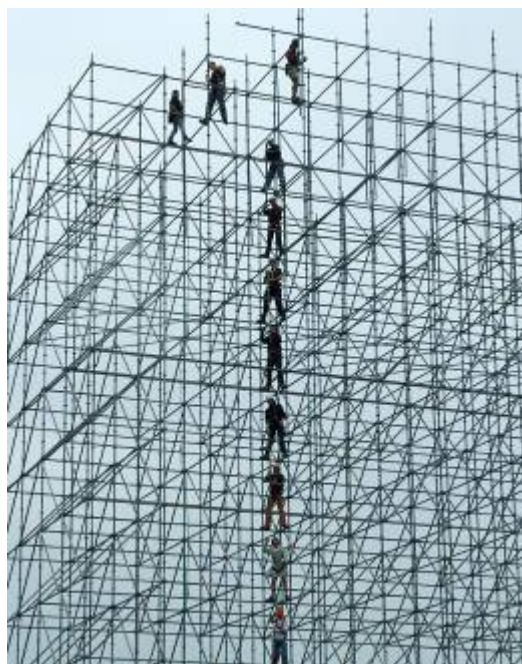


# A COMPREHENSIVE PRODUCT STEWARDSHIP APPROACH FOR RHODE ISLAND:

Study, Options and Recommendations  
July 2010



Prepared by the Product Stewardship Institute, Inc.  
for the  
Rhode Island Department of Environmental Management

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## **A COMPREHENSIVE PRODUCT STEWARDSHIP APPROACH FOR RHODE ISLAND: STUDY, OPTIONS, AND RECOMMENDATIONS**

### **--Executive Summary--**

Over the past decade, Rhode Island lawmakers, businesses, and residents have taken significant steps to implement product stewardship. The Rhode Island legislature has already enacted product stewardship laws for mercury auto switches (2001) and electronics (2008), leading to the collection and recycling of significant quantities of obsolete products. This year legislation was introduced to regulate pharmaceuticals and a law was passed governing mercury thermostats. Across the country, over 50 product stewardship laws are now in place for electronics, products containing mercury (e.g. mercury auto switches, thermostats, and fluorescent lamps), batteries, paint, and pesticide containers.

In 2009, the legislature directed the Rhode Island Department of Environmental Management (RI DEM) to develop recommendations to establish “a comprehensive product stewardship approach to reduce environmental and health risks posed by the use or disposal of products.” Such a comprehensive approach—also known as a “framework approach”—defines an overall policy structure for product stewardship that can be applied to an array of products. Framework approaches build on states’ successful experiences with laws that require stewardship of individual products. Maine enacted the nation’s first product stewardship framework law in March 2010, and six other states, including Rhode Island, have proposed similar framework legislation.

This report outlines the potential advantages and challenges in adopting such a standardized approach to managing products, and provides legislators with options for designing framework legislation by comparing Maine’s current framework law and proposed legislation in other states. The report also includes a summary of the April 15, 2010 stakeholder meeting held by the RI Department of Environmental Management to solicit feedback on a comprehensive product stewardship approach for Rhode Island. The meeting summary includes recommendations for various components of framework legislation, such as the authority to designate products, product selection criteria, program financing, performance metrics, reporting requirements, and enforcement provisions.

A comparison of these elements is especially relevant given the recent increase in product stewardship legislation in the United States, and in New England in particular. Every state in New England has adopted at least one product stewardship law, and 16 laws are currently in place. An additional 10 product stewardship bills were introduced in the 2010 legislative session. While Maine’s framework law and the framework bills introduced in Rhode Island and other states share important features—most

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significantly the requirement that manufacturers finance the costs of product stewardship—other key aspects vary, such as provisions for stewardship plans, reporting, and performance measurement. The current patchwork approach places a burden on manufacturers who must contend with a diversity of requirements. Harmonization of policies across New England could facilitate coordination, reduce manufacturers' costs, and allow policymakers to compare performance from one jurisdiction to another.

The Product Stewardship Institute (PSI) estimates that approximately 262,000 gallons of leftover paint are available for collection in Rhode Island on an annual basis, along with some 420 tons of leftover pesticides, 13.6 million used medical sharps, 2,200 tons of discarded phone books, 420 tons of spent single-use batteries, 126 tons of spent rechargeable batteries, and 420,000 burned out fluorescent lamps.<sup>1</sup> In addition, Rhode Island residents on an annual basis discard about 270,000 tons of containers and packaging.<sup>2</sup> If all the electronics, sharps, lamps, thermostats, paint, pesticides, batteries, and phone books generated in Rhode Island were managed safely through a product stewardship program, PSI estimates that it would provide Rhode Island taxpayers with about \$8 million annually in direct savings or additional service benefits.



Framework legislation provides legislators with a means of streamlining the legislative process to create an easier and more transparent way to manage products. It has the potential to increase the collection and recycling of products (thereby creating jobs), reduce toxic materials disposed, lower waste management costs borne by government, reduce the demand for virgin materials, and curtail greenhouse gas emissions.

## I. ROADMAP OF THIS REPORT

PSI submits this report to the RI DEM in partial fulfillment of the General Assembly's charge to recommend options for framework legislation in Rhode Island. The report defines product stewardship, explains why it is necessary, and provides a brief overview of product stewardship activity in the United States, highlighting activities in Rhode Island. It defines what is meant by a framework approach, outlines its advantages and potential concerns, and summarizes relevant experience in Canada. Finally, it describes the major components of framework legislation and notes how framework bills introduced in US states address those components. Appendix 1 lists the Product Stewardship Institute's 2001 *Principles of Product Stewardship*, while Appendix 2 lists *Framework Principles of Product Stewardship*. Appendix 3 is a summary of the April 15 stakeholder meeting held by RI DEM, and includes PSI's recommendations for framework legislation for Rhode Island. Appendix 4 lists individuals who commented on this report or the meeting summary. Appendix 5 includes additional references.



## II. PRODUCT STEWARDSHIP: What it is, why it is important, and where it is working

Product stewardship is a way of doing business that changes how products are designed and how waste is managed.<sup>3</sup> Firmly established in Europe and Canada, product stewardship is rapidly gaining ground in the United States as the most effective and efficient method for reducing the environmental impacts of consumer products and packaging. Product stewardship means that manufacturers, retailers, governments, and consumers share responsibility for reducing a product's health and environmental impacts. Those with the greatest ability to reduce those impacts (e.g., manufacturers and consumers) shoulder the greatest responsibility. Product stewardship programs can take many forms, but all systems assign responsibilities in basically the same manner. Manufacturers—and ultimately consumers, to whom manufacturers pass on costs—pay for collecting, recycling, or appropriately disposing of products consumers no longer want. Retailers may serve as collection points for used or leftover products and distribute information to the consumer. Governments oversee product stewardship systems to ensure fairness (e.g., all manufacturers are subject to the same requirements), effectiveness (e.g., performance levels are achieved), and consumer protection. Consumers play a critical role of bringing products they no longer need to appropriate collection points (e.g., retail stores, government facilities, etc.) or using mail-back programs, curbside recycling, or other management opportunities. Recyclers assure that products are dismantled and recycled in a manner that does not harm workers or the environment.

## ***Why is product stewardship necessary?***

PSI estimates that approximately 262,000 gallons of leftover paint are available for collection in Rhode Island on an annual basis, along with some 420 tons of leftover pesticides, 13.6 million used medical sharps, 2,200 tons of discarded phone books, 420 tons of spent single-use batteries, 126 tons of spent rechargeable batteries, and 420,000 burned out fluorescent lamps.<sup>4</sup> In addition, Rhode Island residents on an annual basis discard some 270,000 tons of containers and packaging.<sup>5</sup> If all the electronics, sharps, lamps, thermostats, paint, pesticides, batteries, and phone books generated in Rhode Island were managed safely through a product stewardship program, PSI estimates that it would provide Rhode Island taxpayers with about \$8 million annually in direct savings or additional service benefits.

Many consumer products contain materials that federal and state environmental agencies have determined to be toxic. For example, electronic products such as televisions and computers can contain lead, mercury, cadmium, lithium, phosphorous, and brominated flame retardants. Batteries contain toxic metals and oil-based paints are hazardous due to their ignitability. Fluorescent light bulbs and many thermostats contain mercury, a potent neurotoxin. In terms of the environmental hazards they represent, consumer products are often no different from hazardous wastes generated by industry.<sup>6</sup> For that reason, they are often referred to as household hazardous waste, or HHW.



Consumer products can often be reused, and many contain materials that can be recycled. For example, leftover paint can be reused by residents who frequent local swap shops, while nickel and cadmium from a spent battery can be remanufactured into a new battery or other product. Non-toxic recyclables, such as bottles, cans, cardboard, and other packaging materials, represent some 30 percent of the municipal solid waste stream, nearly all of which can be recycled.<sup>7</sup> Neglecting to recover and reuse products and packaging means energy and other natural resources are wasted in the extraction and production of virgin materials and the manufacture of new parts. According to the U.S. Environmental Protection Agency (EPA), the extraction, production, transport, and disposal of goods accounts for approximately 29 percent of all man-made greenhouse gas emissions.<sup>8</sup> Greater reuse and recycling of consumer products and packaging is a powerful greenhouse gas reduction strategy. Product impacts are increasingly being viewed from a lifecycle perspective, which can help policy-makers understand what phases of a product's lifecycle should be a priority for reducing its impacts on the environment and health.

In many parts of the country, the costs to local governments of managing discarded consumer products through household hazardous waste collection programs has proven to be staggeringly high, ranging

from about \$0.30 per pound for waste electronics to \$8.00 per gallon for leftover paint.<sup>9</sup> While costly to run, these programs rarely offer convenient opportunities for the public to discard products and packaging. As a result, most people end up throwing away products in their household trash or storing them in their basements or attics. By shifting the costs of HHW management and product recycling from taxpayer-funded government programs to manufacturers and consumers, product stewardship creates the funding base needed to expand and sustain end-of-life management programs without depleting scarce government resources. By making manufacturers responsible for their products and packaging, product stewardship creates incentives for manufacturers to redesign their products and packaging to be less costly to manage at end-of-life.

### ***Economic Benefits of Product Stewardship***



Product stewardship offers numerous economic benefits. Collecting spent products prior to disposal in landfills and incinerators avoids the cost of cleaning up contamination resulting from inappropriate disposal. While it is not possible to estimate such cost savings precisely, the magnitude is proportionate to the quantities and toxicities of material stored in products.

The US EPA estimates, for example, that between 7 and 10 tons of mercury are contained in the mercury thermostats coming out of service each year in the United States.<sup>10</sup> Cleaning up just a single pound of mercury can cost tens of thousands of dollars.<sup>11</sup> This unfortunate type of event was demonstrated in a major mercury release in Pawtucket, RI in 2004 in which the total cost of cleanup was in the millions of dollars. Another spill at Cranston High School East in Cranston, RI in 2007 closed the high school for a number of days, inconveniencing teachers, students and parents.

Product stewardship relieves the financial burden on local governments for managing products at end-of-life. Oregon's newly enacted paint stewardship law, for example, is expected to provide governments in Oregon with services valued at more than \$6 million per year based on current estimates of what it costs to collect, recycle, and transport leftover paint. But product stewardship does not simply shift costs from the public sector to the private sector. It reduces overall system costs since product stewardship programs require all stakeholders to work together and assume clearly defined roles. Under a product stewardship system, manufacturer-run programs can be more efficient than government programs. A recent analysis by CalRecycle staff found, for example, that California's government-run paint collection programs cost about 20 percent more per gallon than British Columbia's manufacturer-run program. In addition to costing more, it collected less than half as much paint. To achieve British Columbia's diversion rate of 77 percent, California would need to spend an additional \$28 million (assuming it continued to rely on a government-run system).<sup>12</sup>

Product stewardship can save money for some individual firms, too. Several major corporations have initiated voluntary take-back programs because these programs are profitable. For example, since the 1990s Xerox voluntarily takes back and remanufactures its office equipment. Xerox now leases nearly 75 percent of all equipment sold, diverting over 2 billion pounds of waste from landfills and saving the

corporation an estimated \$2 billion.<sup>13</sup> Other examples of product stewardship efforts that generate corporate revenue include the collection and refurbishing of toner cartridges at office supply stores and the collection and refurbishing of barbecue cylinders at retail outlets. However, these products already have value at their end-of-life and, therefore, offer readily available business opportunities. Legislated product stewardship has become necessary for those products that cost money to manage once discarded. That *external* cost has traditionally been the financial and management responsibility of local governments, although in Rhode Island the Rhode Island Resource Recovery Corporation (RIRRC) finances HHW management, albeit on a limited scale. Product stewardship seeks to change the dynamic so that manufacturers have a direct financial incentive to reduce their end-of-life management costs and, where possible, create value in the supply chain through large-scale recycling of recovered materials.

