufacturers, mercury-added lamp manufacturers have a strong financial disincentive to offer and educate the public about the free convenient lamp collection and recycling program they are required to implement. To counter this disincentive, the Department proposes that manufacturers provide the state with $100,000 to be used for educational outreach and grants to support mercury-added lamp recycling if they do not achieve the consumer awareness goals. This will provide a financial
incentive to producers to justify the investment needed to create a successful recycling program. The legislature could provide the Department with the authority to waive the $100,000 payment if there is sufficient evidence to find that the manufacturers’ education and outreach program is effective despite not achieving the consumer awareness goals.

4. **Proposal.** Amend 38 M.R.S.A. §1772.4 to include an enforcement provision similar to the one in Maine’s *E-Waste* law at 38 M.R.S.A. §1610(7) making a lamp manufacturer that fails to meet its stewardship responsibility liable for 3 times the amount of any costs incurred by the State or other manufacturers as a result of a manufacturer’s failure to comply.

**Discussion.** As of mid-November 2010, all manufacturers the Department had identified as subject to 38 M.R.S.A. §1772.4 were committed to participating in the product stewardship program proposed by NEMA. However, NEMA has indicated to the Department that it has concerns with being held liable for the cost of recycling lamps from any manufacturers that may choose not to participate. This proposal is comparable to the proposal for amend the mercury auto switch recycling law. As noted before, under the proposed provision a manufacturer who fails to meet its stewardship responsibility could be held liable for 3 times the amount of any costs incurred by the state as a result of the manufacturer’s failure to comply. The Department has found this provision to be effective in encouraging electronics manufacturers to meet their product stewardship responsibilities.

**D. Product stewardship framework law**

**Proposal.** Amend 38 M.R.S.A. Chapter 18, *Product Stewardship* to clarify that a producer may meet its product stewardship program responsibilities either individually or collectively, and that producer financing options include financing of a program through a stewardship organization.

**Discussion.** In reviewing the new law, the Attorney General’s Office identified that the current language about financing contained within the definition of “product stewardship program”, i.e., “without a visible fee at purchase” does not adequately describe the producer’s program financing options. The Department has worked with counsel in the Attorney General’s Office to develop the proposed language presented in Appendix L to address this deficiency.

**E. Thermostats**

Maine’s mercury-added thermostats recycling law was developed over the course of several years. Initially, through the Thermostat Recycling Corporation (TRC), the major mercury thermostat producers made their voluntary recycling program available to wholesalers. Despite significant outreach efforts to wholesalers by the Department, few wholesalers signed up to participate, and thermostat recycling rates were very low.

In 2004,28 the state enacted a law requiring wholesalers to participate in a manufacturer-funded recycling program. This resulted in the expansion of the TRC program to over 70 wholesaler

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locations across the state, but collections remained disappointingly low, with only 7.3% of the estimated thermostats available for recycling being recycled in 2005.

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRC Program</td>
<td>233</td>
<td>280</td>
<td>482</td>
<td>1,079</td>
<td>1,290</td>
<td>2924</td>
<td>4656</td>
<td>5555</td>
<td>6374</td>
</tr>
<tr>
<td>UW collection</td>
<td>253</td>
<td>856</td>
<td>1398</td>
<td>335</td>
<td>701</td>
<td>361</td>
<td>667</td>
<td>823</td>
<td>655</td>
</tr>
<tr>
<td>EPI Program</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>363</td>
<td>353</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>486</td>
<td>1136</td>
<td>1880</td>
<td>1414</td>
<td>1991</td>
<td>3285</td>
<td>5686</td>
<td>6731</td>
<td>7029</td>
</tr>
<tr>
<td>Recycling Rate*</td>
<td>2%</td>
<td>4.2%</td>
<td>7%</td>
<td>5.2%</td>
<td>7.3%</td>
<td>12%</td>
<td>20.9%</td>
<td>24.7%</td>
<td>25.8%</td>
</tr>
</tbody>
</table>

*Based on baseline calculations of 27,200 estimated mercury thermostat removals per year in Maine.

In 2006, Maine enacted the Mercury-added Thermostats law requiring manufacturers to pay a financial incentive for each mercury-added thermostat returned for recycling. The manufacturers began paying a $5 incentive for each mercury thermostat returned for recycling in 2007. This change boosted recycling rates to 25.8%, resulting in the recycling of 48.75 pounds of mercury in 2009. However, this program performance remains far short of the statutory goal of collecting and recycling at least 125 pounds of mercury within 2 years and at least 160 pounds of mercury within 3 years of program implementation.

The Department has taken a number of steps to promote the program, ensure compliance and determine why the program is underperforming. Each year the program has been in place, Department staff has visited just about every collection location twice. During these visits staff checks to ensure the thermostats are being safely stored, that no non-program items are in the collection bins, that the collection site has all the program materials necessary for operations and shipment, and to answer any questions the wholesaler or retailer may have. This on-going contact has provided staff with feedback from the collection sites about any difficulties they have had with implementing the program.

For this report, the Department reviewed information gathered in the field and conducted a survey of licensed heating, ventilating and air conditioning (HVAC) technicians to learn about their knowledge of and participation in the program, and perceived barriers to participation; a summary of results is included in Figure 2.

Department staff is engaged in discussions with manufacturers on ways to improve program performance. TRC recently has extended availability of its bins to HVAC contractors. Other ideas discussed to improve program performance include making bins available to housing authorities and property management companies responsible for 50 or more units, and consideration of implementing performance metrics on consumer awareness and convenience to help target manufacturer education and outreach.

29 EPI was the program administrator for the many of the manufacturers, but reached an agreement with TRC to enable all collection through the TRC system.
IV. Conclusion

Maine can significantly increase its recycling rates by moving forward with new product stewardship programs and improvements to its existing programs. Small businesses can benefit from having the option to recycle their mercury-added lamps and some of their electronic wastes through the product stewardship systems for households. Municipalities and their taxpayers also benefit when the costs of end-of-life management are borne by producers and the product consumers (in the price they pay for a product) rather than through general taxes. Product stewardship programs also create new business opportunities in the waste management and recycling industry.

The Department’s highest priority products for new product stewardship programs are unused pharmaceuticals, medical sharps, and architectural paint.

- Unused pharmaceuticals pose significant risks to the public safety, public health and the environment. Permanent product stewardship programs are funded and operated by the pharmaceutical industry in Canada and several EU countries. Despite much work on this issue and knowledge of the societal costs of abuse of unused pharmaceuticals, the

Figure 2

Summary of Results
Survey of HVAC Technicians on TRC’s Thermostat Recycling Program

In July 2010, the Maine Department of Environmental Protection conducted a survey by mail of approximately 9300 people licensed as HVAC technicians in Maine. This is a summary of the responses received.

Total number of responses: 337*

1. The recycling program
   - 161 works well
   - 151 needs improvement
   - 7 checked both
   - 32 No Answer on #1

2. If you checked “needs improvement” why? (check all that apply)
   - 36 Too much paperwork
   - 92 It takes too long to get paid
   - 34 It’s a hassle to mail the cards
   - 41 Inconvenient collection locations
   - 39 $5/thermostat is too little to make it worthwhile
   - 190 No Answer on #2

3. Have you ever participated but didn’t receive your payment?
   - 91 Yes
   - 192 No
   - 54 No Answer on #3

4. If “Yes”, have you participated since and been paid?
   - 18 Yes
   - 67 No

*In Maine, a survey of 500 out of 1.3 million residents can provide a confidence interval of 95% in the results.
manufacturers have refused to implement an on-going, comprehensive and easily-accessible voluntary program takeback program.

- Used medical sharps pose a risk of disease transmission when not properly packaged. They are also one of the highest on-the-job hazards for solid waste workers. With manufacturer funding, a comprehensive program for sharps recovery and sterilization can be readily implemented in Maine.

- Household hazardous waste continues to be extremely challenging for Maine municipalities to manage safely. Paint is the greatest volume of material collected at HHW collections in Maine. Successful paint product stewardship programs for HHW are operating in several Canadian provinces. Paint producers have recently implemented a product stewardship program in Oregon, and California’s governor signed a paint product stewardship law on September 29, 2010. Processing capacity for turning unused paint into new product is available nearby in Canada. A product stewardship program for paint in Maine would encourage a reduction in waste paint generated, significantly increase recycling, and relieve municipal taxpayers of the cost of managing waste paint.

In 2009, the Canadian Council of Ministers of the Environment approved the Canada-wide Action Plan for Extended Producer Responsibility in which they established a schedule setting 2015 as the date by which product stewardship programs for all household hazardous wastes will be implemented throughout Canada. The work being done in Canada provides Maine with the opportunity to work with our near neighbors to develop systems and programs that are integrated and harmonized to increase efficiencies and avoid duplicative costs.

Additionally, the Department is continuing to work with the carpet industry in support of its voluntary product stewardship initiative, with the interim objective of making carpet recycling less expensive than disposal in Maine, and a final goal of the manufacturers accruing a financial benefit for cradle-to-cradle management of their products.

Based on the experience gained by implementing product stewardship programs in Maine and other states, the Department is proposing changes to Maine’s existing product stewardship laws for mercury auto switches, mercury-added thermostats, e-waste and mercury-added lamps. These changes are designed to provide small businesses with the opportunity to participate in the EPR programs, and to improve the performance of the product stewardship programs and the enforceability of the laws.

In 2010 Maine declared that it is the policy of the State to promote product stewardship to support recycling and waste reduction. Enacting new product stewardship laws and refining Maine’s existing product stewardship laws to be more effective is consistent with this policy and with the State’s “duty to protect the health, safety and welfare of its citizens.”

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31 38 MRSA §1772.1
Appendices
Appendix A – Statement of Mark Parent, Nova Scotia Minister of Environment and Labour

The following statement was provided by Mark Parent, Nova Scotia Minister of the Environment and Labour, in support of LD 1631, An Act to Provide Leadership Regarding the Responsible Recycling of Consumer Products.

Submission to the Joint Standing Committee on Natural Resources
22 January 2010
(Mark Parent)

In 1995, the province of Nova Scotia, a province only slightly smaller in population than the state of Maine, had a problem. Scattered throughout the province were over 100 dumps, some open burning waste sites which you could smell long before you could see them. To solve this problem, the government of the day decided to move to modern, state-of-the art landfills. This decision coincided with a challenge across Canada for the various provinces to reduce the waste they were diverting by 50 percent.

Putting together an innovative partnership which included the municipal governments, a crown corporation called the Resource Recovery Fund Board and private businesses, the province was able to do away with these dump sites and establish six state-of-the art landfills. In a matter of a few years, as a result of extensive education, particularly at the public school level, and with the cooperation of citizens across the province, Nova Scotia managed to reach the target of diverting 50 percent of its garbage, the only province in Canada to meet that goal.

When I was first elected as an MLA in 1999, the solid waste system was already in place and Nova Scotia had garnered national and international reputation for it recycling efforts. We kept improving on the system with innovative tire recycling projects, paint recycling and an extension of a province wide composting program. When I became minister of the Department in 2006, we realized, looking back over our successes in waste diversion and recycling, that not only had we dealt with a waste problem but we had created an economic generation with hundreds of new jobs and millions of new dollars.

The traditional view had been that you cared for the environment at the expense of the economy. Our experience was concrete proof that this was wrong. This insight led to a new economic model based on building a sustainable economy, the task facing all of us, not only in North America but globally as well. (see handout) This then led me as minister to propose to my elected colleagues that we make the "green economy" a central focus of our government's agenda. I brought forward an innovative bill which expressly linked care for the environment and the growth of the economy together. Known as the Environmental Goals and Sustainable Prosperity Act, this bill was at the time unique in North America. (see handout)
It led to companies relocating to Nova Scotia, to the further growth of the environmental industry in the province, and to international agreements with countries such as Trinidad and Tobago. However, for this branding of our province to be effective we had to continue our environmental leadership. Our diversion rate had begun to slip because our economy was growing. Construction and demolition waste became a problem and there was a growing stream of electronic waste which was filling our land sites. And so two years ago, I brought in a two part electronic recycling and waste diversion industry stewardship agreement, the first of its kind in Atlantic Canada. (see handout) This program has gone remarkably well and was received with open arms by both the public and political colleagues. Currently, in Nova Scotia the following items are banned from landfills, creating vibrant recycling efforts and businesses:

- beverage containers
- corrugated cardboard
- newsprint
- lead acid batteries
- used tires
- post consumer paint products
- compostable organic material
- steel/tin food containers
- glass food containers
- low and high density polyethylene bags and packaging material (#4 and 2)
- televisions
- desktop and laptops including CPUs, keyboards, mice and cables
- computer monitors
- computer printers and faxes
- computer scanners
- audio playback and recording systems
- telephones and standalone fax machines
- cell phones and other wireless devices.

