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**Report to the Joint Standing Committee on
the Environment and Natural Resources**

Annual Product Stewardship Report

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I. Introduction

This is a report on the current implementation of product stewardship laws in the State of Maine, and opportunities for new product stewardship initiatives and improvements to existing programs to help achieve Maine's waste reduction and recycling goals. Product stewardship is a policy approach that can be used by governments and businesses to minimize the negative impacts of products and packaging throughout their lifecycle. Manufacturers (a.k.a. producers) have the greatest ability to affect the life-cycle impacts of products, with distributors, retailers and consumers also having a role. Extended producer responsibility (EPR) is the term used to describe laws that mandate responsibilities for manufacturers in the end-of-life management of their products.

Maine currently has 9 laws related to the end-of-life management of specific consumer products that may be considered to be product stewardship laws. Additionally, in 2009 Maine enacted 38 M.R. S. Chapter 18, *Product Stewardship*, which sets a framework of elements to be included in new product stewardship programs (as well as the requirements for this annual report to the Joint Standing Committee on the Environment and Natural Resources). The Department is recommending statutory changes to the *Product Stewardship* framework law and to 4 of the product-specific laws to improve program performance and/or create efficiencies in implementation:

- **Framework law.** [38 M.R.S. Chapter 18, Maine's Product Stewardship](#) "framework law" delineates required components for new EPR programs at [38 M.R.S. § 1776, Product Stewardship Program Requirements](#). Based on Maine's experience in implementing its great variety of EPR laws, it is now apparent the framework law does not include adequate provisions to ensure implementation of effective programs. The department is proposing additions to the framework law to address these deficiencies.
- **Mercury lamps.** [38 M.R.S. § 1672, Maine's Mercury-added lamps](#) law, requires manufacturers to establish and operate a recycling program for mercury-added lamps (fluorescents and HIDs) generated by households (see section 4 of the law). This law was enacted prior to the program component requirements in the *Product Stewardship* framework law. The resulting program has consistently underperformed, with recycling rates never exceeding 13%. Revising this law to address all required components for new product stewardship programs will help drive better program performance.
- **Beverage containers.** Maine's Bottle Bill, [38 M.R.S. Chapter 33, Manufacturers, Distributors, and Dealers of Beverage Containers](#), (originally enacted in Title 22 in 1976) establishes responsibilities for the collection and recycling of most plastic, metal and glass beverage containers sold in the state. During 2018, the Legislature's Office of Program Evaluation and Government Accountability (OPEGA) completed a review of this program. The report resulting from this review (<http://legislature.maine.gov/doc/2316>) includes a number of recommendations requiring legislative consideration. These include: comprehensive data reporting to assess program performance and inform policymaking; clarification of BABLO's commingling status and expectations for unredeemed deposits; opportunities to improve program design; and clarification of the intended benefits of commingling and updates to maximize its impact. The

Department is recommending changes to address many of the issues identified in the OPEGA report.

- **Dry-cell mercuric oxide, rechargeable nickel-cadmium, and rechargeable sealed lead acid batteries.** [38 M.R.S. § 2165, Regulation of certain dry-cell batteries](#) (enacted in 1991) requires manufacturers of certain battery types to provide a system for the recycling of their batteries from certain users. The Department recommends that this law be repealed and replaced with an EPR law covering all consumer battery types.
- **Cellular telephones.** [38 M.R.S. § 2143 Maine's Cellular telephone recycling](#) law requires retailers to accept, at no cost, used cell phones at retail locations, and annual reporting by cellular telephone service providers on their recycling efforts in Maine. The Department recommends repeal of the reporting requirement as the data reported reflects only a portion of cell phone recycling so is not useful for assessing program performance.

The department is not recommending statutory changes to these other currently-implemented programs:

- **Electronic waste (e-waste).** [38 M.R.S. § 1610, Maine's Electronic Waste](#) law, was initially enacted in 2003 to manage TVs and other electronics with video displays greater than 4" diagonally from households only. It was subsequently amended to add game consoles and desktop printers and to manage the covered electronics from small businesses (100 or fewer employees) and K-12 schools.
- **Mercury auto-switches.** [38 M.R.S. § 1665-A, Maine's Motor Vehicle Components](#) law, set up a system by-which motor vehicle manufacturers pay for the collection and proper disposal of mercury auto-switches as the vehicles containing them are removed from service.
- **Mercury thermostats.** [38 M.R.S. § 1665-B, Maine's Mercury-added Thermostats](#) law requires that manufacturers that sold mercury-added thermostats into the state pay for the collection and disposal of mercury-added thermostats and to provide a financial incentive with a minimum value of \$5 for the return of each mercury-added thermostat to an established recycling collection point.
- **Architectural paint.** [38 M.R.S. § 2144, Maine's Stewardship Program for Architectural Paint](#) law requires that manufacturers establish and maintain a statewide system to collect, transport, recycle and process post-consumer paint.
- **Plastic bags.** [38 M.R.S. § 1605, Plastic bags: recycling](#) law requires retailers that use plastic bags to have a receptacle within 20 feet of their store entrance to collect used plastic bags and to ensure the bags are collected.

Additionally, the report includes discussion of other products that may warrant future legislative consideration as candidates for new EPR programs, including:

- Packaging
- Pharmaceuticals
- Mattresses
- Carpet
- Solar panels

II. Background

Product stewardship is a policy approach that can be used by governments and businesses to minimize the negative impacts of products throughout their lifecycle. Manufacturers (a.k.a. producers) have the greatest ability to affect the life-cycle impacts of products, with distributors, retailers and consumers also having a role. Extended producer responsibility (EPR) is the term used to describe laws that mandate responsibilities for manufacturers in the end-of-life management of their products.

A. Basic components included in Maine's Framework law

38 M.R.S. § 1776, *Product Stewardship Program Requirements* delineates the basic components for new EPR programs. These include:

- Identification of participating entities, and their roles and responsibilities
- Identification of covered product(s)
- Convenient and adequate collection system, including no fee at collection
- Effective education and outreach
- A sales ban on products from non-compliant manufacturers
- Immunity from antitrust liability for participating manufacturers
- Requirements for the program plan, including management standards and submittal of the plan for review and approval by the Department
- Program performance goals
- Program performance monitoring and assessment
- A financing mechanism to fund “collection, transportation and reuse, recycling or disposition of the relevant product”
- A mechanism for amending the approved program

Based on the Department's experience with implementing EPR programs to date, a program plan designed only to meet the basic requirements in the *Product Stewardship* framework law will not be guaranteed to be successful, i.e., it has a good likelihood of not achieving substantial collection rates. Most notably, the *Product Stewardship* framework law does not include meaningful standards for program performance, any mechanism for the Department to require program improvements or improved program performance, nor any reporting or oversight agency review of annual program budgets.

B. Additional elements of successful EPR programs

Based on experience in Maine and elsewhere, there are certain elements that contribute to an EPR program achieving high rates of diversion from disposal. The following elements are key to achieving high collection rates but currently are not included in Maine's *Product Stewardship* framework law.

- 1) Minimum standards for producers' or stewardship organization staffing, e.g., a minimum 1/2-fulltime equivalent (FTE) to recruit, train and monitor collection sites. For example, the PaintCare program has employed 1-FTE to perform these functions for its program in Maine and Vermont since the inception of their program. This level of staffing has ensured that collection sites receive the support they need to safely and adequately implement the program as confirmed by Department staff field visits.
- 2) Adequate financing for implementation and operations, including funding for regulatory oversight. Payment into the system to finance end-of-life management must be sufficient to cover materials management costs, consumer and collection site education, a minimum 1/2-FTE per stewardship program assigned to implement the program in Maine, on-going program evaluation and reporting, government oversight, and any incentives for collection.
- 3) Minimum program standards for education and outreach to collection sites and to consumers, and on-going evaluation of the effectiveness of education and outreach efforts. No program can be successful without collection site staff and consumers knowing about the program and how it works. Staff turnover at collection sites (often retailers and/or solid waste facilities) is ongoing, as are changes in residents in Maine. Evaluation of education and outreach efforts identifies which initiatives are most effective, and where additional focus is needed. Manufacturers can use the information gained to achieve cost-effective continuous improvement in their programs.
- 4) Measurable, enforceable goals (e.g., recycling rate, consumer awareness, convenient collection), and defined consequences for non-compliance. When manufacturers are responsible for paying for the recycling of collected products, they have a disincentive to collect or to promote the existence or ease of use of a collection system. Minimum standards for locations of collection sites along with a ban on fees at collection are critical to counteracting the financial incentive manufacturers have to discourage consumer participation. Repercussions for insufficient performance or non-participation on the part of manufacturers must be practical to implement. The Department must have the authority to direct program changes if the program fails to make sufficient progress toward achieving program goals.
- 5) Financial incentives for collection site participation and for consumers to return products to collection sites. Successful programs provide an incentive for collection to either consumers or third-party collection agents or both. Collections in Maine's mercury thermostat recycling program increased significantly when the \$5 incentive was implemented, and again when a \$10 incentive was offered for a limited period of time. A similar jump in collections was

achieved in Maine's mercury auto switch recycling program when the \$4 incentive to collection sites was implemented. Maine's Bottle Bill program consistently achieves the highest return rate, with consumers motivated by the deposit/return payment system.

III. Recommendations for changes to existing EPR laws

Based on reviews of Maine's 10 product stewardship laws, the performance of each of the implemented programs and the staffing resources needed to provide adequate oversight, the Department is recommending changes to 5 of these laws.

A. Framework law – [38 M.R.S. chapter 18](#)

As discussed in section II.B above, there are significant deficiencies in the framework law that would allow for approval of a manufacturer program plan which would not result in an effective program. The framework law does not include adequate program performance standards and does not provide the department with the authority to require changes in programs that fail to achieve adequate progress toward the program goals. Legislation to address these deficiencies is included as Appendix A.

B. Mercury lamps – [38 M.R.S. § 1672](#)

Program description: The manufacturer requirements for recycling of mercury-added lamps (fluorescent, neon, black lights, UV, and high intensity discharge - HID) from households are implemented by the National Electrical Manufacturers Association (NEMA) on behalf of the manufacturers. NEMA's program provides free containers, shipping and recycling services to voluntarily participating retail and municipal collection sites. The program also does some outreach to let consumers know about the program.

**Figure 1:
NEMA's Household Mercury-added Lamp Recycling Rates**

	# NEMA collection sites	# Lamps recycled by NEMA	# Lamps available for recycling	NEMA recycling rate
2011	149	6,634	688,000	0.96%
2012	263	50,492	708,889	7.12%
2013	293	97,743	844,576	11.57%
2014	300	109,337	1,042,750	10.49%
2015	307	135,035	1,127,500	12.00%
2016	270*	151,434	1,344,991	11.26%
2017	244*	181,255	1,456,902	12.44%
Total		731,930	7,213,608	10.15%

*Approximately 150 sites sent lamps for recycling in 2016 and 2017

Current performance: Through its product stewardship program, NEMA collected and recycled 181,255 mercury-added lamps out of the estimated 1,456,902 mercury-added lamps available for collection in Maine in 2017. The recycling rate, i.e., the percentage recycled of lamps estimated to be at end of life, has been consistently low for the duration of the program, with an average recycling rate of 10.15%¹.

NEMA's methodology to determine the number of lamps expiring each year utilizes national sales data and lamp life averages for HID, linear fluorescent and compact fluorescent lamps. This information provides a denominator used to calculate an overall recycling rate. NEMA does not provide the actual numerical data for these calculations, which could be used to calculate separate recycling rates for each type of lamp and determine if certain lamps are being recycled at lower rates than others, allowing for more targeted outreach. In addition, NEMA does not provide the Department with the estimated amounts of mercury recovered or available for recovery each year. Lamp mercury content varies significantly, ranging from 0.01 milligrams to 1,000 milligrams.

Lamp companies selling in Maine report data on their mercury per unit and total mercury amounts to the Interstate Mercury Education & Reduction Clearinghouse (IMERC). The IMERC database provides the best available data to estimate lamp mercury content, with ranges for average mercury content in lamps sold by type as well as the percent of lamps that contain a specified range of mercury. For example, 27 percent of fluorescent lamps contain more than 10 but fewer than 50 milligrams of mercury. This data allows the Department to calculate low and high end estimates of how much mercury is recovered. If one assumes that lamps are returned through the NEMA program in the percentages in which they are available in the waste stream, it is also possible to estimate potential mercury recovery. While the Department does not have data on the NEMA lamp collections by lamp type prior to 2015, recent data highlights the significant amount of mercury not being recovered from waste lamps.