Product stewardship also stimulates job creation. On a per-ton basis, recycling, sorting, and processing waste create 10 times the number of jobs created by straight disposal.<sup>14</sup> Recycling generates domestic jobs by collecting and processing materials locally, which can replace the extraction of virgin materials often outside the region.<sup>15</sup> Product stewardship's role in creating jobs is clear in countries where it has been in place for a significant length of time. Germany's packaging stewardship law enacted in 1991 has resulted in the employment of 17,000 people.<sup>16</sup> British Columbia created an estimated 2,100 full-time jobs through programs for beverage containers, used oil, tires, and electronics.<sup>17</sup>



### ***Emergence of Product Stewardship in the US***

Today's US product stewardship movement has roots in European environmental policy. In 1991, Germany enacted a packaging ordinance that held packaging producers responsible for meeting national packaging waste reduction targets. By 2000, German packaging recovery rates had increased to more than 75 percent, compared to about 37 percent when the ordinance was enacted.<sup>18</sup> In 2003, the European Commission enacted the Waste Electrical and Electronic Equipment Directive (WEEE Directive) that held electronics manufacturers responsible for recycling any equipment powered by electricity. The WEEE Directive has not yet been fully implemented, particularly in the newer member states of Eastern Europe. To date, it has achieved varied rates of success in different countries and across different product categories; nonetheless, the program has already gone through one reevaluation after easily achieving its collection target of 4 kg/person in certain countries. The European Commission has proposed a collection rate goal of 65 percent, based on the average weight of products placed on the market in the two preceding years, to be achieved by 2016.<sup>19</sup>

Over the past decade, the concept that producers are responsible for their products throughout their entire life cycle has taken hold in the United States. Mercury thermostat and rechargeable battery manufacturers have established voluntary take-back programs that have been operating for about a decade. These industries have assumed responsibility for collecting and recycling their products, while still relying on states for program oversight and compliance. To date, however, these programs have failed to collect a significant percentage of products available for collection. The Thermostat Recycling Corporation (TRC), for example, which was created by the three largest thermostat manufacturers in 1998 and now has about 25 members, collected 135,604 mercury thermostats in 2008, which represents just 5 percent of all mercury thermostats estimated to be available for collection (according to the US EPA).<sup>20</sup> A 2005 PSI study found that TRC's voluntary program relied heavily on government officials to conduct outreach to heating and cooling contractors and wholesalers.<sup>21</sup> In Rhode Island in 2008, TRC collected just 370 mercury thermostats, which mirrors the national average of 5 percent collection of all mercury thermostats available for collection.<sup>22</sup> Similarly, the Rechargeable Battery Recycling Corporation collected 14,051 pounds of rechargeable batteries in Rhode Island in 2009. That number represents about 5 percent of what was available for collection in RI.

The shortcomings of these voluntary efforts highlight the need for product stewardship legislation. As of March, 2010, nearly 60 state laws covering seven products have been enacted across the country requiring manufacturers to take responsibility for their products at end-of-life.<sup>23</sup> As shown in Table 1, the greatest number of laws address electronics (22), followed by mercury auto switches (14), batteries (7),<sup>24</sup> mercury thermostats (9), fluorescent lamps (2), paint (1), pesticide containers (1), and framework (1). Over 30 states have enacted at least one producer responsibility law, with one state (Maine) passing six such laws. The number of states with at least one law has doubled since 2006.

**Table 1. State Product Stewardship Laws (as of July 7, 2010)**

Product	No. of Laws	States with Product Stewardship Law
Electronics	22*	CT, HI, IL, IN, ME, MD, MI, MN, MO, NC, NJ, NY, OK, OR, RI, SC, TX, VA, VT, WA, WV, WI
Auto Switches	14	AR, IL, IN, IA, LA, ME, MD, MA, NJ, NC, RI, SC, UT, VT
Thermostats (mercury)	9	CA, IA, IL, ME, MT, NH, PA, RI, VT
Batteries	7	FL, IA, ME, MD, MN, NJ, VT
Fluorescent Lamps	2	ME, WA
Paint	1	OR
Pesticide Containers	1	CA
Framework	1	ME

\* CA was the first state to pass an electronics law, but it is based on an advanced recycling fee.

## *Emergence of Product Stewardship in Rhode Island*



Local governments in Rhode Island send nearly all of their solid waste to the RIRRC facility in Johnston. RIRRC operates one major landfill, known as the Central Landfill, which has already undergone a series of expansions and is currently on track to reach its capacity in 25 years.<sup>25</sup> RIRRC has designated waste reduction as its primary goal.<sup>26</sup>

Since 2001, RIRRC has collected HHW at a central facility known as the Eco Depot in Johnston, which offers monthly collections for items such as leftover paint, pesticides, mercury thermostats, fertilizer, and automotive fluids. RIRRC will accept virtually any household hazardous waste, with the exception of medications and controlled substances. Overall, approximately 70 percent of what is collected by weight is paint, and the next largest category of collected products is pesticides.<sup>27</sup> The Eco Depot also hosts approximately 15 satellite collections across the state on certain Saturdays. Between 2001 and 2009, RIRRC collected more than 2,582 tons of HHW from residents at a cost of more than \$3.2 million.<sup>28</sup> RIRRC collection events are efficiently run and have earned it many accolades from participants. Collection events capture significant quantities of paint – as much as 35% of what is available for collection. Collection rates for other products are likely considerably lower. If properly designed, a manufacturer-financed program would offer additional opportunities to collect products from a larger percentage of RI households and ensure that fewer products are disposed inappropriately.

The Rhode Island legislature has enacted three product stewardship laws: Mercury Reduction and Education Act (in 2001 and subsequently amended to include mercury auto switches),<sup>29</sup> the Electronic Waste Prevention, Reuse, and Recycling Act (in 2008),<sup>30</sup> and the Mercury Thermostat Pollution Prevention Act<sup>31</sup> Key features of the auto switch and electronics laws are summarized in Table 2. The recently enacted thermostat law also includes many of the same key features. As will be described in a later section, many of these features are standard elements in framework



policy. The Mercury Reduction and Education Act prohibits the sale of all mercury-added products unless manufacturers establish a plan for convenient and accessible collection. It phases out products containing more than 10 milligrams of mercury as of July 2009, unless an exemption is provided in the law or a manufacturer has an approved exemption from DEM. The law specifically mandates a capture rate of 70 percent of all auto mercury switches by 2007, but does not reference performance goals for other products. Auto manufacturers are required to submit detailed documentation of their collection rates and reimbursements to auto recyclers in the form of a per switch bounty payment. Manufacturers

**Table 2. Key Features of Rhode Island Product Stewardship Laws**

Requirement	Mercury Reduction and Education Act [Auto switches portion]	Electronic Waste Prevention, Reuse, and Recycling Act
<b>Product Stewardship Organizations (PSO)</b>	<ul style="list-style-type: none"> <li>Manufacturers may meet their legal obligations individually or collectively</li> </ul>	<ul style="list-style-type: none"> <li>Manufacturers may meet their legal obligations in one of three ways: individually, through a group stewardship plan, or participate in the state program run by RIRRC</li> </ul>
<b>Financing</b>	<ul style="list-style-type: none"> <li>Manufacturers pay for collection, transportation, and recycling</li> <li>Manufacturers pay a \$5 bounty per returned auto switch to auto recyclers</li> </ul>	<ul style="list-style-type: none"> <li>Manufacturers pay for collection, transportation, and recycling</li> <li>Manufacturers cover DEM administrative costs in annual fee</li> </ul>
<b>Stewardship Plan</b>	<ul style="list-style-type: none"> <li>Manufacturers submit stewardship plan to RI DEM for review and approval</li> </ul>	<ul style="list-style-type: none"> <li>Manufacturers not participating in state program submit stewardship plan to RI DEM for review and approval</li> </ul>
<b>Performance Goals</b>	<ul style="list-style-type: none"> <li>Manufacturers must achieve capture rate of 70 percent of switches estimated to be available</li> </ul>	<ul style="list-style-type: none"> <li>Based upon assigned return share and market share (by weight)</li> </ul>
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Manufacturers submit annual progress reports to RI DEM, including collection rate</li> </ul>	<ul style="list-style-type: none"> <li>Manufacturers submit to RI DEM a list of all brands covered, how they will finance, manage, conduct, and advertise the program, and demonstrate environmentally sound practices and convenient collection service</li> </ul>
<b>Compliance</b>	<ul style="list-style-type: none"> <li>Non-compliant manufacturers are prohibited from selling their products in RI</li> </ul>	<ul style="list-style-type: none"> <li>Non-compliant manufacturers are prohibited from selling their products in RI. A manufacturer that does not meet its return share/market share by weight is subject to penalty</li> </ul>
<b>RI General Assembly Responsibility</b>	<ul style="list-style-type: none"> <li>None stated</li> </ul>	<ul style="list-style-type: none"> <li>Review DEM biennial report</li> </ul>
<b>RI DEM Responsibility</b>	<ul style="list-style-type: none"> <li>Review and approve manufacturers' plans, estimate the number of auto switches available for collection, review manufacturers' annual reports, determine whether collection rate is achieved, develop regulations for \$5 bounty.</li> </ul>	<ul style="list-style-type: none"> <li>Review and approve manufacturers' plans, define environmentally sound recycling and reuse practices, approve the methodology for calculating collection and recycling rates, approve the market share for TV manufacturers, maintain list of registered manufacturers and their brands, report biennially to the General Assembly</li> </ul>

must pay at least \$5 for each switch to compensate vehicle recyclers for their labor and costs for collecting. To date, the End of Life Vehicle Solution (ELVS) has been coordinating this program and reporting requirements on behalf of many of the major auto manufacturers.

Rhode Island's electronic waste law makes producers responsible for the costs of collection, transportation, and recycling of computers, laptops, monitors, and televisions. Recycling or disposal of these goods is free for individuals and schools. Producers have the option of establishing their own manufacturer-administered collection/recycling program or participating in the state-run electronic waste program administered by RIRRC. The financial contribution is determined by the company's "return share" by weight (e.g., the percentage by weight of the company's products collected for recycling) for computers, laptops, and monitors. For televisions, the financial contribution is based on market share. RI DEM is responsible for developing regulations to ensure environmentally sound recycling and reuse practices and has the power to fine non-compliant producers. In addition, the RI state government helps support this effort by only purchasing EPEAT<sup>32</sup> registered electronics from vendors that have established take-back programs for their products. Producers partially cover RI DEM's cost of administering and enforcing the program with an annual registration fee of \$5,000 per company.

### **III. FRAMEWORK APPROACHES: Definition, advantages, experience**

Nearly 60 product stewardship laws addressing seven products have been enacted in the United States. A comprehensive, or "framework," legislative approach would establish an overarching product stewardship policy for multiple products.<sup>33</sup> Just as some state agencies (such as Massachusetts, Minnesota, and California) have established product stewardship as statewide policy, framework legislation would extend that policy to legislation. In many respects, Rhode Island legislators, regulators, businesses, and the public are already familiar with "framework." A framework approach simply makes it easier to apply the same principles that are the basis of Rhode Island's mercury products and e-waste programs to other products. Just like Rhode Island's mercury products and e-waste laws, a framework law would accomplish the following:

- Establish criteria for designating products;
- Require that manufacturers establish and finance a system for product collection and recycling;
- Stipulate that manufacturers that do not participate in the collection system cannot sell their products in Rhode Island;
- Require manufacturers to submit a collection plan to the state environmental agency for review and approval;
- Report on progress toward meeting performance goals.