Because of such efforts, our recycling rate is 68 percent higher than the national average and our composting rate is 69 percent compared to the national average of 25 percent. More importantly, this was not done at the expense of the economy but as way of stimulating economic growth.

Let me provide four examples:

- We have a large pulp company that produces chinet plates and other paper products which uses only recycled cardboard. So large is this company that it now has to important cardboard from Quebec and the New England states to feed its product lines
- We have a paint recycling business which creates 15-20 sustainable jobs which we placed in an underemployed area of the province. It takes used paint from across the Atlantic Provinces and create new paint sold under the label Boomerang Paint for half the price and yet of the same quality, albeit a limited color selection.
• In my riding, all the used vegetable oil from restaurants throughout Atlantic Canada is collected and turned into bio diesel.

• A company in Halifax has discovered a way to break down used roof shingles into two products. One of which produces energy, substituting for buying coal and the other is turned into asphalt for road paving.

To facilitate the research and development necessary for these innovative approaches we fund smaller projects through our bottle recycling monies to the tune of 2 million a year. I also set up a consortium with our universities known as the Environmental Engineering Institute with the express goal of taking inventions and innovations from lab and academic setting to the market.

In closing, I realize that Maine has also shown leadership in this regard through your "clink" program and through your electronic recycling efforts and I want to commend you and encourage you to continue in your leadership efforts. I firmly believe that the old model of the economy against the environment must be abandoned and that the future belongs to jurisdictions where the two are held in a creative partnership which leads to new and sustainable jobs and a higher quality of life.
Appendix B – *Maine Revised Statute Title 38, Chapter 18: PRODUCT STEWARDSHIP*

38 §1771. DEFINITIONS

As used in this chapter, unless the context otherwise indicates, the following terms have the following meanings.

1. **Brand.** "Brand" means a name, symbol, word or mark that identifies a product, rather than its components, and attributes the product to the owner of the brand.

2. **Producer.** "Producer" means a person that:
   A. Has legal ownership of the brand of a product sold in or into the State;
   B. Imports a product branded by a person that meets the requirements of paragraph A and has no physical presence in the United States; or
   C. Sells a product in the State at wholesale or retail, does not have legal ownership of the brand of the product and elects to fulfill the responsibilities of the producer for that product.

3. **Product.** "Product" means an item intended for sale within the State that is identified pursuant to section 1772 as appropriate for a product stewardship program.

4. **Product category.** "Product category" means a group of similar products designated pursuant to section 1772 for the purpose of establishing product stewardship programs.

5. **Product stewardship.** "Product stewardship" means a 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.

6. **Product stewardship program.** "Product stewardship program" means a program financed without a visible fee at purchase either managed or provided by producers and includes, but is not limited to, the collection, transportation, reuse and recycling or disposal, or both, of unwanted products.

7. **Recycling.** "Recycling" means the transforming or remanufacturing of an unwanted product or the unwanted product's components and by-products into usable or marketable materials. "Recycling" does not include landfill disposal, incineration or energy recovery or energy generation by means of combusting unwanted products, components and by-products with or without other waste.

8. **Reuse.** "Reuse" means a change in ownership of a product or component in a product for use in the same manner and purpose for which it was originally produced.

9. **Unwanted product.** "Unwanted product" means a product that is no longer wanted by its owner or that has been abandoned or discarded or is intended to be discarded by its owner.
38 §1772. IDENTIFICATION OF CANDIDATE PRODUCTS; REPORT

1. Policy; report. It is the policy of the State, consistent with its duty to protect the health, safety and welfare of its citizens, to promote product stewardship to support the State's solid waste management hierarchy under chapter 24. In furtherance of this policy, the department may collect information available in the public domain regarding products in the waste stream and assist the Legislature in designating products or product categories for product stewardship programs in accordance with this chapter. By January 15, 2011, and annually thereafter, the department may submit to the joint standing committee of the Legislature having jurisdiction over natural resources matters a report on products and product categories that when generated as waste may be appropriately managed under a product stewardship program.

2. Recommendations. The report submitted under subsection 1 may include recommendations for establishing new product stewardship programs and changes to existing product stewardship programs. The department may identify a product or product category as a candidate for a product stewardship program if the department determines one or more of the following criteria are met:

   A. The product or product category is found to contain toxics that pose the risk of an adverse impact to the environment or public health and safety;
   B. A product stewardship program for the product will increase the recovery of materials for reuse and recycling;
   C. A product stewardship program will reduce the costs of waste management to local governments and taxpayers;
   D. There is success in collecting and processing similar products in programs in other states or countries; and
   E. Existing voluntary product stewardship programs for the product in the State are not effective in achieving the policy of this chapter.

3. Draft legislation. The report submitted under subsection 1 must include draft legislation if any is necessary to implement a product stewardship program requirement for the product or product category.

4. Public comments. At least 30 days before submitting the report under subsection 1 to the joint standing committee of the Legislature having jurisdiction over natural resources matters, the department shall post the report on its publicly accessible website. Within that period of time, a person may submit to the department written comments regarding the report. The department shall submit all comments received to the committee with the report.

38 §1773. ESTABLISHMENT OF PRODUCT STEWARDSHIP PROGRAMS

Annually, after reviewing the report submitted by the department pursuant to section 1772, the joint standing committee of the Legislature having jurisdiction over natural resources matters may submit a bill to implement recommendations included in the department's report to establish new product stewardship programs or revise existing product stewardship programs.
38 §1774. EXCLUSIONS

This chapter does not apply to:

1. **Motor vehicles and watercraft.** Motor vehicles as defined in Title 29 - A, section 101, subsection 42 and watercraft as defined in Title 12, section 13001, subsection 28 or their component parts; and

2. **Pulp and paper manufacturers.** Pulp and paper manufacturers except conversion facilities for consumer product packaging.

38 §1775. NO LIMITATION OF MUNICIPAL AUTHORITY

Nothing in this chapter changes or limits municipal authority to regulate collection of solid waste, including curbside collection of residential recyclable materials.
Appendix C - Standard Legislative Components for Product Stewardship Programs

Black text indicates *key components* that need to be addressed in legislation to ensure a viable program; gray text indicates *additional components* that help drive program performance and fund state program oversight responsibilities.

<table>
<thead>
<tr>
<th>Item code</th>
<th>Program Definitions and Standards</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1</td>
<td>Scope of products</td>
<td>Category of products or individual products</td>
</tr>
<tr>
<td>K2</td>
<td>Definition of “producer” or “manufacturer”</td>
<td>Legal owner of brand; first importer if brand owner has no physical presence in U.S.; wholesaler or retailer electing to fulfill producer's responsibilities.</td>
</tr>
<tr>
<td>K3</td>
<td>Individual and/or collective responsibility</td>
<td>If collective allowed, must define &quot;Product Stewardship Organization&quot; (PSO) and include antitrust waiver provision</td>
</tr>
<tr>
<td>K4</td>
<td>Covered entities</td>
<td>May include residential, and &quot;ICI&quot; (industrial, commercial, institutional) (small universal waste generators or all)</td>
</tr>
<tr>
<td>K5</td>
<td>Stewardship Plan</td>
<td>Require agency review and approval. Individual cost internalization and/or producers pay PSO. If producers impose a set fee to retail, any information provided to the consumer about the fee must clearly state that it is a manufacturer fee and must not be labeled a government imposed fee or mandate. Must educate covered entities about program and how to use it.</td>
</tr>
<tr>
<td>K6</td>
<td>Management standards</td>
<td>Ensure environmentally sound management.</td>
</tr>
<tr>
<td>K7</td>
<td>Annual reporting / registration</td>
<td>Provides data and assessment of performance and information on program changes.</td>
</tr>
<tr>
<td>K8</td>
<td>Implementation date(s)</td>
<td>Set date(s) by which program is to be implemented by producers.</td>
</tr>
<tr>
<td>A1</td>
<td>Application/Registration/Report fees</td>
<td>To fund agency oversight.</td>
</tr>
</tbody>
</table>

**Performance Drivers**

<table>
<thead>
<tr>
<th>Item code</th>
<th>Program Definitions and Standards</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td>Incentive for returning product to collection system</td>
<td>May be needed to pay collector for extra work and/or motivate to not toss small items in trash.</td>
</tr>
<tr>
<td>K9</td>
<td>Performance metrics</td>
<td>Plan for data gathering and analysis to assess program performance.</td>
</tr>
<tr>
<td>K10</td>
<td>Performance goals</td>
<td>Include consumer awareness and convenient collection (geographic, accessibility &amp; simplicity), and recycling rate if possible.</td>
</tr>
<tr>
<td>A3</td>
<td>Performance incentives</td>
<td>May include producer payments to education &amp; grant fund, and/or penalties for non-performance.</td>
</tr>
<tr>
<td>A4</td>
<td>Sales ban</td>
<td>Placed on products from non-compliant manufacturers. Include retailer responsibilities and protections.</td>
</tr>
<tr>
<td>A5</td>
<td>Disposal ban</td>
<td>Drives products to collection system.</td>
</tr>
<tr>
<td>A6</td>
<td>Environmentally preferable purchasing (EPP)</td>
<td>Increases demand and economic support for development of products with no toxics, easy recycling, and end-of-life commodity value.</td>
</tr>
</tbody>
</table>
Appendix D – Issue Profile – Household Hazardous Waste

Issue Profile
Household Hazardous Waste Management

Issued: December 1998  Contact: (207) 287-2651

Background

As consumers, all of use hazardous materials at some time or other around our homes. Examples include paint, cleaning products or mercury-containing thermometers. When discarded in the trash, the residual materials in their containers may seem insignificant to an individual; however, when multiplied by the number of households in a community, it becomes an environmental problem that needs to be addressed.

Much of Maine’s municipal solid waste is now incinerated to generate electricity. Heavy metals, such as mercury, in the solid waste stream can be carried through the combustion process to contaminate the air or the ash.

Pesticides may not always be entirely destroyed or they may form more toxic compounds.

Dioxins can be formed from the burning of wastes with a high plastic content.

A danger exists that solid waste workers will be exposed to the reactions of incompatible materials as the solid waste is collected and transported to treatment and disposal facilities.

In Maine, the Hazardous Waste Management Rules are administered by the Department of Environmental Protection (DEP). Maine’s rules are a refinement of the minimum standards established by the United States Environmental Protection Agency (EPA) and were tailored to best protect our natural resources. Among these protections are stringent licensing requirements for transporters, treatment, transfer, and storage facilities that manage hazardous waste.

As with the federal rules, Maine rules exempt households from all provisions of the hazardous waste rules that govern industrial and commercial generators. However, the Department supports the voluntary and environmentally safe management and disposal of hazardous waste from your home. With household awareness and cooperation, the hazardous component of the solid waste stream can be dramatically reduced, resulting in improved environmental quality.

There are alternatives to many hazardous household chemicals. These usually include compounds made from common household products, such as vinegar, baking soda, lemon juice, and ammonia, which readily break down in the environment. Some companies are even currently marketing “non-toxic” products to replace the traditional hazardous ones. Be informed, check the labels and compare.
What is a household hazardous waste?

Hazardous wastes always display at least one of the following characteristics: They can be toxic, ignitable, corrosive or reactive. There are specific tests used to definitively conclude any of the above parameters, but generally they can be described as follows:

Toxic: These are wastes that are harmful or fatal if swallowed. They may generate fumes that irritate the eyes or skin. Heavy metals, like lead and mercury, and waste pesticides are examples of toxic wastes.