Figure 2: Amount of mercury collected by the NEMA program compared to that which was not collected

Year	Low end mercury estimates (lbs.)		High end mercury estimates (lbs.)	
	NEMA collections	Available to collect	NEMA collections	Available to collect
2015	3.03	25.22	10.27	85.55
2016	2.79	24.89	8.40	72.59
2017	3.54	29.11	10.72	88.16
Total	9.36	79.22	29.39	246.30

NEMA has failed to consistently implement the approved plan or take timely actions to improve program performance as proposed in its annual reports. The Department has noted multiple instances of poorly handled program operations, characterized by a lack of communication with participating collection sites and the Department, a lack of effort to make any substantial program improvements in response to Department requests, and a marked lack of resource allocation to ensure the program functions successfully. The lamp law requires that NEMA provide "effective education and outreach, including, but not limited to, point-of-purchase signs and other materials provided to retail establishments without cost." Beginning in 2016, NEMA eliminated their budget allocation for staff, and in 2017 NEMA reduced "Program and Administration" costs by 43%. As the entity that must pay for each bulb recycled, NEMA has an economic disincentive to effectively

¹ If 2011 data is included due to lower collections during program implementation, the average recycling rate is 10.81%

advertise the recycling program. Recovery of mercury-added lamps could be increased through improved public education and outreach and through ensuring convenient collection.

Recommendations: Title 38 § 1672, Maine's *Mercury-added lamp* law, was passed prior to Maine's Product Stewardship Framework law and is, in many ways, inconsistent with the framework. This statute should be revised to better align with the Framework and with more recent, successful product stewardship programs implemented in Maine. Included as Appendix B is legislation that if enacted would accomplish the following:

1. Incorporate the standard definition of “covered entities” rather than limiting participation to households. All references limiting participation to “households” and “residents” would change to “covered entities” and the definition of “covered entities” consistent with that in §1672(1)(E).
2. Establish convenience standards with distribution goals to ensure access to collection sites in rural and urban geographic areas throughout the State.
3. Establish a minimum standard for producer or stewardship organization staffing of ½-FTE to ensure adequate personnel resources to recruit, train and provide on-going in-person technical assistance to collection sites.
4. Strengthen requirements for education and outreach.
5. Establish goals for consumer awareness of key program information.
6. Strengthen data requirements for annual reporting.

C. Consumer batteries – [38 M.R.S. § 2165](#)

In 1991, Maine enacted Title 38 § 2165, *Regulation of certain dry cell batteries*, which requires manufacturers of nickel cadmium and small sealed lead acid batteries to provide recycling services for these batteries at no cost to government agencies, and industrial, communications and medical facilities. In response to this and similar laws enacted by other states in the early 1990's, U.S. battery manufacturers established the Rechargeable Battery Recycling Corporation (RBRC) in 1996. This program, now known as Call2Recycle, offered a free rechargeable battery recycling program to any interested business, government entity and retail location interested in acting as a collection location until mid-2017. Due to increases in “free riders”, i.e., collection of batteries from primary (single-use) and rechargeable battery manufacturers that do not financially support Call2Recycle, Call2Recycle now limits participation in its free rechargeable battery recycling program to municipal collection sites and businesses only as required by state laws. The Call2Recycle program is also incurring new operational costs for redesigning their collection boxes with fire retarding properties and for training of collection site staff in management to prevent fires caused by improper management of lithium and lithium-ion batteries. Note that Maine's current rechargeable battery recycling law does not include lithium or lithium-ion batteries, new chemistries placed into the market subsequent to the law's enactment.

Lithium ion batteries improperly disposed of in the household trash or recycling pose a significant fire risk. The batteries are prone to short circuit and explode if dropped, punctured, or dented, any of which can easily happen during collection or processing at a traditional waste and recycling

facility². This danger has been made evident by the increasing number of Materials Recovery Facility (MRF) fires in recent years attributed to lithium ion batteries, including two at ecomaine's Portland facility in 2017³. Lithium ion battery use is growing at a rate of 1.63 batteries per person, per year⁴. Estimated costs to a MRF from such a fire depends on damages, but some have reported costs ranging from \$8 to \$10 million from a single lithium ion battery fire⁵.

In 2016, Senator Saviello introduced an amendment to LD 1578, *An Act to Update Maine's Solid Waste Management Laws*, to establish an EPR program for small primary and rechargeable batteries of all chemistries. This proposal was developed by the battery industry⁶, and supported by Call2Recycle, Duracell, and other representatives of battery manufacturers. Requiring all manufacturers of covered batteries to participate in a stewardship program would level the playing field by making all suppliers pay their fair share for the recycling of collected batteries. LD 1578 included several other sections affecting other aspects of solid waste management in Maine, and ultimately did not pass the Legislature.

Consumer batteries are a growing problem in Maine's waste stream. The battery industry estimates more than 28 million consumer batteries (single-use and rechargeable) are sold in Maine annually. Maine consumers frequently contact DEP staff asking how they can recycle their batteries. Fires caused by batteries in the waste stream are increasing, and the risk of fires continues to increase as the number of batteries discarded by consumers increases. For these reasons, the Department is proposing the Legislature consider the draft legislation included as Appendix C to establish an expanded product stewardship program for small primary and rechargeable batteries. Along with addressing the elements required in Maine's *Product Stewardship* framework law, this draft includes provisions from the industry-developed model presented in Sen. Saviello's 2016 amendment to LD 1578 as amended through the committee process as well as provisions added to address Maine retailers' concerns with the original proposal. The Department estimates that 0.5 new FTE would be needed to implement the proposed expanded program.

D. Container redemption ("Bottle bill") law – [38 M.R.S. chapter 33](#)

Maine's *Manufacturers, Distributors, and Dealers of Beverage Containers*, a.k.a. the "Bottle Bill" law was enacted in Title 22 in 1976, with the resulting beverage container redemption program initially implemented in 1978 under the purview of the Department of Agriculture. The Legislature transferred responsibility for the program to the Department effective November 1, 2015. The Bottle Bill has resulted in a very successful collection program. Estimated recovery rates fall in the

² See EPA: *Lithium Ion batteries in the solid waste system*. Michael Timpane, RRS.

³ See Kennebec Journal: *Ecomaine fire shows why putting lithium-ion batteries in trash is a really bad idea*. December 21, 2017

⁴ Ibid.

⁵ See *How industry pros deal with fires at MRFs*, December 22, 2016: <https://www.waste360.com/mrfs/how-industry-pros-deal-fires-mrfs> and *Battery fires an 'existential' threat for industry*, April 10, 2018: <https://resource-recycling.com/recycling/2018/04/10/battery-fires-an-existential-threat-for-industry/>

⁶ See *Testimony of Richard Abramowitz, Director of Communications and Government Relations, Duracell Before the Joint Standing Committee on Environment and Natural Resources*, February 17, 2016.

75 to 87% range⁷ which, when compared to the national, overall recycling rate of 34%, is outstanding.

In May 2018, the Office of Program Evaluation and Government Accountability (OPEGA) completed a review of and [report](#) on the Bottle Bill program. The purpose of the review as stated in the report was to assess: “whether the program was operating as intended; the costs and offsets of the program for both the State and the initiators of deposit (IoDs); the degree to which risks of non-compliance, fraud, and abuse were mitigated in the program; and how the program compared to the management of beverage containers in other states.”

The OPEGA report includes several recommendations for departmental and Legislative consideration to improve program implementation. In response to the recommendation that the department can implement without legislative action (Recommendation #3), the department has refined and documented its procedures for removing non-compliant products from sale and completed work with Maine Revenue Services (MRS) to better integrate the agencies’ responses to instances of non-compliance. Additionally, in 2018 the Department focused on other initiatives to improve administrative processes, including the continued development and implementation of an on-line portal for manufacturers and distributors to register the labels on all products subject to the law. The information collected through product registrations is critical to apportioning responsibilities for recycling as well as handling fee and deposits payments to redemption centers.

Recommendation #1 in the OPEGA report provides the Department with responsibility for initiating legislation to require data reporting by all IoDs and by third party pick-up agents. Quality data can help improve effectiveness and efficiency in program administration, allow accurate quantitative assessment of program outcomes, and inform policymakers when making decisions about the program. Appendix D contains proposed legislation which would require IoDs to report the number of non-refillable beverage containers sold in the state and the number of non-refillable beverage containers returned by redemption value. Along with proposing new reporting requirements, this draft legislation also seeks to respond to additional issues noted in the OPEGA report and by the department during its 3 years of program oversight as follows:

- Reporting by third party pick-up agents on redemptions by IoD so that the department and MRS can verify self-reported redemptions by IoDs (see OPEGA Recommendation #1). This issue may be addressed by enacting a new subparagraph, § 3113 sub-6, as shown in Appendix D.
- The Bureau of Alcoholic Beverages and Lottery Operations (BABLO) is the IoD for all spirits sold in Maine, efficiently handling all spirits containers collected by redemption centers as a commingled group. However, the statutory criteria for approval inappropriately precludes BABLO from being categorized as a qualified commingling group (see OPEGA Recommendation #4). This issue may be addressed by enactment of the changes proposed in the last sentence of paragraph § 3106.7(C) as shown in Appendix D.

⁷ Office of Program Evaluation and Government Accountability Report No. SR-BOTTLE -17, *Maine’s Beverage Container Redemption Program—Lack of Data Hinders Evaluation of Program and Alternatives; Program Design Not Fully Aligned with Intended Goals; Compliance, Program Administration, and Commingling Issues Noted*, May 2018 (<http://legislature.maine.gov/doc/2316>)

- OPEGA identified several aspects of the law that impact redemption centers and/or retailers and that are outdated or of limited relevance to current program operations (see OPEGA Recommendation #5).

When the Bottle Bill law was enacted, it required all beverage retailers (a.k.a. “dealers”) to allow customers to redeem beverage containers of the brands, types and sizes sold by that retailer. Since that time, a network of redemption centers independent of retailers has developed across the state to manage all brands, types and sizes of containers. To reflect this reality and prevent circumvention of the limit to the number of redemption centers established in Title 38 § 3113 sub- 3, the Department is proposing to eliminate the required redemption responsibility for retailers with less than 5000 square feet of retail space as well as the limitations on the kind, size and brand of containers that must be accepted by retailers with more than 5000 square feet of retail space, and also to eliminate the exemption for food establishments from the limit on the number of redemption centers (which will be moot if the 5000 square foot exemption is enacted) [see proposed amendments to § 3106 sub- 1 and sub- 2, and § 3113(4)(B) respectively, as shown in Appendix D].

Removal of provisions of the law which indicate redemption centers must have agreements to provide redemption services for dealers and only need accept containers of the kind, size and brand sold by those dealers eliminates the administrative burden on redemption centers and retailers of maintaining written agreements. It also addresses the issue of limitations on where consumers can redeem containers by eliminating these limitations. The end result of enacting these proposed changes will be that establishments that sell beverages but have less than 5000 square feet of retail space will not be required to redeem containers. Additionally, stand-alone redemption centers and dealers with 5000 or more square feet of retail space without an agreement with a stand-alone redemption center within 1 mile will be required to redeem all beverage containers included in the deposit/redemption program.

- The OPEGA report identifies on-going concerns by Bottle Bill program participants that the Department does not have a formal role or authority to impose consequences on redemption centers that routinely present bags holding fewer than the required number of containers to pick-up agents. In response to OPEGA’s Recommendation #7, included in the proposed legislation in Appendix D, the Department is proposing an additional subsection in Title 38 § 3109 that adds an affirmative responsibility for redemption centers to package containers for pick up in a manner that ensures accurate unit counts of eligible containers. In addition, the Department is proposing to change the criteria in Title 38 § 3113 sub-2 from criteria for rule-making to criteria for licensing. These changes will enable the Department to implement standard compliance and enforcement procedures to check unit counts of containers readied for pick-up by redemption centers, and to refuse to renew the license of a redemption center based on its record of compliance.
- OPEGA’s Recommendation #8 describes how the current commingling provisions in statute have become too restrictive to meet their original intent of minimizing the number of sorts that must be implemented by redemption centers. Due to the explosion of sizes and

container types for beverages other than soda, beer, wine, and water, redemption centers must employ significant labor and maintain large storage areas to properly sort and store containers that are not included in commingling groups. To fully realize the efficiency benefits of commingling, the department recommends that the Legislature provide all IoDs with the opportunity to become part of a “catch-all” commingling group administered by a third party as delineated in proposed § 3107 sub-5 included in Appendix D. The third-party program could allow redemption centers to commingle containers by material type and allow assignment of responsibility by share of marketed weight, thus eliminating scores of sorts. In this system, manufacturers would pay redemption centers for an assigned portion of that container type proportional to their share of sales based on container weights. Such a system will significantly reduce redemption center costs for labor, as well as costs associated with the delay in receiving deposit reimbursements from the IoDs that results from the need to store containers of non-commingled brands for long lengths of time after paying out the deposits to consumers.

It is important to note that under the current law, only IoDs that do not participate in a commingling group are required to remit unclaimed deposits to the State. Recommendation #4 includes the suggestion that the Legislature consider amending the statute “to specify how unredeemed deposit funds should be processed and used by the State.” This recommendation will become moot if the recommendation to create a “catch-all” commingling group is enacted and all IoDs opt to participate in a commingling group.