A framework approach capitalizes on what states have learned about the stewardship of specific products and incorporates this national experience into a basic process that can be applied to a range

of products. The creation of a framework approach is not new; it is a natural extension of successful product-specific laws already in place in Rhode Island and throughout the country.

Those laws are based on widely accepted *Principles of Product Stewardship* that have been endorsed by 45 states, more than 200 local governments, the National League of Cities (representing 19,000 municipalities), the Environmental Council of the States, the Solid Waste Association of North America, and numerous organizations and businesses. Those principles, which were developed by the Product Stewardship Institute in 2001, can be found in Appendix 2 of this report.

### ***Framework Legislation: Advantages and Concerns***

Enacting a product specific stewardship law may require years of evaluation and revision. Given the thousands of consumer products in commerce today, comprehensive product stewardship across a broad array of products seems a distant possibility if we are to pursue it one product at a time. A framework approach allows policy makers to streamline the legislative process and respond more rapidly and efficiently to new hazards. Framework also makes product policy more consistent and transparent. By establishing a clear government policy on waste management across products, framework creates a more predictable regulatory environment and, in turn, a more stable business environment.

Concerns have been raised that a framework approach may impose the same requirements on every product. However, many argue that, if done properly, framework will not be a “one size fits all” approach. It does not preclude government from negotiating with individual business sectors to ensure that requirements address the specific characteristics of a product or industry. Such negotiation will no doubt be necessary for most products. For example, managing scrap electronics is different from managing used medical sharps. An effective framework law needs to strike a balance between being flexible enough to manage different products, yet specific enough to ensure that stewardship is carried out in an environmentally sound manner. Critics of framework have maintained that these goals cannot be achieved with a single piece of legislation. Others are skeptical of delegating the development of product-specific rules to the state regulatory authority and would prefer such requirements be explicitly legislated. As the discussion that follows makes clear, framework systems in place in Canada and proposed for US states offer a variety of approaches for designating products, sharing authority between legislative and executive branches, engaging external stakeholders in decisions, and other important elements.

### ***Framework Approaches in Canada***

Product Stewardship framework approaches have been enacted in the Canadian provinces of British Columbia (BC), Manitoba, and Ontario.<sup>34</sup>

These provinces are demonstrating leadership through policy and regulation in creating industry led product stewardship programs for

Canada.<sup>35</sup> While the provincial framework approaches are different, each establishes producer-financed product stewardship as the overarching policy objective and encourages a consistent approach to the



stewardship of multiple products. This is evidenced by the provinces collectively agreeing at the federal level, through Canadian Council of Ministers of the Environment, to develop a list of priority products to regulate.

**British Columbia** established a framework approach through its Recycling Regulation, promulgated in 2004 under the province's Environmental Management Act. This regulation requires industry-led product stewardship that does not impose costs on local governments. It holds producers (defined as a manufacturer, brand-owner, distributor, importer, and retailer) responsible for the life-cycle management of the products they produce, transport, or sell. A producer must develop and seek approval of its stewardship plan and report annually on its performance requirements set in the regulation or as requested by the Director, including the requirement that manufacturers achieve a collection rate of 75 percent or higher for generally non-consumable products. Product stewardship programs are now in place for batteries, beverage containers, electronics, medications, HHW, paint, tires, and used oil (including filters and containers). Programs for consumer electrical products will come into effect in 2011. Stewardship programs for all of these products are enabled under a single framework regulation. The agency adds new products by introducing "schedules" that include definitions and timetables for implementation. The Cabinet (a legislative branch of the government) approves each schedule, but approval by the full legislature is not required.<sup>36</sup>

**Manitoba** established a framework approach in 1990 with passage of its Waste Reduction and Prevention (WRAP) Act. This Act creates an industry-funded organization to finance product collection and management, as well as public education. Manitoba's approach differs from Ontario's (below) in that it leaves the development of product-specific requirements to subsequent regulation. To date, three regulations have been promulgated for multi-materials including: beverage containers, packaging, and a variety of paper products in 1995; used oil, oil filters, and containers in 1997; and tires in 2006. The multi-materials regulation will likely soon be replaced with a Packaging and Printed Paper Stewardship Regulation. The used oil and tires regulations include similar requirements for the content of manufacturer stewardship plans and reporting, but somewhat different requirements for program financing and performance assessment.<sup>37</sup>

**Ontario** enacted framework legislation in 2002 with passage of its Waste Diversion Act. The Act created Waste Diversion Ontario (WDO) to develop, implement, and operate waste diversion programs for a wide range of materials. The Act empowers the Minister of the Environment to designate a material for which a waste diversion program is to be established. Once the Minister has designated a material through a regulation under the Act, the Minister asks WDO to develop a diversion program. WDO is required by the Act to work cooperatively with a product stewardship organization to develop a waste diversion plan for the designated waste. WDO is further required by the Act to conduct public consultation on any matter referred to it by the Minister. To date, the Minister has requested diversion programs for Blue Box Wastes,<sup>38</sup> used tires, Municipal Hazardous or Special Waste (MHSW),<sup>39</sup> and Waste Electrical and Electronic Equipment (WEEE).<sup>40</sup>

## Framework Legislation in the US



To date, framework bills have been introduced in seven states: California, Maine, Minnesota, Oregon, Vermont, Washington, and Rhode Island. These bills are based on policy concepts from the *Framework Principles of Product Stewardship*, which have been adopted by an increasing number of local product stewardship councils (see Appendix 3). Maine recently enacted the country's first framework law, although it is not the comprehensive version originally introduced in Maine and in other states. The greatest support for framework legislation appears to be found in states that have already enacted strong product stewardship laws for individual products. Maine has enacted more product-specific laws than any state (five). Information presented in this report offers a snapshot of legislation as of June 2010. In some cases, bills are being amended almost on a daily basis. Framework and product-specific bills can be found on PSI's [EPR Legislation Map](#), which can be accessed from [PSI's website home page](#).

- The framework bill that had been under consideration in **California** was [AB 2139](#), introduced by Assembly member Wesley Chesbro (D-Arcata). It is based on the Framework policy adopted by the California Integrated Waste Management Board (now CalRecycle) in 2007. It is currently inactive.
- **Maine's** framework law is [LD 1631](#), introduced by Representative Melissa Walsh Innes (D-District 107). LD 1631 received unanimous approval from both the Maine House and Senate in mid-March and was signed by the Governor on March 17.
- The framework bill under consideration in **Minnesota** is [HF 2407](#), introduced by Representative Paul Gardner. It was introduced following a framework study undertaken by the Minnesota Pollution Control Agency in January 2009 and received an informational hearing in 2010. It is expected to be reintroduced with alterations in the 2011 legislation session.
- The framework bill introduced in **Oregon** is [HB 3060](#). It was introduced in the 2009 legislative session, received a hearing and a work session, and did not pass out of committee. We include it in this report because it contains features that policymakers in Rhode Island may wish to study.
- **Rhode Island's** framework bill introduced in 2010 is [H 7998](#). It is nearly identical to Maine's framework law.
- The framework bill introduced in **Vermont** is [H 696](#), introduced by Representatives Margaret R. Cheney, Sarah R. Edwards, Tony Klein, and Joseph Krawczyk. The bill did not move out of committee in 2010, but will very likely be reintroduced at the beginning of next fall.



- Framework was one component of [HB 1718](#): an omnibus climate change bill introduced in **Washington**. The climate change bill was a compilation of all legislative proposals developed through the Climate Action Team convened by the Governor and included a detailed draft product stewardship framework proposal. Because the bill was introduced as a "discussion draft" and was not intended to move forward in the legislative process, we refer to it as the Washington Discussion Draft in our analysis.

## **IV. Options for Designing Framework Legislation**

Product stewardship calls on manufacturers, retailers, governments, and consumers to share responsibility for reducing the health and environmental impacts of consumer products. Designing a framework approach for Rhode Island offers an opportunity to build on what has been learned through experience with product-specific legislation. Two product stewardship bills were introduced to the RI General Assembly this year one governing pharmaceuticals, which was not voted upon, and another bill on mercury thermostats that became law in June 2010. Rhode Island's product stewardship laws include provisions on program financing, stewardship organizations, stewardship plans, performance goals, reporting, and compliance. A framework law would need to include those provisions, as well as criteria for designating products and procedures to empower both the General Assembly and RI DEM to participate in policy development through an efficient and transparent process.

Framework legislation provides legislators with a means of streamlining the legislative process to create an easier and more transparent way to manage products. A framework approach does not imply that the management of all products should be identical. Legislators can decide the degree of uniformity they want for each of the specific elements of a product stewardship program. For each product, it is expected that they will be managed differently, even within a similar context. For example, while performance goals are a key component to all product stewardship legislation and, therefore, a key section of a product stewardship framework bill, how performance metrics are set, the levels of performance expected, and other related details might vary by product. Listed below are options for how Rhode Island can develop product stewardship framework legislation, based on the approaches taken by other states.

### ***Criteria for Designating Products***

Two framework bills—AB 2139 in California and H 696 in Vermont—identify specific products to be included under a framework approach. The list of designated products in AB 2139 (as introduced) includes medical sharps, residential pesticide containers, small personal use propane tanks, personal use butane lighters, and single-use food packaging. H 696 designates product packaging. The Washington Discussion Draft included five initial product categories to be covered: carpet, mercury-containing lights, mercury thermostats, paint, and rechargeable batteries.

To date, all proposed framework legislation uses fairly similar criteria to determine which new products should be regulated under the Framework law. These criteria fall into the categories listed below. A limited set of criteria may create a more predictable regulatory environment, while a more broadly defined set of criteria might provide government with greater flexibility to respond quickly to new concerns.

- **Threats to environmental and public health and safety**
  - Toxicity
  - Climate change impacts
  - Total volume in the waste stream and potential for volume to increase
  
- **Possibility of enhanced resource conservation**
  - Potential for energy conservation
  - Potential for material conservation and resource recovery
  - Potential for increasing reuse or recycling, use of recycled content, or product redesign
  
- **Burden product places on the current waste management system**
  - Management and collection costs
  - Problems associated with current disposal or collection methods
    - Lack of disposal capacity
    - Lack of proper disposal methods or recycling infrastructure
    - Problems with illegal dumping
    - Potential for the product to contaminate recycling programs
  
- **Possibility for new business opportunities or job creation**
  - Opportunities for existing or new businesses to manage products
  - Opportunities to create markets for materials

Some bills go beyond these provisions. AB 2139, introduced in California, includes the impact a product has on ocean pollution and storm water runoff. HF 2407, introduced in Minnesota, considers the willingness of potential partners to participate in such a program. Oregon’s HB 3060 included an elastic clause, which would allow the state environmental agency to take into account “any other consideration relevant to the management of a product.” H 696, introduced in VT, does not enumerate specific criteria beyond the intent of the law. The Washington Discussion Draft included “public demand” and recommendations of an advisory committee that would be established by the legislation. Some of the bills also include the success of similar programs in other states as one of the criteria.