Ignitable: These are wastes that are flammable at or below a temperatures of 140°F. Unwanted gasoline is an example of an ignitable waste.

Corrosive: These materials may cause irritation or burns to the skin, eyes or other tissues on contact. They may also corrode plastics, metals, rubber, or other materials. Automobile battery acid is an example of a corrosive waste.

Reactive: These materials are not stable, may react violently with water and may possibly form explosive compounds. Old medicinal ether and out-dated ammunition are examples of reactive wastes.

Note: Empty containers of hazardous materials are not considered hazardous waste. Often the best method of disposal for household hazardous chemicals is to completely use them up according to the directions on the label.

What am I likely to have around my home that would be considered a household hazardous waste?

Any unused, unwanted, expired or otherwise useless household material that meets one of the above hazardous characteristics would be considered a household hazardous waste. Some of the more common examples include the following:

- Pesticides
- Oil-based paints or stains
- Paint remover
- Paint thinner
- Some batteries
- Acids
- Old gasoline
- Some cleaning products
- Solvents
- Mothballs
- Some glues and adhesives
- Pool chemicals

Are there some unacceptable methods of disposal for household hazardous waste?

Yes. Household hazardous wastes should never be poured down a drain. Municipal sewage treatment plants and residential septic system are not designed to adequately treat hazardous materials. Although the waste will be diluted, the chemical composition is usually not changed. These materials are sometimes called "pass through pollutants," meaning that they can travel through your local wastewater treatment plant unchanged and end up in our river and oceans. Further, never pour anything down a curbside storm drain. Usually, these drains are not connected to the sewage collection system and often discharge directly to a river or the ocean.

Likewise, household hazardous wastes should never be dumped on the ground. It takes a surprisingly small amount of material to contaminate large areas of soil or groundwater.
Even though some municipalities allow it, never burn garbage or any hazardous materials in your backyard! Through this uncontrolled open burning, you could generate poisonous gases, including hydrogen cyanide, phosgene and dioxin. In addition, aerosol cans could explode.

**Are there any household hazardous wastes that are "easy" to dispose of safely?**

- Some household hazardous wastes are easier than others to dispose of safely. For example:
  - Antifreeze can be dropped off at some service stations for recycling and reuse;
  - Old, "stale" gasoline can be added in small quantities when you fill up your automobile's gas tank;
  - Although not a hazardous waste, used motor oil can be taken to one of 72 service stations throughout Maine. Call the DEP for the one closest to you:
  - Lead-acid batteries can be recycled and collection services for dry-cell and mercury batteries are becoming more common;
  - Nickel-Cadmium (Ni-Cd) rechargeable batteries are collected at many hardware stores;
  - Some jewelry stores will accept used silver oxide watch batteries;
  - Latex paint products produced after 1989 are usually not hazardous. Once spent, these paint products can be uncovered and allowed to dry prior to disposal. (Older latex paint contains mercury as an anti-bacterial agent and therefore is hazardous.)

**What is the most environmentally friendly way to dispose of my household hazardous waste?**

Recently, government agencies and hazardous waste operators have teamed up to offer collection services for household generators of hazardous waste. These are generally one-day events where residents of participating municipalities can take their hazardous waste to a central collection point, such as the town garage or solid waste transfer station. Usually, there is little or no fee to the residents. From this collection point, the waste will be consolidated by a Department-licensed hazardous waste company and will then enter the managed hazardous waste stream.

*Note: If you participate in these collection days, it is extremely important for you to follow the instructions. Know what materials will be accepted and what materials will be refused. Also, pay close attention to the packaging and transportation requirements. Failure to follow the instructions may result in danger or injury to yourself or volunteers working the event. Further, it could increase disposal costs, resulting in an end to future collection events; so please follow the instructions carefully!*

**My town has scheduled a household hazardous waste collection day and my buddy (who runs a small auto-body shop) asked me if I would take some waste paint thinner he has to the event. Is this Okay?**

No. Your friend's waste is from a commercial facility. He must manage his waste paint thinner in accordance with the Maine Hazardous Waste Management Rules. You should advise him to call the DEP for compliance assistance.
If all of these suggestions for disposal of my household hazardous waste fail, can I still legally dispose of it with my regular trash?

Yes, it is still legal for household generators of hazardous waste to utilize the solid waste stream for disposal. However, commercial and industrial generators of hazardous waste must comply with the Hazardous Waste Management Rules.

Are there safe and effective alternatives to using hazardous materials in my home?

Yes. For example, latex paint is a much safer alternative to hydrocarbon containing oil-based paints AND no solvents are needed for cleanup.

Here are a few non-hazardous products that can be substituted for hazardous chemicals:

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dirty Windows</td>
<td>Vinegar, ammonia &amp; water</td>
</tr>
<tr>
<td>Laundry stains</td>
<td>Club Soda</td>
</tr>
<tr>
<td>Moths</td>
<td>Cedar shavings, lavender</td>
</tr>
<tr>
<td>Dusty furniture</td>
<td>Lemon juice</td>
</tr>
<tr>
<td>Room, refrigerator &amp; drain odors</td>
<td>Baking soda</td>
</tr>
<tr>
<td>Tarnished chrome or silver</td>
<td>Baking soda</td>
</tr>
<tr>
<td>Dirty porcelain</td>
<td>Baking soda</td>
</tr>
</tbody>
</table>

Where can I call or write for more information?

For more information on the Maine Hazardous Waste Management Rules, please write or call:

Maine Department of Environmental Protection  
Bureau of Remediation and Waste Management  
Division Oil and Hazardous Waste Facilities Regulations  
17 State House Station  
Augusta, ME 04333-0017  
Telephone: (207)287-2651  
Fax: (207)287-7826
Appendix E - Statement from Ontario Minister of the Environment John Wilkinson Regarding Waste Diversion

October 12, 2010 3:00 PM

"On July 1st, a new program run by Stewardship Ontario took effect to divert household hazardous waste from landfills. Ontarians quickly recognized that the program that started July 1 was flawed because it applied to some products that made little sense to consumers — and forced consumers to pay fees, in some cases inconsistently, on some routine household purchases.

The Ontario government has listened to the concerns of families. The government is permanently ending the household waste program that took effect on July 1. The end of the program means the end of any consumer fees being charged to pay for that particular program.

Programs that existed prior to July 1, 2010, which currently divert, recycle and dispose of electronics, tires and household hazardous wastes such as paint and single-use batteries, will continue. To help ensure these programs are fair and transparent, and that money is used solely to keep hazardous waste out of landfills, the province will:

- Establish a special team that will investigate incorrect or misleading fees being charged by retailers to Ontarians
- Request that consumer representation sit on the independent boards that deliver waste diversion programs
- Improve oversight by including provisions for both increased reporting and third-party audits.

Ontario will continue to make progress in diverting hazardous waste from landfills to protect our water and land for future generations. The province will begin to provide funding to municipalities to properly manage, recycle and dispose of fire extinguishers, rechargeable batteries, compact fluorescent light bulbs, needles, mercury-containing devices and pharmaceuticals.

These changes will ensure that Ontario strikes the right balance between consumer protection and effectively managing waste that is harmful and hazardous to our families."

Ministry of the Environment
ontario.ca/environment

Appendix F - An Act to Provide for the Collection and Recycling or Proper Disposal of Household Hazardous Waste

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 38 MRSA §1310-B. Confidential Information, section 2 as amended by PL 2009, c. 579, Pt. A, §1 is amended to read:

2. Hazardous waste information and information on mercury-added products, electronic devices, and mercury reduction plans, and architectural paint. Information relating to hazardous waste submitted to the department under this subchapter, information relating to mercury-added products submitted to the department under chapter 16-B, information relating to electronic devices submitted to the department under section 1610, subsection 6-A, information relating to mercury reduction plans submitted to the department under section 585-B, subsection 6, information relating to architectural paint submitted to the department under section _____ or information related to priority toxic chemicals submitted to the department under chapter 27 may be designated by the person submitting it as being only for the confidential use of the department, its agents and employees, the Department of Agriculture, Food and Rural Resources and the Department of Health and Human Services and their agents and employees, other agencies of State Government, as authorized by the Governor, employees of the United States Environmental Protection Agency and the Attorney General and, for waste information, employees of the municipality in which the waste is located. The designation must be clearly indicated on each page or other portion of information. The commissioner shall establish procedures to ensure that information so designated is segregated from public records of the department. The department's public records must include the indication that information so designated has been submitted to the department, giving the name of the person submitting the information and the general nature of the information. Upon a request for information, the scope of which includes information so designated, the commissioner shall notify the submittor. Within 15 days after receipt of the notice, the submittor shall demonstrate to the satisfaction of the department that the designated information should not be disclosed because the information is a trade secret or production, commercial or financial information, the disclosure of which would impair the competitive position of the submittor and would make available information not otherwise publicly available. Unless such a demonstration is made, the information must be disclosed and becomes a public record. The department may grant or deny disclosure for the whole or any part of the designated information requested and within 15 days shall give written notice of the decision to the submittor and the person requesting the designated information. A person aggrieved by a decision of the department may appeal only to the Superior Court in accordance with the provisions of section 346. All information provided by the department to the municipality under this subsection is confidential and not a public record under Title 1, chapter 13. In the event a request for such information is submitted to the municipality, the municipality shall submit that request to the commissioner to be processed by the department as provided in this subsection.
Sec. 2. 38 MRSA §____ Paint Stewardship is enacted to read:

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. “Architectural paint” means a coating sold in a container of five gallons or less, including aerosols, for interior or exterior application to buildings or structures. “Architectural paint” does not mean adhesives, spackling paste or compound, or coatings for industrial application, application on equipment, application on transportation infrastructure, or specialty applications.

B. “Department” means the Department of Environmental Protection.

C. “Distributor” means a company that has a contractual relationship with one or more producers to market and sell architectural paint to retailers.

D. “Environmentally sound management practices” means policies to be implemented by a producer or a stewardship organization to ensure compliance with all applicable laws and also addressing such issues as adequate record keeping, tracking and documenting the fate of materials within the state and beyond, and adequate environmental liability coverage for professional services and for the operations of the contractors working on behalf of the producer organization.

E. “Energy recovery” means recovery in which all or a part of the solid waste materials are processed in order to use the heat content or other forms of energy of or from the material.

F. “Paint stewardship program” means a program financed and either managed or provided by producers individually or collectively that includes, but is not limited to, the collection, transportation, reuse and recycling or disposal, or both, of unwanted architectural paint, and initiatives to reduce the generation of unwanted architectural paint.

G. “Post-consumer paint” means architectural paint not used and no longer wanted by a purchaser.

H. “Producer” means a producer of architectural paint who sells, offers for sale, or distributes that paint in or into Maine under the producer’s own name or brand.

I. “Recycling” means any process by which discarded products, components, and by-products are transformed into new usable or marketable materials in a manner in which the original products may lose their identity but does not include energy recovery or energy generation by means of combusting discarded products, components, and by-products with or without other waste products.
J. “Retailer” means any person that offers architectural paint for sale at retail in or into Maine.

K. “Reuse” means the return of a product into the economic stream for use in the same kind of application as originally intended, without a change in the product’s identity.

L. “Sell” or “sale” means any transfer of title for consideration, including remote sales conducted through sales outlets, catalogues, or the Internet or any other similar electronic means.

M. “Stewardship organization” means a corporation, nonprofit organization, or other legal entity created or contracted by a producer or group of producers to implement the paint stewardship program required under this subchapter.

2. Producer responsibilities. Producers shall meet the following responsibilities:

A. By January 1, 2012, a producer or a stewardship organization representing producers shall submit a plan for the establishment of a statewide paint stewardship program to the department for approval. Within three (3) months of submittal of an annual report that shows approved performance goals were not met, a producer or a stewardship organization shall submit a revised plan for the continuation of a statewide paint stewardship program to the department for approval. Each plan shall address the following:

(1) Identify each producer participating in the program, the contact information for each producer, and the brands covered by each producer.