- Additionally, this draft legislation includes amendments to consolidate the rule-making provisions, to integrate the redemption center licensing fees into Title 38 subchapter 2, *Maine Environmental Protection Fund*, and to set the licensing fee at \$100 consistent with the standards Title 38 § 352, *Fees* (see Section 1 of the proposed legislation in Appendix D). The current annual licensing fee is \$50, which is not adequate to cover costs incurred by the department for application review and processing.

The department also recommends that the Legislature review Recommendation #6 in the OPEGA report to determine how the Legislature and the department should proceed to address the issues of program scope, deposit value, performance measurement, final disposition of redeemed materials and maximizing commodity values as identified by OPEGA.

E. Cell phones - [38 M.R.S. § 2143](#)

Maine’s cellular telephone recycling law (38 M.R.S. § 2143) requires retailers to accept, at no cost, used cell phones at retail locations, and annual reporting by cellular telephone service providers (i.e., carriers including Verizon, T-Mobile, USCellular, AT&T) on their recycling efforts in Maine. The Department recommends repeal of the reporting requirement as it does not provide useful data (see Appendix E for proposed statutory change). Many consumers return cell phones to entities that pay for them, so the data from the service providers cannot be used to assess program performance or determine a recycling rate. Also, each of the carriers provides information to their customers on the recycling programs they offer, often in support of social welfare causes. This information is readily available on their web sites.

IV. Candidate products for new EPR programs

Maine's Product Stewardship Framework law identifies the following criteria for evaluating product stewardship as a mechanism to facilitate recycling:

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

Recycling is defined as “the transforming or remanufacturing of an unwanted product or the unwanted product's components and by-products into usable or marketable materials. ‘Recycling’ does not include landfill disposal, incineration or energy recovery or energy generation by means of combusting unwanted products, components and by-products with or without other waste.”

Included here are several products that may be good candidates for EPR programs in Maine in the future. Some of these are products that previously have been the subject of some discussion in Maine, and EPR programs have been established for each of these products in other jurisdictions.

A. Product stewardship for packaging

A large portion of the current municipal waste stream is comprised of various types of consumer packaging. Much of it is not recyclable. Packaging that is readily recyclable has historically been managed to some extent through Maine's existing recycling system, which is a combination of public and private enterprises. However, shifts in international markets for recyclables during 2018 have shown the vulnerability of these programs to commodity price changes and the need for investment in recycling infrastructure. Stable funding provided by extended producer responsibility can prevent high municipal costs and diversion of these resources to disposal when material values drop, as occurred during 2018.⁸ An EPR program for packaging also can provide incentives for producers to increase the recyclability of their packaging and to use packaging that is more valuable at end of

⁸ The average value of a ton of single stream recycling in Maine, as tracked by the Maine Resource Recovery Association, fluctuated between a value of \$20/ton to a cost of \$30/ton between 2007 and 2017 before dropping to cost of more than \$100/ton in 2018.

life, galvanize investment in Maine’s recycling infrastructure, and relieve municipalities of much of the financial burden of dealing with this waste stream.

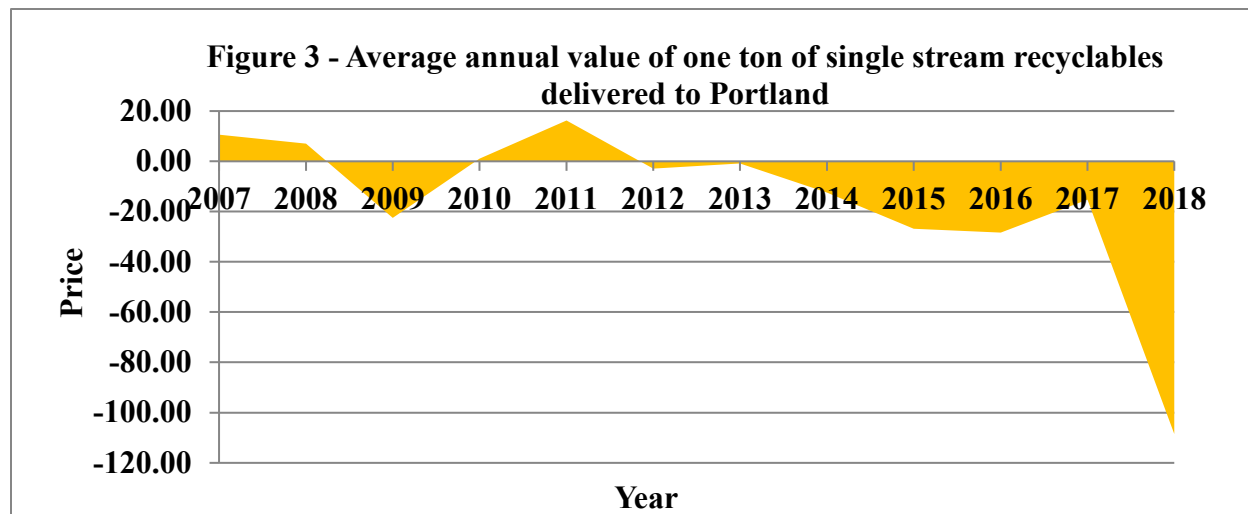
1) Packaging meets four candidate criteria for stewardship program

Product stewardship for packaging meets four of the five criteria outlined in the Framework Law – all but criteria A, products containing toxics.⁹

Criteria B: Increase the recovery of materials. Alleviating economic pressure on municipalities would prevent moves away from recycling caused by market downturns like that experienced during 2018. In addition, the incentives provided by product stewardship can help change the make-up of this stream. Currently, much packaging is not readily recyclable and therefore is destined for disposal. Examples of packages that are not practical to recycle include plastic pouches, multilayered materials, and packages made from commonly recycled materials like PET that can’t be processed by the recycling system because of issues with their wrappers or shapes and sizes¹⁰. To support the development of a sustainable “circular economy”, there is a need to design packaging with recycling in mind.¹¹

Criteria C: Reduce the costs of waste management to local governments and taxpayers.

Packaging is a large material stream, only part of which is readily recyclable. Packaging that is not readily recyclable is being disposed of as municipal solid waste. The portion of the stream that is readily recyclable can also be problematic. Although recycling of some packaging streams has long been promoted as a way to lessen the burden of waste management costs on municipalities or even as a money maker, recycling costs for packaging rose sharply in 2018 when China stopped accepting



⁹ Nineteen states, including Maine, have laws governing toxics in packaging. For more information, see the Toxics in Packaging Clearinghouse website at <https://toxicsinpackaging.org/> and [Title 32 Chapter 26-A, Reduction of Toxics in Packaging](#).

¹⁰ “APR Design Guide for Plastics Recyclability”, The Association of Plastics Recyclers, <https://plasticsrecycling.org/apr-design-guide/apr-design-guide-home>

¹¹ *The New Plastics Economy – Catalysing Action*, Ellen MacArthur Foundation, 2017 https://www.ellenmacarthurfoundation.org/assets/downloads/New-Plastics-Economy_Catalysing-Action_13-1-17.pdf

bales of plastic and fiber recyclables due to contamination. Municipal transfer stations and the companies that manage these materials found themselves unable to move some materials or only able to do so at a cost. Single-stream programs increased their fees,¹² while source separated programs stopped recycling certain material types. The lack of data on packaging generation and municipal recycling and disposal costs makes price estimates of the amount of municipal resources spent handling packaging difficult to come by. That said, triangulating a variety of imperfect estimates can provide a rough idea of the amount of money spent.

- Using Maine tons of municipal solid waste generated in 2017¹³ and applying percentages of packaging materials found in the University of Maine's 2011 study¹⁴ characterizing the makeup of Maine municipal solid waste provides an estimate of the amount of packaging disposed of as waste in 2017. This method yields an estimated 177,000 tons of material. If Maine municipalities spent an average of \$90/ton¹⁵ to transport and dispose of this material during 2018, they spent approximately \$16 million. This \$16 million estimate understates the actual cost to municipalities of managing packaging because it does not include the cost of separated recyclables, i.e., it is only the cost of managing packaging material that is thrown out with household trash.
- Using statistics on average per capita generation of packaging from Europe¹⁶ and subtracting the amount of material handled through Maine's Bottle Bill¹⁷ provides an estimate of approximately 194,000 tons of packaging handled through Maine municipalities annually. Once again, assuming Maine municipalities paid \$90/ton to handle packaging either as trash or as recycling

¹² Data for Figure 3 courtesy of Victor Horton, Maine Resource Recovery Association, October 29, 2018, "Single stream spot market pricing paid in Maine delivered to Portland; for contract pricing add \$2-5/ton"

¹³ Maine Department of Environmental Protection, "Maine Solid Waste Generation and Disposal Capacity Report for Calendar Year 2017", January 2019, shows 721,646 tons of municipal solid waste generate in Maine in 2017.

¹⁴ Criner, George; Blackmer, Travis; "2011 Maine Residential Waste Characterization Study School of Economics Staff Paper #601", available here: <https://umaine.edu/wp-content/uploads/sites/2/2017/04/2011-Maine-Residential-Waste-Characterization-Study.pdf>, studied samples of municipal solid waste in Maine and identified the components, by material type. Using the total percentage of plastics other than "durable plastic items"; the percentages of "tin/steel containers", "redeemable aluminum beverage containers", "non-redeemable aluminum beverage containers" in the metals category; the total percentage of glass other than the "remainder/composite glass" and "flat glass"; and the percentages of "uncoated corrugated cardboard/kraft paper" and "remainder/composite paper", and half of the percentage of "other recyclable" paper, we obtained an estimate of the percentage of Maine's municipal waste stream composed of packaging waste of 24.5%.

¹⁵ There is not good data to support this number; tonnages of packaging resulting from each method have been provided so that municipalities can easily adjust estimates to reflect their costs. The Maine Department of Environmental Protection, "Maine Solid Waste Generation and Disposal Capacity Report for Calendar Year 2017", January 2019, reports that tipping fees for municipal solid waste were between \$40 and \$85 during 2017, which does not include the cost of transportation. Figure 3 of this report shows the average cost of single stream recycling delivered to Portland at over \$100/ton in 2018.

¹⁶ Eurostat, "Packaging Waste Statistics", https://ec.europa.eu/eurostat/statistics-explained/index.php/Packaging_waste_statistics show the average European generated 166.3 kg or 366.6 pounds of packaging in 2015.

¹⁷ 51,808 tons of material or 77.3 pounds per person were recycled through Maine's Bottle Bill program in 2017, which would leave approximately 290 pounds of packaging per person handled through the municipal waste stream.

in 2018, the cost to Maine municipalities of managing packaging in 2018 was approximately \$17.5 million.

- Using estimated costs in the Canadian province of Saskatchewan (which has 1.17 million people in 700 municipalities, 600 of which have fewer than 1000 residents), where the cost of handling packaging is around \$14.5 million, annually¹⁸ and prorating this cost for a population of 1.34 million yields an annual municipal cost of \$16.6 million.

Criteria D: There has been success in other states or countries. Many European Union countries and five of Canada’s provinces manage packaging through product stewardship programs. Years of successful implementation, per capita results, and municipal savings for each of the Canadian stewardship programs are presented below. Movement toward more sustainable packaging is hard to quantify based on available information, but there is an on-going pilot program in British Columbia testing the recyclability of flexible packaging collected at drop-off locations and there have been significant decreases in the use of plastic bags in Manitoba since the initiation of a government effort that has been facilitated by the Manitoba packaging stewardship organization.

Figure 4
Per capita results of Canada’s five EPR for Packaging and Printed Paper Programs

PROVINCE	PROGRAM DURATION	PER CAPITA RESULTS	MUNI. SAVINGS	BOTTLE BILL MATERIAL*
Ontario	15 years	65 kg <i>recycled</i> (2016) **	Reimbursed 50% of recycling costs	Alcohol
Manitoba	9 years	71 kg collected (2017)	Reimbursed 80% of recycling costs	Beer
British Columbia	7 years	38 kg collected (2017)	Municipalities don’t recycle	Non-milk
Quebec	5 years	93 kg collected (2017)	Reimbursed 100% of recycling costs	Beer and carbonated beverages
Saskatchewan	3 years	49 kg collected (2017)	Reimbursed 75% of recycling costs	Non-milk, non-nutritional supplements

*Bottle bill material is not collected through these programs so the breadth of a province’s bottle bill influences the amount of material available for collection.

** Ontario’s program reports on kg recycled per person, as opposed to kg collected; more material is collected than can be recycled. Ontario’s most recent data is from 2016, not 2017.

Criteria E: Voluntary efforts are insufficient. Industry efforts to assist with the management of packaging include the Closed Loop Fund and The Recycling Partnership, which invest in recycling infrastructure and education at the national level. The city of Portland received a grant of \$175,000 from The Recycling Partnership to help pay for new recycling carts in 2017.¹⁹ The department is unaware of any other direct contributions by these organizations to recycling programs in Maine.