## ***Authority to Designate Products***

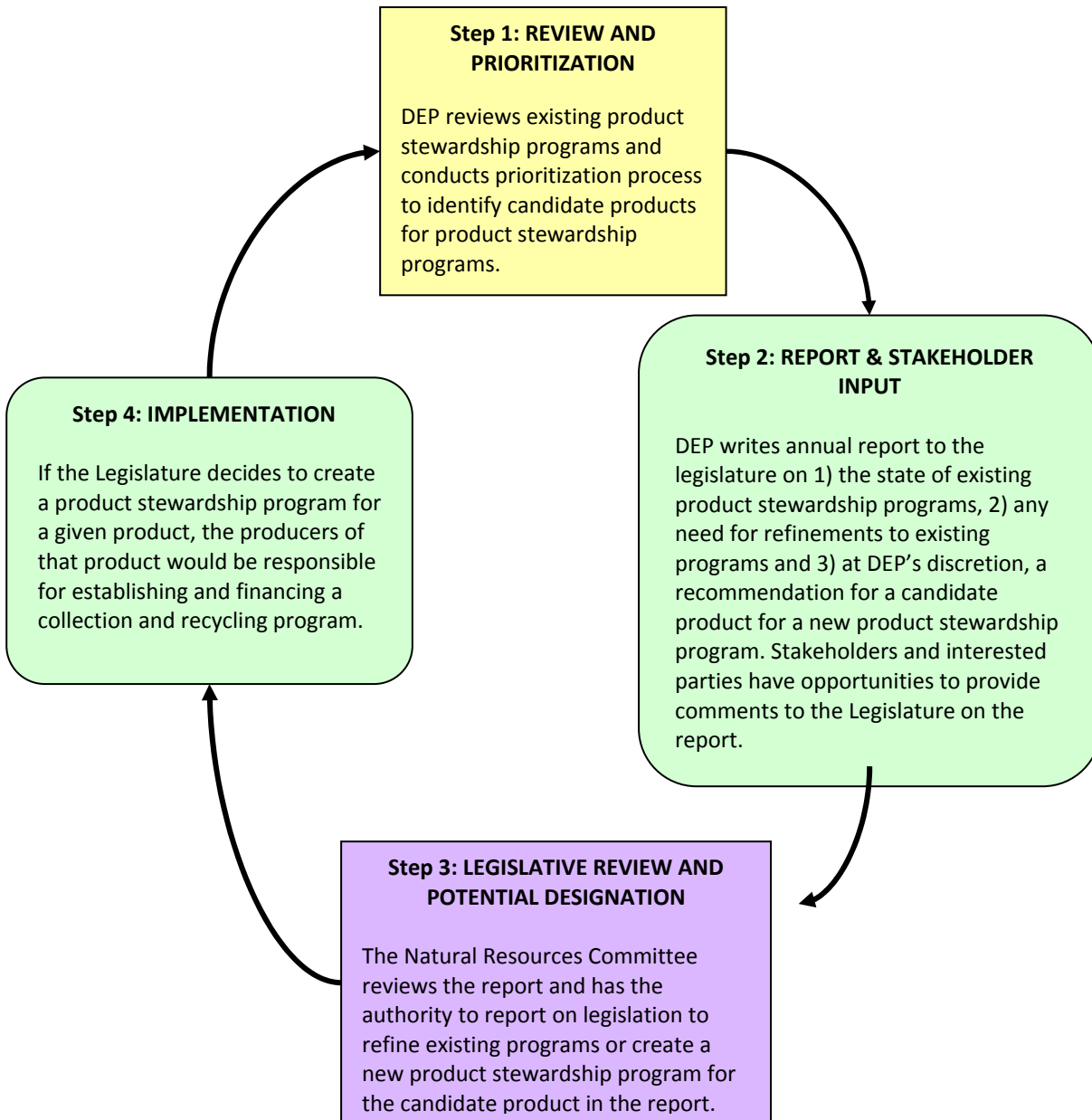
One of the primary advantages of a framework approach is that it streamlines the process for establishing product stewardship by offering a consistent approach that can be applied to multiple products. As outlined below, authority for designating which products should be included under the framework could rest primarily with the legislative branch, the executive branch, or with both branches through a coordinated process. The framework bills currently under consideration include variations on these approaches.

1. **Strong legislative authority.** One option would be to rely on the RI General Assembly to determine which product(s) to include under the framework. MN's framework bill comes closest to following this approach. It calls on the MN Pollution Control Agency to submit a list of potential products to the chairs and ranking minority members of the house and senate committees with jurisdiction over environmental issues. New legislation must be enacted before the agency may establish a new product stewardship program.
2. **Strong executive authority.** A second option would be to rely on the RI DEM to determine which product(s) to designate through regulation. This approach would take advantage of DEM's expertise regarding mitigating environmental hazards. It would allow DEM to respond more rapidly to any new circumstances or threats that may arise. DEM already possesses this authority as part of its comprehensive electronic waste law—it can incorporate additional electronic products beyond what is specifically outlined in law through regulation.
3. **Shared authority.** A third option would be to devise a system whereby the legislative and executive branches shared authority to determine which product(s) to designate. For example, the RI DEM could propose a list of products to be covered to the General Assembly in its semi-annual Regulatory Agenda or else submit a specific report to the Assembly on suggested products for designation. This approach would still have the advantage of relying heavily on DEM's expertise, but the General Assembly would retain ultimate authority to review and approve (or veto) DEM's product choices.

The framework bill introduced in Rhode Island, H. 7998, is virtually identical to Maine's new framework law. Maine's law offers a model for how authority might be shared. Maine's law calls on the DEP to collect information about products in the waste stream that contain toxics, have the potential to be reused or recycled, are costly for governments to manage, and for which voluntary programs are not working well. On an annual basis, Maine DEP prepares a report to the Legislature "on products...that when generated as waste may be appropriately managed under a product stewardship program."<sup>41</sup> The report must include draft legislation if any is necessary to implement the product stewardship program. After posting the report on its website and receiving public comment, DEP submits it to the joint committee of the legislature with jurisdiction over natural resources. The joint committee reviews the report and may submit a bill to the full legislature to implement the DEP report recommendations. Figure 1 depicts this process. H 696 proposed in Vermont offers a similar shared responsibility model. It calls on the Secretary

of Environmental Affairs to submit a list of products to the General Assembly after consulting with interested parties.

**Figure 1. Shared Authority in Maine’s Framework Law**



**Source: Natural Resources Council of Maine**

External stakeholders could provide input as to which of these approaches is most appropriate for Rhode Island. Legislation could mandate stakeholder consultation at any stage of the listing process or establish a standing advisory committee of stakeholders. HB 3060 in Oregon had the most extensive

requirements for stakeholder consultation. In developing a list of recommended products, the Oregon Department of Environmental Quality (OR DEQ) would consult a standing advisory committee composed of at least 11 members, with at least one member representing producers, retailers, local governments, environmental groups, and the solid waste industry. After this consultation, the OR DEQ would then submit its list of recommended products to the Environmental Quality Commission (EQC), the DEQ's policy and rulemaking board. After a product was approved by the EQC, DEQ would then establish and consult with a product-specific advisory committee to develop rules particular to each product. Other bills mandated consultation at various stages.

## ***Program Financing***

Product stewardship programs internalize end-of-life product management costs into the purchase price of the product. In many product stewardship systems, the cost of managing a product's reuse, recycling, or appropriate disposal are included in the company's business model as another cost of doing business. That end-of-life management cost is reflected in the product purchase price in a way that is invisible to the consumer, just like the costs of production, labor, and marketing.<sup>42</sup> Rechargeable battery manufacturers, for example, include the cost of collecting and managing batteries in the purchase price of new batteries. Thermostat manufacturers operate a similar system. Some product stewardship systems today, however, include end-of-life product management fees that might be visible to consumers. Under Oregon's pilot paint stewardship program, for example, manufacturers add an "assessment" to the purchase price of new paint based on the cost to manage paint that consumers no longer need. The Oregon DEQ must approve the assessment amount. Retailers may make the assessment visible to consumers if they wish. Such a system is also common in some Canadian paint stewardship programs. Whether product stewardship costs are internalized or visible, product consumers, rather than taxpayers, pay for the end-of-life management services. From a product stewardship perspective, levying a fee at the time of disposal is not desirable since it is likely to reduce return rates and increase the risk of illegal disposal. Some waste management companies have offered to provide municipalities with premium curbside and in-home collection of unwanted products. This service is outside the scope of most product stewardship programs which generally define "collection" as the consumer dropping off an unwanted product at a collection location, or mailing it back to a manufacturer or recycler.

The financing of product stewardship programs is largely consistent in the proposed framework bills, with producers responsible for the costs of running the product stewardship program (including processing, transporting, and recycling or appropriately disposing unwanted products). In all bills, producers are barred from charging a fee to consumers at the time of drop-off or mail-back, and in some cases at the time of purchase (e.g., no visible fees to consumers). HF 2407 introduced in Minnesota, and past bills introduced in Oregon and Washington, would hold manufacturers responsible for covering the administrative costs of the government agency overseeing and enforcing the program. AB 2139, introduced in California, would require producers to pay a flat annual registration fee to partially cover administrative costs, similar to the system Rhode Island has currently for electronics recycling. H 696,

introduced in Vermont, would allow the state environmental agency to require producers to cover its administrative costs on a per-product basis, allowing different fees for different products.

## ***Stewardship Organizations***

Most product-specific laws enacted by US States, and all framework bills under consideration at this time, give manufacturers discretion over whether to meet their legal responsibilities collectively or to do so on their own. While the financial incentive to influence product design may be strongest when producers are responsible for their own goods, most US manufacturers subject to product stewardship requirements have chosen a collective approach because it is more efficient and saves money. For example, manufacturers of mercury thermostats and paint have formed collectives known as Product Stewardship Organizations (PSOs) to represent their shared interests. With funding from 25 thermostat manufacturers, the Thermostat Recycling Corporation (TRC) collects and recycles mercury thermostats, while the newly formed PaintCare organization will satisfy the legal requirements of all manufacturers of architectural coatings required to collect and manage leftover paint in Oregon. Some legislation includes explicit provisions that allow manufacturers to share information in order to implement product stewardship without violating state or federal anti-trust laws.

The PSO's method of apportioning funds can be directly legislated, left to the discretion of the regulated industry, or left to the discretion of the industry-run PSO. Many state laws governing electronic waste, for example, specify how manufacturers' payments will be assessed. Manufacturers may contribute financially to product stewardship based on market share (the approach used in RI for discarded TVs), or return share (the approach used in RI for other e-waste). The basis for manufacturers' fees can create incentives or disincentives for manufacturers to redesign their products to be environmentally beneficial. Fees assessed based on sales are relatively easy to set but provide little incentive for manufacturers to change their product design. Framework bills introduced to date do not address how manufacturer fees will be assessed. By not predetermining a basis for assessing fees, these bills leave room for manufacturer discretion or subsequent agency regulation.

## ***Stewardship Plans***

The requirement that manufacturers submit plans for implementing stewardship programs to the regulating agency is a key feature in state product stewardship programs. Many product-specific laws, such as those in place in Rhode Island, require manufacturers to describe their plans to implement a stewardship program in a document they submit to their state agency. Some laws are silent about plan requirements, while others include many details. Rhode Island's electronics waste law lies somewhere in between, requiring that a manufacturer, or group of manufacturers under a PSO, submit a plan describing how they will "finance, manage, and conduct" their stewardship program, use "environmentally sound management practices," promote collection opportunities, offer convenient service "adequate to meet the needs of the area being served," and disclose whether their products exceed specified toxic concentrations.

Just like product-specific laws, framework legislation under consideration at this time sets down what manufacturers must tell agencies about how their product stewardship programs will operate and what they will accomplish. Below is a list of requirements that appear in most of the Framework bills currently under consideration:

1. List of producers that will participate in the program and information about how to reach each program contact.
2. Anticipated resources required and the extended producer responsibility program financing system to implement the plan.
3. Performance goals and metrics.
4. Collection infrastructure that will be used to meet performance goals.
5. Consumer education programs.
6. How source reduction and reuse will be achieved.
7. Post-collection management operations.
8. Public outreach and consultation.
9. Reporting requirements.

Several of the framework bills currently being considered include additional provisions aimed at encouraging market development for recycled products, local reuse or recycling (which reduces greenhouse gas impacts by reducing transportation of materials and stimulates local job creation), environmentally sound and socially responsible disposition of end products (e.g., export bans, prison labor, etc.), and strategies to encourage design for the environment.

### ***Performance Goals***

Performance goals are an important and often contentious feature of product stewardship laws. By setting realistic yet ambitious performance goals, policymakers communicate their commitment to hold manufacturers accountable. Rhode Island's Mercury Reduction and Education Act includes a performance goal for the recovery of mercury auto switches, along with ramifications if that goal is not met. Manufacturers must achieve a 70 percent capture rate and reimburse auto recyclers \$5.00 for each returned switch. The RI DEM has promulgated regulations determining that a total of 19,300 switches are available for collection/recycling each year in RI (and at a 70 percent capture rate, which corresponds to 13,510 switches mandated to be collected each year). A "capture rate" is the amount of a product that is collected compared to the amount available for collection. Capture rate is one of several metrics that states use to assess program performance. Other metrics included in product-specific laws at the state level are program convenience (often measured in terms of the distance a person must travel to a collection site or the number of collection sites for every 10,000 people), amount collected per capita, and level of public awareness about the collection program. Many state product stewardship laws do not include performance goals or metrics of any kind, despite the fact they are viewed as essential to evaluating program progress.