(2) Describe how the program proposed under the plan will collect, transport, reuse, recycle, and process post-consumer paint for end-of-life management, including recycling, energy recovery, and disposal, using environmentally sound management practices, including standards for retail and other collection sites.

(3) Describe the program and how it will provide for convenient and available statewide collection of post-consumer paint at no cost in both urban and rural areas of the state. At a minimum, convenient collection shall include, for all brands of architectural paint, a minimum of two collection sites in each county and one collection site or alternate collection service for each city or town with a population greater than ten thousand providing collection at least five days per week on an on-going year-round basis. A collection site for a county may be the same as a collection site for a city or town in the county. The producer or stewardship organization shall pay fair compensation for collection costs to collection sites other than retail. Once the required minimum of collection services is established, a product stewardship organization shall accept any additional retailer of architectural paint that volunteers to serve as a post-consumer paint collection facility, so long as that retailer agrees to meet approved standards and comparable terms for other retailers participating in the program.
(4) Provide the facility name, location, and hours of operation of all facilities accepting paint for recycling under the program.

(5) Establish goals to reduce the generation of post-consumer paint, to promote the reuse of post-consumer paint, and for the proper end-of-life management of post-consumer paint, and describe the methodology that will be used to measure program performance in achieving the goals. At a minimum, the goals must include that 80% of consumers are aware of the collection opportunities for recycling post-consumer paint within 5 years of the start of the program. Based on the information collected and presented in the annual report, the producer or stewardship organization may propose revisions to the goals for review and approval by the department.

(6) Describe how post-consumer paint will be managed in the most environmentally and economically sound manner, including following the waste-management hierarchy of source reduction, reuse, recycling, energy recovery, and disposal.

(7) Describe education and outreach efforts to promote the paint collection programs and the source reduction and recycling of architectural paint for each of the following: consumers, painting contractors, and paint retailers. Describe how the education and outreach efforts will be tailored to reach all sectors of the state’s diverse population, including immigrant and senior populations. Describe how the paint stewardship program will annually evaluate the effectiveness of its education and outreach, including a method for determining the percentage of consumers, painting contractors and paint retailers that are aware of ways to reduce the generation of post-consumer paint, opportunities for reuse of post-consumer paint, and collection options for paint recycling.

(8) Describe the financing mechanism for the program, and delineate any activities necessary to implement the program that are not funded by the program and by whom those costs will be incurred. If the producer is financing the program through payment to a stewardship organization, any assessment imposed by the producer through its sales chain must reflect the producer’s actual program costs and must not be described at wholesale or retail as a tax or government-imposed fee. Any information provided to the consumer about the assessment must clearly state that it is imposed by the producer and shall not identify the assessment as, or imply that the assessment is, a tax or government-imposed fee or mandate.

B. Beginning no later than July 1, 2012, or three months after approval of the paint stewardship program plan under subsection A, whichever occurs later, a producer of architectural paint sold at retail or a stewardship organization of which a producer is a member shall implement the approved paint stewardship program plan. All collection sites identified in the plan as necessary to meet the convenience standards in sub-paragraph 2.A(3) must be operating in the program as of the start date.

C. A producer may not sell or offer for sale architectural paint to any person in Maine unless the producer of a paint brand or a stewardship program of which the producer is a member is implementing an approved paint stewardship program plan.
D. No later than March 31, 2013, and annually thereafter, a producer or a stewardship program of which the producer is a member shall submit to the department a report describing the paint stewardship program that the producer or stewardship program implemented for the preceding calendar year. At a minimum, the report shall include:

1. A description of the methods the producer or stewardship program used to reduce, reuse, collect, transport, recycle, and process post-consumer paint statewide in Maine;

2. The volume and type of post-consumer paint collected by the producer or stewardship program in all regions of Maine;

3. The volume of post-consumer paint collected by the producer or stewardship program in Maine by method of disposition, including reuse, recycling, energy recovery, and disposal;

4. The total volume of architectural paint sold in the state during the preceding calendar year by the producer or members of the stewardship program;

5. Samples of the educational materials that the producer or stewardship program provided to consumers of architectural paint;

6. A description of the annual evaluation of the effectiveness of the education and outreach efforts, including the percentage of consumers, painting contractors, and paint retailers that are aware of the ways to reduce the generation of post-consumer paint, opportunities for reuse of post-consumer paint, and collection options for paint recycling;

7. Beginning with the report submitted for calendar year 2013, a copy of a report from an independent third party audit on the financing and expenditures of the program, including but not limited to: detailed costs and revenues of the program, the basis and calculations for determining producers’ financial responsibilities, and the basis and calculations for any assessment imposed by the producer or a stewardship organization on product sales;

8. Proposed amendments to its plan for review and approval by the department.

E. A producer or a stewardship program of which the producer is a member shall pay an application fee of $15,000 with submittal of its initial plan for approval, and an application fee of $10,000 with the submittal of each revised plan for approval.

A producer or a stewardship program of which the producer is a member shall pay an annual report fee of $10,000 to the department with each annual report submitted. The department may establish a schedule of fees in lieu of the $10,000 annual report fee that is based on an average of the results of the financial audits described in paragraph 3.D(7) and that do not exceed 0.05 percent of the average architectural paint stewardship pilot
program costs reported in the financial audits. Application and reporting fees collected by the department pursuant to this paragraph must be deposited in the Maine Environmental Protection Fund established in section 351.

3. Retailer responsibilities.

A. A retailer may not sell or offer for sale architectural paint to any person in Maine unless the producer of a paint brand or a stewardship program of which the producer is a member is implementing an approved paint stewardship program plan. A retailer complies with the requirements of this section if, on the date the architectural paint was ordered from the producer or its agent, the producer of the paint brand is listed on the department’s website as a producer implementing an approved paint stewardship program.

B. At the time of sale to a consumer, a retailer selling or offering architectural paint for sale shall provide the consumer with information provided from the producer or a stewardship organization regarding available end-of-life management options for architectural paint collected through the paint stewardship program or a brand of paint being sold under the program.

C. No retailer of architectural paint shall be required by a producer or stewardship organization to serve as a post-consumer paint collection facility unless the retailer expressly agrees to participation under the plan submitted by the producer or stewardship organization under sub-section 3.

4. Solid waste facility license not required. Facilities solely collecting paint for the paint stewardship program that would not otherwise be subject to solid waste facility licensing requirements shall not be required to obtain a solid waste facility license.

5. Anticompetitive conduct. A stewardship organization that manages or operates a paint stewardship program pursuant to this section is granted immunity from state laws relating to antitrust, restraint of trade, unfair trade practices, and other regulation of trade and commerce for the limited purpose of establishing and operating a paint stewardship program. The activities of the stewardship organization that comply with the provisions of this section may not be considered to be in restraint of trade, a conspiracy, or a combination or any other unlawful activity in violation of any provision of Title 10.

6. Enforcement; cost recovery. If a manufacturer fails to implement an architectural paint collection and recycling program approved by the department or fails to pay costs allocated to it by a product stewardship organization for its responsibilities pursuant to subsection 3, the department may pay for the legitimate costs of collection and recycling of the manufacturer’s architectural paint from the Maine Solid Waste Management Fund established in section 2201 and seek cost recovery from the nonpaying manufacturer. Any nonpaying manufacturer is liable to the State for costs incurred by the State in an amount up to 3 times the amount incurred as a result of such failure to comply.
The Attorney General is authorized to commence a civil action against any manufacturer to recover the costs described in this subsection, which are in addition to any fines and penalties established pursuant to section 349. Any money received by the State pursuant to this subsection must be deposited in the Maine Solid Waste Management Fund established in section 2201.

7. Confidential business information. The department may keep information submitted pursuant to this section confidential as provided under section 1310-B, provided that the agency may use and disclose such information in summary or aggregated form that does not directly or indirectly identify individual producers, distributors, or retailers. The agency may require, as a part of the report submitted under paragraph 2.D that the producer or stewardship organization provide a report that does not contain confidential business information and is available for public inspection and review.

8. Rulemaking. The department may adopt rules or procedures to implement the requirements of this subchapter.

Sec. 3. 38 MRSA §2133, sub-§2-B, as enacted by PL 1995, c. 465, Pt. A, §46 and affected by Pt. C, §2 and amended by PL 1999, c. 779, is amended to read:

2-B. Household hazardous waste collection. The office may, within available resources, award grants to eligible municipalities, regional associations, sanitary districts, sewer districts, and private businesses for household hazardous waste collection, recycling and disposal programs for household hazardous and other solid wastes. In implementing this program, the office shall attempt to:

   A. Coordinate the household hazardous waste collection programs with overall recycling and waste management;
   B. Encourage regional economies of scale;
   C. Coordinate programs between private and public institutions;
   D. Maximize opportunities for federal grants and pilot programs; and
   E. By January 1, 2002 and as necessary thereafter, fund capital improvements and operating expenses to facilitate the development of collection programs throughout the State for hazardous waste that is universal waste, as identified in board rules, generated by households, small-quantity generators, public schools and municipalities.

At a minimum, the office shall award grants to public schools and municipalities for reasonable costs incurred as a result of managing waste mercury-added products generated by those public schools and municipalities, in compliance with the requirements in sections 1663 and 1664, that would not otherwise be incurred by complying with existing laws, rules or regulations as of July 15, 2002.
Sec. 4. Product Stewardship Program for Household Hazardous Waste. The Department of Environmental Protection shall review existing product stewardship programs for household hazardous wastes and develop a proposal for implementing product stewardship programs for components of household hazardous waste not currently covered by product stewardship programs in Maine. The proposal should delineate household hazardous waste product categories, include an implementation schedule for household hazardous waste product stewardship programs, and include legislation to establish product stewardship programs for categories of household hazardous waste. The Department of Environmental Protection shall present its findings in a report to the Joint Standing Committee on Natural Resources to be submitted in 2012 in accordance with Title 38 §1771.
Appendix G - An Act to Prevent Crime and Protect Public Safety, Health and the Environment

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 22 MRSA §2700, sub-§5, as amended by PL 2005, c. 297, §1 and affected by §3, is further amended to read:

5. Unused Pharmaceutical Disposal Program Fund; funding. The Unused Pharmaceutical Disposal Program Fund, referred to in this chapter as "the fund," is established within the agency to be used by the director of the agency to fund or assist in funding the program and programs under Title 38, section 1611. Any balance in the fund does not lapse but is carried forward to be expended for the same purposes in succeeding fiscal years. The fund must be deposited with and maintained and administered by the agency. The agency may accept funds into the fund from any non-General Fund source, including grants or contributions of money, fines and penalties imposed pursuant to Title 38, section 1611, subsection 13 or other things of value, that it determines necessary to carry out the purposes of this chapter. Money received by the agency to establish and maintain the program must be used for the expenses of administering this chapter and Title 38, section 1611 and to support the expenses of programs established under Title 38, section 1611 for the collection, handling, transportation, management and disposal of unwanted covered drugs obtained from residential sources.

Sec. 2. 38 MRSA §1611 is enacted to read:

§ 1611. Disposal of unwanted drugs

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Agency" means the Department of Public Safety, Maine Drug Enforcement Agency under Title 25, section 2955.

B. "Covered drug" means all prescription drugs and nonprescription over-the-counter drugs and veterinary drugs obtained from residential sources in any form, including pill, tablet, capsule, suppository, liquid, cream, ointment, lotion, transdermal patch, powder or aerosol form and both brand name and generic drugs but not including vitamins, herbal-based remedies, human shampoos, cosmetics or toothpaste or pet pesticide products contained in pet collars, powders or shampoos.

C. "Manufacturer" means a person or entity that:

(1) Has a physical presence in the United States and causes a covered drug to be
manufactured or has legal ownership of the brand, brand name or co-brand under which a covered drug is sold;

(2) Imports a covered drug branded or manufactured by a person or entity that has no physical presence in the United States; or

(3) Sells at wholesale a covered drug and does not have legal ownership of the brand or brand name, but elects to fulfill the manufacturer's responsibilities for that covered drug.

"Manufacturer" does not include a compounding pharmacy or pharmacist who compounds a prescribed drug product for an individual or a retailer that puts its store label on a covered drug unless the retailer imports the covered drug directly from a person that has no physical presence in the United States.