¹⁸ Steven Dribnenki, Saskatchewan Recycling, November 28, 2018: Saskatchewan recently studied program costs and updated payments to municipalities, increasing them to \$8.7 million, which covers approximately 60% of the cost of a “reasonably run” program.

¹⁹ Harry, David, *The Forecaster*, “Portland set to roll out covered recycling carts”, July 31, 2017, <http://www.theforecaster.net/portland-set-to-roll-out-covered-recycling-carts/>

The Department estimates that 1 new FTE would be needed at the Department to oversee implementation of the program.

2) Key considerations in design of a packaging stewardship program

Maine's *Product Stewardship* framework law provides minimum requirements for new product stewardship programs. Review of the Canadian provinces' EPR programs for packaging reveals additional key aspects that should be considered when formulating legislation to establish a new packaging stewardship program. These include a) whether manufacturers are given complete financial and operational responsibility for establishing and maintaining recycling systems (full manufacturer responsibility) or share that responsibility with municipalities, and b) whether the enabling legislation includes incentives for the use of recyclable packaging and/or disincentives for the use of non-recyclable packaging.

a) Division of responsibilities between manufacturers and municipalities

Whether there is a division of responsibilities between municipalities and producers in packaging stewardship programs provides incentives for effective and efficient collection and recycling, streamlining of operations, and the free market economics of the recycling industry. Canada's existing product stewardship laws governing packaging differ in the level of financial and operational responsibility given to each group. For example, British Columbia assigns manufacturers full responsibility while Province Quebec implements a program of shared responsibility. If responsibilities are shared, legislation establishing the EPR system must delineate the division of financial and operational responsibilities.

Proponents of a system in which a producer organization has full financial and operational responsibility for recycling point to the opportunity for efficiencies that such a system provides. If one entity manages the recycling of all packaging (including control of the collection system), the collection system and educational programs can be standardized; fewer, larger contracts can be written to reduce administrative costs; and the single entity managing recycling has much more control over market price than do a larger number of smaller entities²⁰. If managed well, the streamlining afforded by full producer responsibility for operations could lead to lower system costs, though the limited available data from North America does not show this to be the case.²¹

²⁰ Recycle BC runs the only North American packaging stewardship program that gives producers responsibility for recycling operations. A common comment from local government stakeholders during the revision of Recycle BC's stewardship plan is that incentive payments made by the stewardship organization to collectors are insufficient. For instance, the City of Vancouver receives an incentive of \$66 per ton for recycling collected for Recycle BC at its depots, while Recycle BC's own cost study pegs the per ton cost of recycling through a depot at \$301 per ton. Because Recycle BC is the only buyer, it has a lot of power to influence the price. Data from, Recycle BC, "Consultation Report on Revised Packaging and Paper Product Extended Producer Responsibility Plan", October 2018.

²¹ Recycle BC performed a cost comparison of pre-program costs (2012 data) and costs 5 years into the program (2017). This cost study uses a limited sample size but is the best data available to compare costs under a free-market vs. stewardship run recycling system. Results show that the range of kilograms of packaging diverted for recycling per household has shifted downward for both curbside and multifamily collections (from 48-270kg/household to 42-200kg/household using curbside and from 73-136 kg/household to 67-91kg/household using multifamily collection);

Proponents of a shared responsibility system cite the advantages of maintaining diverse recycling systems as the maintenance of free market forces in the industry and the avoidance of stranded investments in the existing system. Competition in a free market correctly sets prices, leads to innovation, and drives efficiency and effectiveness elsewhere in the economy. Distributed end-of-life management of post-consumer packaging also ensures that, once recycled, these resources are available at market prices rather than having the price controlled by a single entity.

Maintaining municipal control of recycling also minimizes disruption of current waste management, allowing municipalities to continue collecting and sorting material as they see fit and avoiding the stranding of investments and excessive consolidation in the recycling industry that may be experienced if operational responsibility for recycling of packaging was removed from municipal MSW management systems. This type of system design dovetails with Maine law that assigns each municipality responsibility for providing for management of MSW generated within the municipality (see [38 M.R.S. § 1305.1](#)). However, in such a shared responsibility system, municipalities and their recycling service providers must be willing to share information with producers to ensure transparency in costs and accountability for ensuring materials are recycled.

Division of financial responsibilities: incentives for *efficient* collection and recycling.

Careful division of financial responsibility in legislative design can promote efficient collection and recycling systems. If producers are financially responsible for the recycling of packaging yet municipalities have operational control of their recycling programs (i.e., producers pay municipalities for their costs of recycling packaging), system requirements should include incentives for municipalities to operate efficiently. Existing Canadian programs in which municipalities have operational control over recycling do this by tying municipal costs to producer costs, defining what constitutes an efficient program, and providing municipalities with extensive producer assistance. For example, defining reimbursable municipal costs as the average regional cost of municipal recycling rather than each municipality's actual costs results in municipalities with higher-than-average costs bearing the cost of their premium operations. Conversely, municipalities with lower-than-average costs receive a premium for their efficient operations. This incentivizes cost-efficient municipal operations and dis-incentivizes premium operations.

The legislative design of a shared responsibility system can also promote efficiency by giving producers the ability to lower their program costs by managing their own recycling plans. Producers want, and should have, the opportunity to provide new or improved recycling options for their packaging (some producers already provide for recycling of their packaging).²²

the change in quantity collected using depots is not reported. Cost data shows a 6% increase in cost per household for curbside collection, a 11% increase in cost per household for multifamily collection, and a 79% increase in cost per ton at depots. Cost savings were realized in the areas of education and administration (39% and 62%, respectively), but these costs make up a much lower percentage of total program costs than do the costs of collection (\$1.50/household on education, \$1.60/household on administration, \$43/household on curbside collection, \$23/household on multifamily collection, and \$301/ton on depot collection). Data from, Recycle BC "Packaging and Paper Product Collection Costs Five Year Cost Study Refresh", June 8, 2018.

²² Letter to Elena Bertocci, Maine DEP, from Calla Farna, Vice President Corporate Affairs, Canadian Stewardship Services Alliance, December 11, 2018.

Legislation can support the creation of new, and maintenance of current, producer recycling operations by providing producers the ability to offset their financial responsibility for material they place on the market by collecting and recycling that material through their own programs. For instance, every pound of plastic bags a producer collects may offset a pound of plastic bags it marketed and the amount the producer would pay into the system. If a producer collects as many pounds of plastic bags as it markets, it would not need to pay into the system. With this design, if a material is not being handled efficiently by municipal recycling programs, producers have the incentive and the ability to create an alternative management system.

Division of operational responsibilities: incentives for *effective* collection and recycling.

In systems where municipalities are operationally responsible for recycling, when a municipality recycles more, it pays less for trash disposal. When combined with a system that incentivizes municipalities to recycle better as described above, municipalities have strong incentives to recycle as much material as possible, as well as possible.²³ Conversely, in systems where a producer or group of producers operate the only collection system, they pay more as their collection increases (other than when the material is worth more than the cost of processing and transportation).²⁴ In this case, the responsible entity (producer) has an incentive to collect as little recycling as is allowable under the law and to recycle only to the extent the law requires. A legislative design that maintains municipal control over municipal recycling operations incentivizes effective collection for recycling.

b) Incentives and disincentives to support the use of readily-recyclable packaging

Legislation establishing EPR for packaging should include incentives that promote the design and use of packaging that can be efficiently collected and reused or recycled. Whether the legislation requires full producer responsibility or establishes a shared responsibility system, it can incentivize the use of readily recyclable packaging by calibrating financial responsibility based on the cost to recycle the packaging material as well as the amount of packaging a producer sells into Maine. Producer costs for packaging that has a positive recycling value (taking into account the cost of processing and transportation) could be limited to simply providing support for consumer recycling education.

A shared responsibility system can be designed to provide producers with additional incentives to create new opportunities for recycling materials that currently are not readily recyclable. One

²³ Recycle BC runs the only North American packaging stewardship program that gives producers responsibility for recycling operations. The Recycle BC program is criticized for its extensive limitations on eligibility for participation. Local governments and First Nations note that collection could be expanded if Recycle BC would loosen population and process restrictions that prevent many smaller, more rural communities from participating. Complaints include an inability to drop off recycling even if a community that is not served by Recycle BC is willing to pay a hauler to bring its material to an existing Recycle BC depot. Recycle BC, “Consultation Report on Revised Packaging and Paper Product Extended Producer Responsibility Plan”, October 2018.

²⁴ Recycle BC runs the only North American packaging stewardship program that gives producers responsibility for recycling operations. According to page 9 of its 2018 Packaging and Paper Product Extended Producer Responsibility Plan, “Recycle BC offers financial incentives to qualified collectors. These incentives are designed to provide collectors near-by with sufficient incentive to collect the amount of PPP required by Recycle BC to meet its targets.” “Packaging and Paper Product Extended Producer Responsibility Plan”, Recycle BC, October 2018 revision. As could be anticipated, considering the incentives and this statement, the program’s recovery rate dropped in 2017 after passing the mandated minimum in 2016.

mechanism to accomplish this is to require producers to reimburse municipalities their costs of disposal for packaging materials that are not readily recyclable in Maine. This eliminates any incentive to switch recyclable materials packaging, which may carry a cost in the system, to non-recyclable. It also creates a financial incentive for producers to develop recycling processes and/or infrastructure to increase the types of packaging that are readily recyclable. For example, although systems do not exist today for recycling multi-laminate pouches, producers may help support the development of new recycling processes and the subsequent establishment of nearby infrastructure to make multi-laminate packaging readily recyclable in Maine.

B. Pharmaceuticals

A pharmaceutical product stewardship program meets four of the five criteria listed in the framework law – all but the criterion of increasing recovery of material for reuse and recycling. The most compelling of the criterion as relates to pharmaceuticals is the increasing evidence that, when not managed properly, they adversely impact the environment and public health and safety.

The public health argument for proper disposal of pharmaceuticals is strong. A 2015 study published in the U.S. National Library of Medicine, National Institutes of Health estimates that 2 of 3 prescriptions dispensed go unused.²⁵ Unused medications may be left sitting in medicine cabinets, where they contribute to accidental poisonings of children²⁶ and are available to potential abusers – in 2013, 18% of Maine high school students reported having misused a prescription drug during their lifetime and more than 1 in 3 Maine parents felt their teen would be able to access prescription medications at home without parental knowledge.²⁷

Common disposal options like sending unused meds to landfills or through waste water treatment systems result in the release of these chemicals into the environment. A study of Seattle area seafood performed during the spring of 2018 detected opiates, antibiotics, anti-depressants, chemotherapy drugs and heart medications. Because shellfish lack the ability to metabolize these chemicals, they can be passed on to humans that consume them.²⁸ In addition, an Associated Press investigation found pharmaceuticals including antibiotics, anti-convulsants, mood stabilizers and sex

²⁵ Law A.V., Sakharkar P., Zargarzadeh A., Tai B.W., Hess K., Hata M., Mireles R., Ha C., Park T.J. (2014, Oct 17). “Taking stock of medication wastage: Unused medications in the U.S.” U.S. National Library of Medicine, National Institutes of Health. <https://calpsc.org/mobius/cpsc-content/uploads/2015/08/Study-Taking-Stock-of-Medication-Wastage-Unused-Medicines-in-US-Households-2015.pdf>

²⁶ Centers for Disease Control and Prevention, “Protect the Ones You Love: Childhood Injuries are Preventable”, <https://www.cdc.gov/safecchild/poisoning/index.html>

²⁷ Diomedes, Tim. Maine Department of Health and Human Services. “SEOW Special Report: Heroin, Opioids, and Other Drugs in Maine”. October 2015.

https://www.maine.gov/dhhs/samhs/osa/data/cesn/Heroin_Opioids_and_Other_Drugs_in_Maine_SEOW_Report.pdf

²⁸ NPR. “Traces of opioids found in Seattle area mussels”, May 25, 2018.

hormones in the drinking water supplies of at least 41 million Americans.²⁹ It is known that pharmaceuticals in the environment are having toxic effects on marine animals³⁰ and fish.³¹

The case for pharmaceutical takeback has been strengthened by the connection between prescription opioids and opioid abuse. This link led the legislature to enact, “An Act to Prevent Opiate Abuse by Strengthening the Controlled Substances Prescription Monitoring Program” in March of 2017. Since 2016, four states have enacted product stewardship laws for pharmaceuticals: Massachusetts and Vermont included extended producer responsibility requirements for pharmaceutical takeback as part of comprehensive legislation for the prevention of opioid abuse, while New York and Washington passed stand-alone product stewardship laws to fight prescription drug abuse.

In response to the opioid epidemic, a number of Maine entities have begun pharmaceutical takeback programs. Although these appear to be doing a good job and are free,³² collection sites and events are limited, as is money to cover the costs of education, outreach, and collection. Establishing an EPR law for pharmaceuticals could guarantee on-going funding and provide for safe, convenient collection from consumers, extended care facilities, and medical service providers.