Framework bills introduced in California, Minnesota, and Vermont include sections on performance goals. Performance is defined as a “collection rate” (CA, VT), “recovery rate” (MN), and “reuse and recycling rate” (CA). Each of these bills requires that manufacturers include performance goals in the stewardship plans they submit to agencies. The framework bill introduced in Oregon in 2009, HB 3060, stated that performance goals established by manufacturers for the first four years of a program were non-enforceable, but by the fifth year the agency would establish an enforceable annual performance goal. The Washington Discussion Draft included a similar process, with the agency establishing an enforceable annual performance goal for the fourth and subsequent years.

AB 2139 introduced in California and H 696 introduced in Vermont go further and specify performance targets that bill sponsors expect manufacturers to meet. AB 2139 (as introduced) states that collection rates must increase by 5 percent annually until a 95 percent collection rate is achieved. H 696 states that manufacturers must explain in the plans they submit to agencies how they will achieve a recycling rate of no less than 60 percent within five years.

Notably, California’s AB 2139 includes a discussion of goals related to lifecycle product impacts in addition to performance goals. AB 2139 requires that manufacturers include in the plans they submit to their state agency “product goals, including, but not limited to, product designing and materials content, manufacturing, packaging, distribution, and end-of-life management goals.”

### ***Program Reporting***

Reporting on program activities is a key feature of most product-specific state laws. Many laws call for two types of reports: by manufacturers to agencies, and by agencies to legislators. Rhode Island’s electronic waste law requires manufacturers to report to the RI DEM on an annual basis, and for the RI DEM to report to the legislature on a biennial basis. Bills introduced in California, Minnesota, and Vermont require *manufacturers* to report the following information to the state regulating agency on an annual basis:

1. Quantity of products collected;
2. Progress toward attaining performance goals ;
3. Deviation, if any, from stewardship plans;
4. Description of educational efforts;
5. An accounting of the product stewardship financing system.

HF 2407, introduced in Minnesota, goes beyond those requirements, stipulating that manufacturers must describe their actions to reduce product life cycle impacts, “including how product design has been improved to reduce toxicity, waste, and water and energy use.” AB 2139, introduced in California, requires manufacturers to report progress toward attaining product goals. H 696, introduced in Vermont, calls on the Secretary of the Agency of Natural Resources to report annually to the relevant legislative committees on the performance of product stewardship programs and to provide recommendations for improvement. Similarly, HF 2407, introduced in Minnesota, requires the

Commissioner of the Pollution Control Agency to report to the legislature on the amounts of designated products collected, fees assessed from manufacturers, costs to the agency for administration, public comments, and recommendations for strengthening product stewardship programs. Maine's framework law calls on the ME DEP to report to the legislature on proposed changes to existing product stewardship programs along with its recommendations for new product designations.

### ***Enforcement***

As the principal means of enforcement, all active framework bills prohibit producers who do not join an approved stewardship program from selling their designated product in that state. HF 2407, introduced in Minnesota, and H 696, introduced in Vermont, authorize the state environmental agency to fine producers \$10,000 per day for failing to participate in an approved program. These bills also authorize the state to fine producers for failing to implement their submitted plans fully and detail specific penalties for retailers that sell products from non-compliant manufacturers. AB 2139 introduced in California authorizes the state to impose penalties of \$10,000/day for failing to comply with all requirements, including achievement of performance goals.

The Washington Discussion Draft required annual third-party audits of each processing and disposal facility in that state. Similarly, an earlier version of LD 1631 introduced in Maine would have required an annual third-party audit of processing and disposal facilities for products containing hazardous substances. Bills currently under consideration in Vermont, and California do not require annual audits of such facilities, but all retain the authority to require them as deemed necessary.

### ***Regional Policy Coordination***

Several framework bills call for states to coordinate their product stewardship policies. For example, Oregon's HB 3060 included language that the OR DEQ should coordinate with other states to achieve consistency in the development of product stewardship programs. Policy coordination makes sense for Rhode Island, whose neighbors share its interest in product stewardship. The state's small size and porous borders are also reasons to strive for coordination. As noted in Table 3, every state in New England has adopted at least one product stewardship law, and 16 laws are currently in place. An additional 10 product stewardship bills were introduced to date in the 2010 legislative session. While these laws and bills share important features—most significantly the requirement that manufacturers finance the costs of product stewardship—other key aspects vary, such as provisions for stewardship plans, reporting, and performance measurement. The current patchwork approach places a burden on manufacturers who must contend with a diversity of requirements. Harmonization of policies across New England could facilitate coordination, reduce manufacturers' costs, and allow policymakers to compare performance from one jurisdiction to another. Rhode Island's framework legislation might include provisions to facilitate a regional approach, including directing RI DEM to coordinate with other state agencies, consider the success of product stewardship programs in other states when listing new products, and allow producers to join multi-state organizations.

**Table 3. Product Stewardship Laws and Legislation in New England**

	RI	CT	MA	ME	NH	VT
<b>Framework Legislation</b>	Bill			Law		Bill
<b>Auto Switches</b>	Law		Law	Law		Law
<b>Batteries</b>				Law		Law
<b>Electronics</b>	Law	Law	Bill	Law		Law
<b>Fluorescent lamps</b>			Bill	Law		Bill
<b>Paint</b>		Bill				Bill
<b>Pharmaceuticals</b>	Bill			Bill		
<b>Thermostats</b>	Law		Bill	Law	Law	Law

## V. Rhode Island Framework Policy Stakeholder Meeting

A key purpose of this report was to provide background information for a public meeting held on April 15, 2010. At that meeting, RI DEM invited the 40 stakeholders present to provide recommendations for a comprehensive product stewardship approach for Rhode Island. Participation in the April 15, 2010 public meeting was open to all. PSI invited several hundred state and local governments, businesses, trade associations, academic institutions, and environmental organizations to attend the public meeting and comment on the draft report. PSI also posted the meeting notice and draft report on its website and distributed it widely to list serves. Prior to the April 15 meeting, PSI revised the draft report, incorporating comments received. Following the April 15 meeting, PSI revised the report again based on input from the meeting and prepared a meeting summary (see Appendix 3). PSI distributed those materials, again inviting comments. This final report and final meeting summary incorporated additional comments received. (See Appendix 4 for a list of the 21 stakeholders who commented on this report or the meeting summary.)

## VI. Recommendations

The PSI meeting summary (Appendix 3) includes recommendations to DEM pertaining to each of the main product stewardship elements discussed during the stakeholder meeting, including criteria for designating products, authority for designating products, financing, planning and reporting, performance goals, and regional coordination. This report section is a consolidated summary of the meeting summary recommendations, which are intended to assist DEM in its response to the legislature. For more detailed information, please refer to the meeting summary in Appendix 3.

### A. Criteria for Designating Products

**RI's framework bill**, H 7998, evaluates products based on the following criteria: Contains toxics that pose environmental or health risk; will increase reuse and recycling; will reduce costs to local governments and taxpayers; successful stewardship programs in other states or countries; existing voluntary stewardship programs are not adequate. Other state framework bills include additional criteria such as a product's climate change impacts; the burden a product places on the existing waste management system; and the possibility for new business opportunities or job creation.

**PSI Recommends:** the current list in H 7998 should be altered to the following:

- Contains toxics that pose environmental or health risk, or has significant lifecycle impacts (including greenhouse gas emissions)
- Will reduce waste at the source or increase reuse and recycling
- Will reduce costs to local governments and taxpayers
- Potential to reduce business costs or develop new business opportunities (including job creation)
- Successful stewardship programs in other states or countries
- Existing voluntary stewardship programs are not adequate

### B. Authority for Designating Products

**Rhode Island's framework bill** calls for sharing authority between RIRRC and the General Assembly, with stakeholder consultation. Other bills allow the state's regulatory agency to initiate the designation process. Some also specify a mandatory process of stakeholder consultation.

**PSI Recommends:** The current mechanism in H 7998 establishes a viable balance of authority between the state administrative agency and the General Assembly. PSI expects that DEM will need to clarify these roles for designated products through policy or regulation, although some of these issues could be addressed in a framework bill that specified planning and reporting requirements. PSI also recommends that the bill include a permanent multi-stakeholder Advisory Committee to advise DEM on which products should be designated, details of program implementation, and address other concerns. In addition to granting RI DEM authority to recommend designation of products, Rhode Island's framework bill should authorize DEM to prohibit sales of designated products sold by manufacturers that do not participate in a stewardship plan.

## C. Financing

**Rhode Island's framework bill** holds producers responsible for “managing and reducing life-cycle impacts” of their products. It defines a “product stewardship program” as: “A program financed without a visible fee at purchase and either managed or provided by producers...” A visible fee informs the consumer when they purchase the product (e.g., on the sales receipt) how much they are paying to manage that product at the end of life. Other bills hold manufacturers responsible for at least some costs of government oversight. In some cases, states use penalties and fees collected from manufacturers to finance program costs.

**PSI Recommends:** The topic of a visible fee at retail should be further explored by a (newly formed) Advisory Committee, and that the group should examine various approaches used in Canada and the United States. PSI also recommends that a revised bill include funding for government oversight. Impact on government programs is a significant factor in deliberations on product stewardship bills on other products around the country, and the trend is for these costs to be considered as part of the overall program cost to be covered by manufacturers. These costs are minimal in comparison to program costs, and can be reviewed and revised periodically by DEM in its report to the General Assembly, and commented on publicly.

## D. Planning and Reporting

**Rhode Island's framework bill** does not include any requirements for producers' reports or plans. Other state framework bills specify that a producer submit a plan either individually or collectively to the state administrative agency.

**PSI Recommends:** Planning and reporting requirements are essential components of framework legislation. We believe that manufacturers should be required to submit a plan to the state administrative agency for approval, and that the state report periodically to the legislature on the progress of program implementation, and recommend corrections needed. We also believe that the legislature should consider including a manufacturer requirement to promote the hierarchy of waste management (e.g., source reduction, reuse, recycling, disposal). In addition, there should be no consumer end of life fee, which would encourage illegal dumping. While the list of specific plan requirements proposed elsewhere could perhaps be narrowed, PSI considers the following elements essential:

- Plan submitted by manufacturers to DEM: List of participating producers, how manufacturers will promote hierarchy of waste management, performance goals and metrics including collection rate, collection infrastructure, and post-collection management.
- Report submitted by manufacturers to DEM: Progress toward attaining goals including collection rate and recycling rate, deviation if any from plan and corrective action, description of education effort, accounting of financing system.

- RI DEM report to General Assembly: State of current product stewardship programs, needs, and recommendations for new product designations, including legislation if recommendations include legislation.

## E. Performance Goals

**Rhode Island's bill** does not address performance goals and enforcement. Other state framework bills:

- Require producers to propose performance goals in plans to agencies.
- Specify performance goals in the bill; call on producers to set "product goals."
- Assess performance in terms of "collection rate," "recovery rate," or a "reuse and recycling rate."
- Authorize fines on producers who fail to implement plans or fail to achieve goals.
- Require 3<sup>rd</sup>-party audit of processing and disposal facilities.

**PSI Recommends:** Rhode Island's framework bill should call on DEM to include performance goals in the legislation the agency submits to the General Assembly for each designated product. The content of each goal should be informed by the multi-stakeholder Advisory Committee. Goals should be stated in terms of a collection rate (the amount collected compared to the amount available for collection) or recycling rate (the amount recycled compared to amount collected). RI DEM should be authorized to require incentives or impose fines if performance goals are not achieved.

## F. Regional Coordination

**Rhode Island's bill** does not address regional policy coordination. Some other state bills include specific language to encourage coordination and regional consistency.

**PSI Recommends:** A regional approach should be pursued. The New England region has several regional organizations that work with state agencies, and these should be included in a regional effort.