D. "Program" means a program established by a manufacturer or in conjunction by manufacturers pursuant to this section for the collection, handling, transportation, management and disposal of unwanted covered drugs.

E. "Residential source" includes single-family and multiple-family residences and locations where unwanted covered drugs may be found such as hospice facilities, nursing homes, boarding homes, schools, foster care facilities, day care facilities, correctional facilities and other locations where either people or their pet animals, or both, reside on a temporary or permanent basis. "Residential source" does not include a hospital, a pharmacy or a business such as a physician's office or any other nonresidential source identified by the department.

F. "Unwanted covered drug" means a covered drug that its owner no longer wants or that has been abandoned or discarded or is intended to be discarded by the owner.

G. "Wholesaler" means a person or entity that buys a covered drug for resale and distribution to persons or entities other than consumers but that does not have legal ownership of the brand or brand name.

2. Requirement; limitation. Effective January 1, 2013, a manufacturer of covered drugs sold in the State:

A. Shall participate in a program for the collection, handling, transportation, management and disposal of unwanted covered drugs in accordance with this section; and

B. May not engage in the collection of unwanted covered drugs in the State prior to receiving approval from the department for operation of a program for the collection, handling, transportation, management and disposal of those drugs.

3. Manufacturer responsibility. A manufacturer of covered drugs sold in the State shall participate in a program, individually or in conjunction with other manufacturers, for the collection, handling, transportation, management and disposal of unwanted covered drugs. A
manufacturer that operates a program independently or that participates in a program with other manufacturers shall ensure that the program operates in compliance with the provisions of this section, in accordance with the approval issued by the department under subsection 7 and in compliance with other state and federal law.

A. By October 1, 2011, each manufacturer shall pay the agency a one-time fee of $1000 to fund the collection, handling, transportation, management and disposal of unwanted covered drugs in 2012 by the agency. Fees paid shall be deposited into the Unused Pharmaceutical Disposal Fund pursuant to Title 22, section 2700, subsection 5. The manufacturer of a drug that is subject to a mandatory return program required by the United States Department of Health and Human Services, Food and Drug Administration is exempt from the one-time fee if that is their only covered drug sold in the State.

B. By July 1, 2012 a manufacturer shall submit to the department a plan to operate the manufacturer's program, individually or in conjunction with other manufacturers through a stewardship organization.

C. Before initiating sales of covered drugs in the State after July 1, 2012, a manufacturer shall submit a plan to operate a program to the department or join a program approved under subsection 7.

D. A manufacturer or stewardship organization whose program plan has been approved under subsection 8 shall begin operating the program within 90 days of obtaining approval from the department or by January 1, 2013, whichever is sooner.

E. At least every four years a manufacturer must update its program plan and submit the updated plan to the department for review and approval;

F. For each program plan and annual report submitted, a manufacturer or stewardship organization shall pay the department a processing fee as follows:
   (1) $1000 for each manufacturer represented in a plan and report; or
   (2) $10,000 for plans and reports submitted on behalf of ten or more manufacturers.

Plan and reporting fees collected by the department pursuant to this paragraph must be deposited in the Maine Environmental Protection Fund established in section 351.

G. A manufacturer or stewardship organization shall pay all the administrative and operational costs associated with implementation of a program, including the cost of the collection, transportation, management and disposal of the unwanted covered drugs and the recycling or disposal of the related packaging.

H. A manufacturer may not charge a fee at collection for the management of unwanted covered drugs.
4. Program requirements. A program must:

A. Collect unwanted covered drugs from all manufacturers. The collection system must be convenient and adequate to serve the needs of residents in both urban and rural areas;

B. Transport, manage and dispose of unwanted covered drugs from all manufacturers. The unwanted covered drugs must be disposed of in compliance with the requirements of subsection 7; and

C. Include a public education and communications strategy that includes educational and outreach information and materials provided at no cost to consumers, pharmacies, health care facilities and other interested parties. The public education and communications strategy must:

   (1) Promote the use of the program and the proper disposal of unwanted covered drugs so that collection options are widely understood by consumers, pharmacists, retailers of covered drugs and health care practitioners including doctors and other prescribers;

   (2) Provide a toll-free telephone number and publicly accessible website where information regarding collection options is made available; and

   (3) Describe where and how to return unwanted covered drugs.

D. The program must identify performance metrics that include the number of collection locations, quantity collected and public awareness, and must describe target goals for each component over the life of the plan.

5. Plan requirements. A program plan submitted to the department under subsection 3, paragraph B, C or E must:

A. List all manufacturers participating in the program and the manufacturers' contact information;

B. List the hazardous waste disposal facilities and other entities, and their contact information, to be used to collect and destroy the unwanted covered drugs;

C. Describe the policies and procedures to be followed by persons in charge of unwanted covered drugs collected pursuant to the program;

D. Describe how the collected unwanted covered drugs are tracked through to final disposal and how safety and security are maintained;

E. Describe a means to allow for access to collected unwanted covered drugs for research purposes by an entity that has been approved by the department, agency or Department of
Health and Human Services for a research project;

F. Describe the financing mechanism for the program, and delineate any activities necessary to implement the program that are not funded by the program and by whom those costs will be incurred. If the producer is financing the program through payment to a stewardship organization, any assessment imposed by the producer through its sales chain must reflect the producer’s actual program costs and must not be described at wholesale or retail as a tax or government-imposed fee. Any information provided to the consumer about the assessment must clearly state that it is imposed by the producer and shall not identify the assessment as, or imply that the assessment is, a tax or government-imposed fee or mandate; and

G. Include a description of how the program's components required under subsection 4 will be met.

H. Provide for the conduct of a survey by July of each year to determine public awareness of the program using a survey tool approved by the department in consultation with the agency and the Department of Health and Human Services until at least 75% of adults in the State are aware of the program and how to participate in it. The plan must also provide for the conduct of a survey by July every 4 years following the achievement of at least 75% of adults in the State being aware of the program. The department may require that the survey tool be modified and updated as appropriate to improve assessment of the program.

6. Drug disposal. A program must provide for the disposal of all unwanted covered drugs at a hazardous waste incinerator, as defined in section 1303-C, subsection 15.A, except that a manufacturer may petition the department for, and the department may grant, approval to use an alternative available disposal technology that provides environmental and human health protection that is proven to be at least as protective as that provided by hazardous waste incineration. The department shall inform the agency of its determination on a petition under this subsection and may grant the petition only if the agency concurs. Alternative technology under this subsection must provide equivalent or superior protection in each of the following:

A. The monitoring of any emissions or waste;

B. Worker health and safety;

C. Air, water or land emissions contributing to persistent, bioaccumulative and toxic pollution; and

D. The overall environment and human health.

7. Program review and approval. The department shall review each program plan submitted pursuant to subsection 3 in consultation with the agency and the Department of Health and Human Services.

A. If the department is satisfied that a plan is complete and that a program complies with
the requirements of this section, the department shall issue an approval or an approval with conditions.

B. If a program is rejected, the department shall provide the applicant with the reasons for rejecting the program in writing.

C. The department shall provide expedited review and approval for a program submitted by a manufacturer independently for a single covered drug that is subject to a mandatory drug return procedure by the United States Department of Health and Human Services, Food and Drug Administration. The manufacturer must provide the department with information on the quantities returned from within the State under the Food and Drug Administration procedure and other information determined to be necessary by the department. Information reported under this paragraph is confidential and may not be disclosed by the department, except that the department may share that information with the Department of Health and Human Services and the agency.

D. The decision of the department under this subsection is a final decision and may be appealed to the Board of Environmental Protection pursuant to section 341-D, subsection 4.

8. Program modification. Except as provided in this subsection, a program must be operated in compliance with the approval issued by the department under subsection 8.

A. A manufacturer or stewardship organization may make substantive changes to the manner in which the program is operated only upon submission of a written application for modification to and issuance of a notice of written approval by the department. The manufacturer or stewardship organization may request a substantive change to the previously approved program at any time;

B. Additions and changes to the list of hazardous waste facilities and other entities under contract for drug collection or destruction under subsection 5, paragraph B may be made without the department's prior written approval. The manufacturer or stewardship organization shall inform the department of such an addition or change within 15 days of the effective date of the addition or change;

C. An additional manufacturer may participate in a program if the manufacturer or stewardship organization provide the department with an updated manufacturer participant list within 15 days after an additional manufacturer begins participation in the program; and

D. If a manufacturer withdraws from a program operated by a stewardship organization or discontinues a program operated independently, the manufacturer shall provide notice to the department within 15 days prior to taking action and a statement explaining the manufacturer's plans for complying with this section.

9. Program reports. A manufacturer or stewardship organization shall provide program reports as follows.
A. By February 1, 2014, and annually thereafter, the manufacturer or stewardship organization shall submit to the department three copies of a written annual report in a format prescribed by the department and covering the previous calendar year. The program report must include:

(1) A list of manufacturers participating in the program and the manufacturers' contact information;

(2) Documentation verifying collection and disposal of the unwanted covered drugs, including but not limited to the amount, by weight, of unwanted covered drugs collected during the year;

(3) A list of the hazardous waste incinerators or other approved facilities used, the location of those facilities and the weight of unwanted covered drugs collected and disposed of at each facility;

(4) A statement of whether policies and procedures for transporting and disposing of unwanted covered drugs, as established in the program plan, were followed during the year and a description of noncompliance with those policies and procedures, if any;

(5) A statement of whether any safety or security problems occurred during collection, transportation, management or disposal of unwanted covered drugs during the year and, if so, what changes are proposed for policies, procedures or tracking mechanisms to improve safety and security in the future;

(6) A description of the public education effort and communications strategy under subsection 4, paragraph C implemented during the year;

(7) A description of research, if any, regarding hazardous waste disposal techniques that provide superior protection to human health and the environment beyond that provided by current disposal techniques;

(8) A description of actions the program will take to increase public awareness if the program evaluation required under subsection 13 indicates that less than 75% of adults in the State are aware of the program and how to participate in it;

(9) A list of active collection sites and locations where mailers are provided; and

(10) Any other information that the department, the Department of Health and Human Services and the agency may reasonably require.

B. By August 1, 2013, and every year thereafter, the manufacturer or stewardship organization shall submit to the department a mid-year data report of the amount, by weight, of unwanted covered drugs collected during the 6 month period covering January through June.
10. **Enforcement.** If the department determines that a program is not being operated in accordance with this section or any rules adopted under this section or if the department determines that there is an imminent danger to the public or the environment, the provisions of this subsection apply.

A. The department may amend the approval of the program by clarifying terms or conditions to ensure full implementation of the program or suspend or cancel the approval of the program. Except as provided in paragraph B, at least 15 days prior to amending, suspending or canceling an approval, the department shall inform the manufacturer or stewardship organization of the action and provide the manufacturer or stewardship organization an opportunity to respond.

B. If the department determines that it is necessary in order to protect the public or the environment from imminent danger, the department may immediately amend, suspend or cancel the approval of a program without giving the manufacturer or stewardship organization an opportunity to be heard, but shall give that manufacturer or stewardship organization an opportunity to be heard through proceedings consistent with Title 5, chapter 375, subchapter 4 within 15 days after the date on which the department takes action.

11. **Fines and penalties.** After January 1, 2013, a manufacturer that is not in compliance with this section is subject to civil penalties under section 349. By June 1, 2013 the department shall list on its publicly accessible website manufacturers that are participating in approved programs and manufacturers that have been identified as being not in compliance with this section. All penalties and fines collected for violations of this section must be deposited into the Unused Pharmaceutical Disposal Program Fund established under Title 22, section 2700, subsection 5.

12. **Anticompetitive conduct.** A stewardship organization that manages a program pursuant to this section is granted immunity from state laws relating to antitrust, restraint of trade, unfair trade practices, and other regulation of trade and commerce for the limited purpose of establishing and operating a stewardship program for unwanted covered drugs. The activities of the organization that comply with the provisions of this section may not be considered to be in restraint of trade, a conspiracy, or a combination or any other unlawful activity in violation of any provision of Title 10.