C. Mattresses

Mattresses meet all 5 criteria established in Maine’s *Product Stewardship* framework law for evaluating products to determine whether mandated product stewardship will facilitate recycling (see criteria above and at [38 M.R.S. § 1772.2](#)).

First, many mattresses contain organohalogen flame retardants (OFRs), including brominated flame retardants (BFRs). In September 2017, the Consumer Products Safety Commission (CPSC) issued a guidance document recommending producers to stop manufacturing mattresses containing OFRs and warning consumers to avoid products containing OFRs,³³ due to their potential toxicity. Maine law ([38 M.R.S. § 1609](#)) banned the sale of mattresses and mattress pads made with the “deca” mixture of polybrominated diphenyl ethers beginning January 1, 2008. Given these and similar governmental actions, the risk to public health and the environment from flame retardants in mattresses should decrease over time.

²⁹ Granite State Analytical Services, June 2018 Newsletter “Pharmaceuticals in Drinking Water”

³⁰ Hernando M.D., Mezcuca M., Fernandez-Alba A.R., Barcelo D. (2006). "Environmental risk assessment of pharmaceutical residues in wastewater effluents, surface waters and sediments." *Talanta* 69: 334-342.

³¹ Corcoran, J., Winter, M.J. and Tyler, C.R. (2010). "Pharmaceuticals in the aquatic environment: A critical review of the evidence for health effects in fish." *Critical Reviews in Toxicology* 40,4: 287-304

³² Current efforts include 59 permanent sites for collection from households only (medical and residential care facilities cannot utilize the current system). The permanent collection sites are located at police offices or sheriff’s stations; they offer continuous collection then store pharmaceuticals until they can access free disposal provided by the USDEA National Takeback Days. Although Maine has just 0.4% of the country’s population, Maine collected 3% by weight of total drugs turned in during the most recent national one-day USDEA event, including unwanted pharmaceuticals collected at 157 temporary collection sites.

³³ *Guidance Document on Hazardous Additive, Non-Polymeric Organohalogen Flame Retardants in Certain Consumer Products*, Consumer Product Safety Commission, Federal Register / Vol. 82, No. 187 / Thursday, September 28, 2017 / Notices, (available at <https://www.govinfo.gov/content/pkg/FR-2017-09-28/pdf/2017-20733.pdf>)

Mattress recycling currently occurs in Maine on an ad hoc basis at a few solid waste facilities. In these cases, facility staff deconstruct mattresses into their wood, metal, foam and fabric components, then recycle the metal, manage the wood with other clean wood wastes, and send the foam and fabric for disposal. Although there are a few businesses that dismantle mattresses in southern New England, there are no such businesses in Maine.

Currently in Maine the vast majority of discarded mattresses are sent for disposal. The costs to municipalities for handling and transportation are relatively high compared to other waste streams due to their bulk; municipalities also bear the cost of disposal fees. Mattresses cause operational challenges for landfills in that they do not compress and have a tendency to “float” to the surface, potentially compromising cover systems.

Connecticut, Rhode Island and California have all enacted EPR laws for mattresses. The mattress recycling programs in these three states are administered by an industry-led nonprofit, the Mattress Recycling Council (MRC), with state government oversight. The program is funded by a visible fee that is levied on new mattress purchases, which is established based upon population distribution, geographic considerations, and other factors. MRC recently announced it has recycled more than 3 million mattresses in California. During the most recent fiscal year (July 1, 2017 – June 30, 2018), MRC recycled more than 180,000 mattresses, bring the total recycled in Connecticut since the program began in 2015 to almost ½ million. In its second year of operation in Rhode Island, the MRC program (known as “Bye Bye Mattress”) collected 83,762 mattresses and recycled 1,645 tons of material.³⁴

There are no existing voluntary stewardship programs for mattresses in Maine.

The Connecticut, Rhode Island, and California EPR programs all have significantly increased the diversion of mattresses from disposal to recycling. However, the fee per unit (a mattress and a box spring are 2 separate units) at sale in Rhode Island jumped from \$11 to \$16 within 2 years of program implementation (currently the fee is \$9 in Connecticut and \$10.50 in California). Given Maine’s geographic size, low population, and lack of businesses to deconstruct mattresses, enacting a law with the same financing mechanism likely would result in a per unit fee at sale even higher than the \$16 fee in Rhode Island. When the Legislature considered the bill to establish an EPR program for architectural paint, concerns were raised that a fee at sale may drive consumers to purchase products outside of Maine rather than in Maine. The higher the fee at sale, the more likely this consumer reaction may happen. Additionally, financing an EPR program fully on revenues collected from a fee-at-sale provides little incentive for manufacturers to design their products for recycling. Given these dynamics, an EPR system for mattresses funded at least partially through cost internalization may be most appropriate for Maine.

D. Carpet

Carpet meets four of the five criteria listed in the framework law for identifying stewardship candidate products – all but the criterion of toxics in the product. However, it is worth noting that

³⁴ This data and additional information on the 3 state programs are available through the Mattress Recycling Council’s website at <https://mattressrecyclingcouncil.org/programs/>.

although carpets generally do not meet the toxin criterion, research shows that some carpets may contain brominated flame retardants,³⁵ which pose health concerns related to endocrine disruption, immunotoxicity, reproductive toxicity, and neurotoxicity.³⁶

In 2002, the carpet industry, several non-governmental organizations (NGOs), the EPA, and 21 states including Maine signed onto a ten-year Memorandum of Understanding for Carpet Stewardship (“MOU”) intended to support recycling of end-of-life carpet.³⁷ This MOU resulted in the establishment of the Carpet America Recovery Effort (CARE), which was formed to implement the MOU. Barriers to the implementation of a voluntary, market-driven carpet recycling program included a shrinking market share for the carpet industry in the flooring market and decreasing value of carpet due to substitution of lower-value materials such as PET (Polyethylene Terephthalate) for higher-value materials such as nylon.

The 2011 Product Stewardship report observed that “industry has not achieved the diversion and recycling goals set by the MOU,” and although a stewardship program was not proposed at that time, the report was clear that “the need for product stewardship legislation may change if significant progress is not made by the industry to establish affordable carpet recycling in Maine.” Since that time, minimal progress has been made with voluntary efforts to recycle carpet in Maine. Several states that signed the MOU have enacted or are considering carpet stewardship legislation; California became the first state³⁸ to enact a carpet stewardship law in 2010³⁹ and the New York Legislature is currently considering a carpet EPR bill.⁴⁰

CARE acknowledges the lack of recycling availability on their website, which states, “There is no simple, routine method in place today to recycle old carpet. Each case is individual since there is no infrastructure to handle old carpet at this time.”⁴¹ A contributing challenge to widespread carpet recycling is that some types of carpet currently on the market are readily recyclable and some are not.⁴² EPR has the opportunity to influence design by encouraging use of readily recyclable materials over those destined for disposal at end-of-life. While a real challenge exists for recycling low-value carpet made from materials that are not easy to recycle, the design of the carpet is a key factor. Manufacturers tasked with ensuring their products are recycled may be more likely to use high-value recyclable materials over low-value non-recyclable materials.

A product stewardship program for carpet will increase the recovery of materials for reuse and recycling and reduce the costs of waste management to local governments and taxpayers. For a

³⁵ *Environmental concentrations and consumer exposure data for selected flame retardants (TBB, TBPH, TBBPA, ATO)*, Consumer Product Safety Commission, 2015

³⁶ Gosavi RA, Knudsen GA, Birnbaum LS, Pedersen LC. 2013. Mimicking of estradiol binding by flame retardants and their metabolites: a crystallographic analysis. *Environ Health Perspect* 121(10):1194-1199.

³⁷ Other states include New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Delaware, North Carolina, Tennessee, South Carolina, Georgia, Florida, Minnesota, Wisconsin, Iowa, Washington, Oregon, and California.

³⁸ *Carpet stewardship law*, California Department of Resources Recycling and Recovery (CalRecycle).

³⁹ *Chapter 20. Product Stewardship for Carpets*, California Legislative Information.

⁴⁰ *Bill Summary for S07147*, New York State Assembly.

⁴¹ *FAQs, How can I recycle my old carpet?*, Carpet America Recovery Effort.

⁴² *Carpet Fiber Types*, California Department of Resources Recycling and Recovery (CalRecycle).

successful program, it is important to incentivize reuse and recycling as well as the use of recycled content.

Adequate funding and resource allocation is essential to establish a functional and lasting program. California's EPR program is funded by a consumer fee upon sale, which has increased steadily over time from \$0.05 per square yard to \$0.25 per square yard⁴³ and will increase again to \$0.35 per square yard as of January 2019.⁴⁴ During the public comment period for review and approval of CARE's 2017 carpet stewardship plan, dozens of negative comments were submitted over continued fee increases, many from flooring businesses concerned with the impact consumer fee increases were having on their carpet sales, business, or livelihood.⁴⁵ As with mattresses, Maine's large geographic size, low population, and lack of businesses to recycle carpet make it likely that enacting a law with the same financing mechanism would result in a per square yard fee at sale even higher than the \$0.35 fee in California. Additionally, financing an EPR program fully on revenues collected from a fee-at-sale provides little incentive for manufacturers to design their products for recycling. Given these dynamics, an EPR system for carpet funded at least partially through cost internalization may be most appropriate for Maine.

E. Solar panels

Product stewardship for photovoltaic (PV) solar panels meets all five criteria outlined in the Framework Law. There are no federal regulations to require solar panel recycling, nor are there any third-party or public recycling programs aside from "limited manufacturer take-back programs."⁴⁶ Recycling is generally motivated by either the value of raw materials or regulations that mandate recycling. Current technology makes it possible to extract or reuse approximately 80% of the solar panel materials.⁴⁷ By 2030, estimates suggest it will be technically possible to recover raw materials from waste solar panels sufficient to "produce approximately 60 million new panels, or 18 GW of power-generation capacity" with an estimated value of "up to USD 450 million (in 2016 terms)" and "by 2050, the recoverable value could cumulatively exceed USD 15 billion, equivalent to 2 billion panels, or 630 GW."⁴⁸ However, on an individual basis, there isn't "a large amount of money-making salvageable parts on any type of solar panel,"⁴⁹ and it is unlikely that sufficient economic motivation exists to support voluntary development of a robust collection and recycling network.

Approximately two-thirds of solar panels are crystalline-silicon (c-Si), made from 90% glass, polymer, and aluminum and silver, tin, and lead.⁵⁰ The remaining one-third of panels are thin-film, made from 98% glass, polymer, and aluminum with 2% copper and zinc and silicon semiconductor and may include indium, gallium, selenium, lead, and cadmium and tellurium in the form of

⁴³ *Public Notice: Consideration of Carpet America Recovery Effort's California Carpet Stewardship Plan 2018-2022*. California Department of Resources Recycling and Recovery (CalRecycle).

⁴⁴ *California Carpet Stewardship Assessment to Increase on January 1, 2019*, Carpet America Recovery Effort (CARE).

⁴⁵ *Public Notice: Consideration of Carpet America Recovery Effort's California Carpet Stewardship Plan 2018-2022*. California Department of Resources Recycling and Recovery (CalRecycle).

⁴⁶ Enbar, N. *PV life cycle analysis: Managing PV assets over an uncertain lifetime*. Electronic Power Research Institute, 2016

⁴⁷ *Ibid.*

⁴⁸ *End-of-life management: Solar photovoltaic panels*. IEA-PVPS Report Number: T12-06:2016

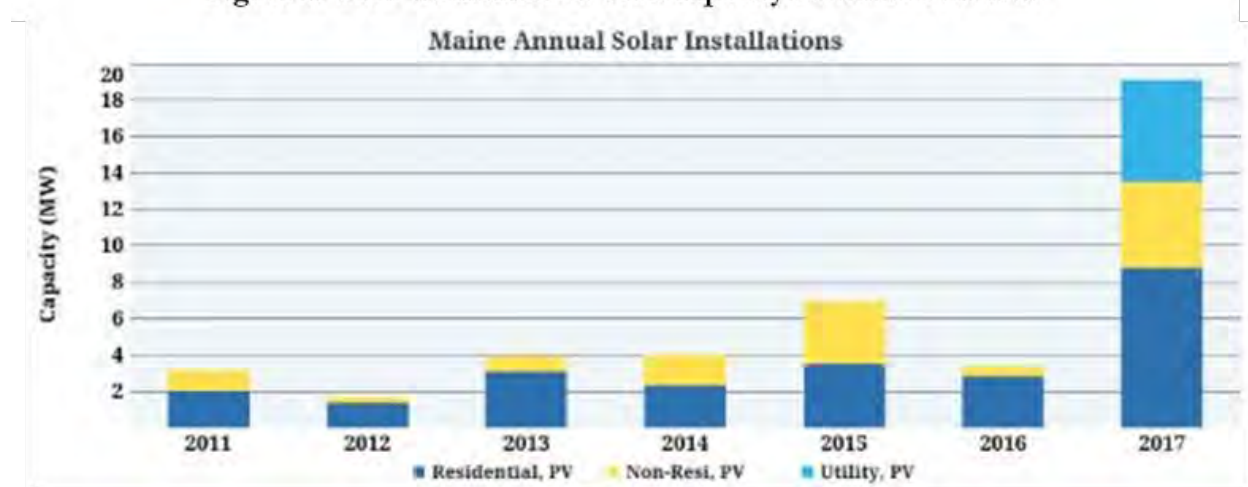
⁴⁹ "It's time to plan for solar panel recycling in the United States," April 2018, Solar Power World.