## VII. Conclusion

Framework legislation provides a means of streamlining the legislative process to create an easier and more transparent way to select products to be managed under a product stewardship program. A framework approach does not imply that the management of all products should be identical, and legislators can decide which elements of a product stewardship program should be made consistent through a framework law (e.g., reporting or planning requirements) and which should be left to subsequent regulation or legislative action (e.g., performance metrics). The framework bill introduced in Rhode Island this legislative session would have left many elements to either the DEM or the state legislature for subsequent approval. Legislation introduced in other states and programs currently in place in Canada offer other models. The development and implementation of framework legislation continues to be a new concept in the US, and ongoing stakeholder discussions will be necessary to allay concerns and find the right balance of approaches that will work for those in Rhode Island.

# Appendix 1



## PRINCIPLES OF PRODUCT STEWARDSHIP (DEVELOPED IN 2001)

It is in the best interest of federal, state, and local governments, companies, environmental groups, and consumers to reduce the adverse health and environmental impacts of consumer products. To achieve this result, product stewardship efforts aim to encourage manufacturers and retailers to take increasing responsibility to reduce the entire life-cycle impacts of a product and its packaging—energy and materials consumption, air and water emissions, the amount of toxics in the product, worker safety, and waste disposal—in product design and in end-of-life management. Product stewardship is a key strategy to reduce greenhouse gas impacts and address climate change issues.

The following Principles of Product Stewardship have been developed to support state and local agencies in promoting product stewardship and developing agreements with industry and environmental groups to reduce the health and environmental impacts from consumer products. These principles will serve as the basis for stakeholder engagement in each product category. The most viable agreements will occur when the interests of all stakeholders are incorporated.

- **Responsibility**

The responsibility for reducing product impacts should be shared among industry (designers, manufacturers, and retailers of products or product components), government, and consumers. The greater the ability an entity has to minimize a product's life-cycle impacts, the greater is its degree of responsibility, and opportunity, for addressing those impacts. Manufacturers have the greatest ability, and responsibility, to reduce product impacts.

- **Internalize Costs**

All product lifecycle costs – from using resources, to reducing health and environmental impacts throughout the production process, to managing products at the end-of-life – should be included in the total product cost. The environmental costs of product manufacture, use, and disposal should be minimized, to the greatest extent possible, for local and state governments, and ultimately shifted to the manufacturers and consumers of products. Manufacturers should thus have a direct financial incentive to redesign their products to reduce these costs.

- **Incentives for Cleaner Products and Sustainable Management Practices**

Policies that promote and implement product stewardship principles should create incentives for the manufacturer to design and produce “cleaner” products – ones made using less energy, materials, and toxics, and which result in less waste (through reduction, reuse, recycling, and composting) and use less energy to operate. These policies should also create incentives for the development of a

sustainable and environmentally sound system to collect, reuse, and recycle products at the end of their lives.

- **Flexible Management Strategies**

Those that are responsible for reducing the health and environmental impacts of products should have flexibility in determining how to most effectively address those impacts. The performance of responsible parties shall be measured by the achievement of goal-oriented results.

- **Roles and Relationships**

In realizing these principles, industry will need to provide leadership. Government will also provide leadership in promoting the practices of product stewardship through procurement, technical assistance, program evaluation, education, market development, agency coordination, and by addressing regulatory barriers and, where necessary, providing regulatory incentives and disincentives. Industry and government shall provide—and consumers should take full advantage of—information needed to make responsible environmental purchasing, reuse, recycling, and disposal decisions.

***In addition to PSI's 45 state and more than 150 local government members, the following organizations have endorsed these principles of product stewardship:***

- Connecticut Product Stewardship Council (adopted: 2010)
- National League of Cities (adopted: November 2009)
- Carolina Recycling Association (adopted: August 2003)
- Northeast Recycling Council (adopted: Spring 2003)
- Southern California Association of Governments (adopted: January 2003)
- Solid Waste Association of North America (adopted: 2002)
- Environmental Council of the States (adopted: October 2002)
- California Resource Recovery Association (adopted: November 2001)
- North American Hazardous Materials Management Association (adopted: September 2001)
- Northwest Product Stewardship Council (adopted: July 2001)

## Appendix 2



### Framework Principles for Product Stewardship Policy

The following principles are intended to guide development of product stewardship policies and legislation that governs multiple products. It is primarily aimed at state legislation but is also intended as a guide for local and federal policy.

#### 1. Producer Responsibility

- 1.1 All producers selling a covered product in the State are responsible for designing, managing, and financing a stewardship program that addresses the lifecycle impacts of their products including end-of-life management.
- 1.2 Producers have flexibility to meet these responsibilities by offering their own plan or participating in a plan with others.
- 1.3 In addressing end-of-life management, all stewardship programs must finance the collection, transportation, and responsible reuse, recycling or disposition of covered products. Stewardship programs must:
  - Cover the costs of new, historic, and orphan covered products.
  - Provide convenient collection for consumers throughout the State.
- 1.4 Costs for product waste management are shifted from taxpayers and ratepayers to producers and users.
- 1.5 Programs are operated by producers with minimum government involvement.

#### 2. Shared Responsibilities

- 2.1 Retailers only sell covered products from producers who are in compliance with stewardship requirements.

- 2.2 State and local governments work with producers and retailers on educating the public about the stewardship programs.
- 2.3 Consumers are responsible for using return systems set up by producers or their agents.

### **3. Governance**

- 3.1 Government sets goals and performance standards following consultation with stakeholders. All programs within a product category are accountable to the same goals and performance standards.
- 3.2 Government allows producers the flexibility to determine the most cost-effective means of achieving the goals and performance standards.
- 3.3 Government is responsible for ensuring a level playing field by enforcing requirements that all producers in a product category participate in a stewardship program as a condition for selling their product in the jurisdiction.
- 3.4 Product categories required to have stewardship programs are selected using the process and priorities set out in framework legislation.
- 3.5 Government is responsible for ensuring transparency and accountability of stewardship programs. Producers are accountable to both government and consumers for disclosing environmental outcomes.

### **4. Financing**

- 4.1 Producers finance their stewardship programs as a general cost of doing business, through cost internalization or by recovering costs through arrangements with their distributors and retailers. End of life fees are not allowed.

### **5. Environmental Protection**

- 5.1 Framework legislation should address environmental product design, including source reduction, recyclability and reducing toxicity of covered products.
- 5.2 Framework legislation requires that stewardship programs ensure that all products covered by the stewardship program are managed in an environmentally sound manner.
- 5.3 Stewardship programs must be consistent with other State sustainability legislation, including those that address greenhouse gas reduction and the waste management hierarchy.

- 5.4 Stewardship programs include reporting on the final disposition, (i.e., reuse, recycling, disposal) of products handled by the stewardship program, including any products or materials exported for processing.

The following organizations have endorsed these framework principles:

Northwest Product Stewardship Council [www.productstewardship.net](http://www.productstewardship.net) (adopted: May 19, 2008)

California Product Stewardship Council [www.calpsc.org](http://www.calpsc.org) (adopted: June 4, 2008)

Vermont Product Stewardship Council [www.vtpsc.org](http://www.vtpsc.org) (adopted: November 6, 2008)

British Columbia Product Stewardship Council [www.bcproductstewardship.org](http://www.bcproductstewardship.org) (adopted: Dec. 9, 2008)

Texas Product Stewardship Council [www.txpsc.org](http://www.txpsc.org) (adopted: January 30, 2009)

NYS Assoc. for Solid Waste Management [www.newyorkwaste.org](http://www.newyorkwaste.org) (adopted: March 11, 2009)



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## Appendix 3

### Summary of Rhode Island Framework Policy Stakeholder Meeting

April 15, 2010 - Providence, RI

#### I. ATTENDEES

The meeting was attended by 40 participants, including state and local government officials, representatives from the Rhode Island Department of Environmental Management (RI DEM), the Rhode Island Resources Recovery Corporation (RIRRC), several environmental groups, local universities, and many representatives from the private sector.

#### II. MEETING MATERIALS

All materials and PowerPoint presentations are on the PSI website at <http://www.productstewardship.us/displaycommon.cfm?an=1&subarticlenbr=688>. These materials should be consulted as a supplement to these notes.

#### III. PURPOSE OF MEETING

The purpose of the meeting was to develop recommendations for the RI DEM for a comprehensive or “framework” approach to product stewardship. The meeting sought to establish a common understanding among participants about the nature of product stewardship, how waste management is currently handled in Rhode Island, and how framework legislation has been crafted in other states. The meeting provided a forum for stakeholders to voice their policy preferences.

#### IV. WELCOME AND INTRODUCTIONS

**Terry Gray**, from the RI Department of Environmental Management, opened the meeting by reviewing Rhode Island’s past approach to waste management, and explained how product stewardship is an opportunity to change the way they do business. Terry recognized Elizabeth Stone (RI DEM) for her role in the state’s product stewardship programs and Rep. Donna Walsh for her leadership as the primary sponsor of the bill that directed DEM to conduct a framework study.

**Rep. Donna Walsh** noted that Rhode Island is a small state with one central landfill that will reach capacity in about 25 years. She is looking forward to implementing product stewardship as a method to reduce waste and associated management costs for local governments in Rhode Island.

**Rep. Melissa Innes**, primary sponsor of the recently enacted framework law in Maine, described the evolution of her state’s framework legislation. A key factor in the successful passage of the law was the engagement of the business community in negotiations to resolve their concerns with some of the bill’s components. The legislation had momentum in the legislature because the state had already passed five product-specific laws and was familiar with the basic principles of product stewardship. The framework

law requires the Maine Department of Environmental Protection (ME DEP) to prepare an annual report for the legislature that reviews the status of all product stewardship laws, suggests necessary improvements, and recommends new products for designation. ME DEP will submit its report to the legislature before the session begins, so the business community knows what product stewardship legislation to expect every year.

**Rep. Amy Rice** later offered comments on RI's framework, bill H 7998 , which she had introduced the previous week. This bill is modeled closely on ME's framework law.

## **V. OVERVIEW OF PRODUCT STEWARDSHIP IN RHODE ISLAND**

**Scott Cassel** (PSI) explained that the purpose of the meeting was to foster dialogue among participants about the advisability of a framework approach in Rhode Island and the components of a framework bill. The meeting was not a public hearing but an opportunity to exchange perspectives intended to inform future legislation. The presentation (available on the PSI website) included a definition of product stewardship, its environmental and economic benefits (including cost savings for Rhode Island), and where it has been implemented in the United States and internationally. Scott thanked RI DEM for the opportunity to outline framework options for the state.

**Sarah Kite** (RIRCC) described RIRCC's role in managing household hazardous waste (HHW). In 2010, RIRRC plans to hold 20 HHW collection events at its Central Landfill in Johnston and 17 collections at municipal locations. RIRRC has offered HHW collections to Rhode Island residents since 2001 and collects "everything and anything" from households except pharmaceuticals. RIRRC averages about 500 cars at a typical collection event, where paint is the most common item received. The program is funded through disposal fees charged to municipal and commercial customers, and RIRRC receives no funding from the state. Local government's role in HHW management is to provide sites for collection events, usually held at municipal or school parking lots, control traffic, and be on call for emergencies. RIRRC collects electronics scrap at the Central Landfill, as well as at municipal collection events. The amount of e-waste that RIRRC collects has tripled since the passage of RI's electronics waste law in 2008. The e-waste program cost RIRRC \$900,000 per year (based upon 2009 program numbers), most of which will be reimbursed by producers through the legislated program.

**Elizabeth Stone** (RI DEM) described the two product stewardship laws previously enacted in Rhode Island – for mercury auto switches and electronics. The bounty component of the mercury auto switch program became mandatory in 2006 only after manufacturers failed to achieve a specific capture rate under a voluntary program. The state's 2008 electronics law requires manufacturers to either establish their own program or opt into the state program. In either case, manufacturers must pay a registration fee to the DEM to cover agency costs. In 2010, DEM plans to work with retailers to enforce the ban on sales of electronics produced by non-participating manufacturers, and will also adopt environmentally sound recycling regulations for electronics.