13. **Wholesaler responsibility.** By February 1, 2013, and annually thereafter, a wholesaler of covered drugs sold in the State shall report to the department the name and contact information for each manufacturer whose covered drugs the wholesaler sold or distributed within the State during the previous calendar year. Information reported under this subsection is confidential and may not be disclosed by the department except that the department may share that information with the Department of Health and Human Services and the agency.

14. **Pharmacy responsibility.** A pharmacy licensed to operate in the State under Title 32, chapter 117 shall make available to its customers the educational information and materials provided by programs under subsection 4, paragraph C and, if a program supplies prepaid mailing envelopes, shall provide the prepaid mailing envelopes to its customers.
15. **Rules.** The department may establish rules to implement this section. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2A.
Appendix H - An Act to Promote the Proper Disposal of Used Medical Sharps

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 38 MRSA § is enacted to read:

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Manufacturer" means a person or entity that:

(1) Has a physical presence in the United States and causes a medical sharp to be manufactured or has legal ownership of the brand, brand name or co-brand under which a medical sharp is sold;

(2) Imports a medical sharp branded or manufactured by a person or entity that has no physical presence in the United States; or

(3) Sells at wholesale a medical sharp and does not have legal ownership of the brand or brand name, but elects to fulfill the manufacturer's responsibilities for that medical sharp.

"Manufacturer" does not include a compounding pharmacy or pharmacist who compounds a prescribed drug for an individual and uses a sharp as a delivery system or a retailer that puts its store label on a medical sharp unless the retailer imports the medical sharp directly from a person that has no physical presence in the United States.

B. “Medical sharps” means hypodermic needles, pen needles, intravenous needles, lancets, and other devices that are used to penetrate the skin for the delivery of medications.

C. “Program” means a stewardship program established by a manufacturer or in conjunction with other manufacturers pursuant to this section for the collection, handling, transportation, treatment and disposal of unwanted medical sharps.

D. “Residential source” includes single-family and multiple-family residences and other locations where unwanted medical sharps are generated outside of the healthcare setting. Residential source does not include a hospital, clinic, pharmacy or a business such as a physician's or veterinary office or any other location identified by the department that may generate sharps in the course of its business.

E. “Sharps collection center” means a site which provides sharps users with secure collection containers and accepts waste sharps from a residential source for proper disposal.

F. “Sharps collection containers” means a container specifically designed for holding waste
sharps that meets the requirements of the federal Occupational Safety and Health Administration and the federal Department of Transportation and is marked with the international biohazard symbol.

G. “Stewardship organization” means a corporation, nonprofit organization, or other legal entity created or contracted by a manufacturer or group of manufacturers to implement the medical sharps stewardship program required under this subchapter.

H. “Unwanted medical sharp” means a medical sharp that its user no longer wants or that has been abandoned or discarded or is intended to be discarded by the user.

I. “Wholesaler” means a person or entity that buys a medical sharp for resale and distribution to persons or entities other than consumers but that does not have legal ownership of the brand or brand name.

2. Disposal ban. After July 1, 2013 a person may not knowingly place a medical sharp in the solid waste for disposal in a solid waste disposal facility.

3. Manufacturer responsibility. A manufacturer shall participate in a program, individually or in conjunction with other manufacturers, for the collection, handling, transportation, treatment and disposal of unwanted medical sharps. A manufacturer that operates a program independently or that participates in a program with other manufacturers shall ensure that the program operates in compliance with the provisions of this section, in accordance with the approval issued by the department under subsection 6, and in compliance with all applicable state and federal law and regulations.

A. By July 1, 2012 a manufacturer shall submit to the department a plan to operate the manufacturer's program, individually or in conjunction with other manufacturers through a stewardship organization.

B. Before initiating sales of medical sharps in the State after July 1, 2012, a manufacturer shall submit a plan to operate a program or join a program approved under subsection 6.

C. A manufacturer or stewardship organization whose program plan has been approved under subsection 6 shall begin operating the program within 90 days of obtaining approval from the department or by January 1, 2013, whichever is sooner.

D. At least every four years a manufacturer or stewardship organization must update its program plan and submit the updated plan to the department for review and approval.

E. For each program plan and annual report submitted, a manufacturer or stewardship organization shall pay the department a processing fee as follows:
   (1) $1000 for each manufacturer represented in a plan and report; or
   (2) $10,000 for plans and reports submitted on behalf of ten or more manufacturers.

Plan and reporting fees collected by the department pursuant to this paragraph must be
deposited in the Maine Environmental Protection Fund established in section 351.

F. A manufacturer or stewardship organization shall pay all the administrative and operational costs associated with implementation of a program, including the cost of the collection, transportation, management and disposal of the unwanted medical sharps and the related packaging. Sharps collection containers shall be considered part of program costs and shall be supplied on an ongoing basis and free of charge to individual sharps collection centers.

G. A manufacturer or stewardship organization may not charge a fee at collection for the management of used medical sharps.

4. Program requirements. A program must:

A. Collect unwanted medical sharps generated by residential sources. The collection system must be convenient and adequate to serve the needs of residents in both urban and rural areas.

B. Establish sharps collection centers in the following types of locations that volunteer to participate and agree to follow state guidelines and rules for sharps management: medical facilities such as hospitals and community clinics, pharmacies, locations that provide public transportation, public parks and municipal facilities such as fire or police stations.

B. Transport, handle, treat and dispose of unwanted medical sharps from all manufacturers.

C. Manage medical sharps as biomedical waste at a licensed biomedical waste treatment facility;

D. The program must include a public education and communications strategy that includes educational and outreach information and materials provided at no cost to consumers, pharmacies, health care facilities and other interested parties. The public education and communications strategy must:

(1) Promote the use of the program and the proper disposal of unwanted medical sharps so that collection options are widely understood by consumers, pharmacists, retailers of medical sharps and health care practitioners including doctors and other prescribers;

(2) Provide a toll-free telephone number and publicly accessible website where information regarding collection options and locations is made available.

E. The program must identify performance metrics that include the number of collection locations and quantity collected and must describe target goals for each component over the life of the plan.
5. **Plan requirements.** A program plan submitted to the department under subsection 3 must:

A. List all manufacturers participating in the program and the manufacturers' contact information;

B. List the biomedical waste treatment and disposal facilities and transporters, and their contact information, to be used to collect and destroy the unwanted medical sharps;

C. Describe how the collected medical sharps are tracked through to final disposal and the policies and procedures to be followed to ensure that safety and security are maintained;

D. Describe the financing mechanism for the program, and delineate any activities necessary to implement the program that are not funded by the program and by whom those costs will be incurred. If the producer is financing the program through payment to a stewardship organization, any assessment imposed by the producer through its sales chain must reflect the producer’s actual program costs and must not be described at wholesale or retail as a tax or government-imposed fee. Any information provided to the consumer about the assessment must clearly state that it is imposed by the producer and shall not identify the assessment as, or imply that the assessment is, a tax or government-imposed fee or mandate; and

E. Include a description of how the program's components required under subsection 4 will be met.

6. **Program review and approval.** The department shall review each program plan submitted pursuant to subsection 3 in consultation with the Department of Health and Human Services.

A. If the department is satisfied that a plan is complete and that a program complies with the requirements of this section, the department shall issue an approval or an approval with conditions.

B. If a program is rejected, the department shall provide the applicant with the reasons for rejecting the program in writing.

C. The department shall provide expedited review and approval for a program submitted by a manufacturer or a stewardship organization if they have entered into a contractual agreement with the Maine Hospital Association (MHA) for dissemination of sharps containers and the collection and disposal of residential medical sharps using the MHA infrastructure.

D. The decision of the department under this subsection is a final decision and may be appealed to the Board of Environmental Protection pursuant to section 341-D, subsection 4.

7. **Program modification.** Except as provided in this subsection, a program must be
operated in compliance with the approval issued by the department under subsection 6.

A. A manufacturer or stewardship organization may make substantive changes to the manner in which the program is operated only upon submission of a written application for modification to and issuance of a notice of written approval by the department. The manufacturer or stewardship organization operating the program may request a substantive change to the previously approved program at any time.

B. An additional manufacturer may join a stewardship organization and participate in their program if the manufacturer or stewardship organization operating the program provide the department with an updated manufacturer participant list within 15 days after an additional manufacturer begins participation in the program; and

C. If a manufacturer withdraws from a program operated by a stewardship organization or discontinues a program operated independently, the manufacturer shall provide notice to the department within 15 days prior to taking action and a statement explaining the manufacturer's plans for complying with this section.

8. Program reports. A manufacturer or stewardship organization shall provide program reports as follows.

A. By February 1, 2014, and annually thereafter, the manufacturer or stewardship organization shall submit to the department two copies of a written annual report in a format prescribed by the department and covering the previous calendar year. The program report must include:

(1) A list of manufacturers participating in the program and their contact information;

(2) A list of the biomedical treatment facilities used, the location of those facilities and the weight of unwanted medical sharps treated at each facility;

(3) Documentation verifying collection and disposal of the unwanted medical sharps;

(4) A statement of whether policies and procedures for transporting and disposing of unwanted medical sharps, as established in the program plan, were followed and a description of noncompliance with those policies and procedures, if any;

(5) A statement of whether any safety or security problems occurred during collection, handling, transportation, treatment or disposal of unwanted medical sharps and, if so, what changes are proposed for policies, procedures or tracking mechanisms to improve safety and security in the future;

(6) A description of the public education effort and communications strategy required under subsection 4, paragraph D implemented during the year;

(7) A list of active sharps collection sites and locations; and
(8) Any other information that the department or the Department of Health and Human Services may reasonably require.

B. By August 1, 2014 and every year thereafter, the manufacturer or manufacturers operating the program shall submit to the department a mid-year data report of the amount, by weight, of unwanted medical sharps collected during the 6 month period covering January through June.

9. Enforcement. If the department determines that a program is not being managed in accordance with this section or other applicable state rules or if the department determines that there is an imminent danger to the public or the environment, the provisions of this subsection apply.

A. The department may amend the approval of the program by clarifying terms or conditions to ensure full implementation of the program or suspend or cancel the approval of the program. Except as provided in paragraph B, at least 15 days prior to amending, suspending or canceling an approval, the department shall inform the manufacturer or stewardship organization of the action and provide the manufacturer or stewardship organization an opportunity to respond.

B. If the department determines that it is necessary in order to protect the public or the environment from imminent danger, the department may immediately amend, suspend or cancel the approval of a program without giving the manufacturer or stewardship organization an opportunity to be heard, but shall provide an opportunity to be heard through proceedings consistent with Title 5, chapter 375, subchapter 4 within 15 days after the date on which the department takes action.

10. Fines and penalties. After January 1, 2013, a manufacturer that is not in compliance with this section is subject to civil penalties under section 349. By June 1, 2013 the department shall list on its publicly accessible website manufacturers that are participating in approved programs and manufacturers that have been identified as being not in compliance with this section. All penalties and fines collected for violations of this section must be deposited into the Maine Environmental Protection Fund established in section 351.

11. Wholesaler responsibility. By February 1, 2013, and annually thereafter, a wholesaler of medical sharps sold in the State shall report to the department the name and contact information for each manufacturer whose medical sharps the wholesaler sold or distributed within the State during the previous calendar year. Information reported under this subsection is confidential and may not be disclosed by the department except that the department may share that information with the Department of Health and Human Services.

12. Pharmacy responsibility. A pharmacy licensed to operate in the State under Title 32, chapter 117 shall make available to its customers the educational information and materials provided free of charge by the Department of Health and Human Services or the manufacturers.
13. Voluntary Participation. A hospital, medical clinic, pharmacy, public transportation locations, public park, municipal facility or other approved site may volunteer to be a residential sharps collection site at any time. Volunteer sites must agree to abide by collection procedures issued by department as well as existing state rules applicable to sharps management. If the location is a hospital or medical facility it must keep medical sharps accepted from residential sources separate from those generated in the course of business. Sharps collection centers will be provided with free sharps collection containers and written information to give to sharps users.