⁵⁰ *End-of-life management: Solar photovoltaic panels*. IEA-PVPS Report Number: T12-06:2016

cadmium telluride (CdTe).⁵¹ Heavy metals in solar panels including lead, tin, and cadmium can pollute the environment and pose threats to human health when panels are not properly managed.⁵² Landfill disposal poses risks as the panels may break and leach toxics into the soil.⁵³ A recent PV life cycle analysis noted that decommissioning plans for solar sites are meant to include information on safe disposal for all materials, but plans "often don't specify what to do or how to do it."⁵⁴

Solar panels have an average lifetime of 25-30 years.⁵⁵ Recycling of solar panels "was not a concern during their first 25 years of development," but early installations are now entering the waste stream in "considerable numbers."⁵⁶ Research modeling projects solar panel waste in the US may increase to between 170,000 to 1 million metric tons cumulatively by 2030 and to between "7.5-10 million tons in 2050."⁵⁷ The overall proportion of waste to new installations is expected to increase over time from an estimated 4-14% in 2030 and up to more than 80% in 2050.⁵⁸

Figure 5: New installation of solar capacity in Maine over time



Currently, there are approximately 4,268 solar installations powering 6,568 homes in Maine.⁵⁹ Prices for solar installation have decreased by an estimated 43% over the last five years in Maine, and the number of installations increased sharply in 2017.⁶⁰ Solar panel-specific treatment standards and collection and recycling regulations are "crucial to consistently, efficiently and profitably deal with increasing waste volumes."⁶¹ Given the lack of any solar panel-specific recycling program in Maine, municipalities are likely to face an increasing financial burden as solar panel waste increases. In the

⁵¹ *Ibid.*

⁵² Xu, Y., Li, J., Tan, Q., Peters, A. and Yang, C. (2018). Global status of recycling waste solar panels: A review. *Waste Management*, 75, pp.450-458.

⁵³ *Ibid.*

⁵⁴ Enbar, N. *PV life cycle analysis: Managing PV assets over an uncertain lifetime*. Electronic Power Research Institute, 2016

⁵⁵ Solar Energy Industry Association, *PV Recycling*: <https://www.seia.org/initiatives/pv-recycling>

⁵⁶ *End-of-life management: Solar photovoltaic panels*. IEA-PVPS Report Number: T12-06:2016

⁵⁷ *Ibid.*

⁵⁸ *Ibid.*

⁵⁹ Installations and table from "Maine solar data current through Q3 2018," Solar Energy Industries Association, 2018.

⁶⁰ Installations and table from "Maine solar data current through Q3 2018," Solar Energy Industries Association, 2018.

⁶¹ *End-of-life management: Solar photovoltaic panels*. IEA-PVPS Report Number: T12-06:2016

US, the State of Washington has passed EPR legislation for solar panels. The legislation, passed in 2017, requires manufacturers to "finance the takeback and recycling system at no cost to the owner of the PV module" by 2021.⁶² The law requires that the manufacturers' plan includes performance goals for "combined reuse and recycling of collected photovoltaic modules as a percentage of the total weight of photovoltaic modules collected, which rate must be no less than eighty-five percent."⁶³ The regulation was part of a larger solar incentives package and is expected to generate new jobs and businesses in solar panel recycling. New York's Legislature is currently considering a solar panel EPR bill.⁶⁴

Proactively establishing EPR for solar panels will allow companies to internalize recovery costs into current production and sales. In addition, the increasing volume of PV waste may improve economies of scale over time.⁶⁵ Including incentives for design can also help minimize impacts on the environment and increase efficient use of resources for production, collection, and recycling.

V. Implementation status for Maine's other EPR programs

A. *Electronic waste - 38 M.R.S. § 1610*

This law was amended by Maine's 128th Legislature to increase efficiency by reducing brand-sorting. These amendments required changes to the Department's rule governing electronics recycling; law and rule changes went into effect in August.

Because of these changes:

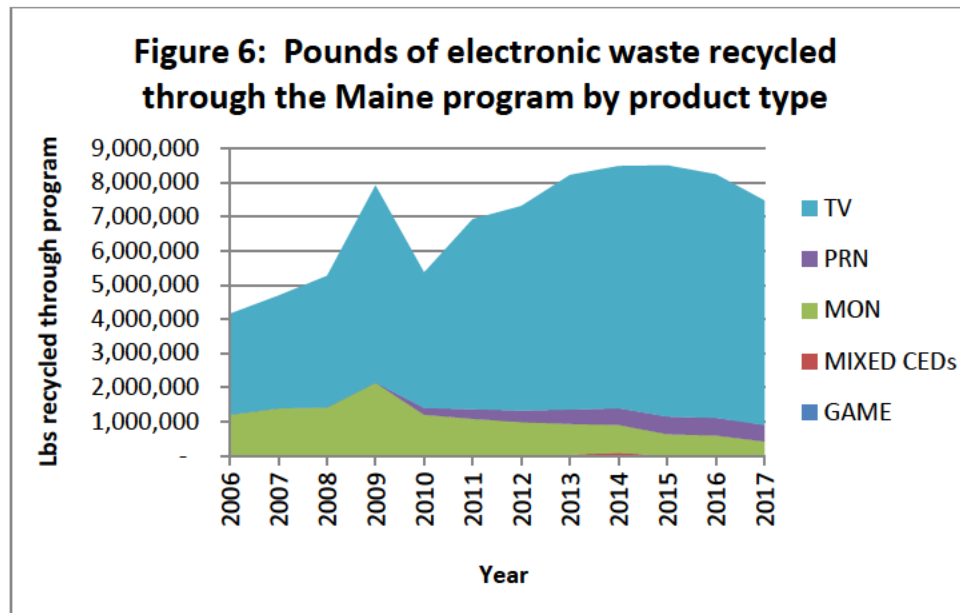
- historic manufacturers no longer register with the Department and are no longer billed for recycling costs;
- all recycling costs are distributed among current manufacturers according to a department determined recycling share that is based on national market share and adjusted to exempt small manufacturers and provide credit to manufacturers with environmentally preferable products and takeback programs;
- program payment structure no longer discourages refurbishment; and
- 3D printers have been added as covered products.

⁶² *Information for manufacturers of PV modules* Department of Ecology, State of Washington.

⁶³ Chapter 70.355 RCW, *Photovoltaic Module Stewardship and Takeback Program*, Washington State Legislature

⁶⁴ *Senate Bill S2837A*, The New York State Senate.

⁶⁵ *End-of-life management: Solar photovoltaic panels*. IEA-PVPS Report Number: T12-06:2016



The question of appropriate product scope was also discussed during the legislative work session and was largely unaddressed by the change. Another change that was not made, though it was suggested by program consolidators during both the legislative work session and department rulemaking, was the increase or removal of the per pound cap of recycling costs that can be approved by the Department.

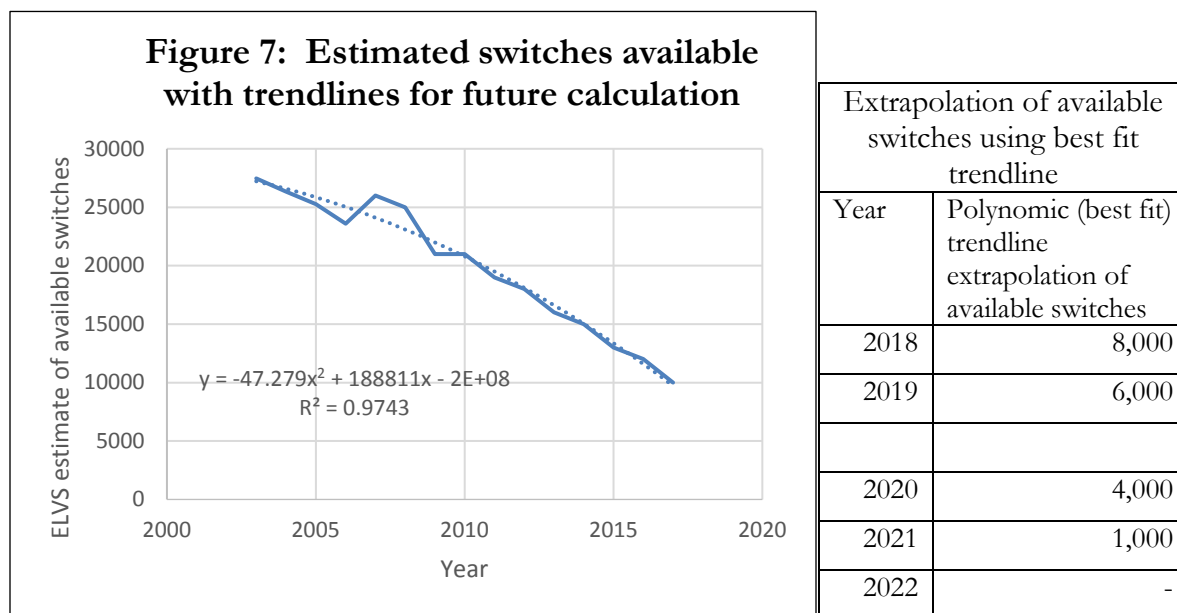
The department is undertaking an evaluation of the effectiveness of credits feeding into recycling share calculations and payments to consolidators for refurbishment, and gathering information on appropriate product scope and the sufficiency of the per pound cap on recycling payments set by department rule. Overall, e-waste collections continue to level off, likely due to light-weighting in the electronics industry.

B. Mercury auto switches – [38 M.R.S. § 1665-A](#)

There were no major changes in the implementation of this law in 2018. This program has been in place since 2003, so Department work mainly consists of telephone contact with previous participants to remind them of the need to collect switches and ensure they have materials and information they need to do so. Some work is still done to identify new participants using DMV Car Recycler records.

During 2017, Maine auto-recyclers collected 4448 switches containing approximately 9.8 pounds of mercury. This represents 44% of switches estimated to be available for collection and a more than 200% increase from 2016 collections.

The subsection of Chapter 16-B *Mercury-added products and services* that created this stewardship program also banned the sale of new vehicles with mercury-auto switches. As a result, the number of a switches available for collection is decreasing. Statute directs the department to recommend repeal of the program once the commissioner determines that the number of mercury switches available for collection is too small to warrant continued collection. The department is not recommending this action at this point.



End of Life Vehicle Solutions (ELVS), the non-profit entity that runs mercury auto-switch collection programs for auto manufacturers nationally, currently plans to end collection in states where switches are collected voluntarily in 2021. There are no available estimates of the number of switches available for recycling after 2017, but extrapolation of the estimates of switches available for collection in Maine from previous years suggest that after 2021, the number of available switches will be negligible. Actual collection amounts and information from automobile recyclers in the coming years can better inform the decision of when Maine's law should sunset but, barring the development of additional information to the contrary, 2021 may be the year.

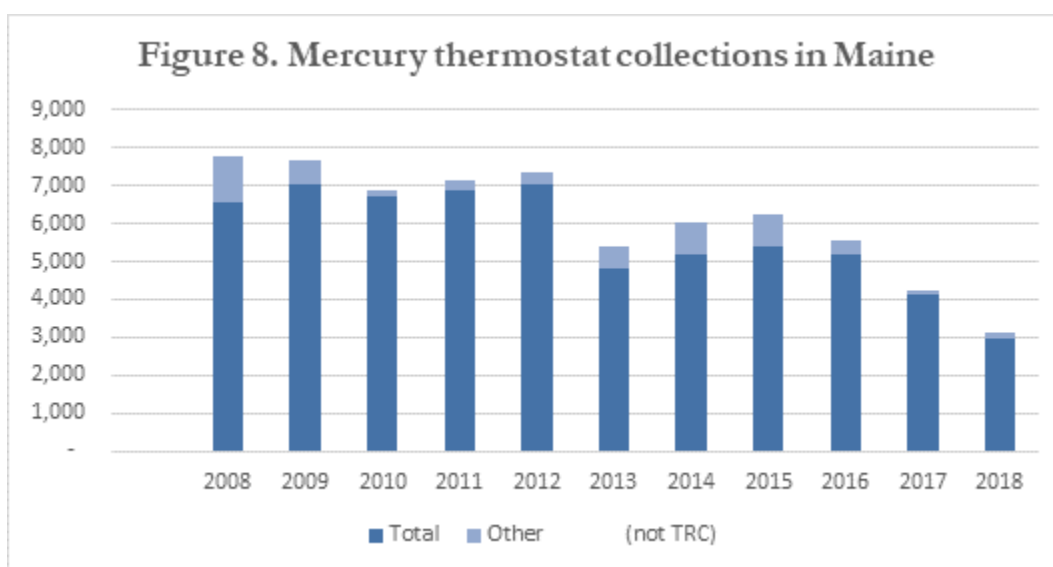
C. *Mercury thermostats* - [38 M.R.S. § 1665-B](#)

Program description: Maine's *Mercury-added Thermostats* law, 38 M.R.S. § 1665-B, enacted in 2005, established extended producer responsibility for the collection and recycling of mercury-added thermostats, and beginning in 2007 required a five-dollar (\$5.00) incentive payment for each mercury thermostat returned.