## VI. REVIEW OF THE REPORT FOR RHODE ISLAND

**Jennifer Nash** (PSI) presented PSI's report, "A Comprehensive Product Stewardship Approach for Rhode Island: Study and Options," which PSI prepared for the RI DEM and distributed to participants prior to the meeting. Jennifer's presentation included a description of the framework bill recently introduced in Rhode Island as well as framework bills that have been introduced in other states.

## VII. DISCUSSION OF KEY ISSUES

**Participants voiced general support for a framework approach for RI.** Developing policy on a product-by-product basis places a considerable burden on the General Assembly and state agencies. A framework approach would mean that the General Assembly would not have to reinvent product stewardship policy each time it passed a new product stewardship law. It would also provide a more predictable regulatory environment for business. While not opposing framework, some questioned the benefits. The specificity of RI's two product stewardship laws allows DEM to implement those statutes directly. With framework, the department would still need to develop regulations for each product, which could delay the implementation of a stewardship program for a designated product for up to a year. One participant questioned whether product stewardship laws are really sharing responsibility or simply placing a greater burden on manufacturers.

### Written Comments Received after the Meeting

Following the public meeting, PSI received written comments about the advisability of RI enacting a framework approach for product stewardship. The comments, submitted by the American Chemistry Council, Carpet and Rug Institute, and Toy Industry Association, Inc. argued that mandating manufacturer take-back will do little to protect the environment and that product take-back and recycling can actually harm the environment in some cases. They believe that costs to government to administer framework programs, and to manufacturers to run those programs, may be high, and that manufacturers will pass those costs on to consumers.

### A. Criteria for Designating Products

RI's framework bill, H 7998, evaluates products based on the following criteria:

- Contains toxics that pose environmental or health risk
- Will increase reuse and recycling
- Will reduce costs to local governments and taxpayers
- Successful stewardship programs in other states or countries
- Existing voluntary stewardship programs are not adequate

Other state framework bills include additional criteria such as a product's climate change impacts; the burden a product places on the existing waste management system; and the possibility for new business opportunities or job creation. An early version of Maine's framework bill included a longer list of criteria than what appears in Maine's law, but was reduced to the same list as now appears in the Rhode Island

bill through negotiations to ensure that each criterion was sufficiently objective and quantifiable. For example, the original bill included “public demand” as a criterion for designation, but since ME DEP had no ready mechanism to measure that demand, the legislature dropped that criterion.

### **Participant Comments**

1. Participants recommended that policymakers add the following criteria to those already included in H 7998:
  - The potential to encourage source reduction, not just end of life criteria
  - Consumer behavior and the degree to which they can be expected to respond
  - Costs to businesses
  - Costs to collect products
2. Consideration should also be given to allowing industry to create a voluntary product stewardship program before government establishes a mandatory program. The failure of a voluntary program could, in turn, be considered a criterion for mandating the creation of a product stewardship program for that product.

### **Written comments received after the meeting**

Following the public meeting, PSI received written comments regarding criteria for designating products. The comments, submitted by the American Chemistry Council, Carpet and Rug Institute, and Toy Industry Association, Inc. recommended that RI DEM only designate products that pose a significant adverse impact on the environment when disposed of in the municipal solid waste stream, and for which technologically and commercially feasible recycling and reuse options exist. In addition, they argued that cost effectiveness of product stewardship should also be taken into account, and that RI DEM should only consider mandatory programs for products in which manufacturers have not established voluntary programs. Furthermore, they believe that manufacturer-sponsored take-back programs are not appropriate for all products, toys and carpet in particular.

### **PSI Recommendations**

PSI believes that the current list in H 7998 should be altered to the following:

- Contains toxics that pose environmental or health risk, or has significant lifecycle impacts (including greenhouse gas emissions)
- Will reduce waste at the source or increase reuse and recycling
- Will reduce costs to local governments and taxpayers
- Potential to reduce business costs or develop new business opportunities (including job creation)
- Successful stewardship programs in other states or countries
- Existing voluntary stewardship programs are not adequate

PSI believes that the other comments are already included in the current criteria, including the failure of a voluntary program. Changing consumer behavior is a significant factor in setting performance goals.

However, as there are always ways to change consumer behavior, PSI does not recommend this should be a limiting criterion for designating a product.

## **B. Authority for Designating Products**

Rhode Island's framework bill calls for sharing authority between RIRRC and the General Assembly, with stakeholder consultation. (For a depiction of this process, please see p. 16 of this document. The process proposed in H 7998 is nearly identical to Maine's framework law.) Other bills allow the state's regulatory agency to initiate the designation process. Some also specify a mandatory process of stakeholder consultation.

### **Participant Comments**

1. Rep. Amy Rice, who introduced H 7998, said that she planned to amend the bill to replace RIRRC with RI DEM as the body responsible for initiating the product designation process.
2. Participants expressed general approval for the approach for sharing authority described in H 7998.
3. Participants recommended that legislation clearly specify the roles for all stakeholders at each stage of the designation process. It should also specify the roles for each party at each step in a product stewardship program.
4. Participants recommended establishment of a standing advisory committee that would bring all stakeholders to the table to review existing product stewardship programs, recommend changes, and designate new products.

### **PSI Recommendations**

PSI believes that the current mechanism in H 7998 establishes a viable balance of authority between the state administrative agency and the General Assembly. Clarifying roles is an important aspect to any product stewardship program, and should be included in a revised bill to the extent it can be accomplished in a general sense. However, each product is different, with its own unique set of negotiated relationships. Therefore, PSI expects that DEM will need to clarify these roles for designated products through policy or regulation, although some of these issues could be addressed in a framework bill that specified planning and reporting requirements. PSI also recommends that the bill include a permanent multi-stakeholder Advisory Committee to advise DEM on which products should be designated, details of program implementation, and address other concerns. In addition to granting RI DEM authority to recommend designation of products, Rhode Island's framework bill should authorize DEM to prohibit sales of designated products sold by manufacturers that do not participate in a stewardship plan.

## **C. Financing**

Rhode Island's framework bill holds producers responsible for "managing and reducing life-cycle impacts" of their products. It defines a "product stewardship program" as: "A program financed without a visible fee at purchase and either managed or provided by producers..." A visible fee informs the

consumer when they purchase the product (e.g., on the sales receipt) how much they are paying to manage that product at the end of life.

While Maine’s framework law defines product stewardship using the same language as Rhode Island’s bill, other bills do not prohibit visible fees, but instead leave it up to the retailer and manufacturer as to whether they want to make the fee visible to the consumer. Other bills hold manufacturers responsible for at least some costs of government oversight. In some cases, states use penalties and fees collected from manufacturers to finance program costs.

### **Participant Comments**

1. Discussion focused on advantages and disadvantages of a visible fee. Some participants argued that a visible fee can serve an important educational function, while others noted that a visible fee should be decided on a product basis and not at the framework level. Still others said that the costs of product stewardship should not be artificially “frozen” by a visible fee, but instead be internalized and reflected in a product’s purchase price so it is invisible to the consumer.
2. Discussion also addressed how best to protect product stewardship fees from being “scooped” into Rhode Island’s general fund. Some said that money should go to third-party organization or be managed by industry. Others said that framework legislation should stipulate what money can be used for, no matter who is holding it.
3. Municipalities cannot bear any addition collection infrastructure costs without being compensated.

### **PSI Recommendations**

PSI suggests that the topic of a visible fee at retail be further explored by the (newly formed) Advisory Committee, and that the group should examine various approaches used in Canada and the United States. PSI also recommends that a revised bill include funding for government oversight. Impact on government programs is a significant factor in deliberations on product stewardship bills on other products around the country, and the trend is for these costs to be considered as part of the overall program cost to be covered by manufacturers. These costs are minimal in comparison to program costs, and can be reviewed and revised periodically by DEM in its report to the General Assembly, and commented on publicly.

### **D. Planning and Reporting**

Rhode Island’s framework bill does not include any requirements for producers’ reports or plans. Other state framework bills specify that a producer submit a plan either individually or collectively to the state administrative agency, and that the plan must include:

- List of producers that will participate
- Anticipated resources required
- Performance goals and metrics
- Collection infrastructure
- Consumer education programs
- How source reduction or reuse will be achieved

- Post-collection management operations, and
- Public outreach and consultation.

Other states' bills also specify that reports must include:

- Quantity of products collected
- Progress toward attaining goals
- Deviation, if any, from plan
- Description of education effort
- Accounting of financing system.

### **Participant Comments**

For the most part, participants at the April 15 meeting did not address planning and reporting requirements. One participant noted that plans and reports should include costs and benefits to business and that agencies should consider costs to business when designating products and reviewing manufacturers' plans.

### **PSI Recommendations**

Planning and reporting requirements are essential components of framework legislation. We believe that manufacturers should be required to submit a plan to the state administrative agency for approval, and that the state report periodically to the legislature on the progress of program implementation, and recommend corrections needed. We also believe that the legislature should consider including a manufacturer requirement to promote the hierarchy of waste management (e.g., source reduction, reuse, recycling, disposal). In addition, there should be no consumer end of life fee, which would encourage illegal dumping. While the list of specific plan requirements proposed elsewhere could perhaps be narrowed, PSI considers the following elements essential:

- Plan submitted by manufacturers to DEM: List of participating producers, how manufacturers will promote hierarchy of waste management, performance goals and metrics including collection rate, collection infrastructure, and post-collection management.
- Report submitted by manufacturers to DEM: Progress toward attaining goals including collection rate and recycling rate, deviation if any from plan and corrective action, description of education effort, accounting of financing system.
- RI DEM report to General Assembly: State of current product stewardship programs, needs, and recommendations for new product designations, including legislation if recommendations include legislation.

### **E. Performance Goals**

Rhode Island's bill does not address performance goals and enforcement. Other states' framework bills:

- Require producers to propose performance goals in plans to agencies
- Specify performance goals in the bill; call on producers to set "product goals"

- Assess performance in terms of “collection rate,” “recovery rate,” or a “reuse and recycling rate”
- Authorize fines on producers who fail to implement plans or fail to achieve goals
- Require 3<sup>rd</sup>-party audit of processing and disposal facilities.

### **Participant Comments**

1. Including performance goals in framework legislation is difficult because such goals are specific to each product. Setting performance goals and metrics is often highly controversial.
2. Without performance goals, a program may fall apart when weighing all the costs. Local governments may stop collecting the product if performance goals are not stated.
3. Goals could be specified in manufacturers’ plans, in legislation, or determined by the agency through regulation.

### **PSI Recommendations**

Rhode Island’s framework bill should call on DEM to include performance goals in the legislation the agency submits to the General Assembly for each designated product. The content of each goal should be informed by the multi-stakeholder Advisory Committee. Goals should be stated in terms of a collection rate (the amount collected compared to the amount available for collection) or recycling rate (the amount recycled compared to amount collected). RI DEM should be authorized to require incentives or impose fines if performance goals are not achieved.

## **F. Regional Coordination**

Rhode Island’s bill does not address regional policy coordination. Some other state bills include specific language to encourage coordination and regional consistency.

### **Participant Comments**

Participants voiced strong support for a regional approach to framework legislation. A regional approach would encourage efficiencies for business and government and eliminate concerns about cross-border sales.

### **PSI Recommendations**

PSI concurs with the participants that a regional approach should be pursued. The New England region has several regional organizations that work with state agencies, and these should be included in a regional effort.

## **VIII. CONCLUDING REMARKS**

Terry Gray and Rep. Donna Walsh thanked all the participants for their contribution at the meeting. Rep. Amy Rice remarked that the end of session was approaching soon and she would like to enact a framework law this year. Rep. Walsh noted that a bill has not yet been introduced in the Senate and suggested drafting a clean new bill that would be thorough and complete. PSI will develop meeting notes and send them to participants, and allow for more time to comment on the draft report.

## **Appendix 4**

### **Stakeholders Providing Comments**

Below are the stakeholders who commented on this report or the summary of the April 15, 2010 stakeholder meeting.