14. Anticompetitive conduct. A stewardship organization that manages a program pursuant to this section is granted immunity from state laws relating to antitrust, restraint of trade, unfair trade practices, and other regulation of trade and commerce for the limited purpose of establishing and operating a waste sharps collection program for residential sources. The activities of the organization that comply with the provisions of this section may not be considered to be in restraint of trade, a conspiracy, or a combination or any other unlawful activity in violation of any provision of Title 10.

15. Rules. The department may establish rules to implement this section. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2A.
Appendix I - *An Act to Improve the Recycling Rate of Mercury-added Motor Vehicle Components*

Proposed by the Department of Environmental Protection for consideration by the Joint Standing Committee on Natural Resources
125th Maine Legislature, First Regular Session—2011

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 38 MRSA §1665-A, sub-§5, as amended by PL 2009, c. 277, §3, is further amended to read:

5. Motor vehicle manufacturer responsibility. Manufacturers of motor vehicles sold in this State that contain mercury switches or mercury headlamps shall, individually or collectively, do the following:

A. Establish a system to collect and recycle mercury switches removed pursuant to subsection 3. The system may consist of consolidation facilities geographically located to serve all areas of the State to which the switches may be transported by the persons performing the removal or any other collection methodology approved by the department. The system must be convenient to use, must accept the switches free of charge and may not provide for collection of the switches at an automobile dealership;

B. Pay for each mercury switch brought to the consolidation facilities as partial compensation for the removal, storage and transport of the switches a minimum of $4 if the vehicle identification number or year, make and model of the source vehicle is provided. If the vehicle identification number or year, make and model of the source vehicle is not provided, no payment is required;

C. Ensure that mercury switches collected pursuant to paragraph A are managed in accordance with the universal waste rules adopted by the board under subsection 8; and

D. Provide the department and persons who remove motor vehicle components under this section with information, training and other technical assistance required to facilitate removal and recycling of the components in accordance with the universal waste rules adopted by the board under subsection 8, including, but not limited to, information identifying the motor vehicle models that contain or may contain mercury switches or mercury headlamps.

The goal of this collection and recycling effort is to minimize mercury emissions to the environment by ensuring that all mercury switches are removed from motor vehicles for recycling before the vehicles are flattened, baled or crushed.

In complying with the requirements of this subsection, manufacturers of motor vehicles shall establish a system that does not require a person who removes a mercury switch to segregate switches separately according to each manufacturer of motor vehicles from which the switches are removed.
For purposes of this section, manufacturer means a person, or a person’s successor in interest, that has legal ownership of the brand of a product sold in or into the State, or imports a product branded by a person that has legal ownership of the brand of a product sold in or into the State and has no physical presence in the United States.

Sec. 2. 38 MRSA §1665-A, sub-§10 is enacted to read:

10. Enforcement; cost recovery. If a manufacturer fails to implement a mercury switch collection and recycling program approved by the department, or fails to pay costs incurred and allocated to it by a product stewardship organization for its responsibilities pursuant to subsection 5, the department may pay for the legitimate costs of collection and recycling of the manufacturer’s mercury switches from the Maine Solid Waste Management Fund established in section 2201 and seek cost recovery from the nonpaying manufacturer. Any nonpaying manufacturer is liable to the State for costs incurred by the State in an amount up to 3 times the amount incurred as a result of such failure to comply.

The Attorney General is authorized to commence a civil action against any manufacturer to recover the costs described in this subsection, which are in addition to any fines and penalties established pursuant to section 349. Any money received by the State pursuant to this subsection must be deposited in the Maine Solid Waste Management Fund established in section 2201.
Appendix J - *An Act to Make it Easier for Small Business to Recycle Electronics*

Proposed for consideration by the Joint Standing Committee on Natural Resources
125th Maine Legislature, First Regular Session—2011

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 38 MRSA §1610, sub-§2 is amended to read:

2. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Computer monitor" means a covered electronic device that is a cathode ray tube or flat panel display primarily intended to display information from a central processing unit or the Internet. "Computer monitor" includes a digital picture frame.

B. "Consolidation facility" means a facility where electronic wastes are consolidated and temporarily stored while awaiting shipment of at least a 40-foot trailer full of covered electronic devices to a recycling, treatment or disposal facility. "Consolidation facility" includes a transport vehicle owned or leased by a consolidator and used to collect covered electronic devices at municipal collection sites in this State at a cost no greater than the per pound transportation rate for a full 40-foot trailer as approved by the department for each consolidator pursuant to the rules governing reasonable operational costs adopted under subsection 5, paragraph D, subparagraph 1.

B-1. "Consolidator" means a person that provides consolidation and handling services for electronic wastes and that operates at least one consolidation facility.

C. "Covered electronic device" means a computer central processing unit, a desktop printer, a video game console, a cathode ray tube, a cathode ray tube device, a flat panel display or similar video display device with a screen that is greater than 4 inches measured diagonally and that contains one or more circuit boards. "Covered electronic device" does not include an automobile, a household appliance, a large piece of commercial or industrial equipment, such as commercial medical equipment, that contains a cathode ray tube, a cathode ray tube device, a flat panel display or similar video display device that is contained within, and is not separate from, the larger piece of equipment, or other medical devices as that term is defined under the Federal Food, Drug, and Cosmetic Act.

C-1. "Desktop printer" means a device that prints text or illustrations on paper and that is designed for external use with a desktop or portable computer. "Desktop printer" includes, but is not limited to, a daisy wheel, dot matrix, inkjet, laser, LCD and LED line or thermal printer, including a device that performs other functions in addition to printing such as copying, scanning or transmitting a facsimile.

D. "Manufacturer" means a person who:

(1) Manufactures or has manufactured a covered electronic device under its own brand or label;
(2) Sells or has sold under its own brand or label a covered electronic device produced by other suppliers;
(3) Imports or has imported a covered electronic device into the United States that is
manufactured by a person without a presence in the United States; or
(4) Owns a brand that it licenses or licensed to another person for use on a covered
electronic device. [D-1. "Market share" means a manufacturer's national sales of a covered electronic device
expressed as a percentage of the total of all manufacturers' national sales for that category of
covered electronic devices.
E. "Municipal collection site" means a municipally owned solid waste transfer station or
recycling center, including a facility owned by a consortium of municipalities or a facility
that is under contract with a municipality or consortium of municipalities to provide solid
waste management services.
F. "Office" means the Executive Department, State Planning Office.
G. "Orphan waste" means a covered electronic device, excluding a video game console and a
television, the manufacturer of which can not be identified or is no longer in business and
has no successor in interest.
H. "Recycling" means the use of materials contained in previously manufactured goods as
feedstock for new products, but not for energy recovery or energy generation by means of
combustion.
I. "Recycling and dismantling facility" means a business that processes covered electronic
devices for reuse and recycling.
J. "Retailer" means a person who sells a covered electronic device in the State to a consumer.
"Retailer" includes, but is not limited to, a manufacturer of a covered electronic device who
sells directly to a consumer through any means, including, but not limited to, transactions
conducted through sales outlets, catalogs or the Internet, or any similar electronic means, but
not including wholesale transactions with a distributor or other retailer.
J-1. “Small universal waste generator” means an entity that qualifies as a small universal
waste generator under the department hazardous waste management rules.
K. "Television" means a covered electronic device that is a cathode ray tube or flat panel
display primarily intended to receive video programming via broadcast, cable or satellite
transmission or video from surveillance or other similar cameras.
L. "Video game console" means an interactive entertainment computer or electronic device
that produces a video display signal that can be used with a display device such as a
television or computer monitor to display a video game.

Sec. 2. 38 MRSA §1610, sub-§5 is amended to read:

5. Responsibility for recycling. Municipalities, consolidators, manufacturers and the State
share responsibility for the disposal of covered electronic devices as provided in this subsection.
A. Each municipality that chooses to participate in the state collection and recycling system
shall ensure that computer monitors, televisions, desktop printers and video game consoles
generated as waste from households within that municipality's jurisdiction are delivered to a
consolidation facility in this State. A municipality may meet this requirement through
collection at and transportation from a local or regional solid waste transfer station or
recycling facility, by contracting with a disposal facility to accept waste directly from the
municipality's residents or through curbside pickup or other convenient collection and transportation system.

B. A consolidator is subject to the requirements of this paragraph.

(1) A consolidator shall identify the manufacturer of each waste computer monitor and desktop printer delivered to a consolidation facility and identified as generated by a household or a small universal waste generator in this State and shall maintain an accounting of the number of waste household computer monitors and desktop printers by manufacturer. By March 1st each year, a consolidator shall provide this accounting by manufacturer to the department.

(1-A) A consolidator shall maintain a written log of the total weight of televisions and video game consoles delivered each month to the consolidator and identified as generated by a household or a small universal waste generator in the State. By March 1st each year, a consolidator shall provide this accounting to the department.

(2) A consolidator may perform the manufacturer identification required by subparagraph (1) at the consolidation facility or may contract for this identification and accounting service with the recycling and dismantling facility to which the covered electronic devices are shipped.

(3) A consolidator shall work cooperatively with manufacturers to ensure implementation of a practical and feasible financing system with costs calculated for televisions on a basis proportional to the manufacturer's national market share of televisions in the State multiplied by the total pounds recycled and with costs calculated for video game consoles on a basis proportional to the manufacturer's national market share of video game consoles in the State multiplied by the total pounds recycled. At a minimum, a consolidator shall invoice the manufacturers for the handling, transportation and recycling costs for which they are responsible under the provisions of this subsection.

(4) A consolidator shall transport computer monitors, televisions, desktop printers and video game consoles to a recycling and dismantling facility that provides a sworn certification pursuant to paragraph C. A consolidator shall maintain for a minimum of 3 years a copy of the sworn certification from each recycling and dismantling facility that receives covered electronic devices from the consolidator and shall provide the department with a copy of these records within 24 hours of request by the department.

C. A recycling and dismantling facility shall provide to a consolidator a sworn certification that its handling, processing, refurbishment and recycling of covered electronic devices meet guidelines for environmentally sound management published by the department.

D. Computer monitor, television, desktop printer and video game console manufacturers are subject to the requirements of this paragraph.

(1) Each computer monitor manufacturer and each desktop printer manufacturer is individually responsible for handling and recycling all computer monitors and desktop printers that are produced by that manufacturer or by any business for which the manufacturer has assumed legal responsibility, that are generated as waste by households and small universal waste generators in this State and that are received at consolidation facilities in this State. In addition, each computer manufacturer is
responsible for a pro rata share of orphan waste computer monitors and each desktop
printer manufacturer is responsible for a pro rata share of orphan waste desktop printers
generated as waste by households and small universal waste generators in this State and
received at consolidation facilities. The manufacturers shall pay the reasonable
operational costs of the consolidator attributable to the handling of all computer
monitors, televisions, desktop printers and video game consoles generated as waste by
households received at consolidation facilities in this State, the transportation costs from
the consolidation facility to a licensed recycling and dismantling facility and the costs of
recycling. "Reasonable operational costs" includes the costs associated with ensuring
that consolidation facilities are geographically located to conveniently serve all areas of
the State as determined by the department. The recycling of televisions must be funded
by allocating the cost of the program among the manufacturers selling televisions in the
State on a basis proportional to the manufacturer's national market share of televisions.
The department shall annually determine each television manufacturer's recycling share
based on readily available national market share data. If the department determines that a
television manufacturer's market share is less than 1/10 of 1%, the department may
determine that market share de minimus. A television manufacturer whose market share
is determined de minimus by the department is not responsible for payment of a pro rata
share of televisions for the corresponding billing year. The total market shares
determined de minimus by the department must be proportionally allocated to and paid
for by the television manufacturers that have 1/10 of 1% or more of the market. The
recycling of video game consoles must be funded by allocating the cost of the program
among the manufacturers selling video game consoles in the State on a basis
proportional to the manufacturer's national market share of video game consoles. The
department shall annually determine each video game console manufacturer's recycling
share based on readily available national market share data. If the department determines
that a video game console manufacturer's market share is less than 1/10 of 1%, the
department may determine that market share de minimus. A video game console
manufacturer whose market share is determined de minimus by the department is not
responsible for payment of a pro rata share of video game consoles for the corresponding
billing year. The total market shares determined de minimus by the department must be
proportionally allocated to and paid for by the video game console manufacturers that
have 1/10 of 1% or more of the market.