Current performance: A total of 4,112 mercury thermostats were collected in 2017 (by TRC and through universal waste management), down from 5,190 in 2016 (3,973 by TRC and 139 through universal waste management). Preliminary data suggests TRC collections dropped to just under

3,000 mercury thermostats in 2018⁶⁶. Since 2001, approximately 534 pounds of mercury has been recovered through thermostat recycling efforts in Maine, 86% of which was recovered through TRC's program.⁶⁷

As was recommended in the *Implementing Product Stewardship in Maine* report submitted to the Legislature in February 2016, TRC simplified the manufacturers' financial incentive payment system for wholesaler and contractor locations. This new process was implemented throughout 2016 and 2017, and has received many positive comments from collection locations. Subsequent to the Department's 2016 report, TRC also made significant improvements to data access with a real-time reporting system that provides public access to TRC's current and historic mercury thermostat recycling data. TRC has been waiving its standard one-time \$25 fee for a mercury thermostat bin to encourage participation, and has provided the Department with new promotional materials focused on the \$5 incentive to distribute. In addition, TRC has conducted an annual round of site visits to 35-45 Maine collection locations that had not returned their mercury thermostat bin within the past year.



From 2007-2016, collections averaged roughly 5,200 thermostats per year, consistently at least 40% higher than rates achieved before the \$5 incentive was implemented. However, collections declined over the past two years; by 18% in 2017 and by 25% in 2018⁶⁸.

TRC conducted national and regional advertising campaigns 2017, but campaign efforts that may have reached Maine residents did not contain information about Maine's program and the \$5 incentive. However, TRC is currently ramping up its Maine-specific efforts and has been working with the Department to improve its education and outreach campaign in Maine. Statute requires that TRC provide an "analysis of program effectiveness" in its annual report. TRC provides a record

⁶⁶ Preliminary 2018 data is based on TRC's real-time reporting as of 12/28/2018.

⁶⁷ Department staff recently reviewed all historic data provided by TRC. An average of 3.18 grams of mercury per thermostat was found and used in calculations for this year's report. In previous reports, an estimate of 4 grams per thermostat was used to calculate the total amount of mercury collected.

⁶⁸ Preliminary 2018 data is based on TRC's real-time reporting as of 12/28/2018.

of year-to-year collections in Maine and nationwide as well as comparisons between state collections. These numbers do not account for the estimated number of thermostats available for collection, nor do they compare annual collections to the statutory performance goal of 160 pounds of mercury per year (equivalent to roughly 22,822 thermostats). TRC reported in 2017 that declines in mercury thermostat collections can be explained by the fact that production was phased out by 2007. However, mercury thermostats have a life expectancy of 30-50 years, although increasing options for energy-saving thermostats may result in early replacement.

The data show that millions of mercury thermostats were still being sold annually until the mid-2000s. In 2017, TRC reported collections of approximately 2.1 million mercury thermostats in its 20 years of operation, equivalent to 0.00002% of the mercury contained in thermostats sold in just the selective six years shown in the table below, which represent the time period during which mercury thermostats were phased out and sales were dwindling. It is unknown how many mercury thermostats have been collected through other programs or remain in use.

Without data upon which to base the claim that collections are dropping due to lack of available mercury thermostats, TRC and the Department do not have adequate information to assess the program's performance. The Department continues to recommend that TRC contract an independent third-party study to determine the expected annual outflow of mercury-added thermostats from Maine. The results of such a study would allow the Department to achieve a more accurate quantitative evaluation of program performance and better target efforts to improve collection rates, and could serve as a basis for adjusting statutory goals as appropriate.

Figure 9 - Total mercury sold in thermostats (pounds)⁶⁹

Year	Pounds mercury	Estimated thermostats
2001	29,253	4,172,659
2004	28,901	4,122,449
2007	7,485	1,067,663
2010	32	4,564
2013	102	14,549
2016	0	0

D. Architectural paint. 38 M.R.S. § 2144

Program description: PaintCare is a non-profit third-party organization established by the paint manufacturers to fulfill their responsibilities under EPR laws in effect in 8 states and the District of Columbia. The costs of operating the PaintCare program are funded by a fee levied at the point of sale on paint.

Consumers may return unwanted architectural paint at no cost to participating retail and municipal collection sites, and to municipally-offered household hazardous waste (HHW) collection events that partner with PaintCare. PaintCare provides the collection sites with gaylords (boxes that are approximately one cubic yard in size) for collection and shipping of the paint, in-person training and a training manual, and education and outreach materials for customers. In addition, PaintCare's Program Manager visits each collection location throughout the state at least once annually.

⁶⁹ Table data is based on fact sheet: IMERC Mercury Use in Thermostats, 2015.

Current performance: PaintCare reports on a fiscal year (July 1 – June 30) basis. In FY 2018 (July 1, 2017 – June 30, 2018), PaintCare collected and processed 129,907 gallons of postconsumer paint, 76% of which was latex and 24% of which was oil-based. The program had a recycling rate of approximately 59% in 2017, an increase over the 2016 recycling rate of 50%.⁷⁰ 90% of the oil-based paint was used as fuel and 10% was recycled into new paint; the percentages of oil-based paint recycled was slightly higher than in the previous reporting period. 83% of the collected latex was made into recycle-content paint and 1% was used as fuel; 16% was unrecyclable and sent to landfills for disposal. These percentages were unchanged from the previous reporting period. In addition, 105 tons of consumer packaging, i.e., metal and plastic containers, were recycled.

PaintCare's analysis shows that its collection network provides a permanent collection site within 15 miles of 94.2% of Maine's population, exceeding the 90% goal set in statute. The current fees at sale are adequate to fund the program going forward in 2018, PaintCare established a separate subsidiary to operate the Maine program, keeping all funds collected in Maine for Maine program activity only.

In FY 2018, PaintCare reached out to housing authorities in Maine, ran Facebook online advertisements, conducted a print newspaper advertisement campaign, and provided pamphlets, posters, brochures, and other materials for collection sites. This advertising effort was noted to be limited due to budget constraints as PaintCare sought to make up costs incurred prior to program implementation. The program ended the fiscal year with a surplus of \$270,717, and PaintCare has indicated that it will employ a variety of media activities to grow public awareness of the program, including television, radio, online and newspaper advertising, as program's financial health improves.

E. Plastic bags. [38 M.R.S. § 1605](#)

Maine's "Plastic bags; recycling" law requires retailers that use plastic bags to have a receptacle within 20 feet of their store entrance to collect used plastic bags and to ensure the bags are collected. Rates of compliance with this "self-implementing" law are unknown. The Department does not have the resources to inspect retailers to assess compliance, but does provide technical assistance when complaints are received.

VI. Conclusion

Over the past 2 decades Maine and other jurisdictions in the U.S. and Canada have gained significant experience implementing mandatory product stewardship programs. In this report, the Department has applied lessons learned from this experience to recommend amendments to Maine's current laws to improve the effectiveness of existing programs in ensuring the safe handling of products containing toxics and in diverting materials from disposal. These "lessons learned" also can be used to inform discussions as Maine develops legislative proposals for new EPR programs. Given recent upheavals in recycling markets, an EPR program for packaging can help address the financial burden that municipalities bear in fulfilling their responsibilities for managing MSW while ensuring materials continue to be recycled. Additionally, pharmaceuticals, mattresses, carpet and solar panels are other products that present end-of-life management challenges that may be addressed by carefully-constructed EPR programs.

⁷⁰ Based on the estimate that approximately 10% of paint sold each year is left over.

Appendices

*Appendix A – Proposed changes to Maine’s Product Stewardship law***An Act to Improve Maine’s Product Stewardship Law**

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

Sec. 1. 38 M.R.S. §1776, is amended to read:

A product stewardship program established for a product or product category designated by the Legislature for inclusion in a product stewardship program must be established and implemented in accordance with the provisions of this section.

1. Program. A producer selling a product in the State that is a designated product or that is in a designated product category is responsible individually, collectively or through a stewardship organization for the implementation and financing of a product stewardship program to manage the product at the end of the product's life in accordance with the priorities in section 2101.

A. The program must include a collection system that is convenient and adequate to serve the needs of covered entities in both rural and urban areas, including a permanent collection site within 15 miles of 90% of Maine residents within 1 year of the start of product collections unless the commissioner determines the 90% requirement is not practicable due to geographical constraints or that an alternative collection system will result in equivalent and more efficient collection.

B. The program must provide for effective education and outreach to promote the use of the program and to ensure that collection options are understood by covered entities.

C. A producer or stewardship organization, including a producer's or stewardship organization's officers, members, employees and agents that organize a product stewardship program under this chapter, is immune from liability for the producer's or stewardship organization's conduct under state laws relating to antitrust, restraint of trade, unfair trade practices and other regulation of trade or commerce only to the extent necessary to plan and implement the producer's or stewardship organization's chosen organized collection or recycling system.

D. The program must provide for a minimum ½-time employee of each producer or stewardship organization dedicated to implementing the program in Maine.

2. Requirement for sale. One hundred eighty days after a product stewardship plan under subsection 5 is approved in accordance with subsection 8, a producer may not sell or offer for sale in the State the relevant product, unless the producer of the product participates individually, collectively or through a product stewardship program in accordance with an approved product stewardship plan.

3. No fee. A product stewardship program may not charge a fee at the time an unwanted product is delivered or collected for recycling or disposal.

4. Costs. Producers in a product stewardship program shall finance the collection, transportation, ~~and~~ reuse, recycling or disposition of the relevant product, effective education and outreach, program assessment, reporting, any incentives necessary to achieve program collection goals, reasonable fees to the department for review of the program plan and any proposed amendments, and an annual fee to cover the actual costs for annual report review, oversight, administration and enforcement. The annual fee may not exceed \$100,000 per year per stewardship program.

5. Requirement to submit a plan. Within one year of a product's or product category's being designated for inclusion in a product stewardship program, the relevant producer or stewardship organization shall submit a product stewardship plan to the department for approval. The plan must include:

A. Identification and contact information for:

(1) The individual or entity submitting the plan;

- (2) All producers participating in the product stewardship program;
- (3) The owners of the brands covered by the program; and
- (4) If using a stewardship organization, the stewardship organization, including a description of the organization and the tasks to be performed by the organization. The description must include information on how the organization is organized, including administration of the organization and management of the organization;

B. A description of the collection system, including:

- (1) The types of sites or other collection services to be used;
- (2) How all products covered under the product stewardship program will be collected in all counties of the State; and
- (3) How the collection system will be convenient and adequate to serve the needs of all entities;

C. The names and locations of recyclers, processors and disposal facilities that may be used by the product stewardship program;

D. Information on how the product and product components will be safely and securely transported, tracked and handled from collection through final disposition;

E. ~~If possible, a~~ A description of the methods to be used to reuse, deconstruct ~~or~~ and recycle the unwanted product to ensure that the product components are transformed or remanufactured to the extent feasible;

F. A description of how the convenience and adequacy of the collection system will be monitored and maintained;

G. A description of how the amount of product and product components collected, recycled, processed, reused and disposed of will be measured;

H. A description of the education and outreach methods that will be used to recruit, train and monitor collection sites, and to encourage participation by collection sites and consumers throughout the state on an on-going basis;

I. A description of how education and outreach methods will be evaluated, including at a minimum an annual consumer awareness survey to assess consumer knowledge about product management options and collection locations. The survey questions and methodology must be approved by the Department and the survey must be administered by a third party;

J. ~~Any~~ A description of how program performance will be assessed, including performance goals ~~established by producers or a stewardship organization~~ to show success of the program. When the performance goal is expressed as a recycling or diversion from disposal rate, the plan must include a description of the methodology and the relevant historic sales data used to develop the rate. The department shall keep sales information submitted pursuant to this paragraph confidential as provided under section 1310-B. The performance goals must include at least 50% of Maine residents having awareness in the third year of program implementation, or a recycling rate of at least 50% in the third year of program implementation and 80% in the sixth year of program implementation unless sufficient evidence is provided to justify alternative performance goals; and

K. A description of how the program will be financed. If the program is financed by a per unit assessment paid by the ~~producer to a stewardship organization~~ consumer at the point of sale, a plan for an annual 3rd-party audit to ensure revenue from the assessment does not exceed the cost of implementing the product stewardship program must be included, and

L. An anticipated budget for the program, broken down into administrative, collection, transportation, disposition, and communication costs. The annual budget must be sufficient to fund a minimum 1/2-time employee of each producer or stewardship organization dedicated to implementing the program in Maine, and funds to reimburse the department for its costs incurred in implementing the program. The budget must not include costs for legal fees or costs related to legislative efforts.