1. Richard Abramowitz, Waste Management
2. Victor Bell, Environmental Packaging International
3. Neil Hastie, Encorp Pacific (Canada)
4. Andrew Hackman, Toy Industry Association
5. Stephen Rosario, American Chemistry Council
6. Alison Keane, American Coatings Association
7. Jennifer Mendez, Carpet and Rug Institute
8. Sarah Kite, Rhode Island Resource Recovery Corporation
9. Carole Cifrino, Maine Department of Environmental Protection
10. Cynthia Dunn, California Department of Resources, Recycling and Recovery
11. Kathleen Frevert, California Department of Resources, Recycling and Recovery
12. Tom Metzner, Connecticut Department of Environmental Protection
13. Jack Price, Florida Department of Environmental Protection
14. Theresa Stiner, Iowa Department of Natural Resources
15. Jan Whitworth, Oregon Department of Environmental Quality
16. Becky Jayne, Illinois Environmental Protection Agency
17. Linda (Jacobs) Glansberg, Empire State Development, NY
18. Garth Hickle, Minnesota Pollution Control Agency
19. Dave Galvin, King County, WA
20. Scott Klag, Metro OR
21. Sejo Jackson, Snohomish County, WA

## Appendix 5

### Additional References

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*Overall Framework for an Extended Producer Responsibility System in California*. Rep. California Integrated Waste Management, 23 Jan. 2008. <<http://www.calrecycle.ca.gov/EPR/Framework/Framework.pdf>>.

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#### Product Stewardship in Canada

*Product Stewardship in Canada: Legislative Framework of Provincial Programs*. Rep. Northwest Product Stewardship Council, Oct. 2009. <[http://www.productstewardship.net/PDFs/policiesNWPSCCanadianPSPPrograms10\\_09.pdf](http://www.productstewardship.net/PDFs/policiesNWPSCCanadianPSPPrograms10_09.pdf)>.

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<[http://www.env.gov.bc.ca/epd/recycling/history/pdf/prodstew\\_plan.pdf](http://www.env.gov.bc.ca/epd/recycling/history/pdf/prodstew_plan.pdf)>.

*Economic Impacts of the B.C. Recycling Regulation*. Rep. Ministry of Environment, Environmental Quality Branch, 31 Aug. 2008.

<<http://www.env.gov.bc.ca/epd/recycling/resources/reports/pdf/econ-impacts-recycle-reg.pdf>>.

*British Columbia's Recycling Handbook: A Simple Guide to What can be Recycled under BC's Stewardship Programs*. <<http://www.encorp.ca/ips/>>.

## ENDNOTES

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<sup>1</sup>To review assumptions and data sources for these calculations, see Product Stewardship Institute. 2010. Financial Benefits to Local Governments from Product Stewardship fact sheet, [http://www.productstewardship.us/associations/6596/files/financial\\_benefits\\_fact\\_sheet\\_1\\_04\\_10.pdf](http://www.productstewardship.us/associations/6596/files/financial_benefits_fact_sheet_1_04_10.pdf)

<sup>2</sup> US Environmental Protection Agency. 2008. *Municipal Solid Waste in the United States: 2007*. EPA530-R-08-101.

<sup>3</sup> Scott Cassel. 2008. "Product Stewardship: Shared Responsibility for Managing HHW," Handbook on Household Hazardous Waste, Amy D. Cabaniss, Ed. Lanham, MD: Government Institutes.

<sup>4</sup>To review assumptions and data sources for these calculations, see Product Stewardship Institute. 2010. Financial Benefits to Local Governments from Product Stewardship fact sheet, [http://www.productstewardship.us/associations/6596/files/financial\\_benefits\\_fact\\_sheet\\_1\\_04\\_10.pdf](http://www.productstewardship.us/associations/6596/files/financial_benefits_fact_sheet_1_04_10.pdf)

<sup>5</sup> US Environmental Protection Agency. 2008. *Municipal Solid Waste in the United States: 2007*. EPA530-R-08-101.

<sup>6</sup> While many household products contain hazardous constituents similar to hazardous waste generated by industry, in most states household products are exempt from federal environmental regulations.

<sup>7</sup> USEPA. *Municipal Solid Waste in the United States: 2007*.

<sup>8</sup> US Environmental Protection Agency. 2009. Opportunities to Reduce Greenhouse Gas Emissions through Materials and Land Management Practices. "Provision of goods" refers to "extraction of natural resources, the production, transport, and disposal of goods, and the provision of services." p. 13.

<sup>9</sup> PSI, Financial Benefits to Local Governments from Product Stewardship fact sheet, 2010.

<sup>10</sup> US Environmental Protection Agency. 1994. Analysis of Potential Cost Savings and the Potential for Reduced Environmental Benefits of the Proposed Universal Waste Rule. 530-R-94-023.

<sup>11</sup> Mercury Spills—How Much Do They Cost? Sustainable Hospitals Project. A Project of the Lowell Center for Sustainable Production, UMass Lowell. Available at: <[http://sustainableproduction.org/downloads/Mercury\\_Spills.pdf](http://sustainableproduction.org/downloads/Mercury_Spills.pdf)>

<sup>12</sup> CalRecycle. 2009. "Comparison of California and British Columbia Paint Management Programs." Internal staff analysis.

<sup>13</sup> Clean Production Action, "Companies Who Have Financially Benefited from EPR Programs" Website. March 3, 2010, <<http://www.cleanproduction.org/Producer.Key.Leasing.php>>.

<sup>14</sup> "Waste to Wealth - Recycling Means Business." *Institute for Local Self-Reliance (ILSR) - Home Page*. Website. Feb. 9, 2010. <<http://www.ilsr.org/recycling/recyclingmeansbusiness.html>>. (Affirms that on a per-ton basis recycling creates 10 times more jobs than direct land filling)

<sup>15</sup> *Recycling Economic Information Study Update: Delaware, Maine, Massachusetts, New York, and Pennsylvania*. Rep. Northeast Recycling Council, Feb. 2009. Website. Feb. 9, 2010. <[http://www.nerc.org/documents/recycling\\_economic\\_information\\_study\\_update\\_2009.pdf](http://www.nerc.org/documents/recycling_economic_information_study_update_2009.pdf)>.

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<sup>16</sup> Organization for Economic Co-operation and Development (OECD). June 2, 2004. *Economic Impacts of Extended Producer Responsibility*. Website. Feb. 9, 2010. p. 127-128 (This is estimated to be a doubling of the industry since 1990)

<sup>17</sup> Gardner Pinfold Consulting. 2008. "Economic Impact of the B.C. Recycling Regulation," Ministry of Environment Environmental Quality Branch. August 31, 2008.  
<<http://www.env.gov.bc.ca/epd/recycling/resources/reports/pdf/econ-impacts-recycle-reg.pdf>>.

<sup>18</sup> Organization for Economic Co-operation and Development (OECD). 2005. *EPR Policies and Product Design: Economic Theory and Selected Case Studies*. p. 34. <<http://appli1.oecd.org/olis/2005doc.nsf/linkto/env-epoc-wgwp%282005%299-final>>.

<sup>19</sup> EUROPA - European Commission - Homepage. "Environment - Waste Electrical and Electronic Equipment." Website Feb. 25, 2010. <[http://ec.europa.eu/environment/waste/weee/index\\_en.htm](http://ec.europa.eu/environment/waste/weee/index_en.htm)>.

<sup>20</sup> The original members were Honeywell, White-Rodgers, and General Electric. Thermostat Recycling Corporation. *2008 Annual Report*. <[http://thermostat-recycle.org/files/2008 TRC Annual Report.pdf](http://thermostat-recycle.org/files/2008%20TRC%20Annual%20Report.pdf)>.

<sup>21</sup> Product Stewardship Institute. "Mid-term Progress Report, Thermostat Projects 1 and 2, December 15, 2005." Available at: <<http://productstewardship.us/displaycommon.cfm?an=1&subarticlenbr=100>>.

<sup>22</sup> Clean Water Action. 2010. "Turning Up the Heat". <<http://www.cleanwateraction.org/publication/turning-heat-exposing-manufacturers-lackluster-mercury-thermostat-collection-program>>.

<sup>23</sup> Each of these laws is an extended producer responsibility (EPR) law requiring that manufacturers finance the costs of product stewardship. States have enacted other laws that contribute to the appropriate management of products, such as banning the sale or disposal of products containing toxic materials, requiring that consumers pay a deposit when they purchase a product to be redeemed when they return the product or its container, and calling for purchasing environmentally preferable products. Only laws that require EPR are included in Table 1.

<sup>24</sup> Some battery stewardship laws cover rechargeable batteries only (such as New Jersey's), while others address rechargeables and mercuric oxide batteries (such as Maine's).

<sup>25</sup> Rhode Island Resource Recovery Corporation, Rhode Island Department of Environmental Management and the Rhode Island Statewide Planning Program, April 2007. "*Rhode Island Comprehensive Solid Waste Management Plan*" Website. Feb. 11, 2010. <<http://www.rirrc.org/content/index.php?id=about-us/program-and-planning-reports/>> (Projection about when capacity will be reached comes from Terry Gray, RI DEM.)

<sup>26</sup> Ibid., p. 32.

<sup>27</sup> Eco-Depot collection amounts provided by Joe Rotella, RI DEM, to Elizabeth Stone, RI DEM, March 18, 2010.

<sup>28</sup> Eco-Depot costs provided by Joe Rotella, RI DEM, to Elizabeth Stone, RI DEM, March 18, 2010. These costs do not include staff time, advertising costs, and other administrative costs.

<sup>29</sup> Mercury: R.I. Gen. Laws §§ 23-24.9-9 -23-24.9-10 (2005) available at <<http://www.rilin.state.ri.us/billtext/billtext05/senatetext05/s0821.htm>>

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<sup>30</sup> Electronic Waste: R.I. Gen. Laws §§ 23-24.10-1 - 23-24.10-17 (2008) available at <<http://www.rilin.state.ri.us/BillText/BillText08/HouseText08/H7880A.htm>>

<sup>31</sup> The Mercury Thermostat Pollution Prevention Act was approved by the legislature and enacted into law from two identical bills, [\(2010-S2353Aaa\)](#) and [\(2010-H7199A\)](#), sponsored by Sen. Dominick J. Ruggerio (D-Dist. 4, Providence, North Providence) and Rep. Jan P. Malik (D-Dist. 67, Barrington, Warren).

<sup>32</sup> Electronic Product Environmental Assessment Tool

<sup>33</sup> Product Policy Institute. 2009. Framework Extended Producer Responsibility Policy Starter Kit: For Legislators, Staff, and Advocates. Available on request from PPI.

<sup>34</sup> Northwest Product Stewardship Council (NWPSC). 2009. Product Stewardship in Canada: Legislative Framework of Provincial Programs. <[http://www.productstewardship.net/PDFs/policiesNWPSCCanadianPSPrograms10\\_09.pdf](http://www.productstewardship.net/PDFs/policiesNWPSCCanadianPSPrograms10_09.pdf)>.

<sup>35</sup> Personal communication with Duncan Bury, Environment Canada, March 2, 2010.

<sup>36</sup> Stewardship plans are publically available at <<http://www.env.gov.bc.ca/epd/recycling/>>.

<sup>37</sup> NWPSC report p. 31

<sup>38</sup> Blue Box Wastes include printed paper and packaging in the residential sector.

<sup>39</sup> Phase 1 materials include paint, solvents, oil filters, oil containers, single use dry cell batteries, antifreeze, pressurized containers, fertilizers, fungicides, herbicides, insecticides, and pesticides. As of July 1, 2010, additional materials include flammables, corrosives, reactives, secondary batteries, aerosol containers, fire extinguishers, fluorescent bulbs and tubes, pharmaceuticals and sharps, and mercury-containing thermostats, switches, and devices.

<sup>40</sup> Phase 1 materials include desktop and portable computers, computer peripherals, monitors, televisions, printing devices. Phase 2 materials (commencing on April 1, 2010) include copying and multi-function devices, telephones and telephone answering machines, cellular devices and pagers, and image, audio and video devices.

<sup>41</sup> LD 1631, Maine's framework law, Section 1772 "Identification of candidate products: report."

<sup>42</sup> In practice, end-of-life management programs in place today in the United States often differ from this ideal. They cover legacy as well as new products and are often run by collective organizations, rather than the individual manufacturer that produces the product.