(2) Each computer monitor manufacturer, television manufacturer, desktop printer
manufacturer and video game console manufacturer shall work cooperatively with
consolidators to ensure implementation of a practical and feasible financing system.
Within 90 days of receipt of an invoice, a manufacturer shall reimburse a consolidator
for allowable costs incurred by that consolidator.

E. Annually by January 1st the department shall provide manufacturers of computer monitors
desktop printers and consolidators with a listing of each manufacturer's pro rata share of
orphan waste computer monitors and desktop printers. The department shall determine each
manufacturer's pro rata share based on the best available information, including but not
limited to data provided by manufacturers and consolidators and data from electronic waste
collection programs in other jurisdictions within the United States. Annually, the department
shall also provide manufacturers of televisions and consolidators with a listing of each
television manufacturer's proportional market share responsibility for the recycling of
televisions for the subsequent calendar year. Annually by January 1st, the department shall
also provide manufacturers of video game consoles and consolidators with a listing of each
video game console manufacturer's proportional market share responsibility for the recycling
of video game consoles for the subsequent calendar year.

Sec. 3. 38 MRSA §1610, sub-§6-A is amended to read:

6-A. Manufacturer registration. Prior to offering a covered electronic device and by By
July 1st annually, a manufacturer that offers or has offered a computer monitor, television, or
desktop printer, or offers or has offered within the preceding calendar year a television or video
game console, for sale in or into this State, shall submit a registration to the department and pay
to the department an annual registration fee of $3,000. The annual registration must include:

A. The name, contact and billing information of the manufacturer;
B. The manufacturer's brand name or names and the type of televisions, video game
consoles, computer monitors and desktop printers on which each brand is used, including:
   (1) All brands sold in the State in the past; and
   (2) All brands currently being sold in the State;
C. When a word or phrase is used as the label, the manufacturer must include that word or
phrase and a general description of the ways in which it may appear on the manufacturer's
electronic products;
D. When a logo, mark or image is used as a label, the manufacturer must include a graphic
representation of the logo, mark or image and a general description of the logo, mark or
image as it appears on the manufacturer's electronic products;
E. The method or methods of sale used in the State;
F. Annual national sales data on the weight, number and type of computer monitors,
televisions, desktop printers and video game consoles sold by the manufacturer in this State
over the 5 years preceding the filing of the plan. The department may keep information
submitted pursuant to this paragraph confidential as provided under section 1310-B;
G. The manufacturer's consolidator handling option for the next calendar year, as selected in
accordance with rules adopted pursuant to subsection 10.; and
H. For each registration, a manufacturer shall pay a registration fee as follows:
   (1) $750 for manufacturers with less than 0.1% national market share as determined by
      the department based on the best and most recent data available;
   (2) $3000 for all other manufacturers, except that computer monitor and desktop printer
      manufacturers that have not marketed any covered electronic device in the current
      calendar year and have had less than 50 units managed by approved consolidators in the
      preceding three years are exempted from paying the fee.

A manufacturer's annual registration filed subsequent to its initial registration must clearly
delineate any changes in information from the previous year's registration. Whenever there is any
change to the information on the manufacturer's registration, the manufacturer shall submit an
updated form within 14 days of the change. Registration fees collected by the department
pursuant to this subsection must be deposited in the Maine Environmental Protection Fund established in section 351.

Sec. 4. 38 MRSA §1610, sub-§8 is amended to read:

8. Reports to Legislature. The department shall submit a report on the recycling of electronic waste in the State to the joint standing committee of the Legislature having jurisdiction over natural resources matters by January 15, 2008 and every 2 years thereafter until January 15, 2014 as part of each product stewardship report submitted in accordance with section 1772. The report may include an evaluation of the recycling rates in the State for covered electronic devices, a discussion of compliance and enforcement related to the requirements of this section and recommendations for any changes to the system of collection and recycling of electronic devices in the State.

SUMMARY

This bill adds the recycling of covered electronic devices received at collection sites and events from small universal waste generators to the manufacturers’ responsibilities. It clarifies that manufacturers must register with the state prior to selling covered electronic devices in Maine, and must report sales information on annual registrations in terms of national numbers. In addition, this bill modifies the annual manufacturer registration fee from a flat fee to a tiered system based on a manufacturer’s annual national unit sales of covered electronic devices, and exempts certain historic manufacturers from the registration and/or fee requirements.
Appendix K - An Act to Make it Easier for Small Businesses to Recycle Fluorescent Lamps

Proposed for consideration by the Joint Standing Committee on Natural Resources
125th Maine Legislature, First Regular Session—2011

Sec. 1. 38 MRSA §1672, sub-§4, as enacted by PL 2009, c. 272, §1, is amended to read:

4. Manufacturer recycling programs for household mercury-added lamps. Effective January 1, 2011, each manufacturer of mercury-added lamps sold or distributed for household use in the State on or after January 1, 2001 shall individually or collectively implement a department-approved program for the recycling of mercury-added lamps from households and up to 60 mercury-added lamps delivered to a collection site at one time by a small universal waste generator under the department’s hazardous waste management rules.

A. The recycling program or programs implemented required under this subsection must include:

(1) Convenient collection locations located throughout the State where residents can drop off their household lamps without cost, including but not limited to municipally-designated collection sites, and for compact fluorescent lamps, at least 200 other sites located to serve all areas of the state that are open for collection at least 5 days per week on an on-going year-round basis. Any retailer that sells household lamps and volunteers to participate as a collection location must be allowed to participate in the program as long as the site is operated in accordance with program requirements.

(2) Handling and recycling equipment and practices in compliance with the universal waste rules adopted pursuant to section 1319-O, subsection 1, paragraph F and all other applicable requirements;

(3) Effective education and outreach to increase consumer awareness regarding the law prohibiting disposal of fluorescent lamps and regarding collection locations for fluorescent lamp recycling at no cost. Education and outreach must include including, but not limited to, point-of-purchase signs and other materials provided to retail establishments without cost. Education and outreach must achieve the following consumer awareness goals:

(a) After one year of program operation, at least 60% of households are aware that it is illegal to dispose of fluorescent lamps in the state and are aware of a location where they can recycle fluorescent lamps at no cost.

(b) After three years of program operation, at least 70% of households are aware that it is illegal to dispose of fluorescent lamps in the state and are aware of a location where they can recycle fluorescent lamps at no cost; and

(c) After five years of program operation, at least 80% of households are aware that it is illegal to dispose of fluorescent lamps in the state and are aware of a location where they can recycle fluorescent lamps at no cost.
(3-A) A biennial survey and report by an independent third party market research firm to determine the effectiveness of education and outreach about the program and progress toward the goals specified in subparagraph (3). At a minimum, the survey shall determine the percentage of households in the state that are aware it is illegal to dispose of fluorescent lamps in Maine and that are aware of a collection location where they can recycle fluorescent lamps at no cost.

(4) An annual report to the department on submitted by June 30 for the previous calendar year. The annual report must include:

(a) the number of mercury-added lamps recycled under the manufacturer's program, the estimated percentage of mercury-added lamps available for recycling that were recycled under the program and the methodology for estimating the number of mercury-added lamps available for recycling;

(b) a description and listing of the collection locations and the number or amount of lamps collected at each location, any changes in the collection location network in the previous year, the percentage of the State population located within 5 miles of collection locations that accept all types of fluorescent lamps, and the percentage of the State population located within 1 mile of compact fluorescent lamp collection locations;

(c) documentation of the program’s compliance with the universal waste rules adopted pursuant to section 1319-O, subsection 1, paragraph F and all other applicable requirements;

(d) results of the biennial survey conducted by an independent third party market research firm pursuant to subparagraph (3-A);

(e) an evaluation of the effectiveness of the recycling program, recommendations for increasing the number of lamps recycled under the recycling program; and

(f) an accounting of the costs associated with administering and implementing the recycling program.

B. A manufacturer required to implement a recycling program under this subsection shall submit its proposed recycling program for department review and approval. The department shall solicit public comment on the proposed program before approving or denying the program.

C. Beginning April 1, 2011, a manufacturer not in compliance with this section is prohibited from offering any mercury-added lamp for final sale in the State or distributing any mercury-added lamp in the State. A manufacturer not in compliance with this section shall provide support to retailers to ensure the manufacturer’s mercury-added lamps are not offered for sale, sold at final sale or distributed in the State.

D. Beginning April 1, 2011, a retailer may not offer for final sale a mercury-added lamp produced by a manufacturer not in compliance with this section. The department shall notify retailers of the manufacturers of mercury-added lamps not in compliance with this section.

E. Beginning April 15, 2013, and biennially thereafter, the department shall calculate the percentage of mercury-added lamps recycled from households and report to the joint standing committee of the Legislature having jurisdiction over natural resources matters on any
modifications to the manufacturer recycling programs it intends to make to improve mercury-
added lamp recycling rates and any recommendations for statutory changes needed to
facilitate mercury-added lamp collection and recycling.

F. The department may determine that a manufacturer's recycling program is in
compliance with paragraph A, subparagraphs (1), (2) and (4) for the collection of compact
fluorescent lamps from households if the manufacturer provides adequate financial support
for the collection and recycling of such lamps to municipalities; and a conservation program
established pursuant to Title 35-A, section 3211-A and implemented by the Public Utilities
Commission.

G. For each year that a manufacturer program does not achieve the consumer awareness
goals specified in paragraph A, subparagraph (3), the manufacturers included in that program
shall pay the department a total of $100,000, with each manufacturer contributing an amount
proportional to their market share of all household lamps based on the most recent available
calendar year data. To determine the payment required of each manufacturer, manufacturers
may either report the annual sales for the applicable calendar year to the department or to a
third-party organization to make the determination. If the manufacturers choose to utilize a
third party, the third party must provide the department with the percentage share for each
manufacturer. The department may keep information submitted pursuant to this paragraph
confidential as provided under section 1310-B. The department may waive payment if there
is sufficient evidence to find that the manufacturers' education and outreach program is
effective despite not achieving the consumer awareness goals in subparagraph 4.A(3). Funds
received by the department pursuant to this subsection must be deposited in the Maine
Environmental Protection Fund established in section 351.

H. Enforcement; cost recovery. If a manufacturer fails to implement a mercury-added
lamp collection and recycling program approved by the department, or fails to pay costs
incurred and allocated to it by a product stewardship organization for its responsibilities
pursuant to this subsection, the department may pay for the legitimate costs of collection and
recycling of the manufacturer's mercury-added lamps from the Maine Solid Waste
Management Fund established in section 2201 and seek cost recovery from the nonpaying
manufacturer. Any nonpaying manufacturer is liable to the State for costs incurred by the
State in an amount up to 3 times the amount incurred as a result of such failure to comply.
The Attorney General is authorized to commence a civil action against any
manufacturer to recover the costs described in this subsection, which are in addition to any
fines and penalties established pursuant to section 349. Any money received by the State
pursuant to this subsection must be deposited in the Maine Solid Waste Management Fund
established in section 2201.
Appendix L - An Act to Make Minor Changes to Maine’s Product Stewardship Framework Law

Proposed for consideration by the Joint Standing Committee on Natural Resources
125th Maine Legislature, First Regular Session—2011

Sec. 1. 38 MRSA §1771, sub-§6, as enacted by PL 2009, c 516, §1, is amended to read:

6. Product stewardship program. “Product stewardship program” means a program financed without a visible fee at purchase and either managed or provided by producers individually or collectively that includes, but is not limited to, the collection, transportation, reuse and recycling or disposal, or both, of unwanted products. A product stewardship program may be financed through an assessment paid by the producers to a stewardship organization.

Sec. 2. 38 MRSA §1771, sub-§8-A, is enacted to read:

8-A. Stewardship organization. “Stewardship organization” means a corporation, nonprofit organization, or other legal entity created or contracted by a producer or group of producers to implement a product stewardship program.
THERE'S A NEW DEALER IN TOWN...

Secure medications. Monitor quantities. Contact local police about disposal.

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