6. Plan amendments. Changes to an approved product stewardship plan may be initiated by the responsible manufacturers or by the department.

A. A change to an approved product stewardship plan by a manufacturer must be submitted to the department for review prior to the implementation of that change. If a change is not substantive, such as the addition of or a change to collection locations, or if an additional producer joins the product stewardship program, approval is not needed, but the producer or stewardship organization operating the program must inform the department of the change within 14 days of implementing the change. The department shall review plan amendments in accordance with subsection 8.

B. When the department determines that a product stewardship program has failed to make adequate progress toward achieving program goals, the department shall notify the responsible entities in writing of its findings and may direct the manufacturer to implement specific changes to the program plan within 6 months of the written notification. This may include the implementation of financial incentives or a deposit/refund system if appropriate for the product.

7. Annual reporting. By ~~February~~ March 1st of the calendar year after the calendar year in which an approved product stewardship program is implemented, and annually thereafter, the producer or stewardship organization operating the program shall submit to the department a report on the program for the previous calendar year. The report must include, at a minimum:

- A. The amount of each product collected by collection site per county;
- B. A description of the methods used to collect, transport and process the product;
- C. An evaluation of the program performance, including, if possible, diversion and recycling rates together with certificates of recycling or similar confirmations and an evaluation of the convenience of collection;
- D. A description of the methods used for education and outreach efforts ~~and an evaluation of the convenience of collection~~ and the effectiveness of outreach and education. Every 2 years, the report must include the results of an assessment of the methods used for and effectiveness of education and outreach efforts. The assessment must be completed by a 3rd party;
- E. If applicable, the report of the 3rd-party audit conducted to ensure that revenue collected from the assessment does not exceed implementation costs pursuant to subsection 5, paragraph K; ~~and~~
- F. Any recommendations for changes to the product stewardship program to improve convenience of collection, consumer education and program evaluation; and
- G. A financial report on the program, including: the total cost of implementing the program, as determined by an independent financial audit, including a breakdown of administrative, collection, transportation, disposition and communication costs; and an anticipated budget for the next program year.

8. Department review and approval. Within ~~20 business~~ 120 days after receipt of a proposed product stewardship plan, the department shall determine whether the plan complies with ~~subsection 5~~ this section. If the plan is approved, the department shall notify the submitter in writing. If the department rejects the plan, the department shall notify the submitter in writing stating the reason for rejecting the plan. ~~A submitter whose plan is rejected must submit a revised plan to the department within 60 days of receiving a notice of rejection.~~

Appendix B – Proposed changes to Maine’s Mercury-added Lamp law

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

Sec. 1. 38 M.R.S. §1672, is amended to read:

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

...

E. Covered entity. "Covered entity" means a household in this State, a business or nonprofit organization in this State exempt from taxation under the United States Internal Revenue Code of 1986, Section 501(c)(3) that employs 100 or fewer individuals, an elementary school in this State or a secondary school in this State.

F. Proprietary information. "Proprietary information" means information that is a trade secret or production, commercial or financial information the disclosure of which would impair the competitive position of the submitter and which is not otherwise publicly available.

G. "Population center" means an urbanized area or urban cluster as defined by the United States Department of Commerce, Bureau of the Census to identify areas of high population density and urban land use with a population of 2,500 or greater.

Sec. 2. 38 M.R.S. §1672, is amended to read:

4. Manufacturer recycling programs for household mercury-added lamps. Effective January 1, 2011, each manufacturer of mercury-added lamps sold or distributed for household use by covered entities in the State on or after January 1, 2001 shall individually or collectively implement a department-approved program for the recycling of mercury-added lamps from ~~households~~ covered entities.

A. The recycling program required under this subsection must include, but is not limited to, the following:

(1) Convenient collection locations adequate to serve the needs of covered entities in both rural and urban areas located throughout the State where ~~residents~~ covered entities can drop off their ~~household~~ mercury-added lamps without cost, including but not limited to municipal collection sites and participating retail establishments;

(a) A method to determine the number and geographic distribution of lamp collection sites based on the use of geographic information modeling. By January 1, 2020 the program must provide that at least 90% of state residents have a permanent lamp collection site within a 15-mile radius of their residences, unless the commissioner determines that the 90% requirement is not practicable due to geographical constraints. If the commissioner determines the 90% requirement is not practicable, the commissioner may approve a plan that includes a geographic distribution of lamp collection sites that is practicable. The distribution of lamp collection sites must include at least one additional lamp collection site for each 30,000 residents in a population center that is located to provide convenient and reasonably equitable access for residents within the population center unless otherwise approved by the commissioner;

(b) Identification of the ways in which the program will coordinate with existing solid waste collection programs and events, including strategies to reach the State's residents who do not have a permanent lamp collection site within a 15-mile radius of their residences and to ensure adequate coverage of service center communities as defined in Title 30-A, section 4301, subsection 14-A;

(2) Handling and recycling equipment and practices in compliance with the universal waste rules adopted pursuant to section 1319-O, subsection 1, paragraph F, with subsection 6 if a crushing device is used and with all other applicable requirements;

(3) Provision of education and outreach efforts by the manufacturer to promote the program. The education and outreach efforts must include strategies for reaching consumers in all areas of the State and must ensure that collection options are understood by covered entities;

Effective The education and outreach program, including, but not limited to, shall, at a minimum, include posters, window clings, and point-of-purchase signs and other materials provided to retail establishments collection locations without cost; and that can be prominently displayed and will be easily visible to the consumer, and outreach to the general public including annual web, print, and radio media campaigns in both rural and urban areas throughout the State.

(4) Goals for consumer awareness of the requirement to recycle mercury-added lamps and lamp collection locations, provisions for routinely evaluating the effectiveness of education and outreach efforts; and procedures for improving education and outreach efforts if goals are not achieved;

(5) A minimum ½-time employee of one or more manufacturers dedicated to implementing the program in Maine; and

(4) (6) An annual report to the department which must, at a minimum, include the following information:

(a) ~~on~~ The number of mercury-added lamps recycled under the manufacturer's program and recommendations for program modifications to increase the percentage of discarded lamps recycled under the recycling program;

(b) ~~t~~ The estimated percentage of mercury-added lamps available for recycling that were recycled under the program;

(c) ~~and~~ The methodology for estimating the number of mercury-added lamps available for recycling, which must include an assumption of the average life span by type of mercury-added lamp and number of lamps sold by type in the years on which the recycling calculation is based. If the manufacturer may designate this as proprietary information, the department shall handle this information in the same manner as confidential information is handled under section 1310-B ;

(d) A description of the methods used for education and outreach efforts and an evaluation of the effectiveness of the recycling program, recommendations for increasing the number of lamps recycled under the recycling program education and outreach. This must include a description of the methods used for measuring consumer awareness of the requirement to recycle mercury-added lamps, and every 2 years the results of an assessment of consumer awareness of the program completed by an independent third party;

(e) The location of and contact information for each collection point established under the program, and an assessment of the convenience of collection;

(f) Any recommendations for changes to the product stewardship program to improve convenience of collection, consumer education and program evaluation; and

(g) ~~a~~ An accounting of the costs associated with administering and implementing the recycling program;

...

F. The department may determine that a manufacturer's recycling program is in compliance with paragraph A, subparagraphs (1), (2) and (4) for the collection of compact fluorescent mercury added lamps from households covered entities if the manufacturer provides adequate financial support for the collection and recycling of such lamps to municipalities and a conservation program established pursuant to Title 35 A, section 10110 and implemented by the Efficiency Maine Trust.

*Appendix C – Proposed replacement for Maine’s rechargeable battery recycling law***An Act to Establish Comprehensive Consumer Battery Recycling**

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

Sec. 1. 38 MRSA §1611 is enacted to read:

§ 1611. Stewardship program for small batteries

1. Purpose. It is the intent of the legislature that the cost associated with the handling, recycling, and disposal of used batteries be the responsibility of the producers and consumers of batteries, not the local government or their service providers, state government, or tax payers. These costs should be internalized at or before the point of sale.

Further, it is the intent of the legislature that materials in batteries be made available for use in new products and, therefore, that they should be recycled to the greatest extent possible. Battery stewardship in this state should incentivize the design and marketing of batteries and battery-containing products that are more recyclable, less hazardous, and, in general, more environmentally sound.

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

A. "Approved product" means:

(1) A covered battery or a covered battery-containing product the producer of which participates in a battery stewardship program approved by the department; or

(2) A covered battery-containing product that has been listed in accordance with subsection 9 as the product of a participant in a covered battery stewardship program.

B. "Battery stewardship plan" means a plan submitted to the commissioner in accordance with subsection 3 by a producer or a battery stewardship organization.

C. "Battery stewardship program" means a system implemented for the collection, transportation, recycling, and disposal of covered batteries and/or covered battery-containing products in accordance with a battery stewardship plan approved by the Department.

D. "Brand" means a trademark, including both a registered and an unregistered trademark, a logo, a name, a symbol, a word, an identifier or a traceable mark that identifies a covered battery or covered battery-containing product and identifies as the producer of the battery or product the owner or licensee of the brand.

E. "Covered battery" means a new or unused primary battery or a small rechargeable battery.

F. "Covered battery-containing product" means a new or unused primary battery-containing product or a rechargeable battery-containing product, or a product containing a covered battery that is not easily removed from the product using common household tools.

(1) a product subject to section 1610 from which a primary battery or a rechargeable battery is not easily removed or is not intended or designed to be removed from the product other than by the manufacturer;

(2) a medical device, as described in the Federal Food, Drug and Cosmetic Act, 21 United States Code, Section 321(h) (2012), if, when the device or battery within the device is discarded, it must be treated as biomedical waste or if changing the supplier of the battery contained in the medical device would trigger the need for premarket review of the device with the United States Food and Drug Administration pursuant to the Federal Food, Drug and Cosmetic Act, 21 United States Code, Section 360 (2012), unless such device is listed as an exempt device under 21 United States Code, Section 360 (m)(2012) or other applicable provisions of law.

G. "Discarded battery" means a covered battery that a user discarded, abandoned or sent for recycling.

H. "Operator" means a producer or covered battery stewardship organization that implements and administers a covered battery stewardship program.

I. "Participant" means a producer that establishes or participates in a covered battery stewardship program individually or by appointing and having that appointment accepted by a covered battery stewardship organization to operate the program on the producer's behalf.

J. "Primary battery" means a nonrechargeable battery that weighs 2 kilograms or less, including, but not limited to, nonrechargeable alkaline, carbon-zinc and lithium metal batteries.

K. "Producer" means, with respect to a covered battery or covered battery-containing product that is sold, offered for sale or distributed for sale in the State, the following:

(1) The person that manufactures the covered battery or covered battery-containing product and sells or offers for sale in the State that battery or product under the person's own brand;

(2) If there is no person to which subparagraph (1) applies, the owner or licensee of a brand under which the covered battery or covered battery-containing product is sold or distributed in the State; or

(3) If there is no person to which subparagraph (1) or (2) applies, a person, including, but not limited to, a wholesaler or retailer, that imports the covered battery or covered battery-containing product into the United States for sale or distribution in the State.

L. "Proprietary information" means information that is a trade secret or production, commercial or financial information the disclosure of which would impair the competitive position of the submitter and would make available information not otherwise publicly available.

M. "Rechargeable battery" means a battery that contains one or more voltaic or galvanic cells, electrically connected to produce electric energy, that weighs less than 5 kilograms and that is designed to be recharged and to provide less than 40 volts direct current. "Rechargeable battery" does not include:

(1) A battery that contains electrolyte as a free liquid; or

(2) A battery or battery pack that employs lead-acid technology, unless the battery or battery pack is sealed, contains no liquid electrolyte and is intended by its manufacturer to power a handheld device or to provide uninterrupted backup electrical power protection for consumer covered battery-containing products or stationary office equipment.

N. "Recycling" means any process through which a discarded covered battery or its components or by-products is transformed from its original identity or form into new usable or marketable material. "Recycling" does not include the incineration of a discarded covered battery or its components or by-products for energy recovery.

O. "Retailer" means a person that sells or offers a covered battery or covered battery-containing product for retail sale, as defined in Title 36, section 1752, subsection 11, in the State, including through a remote offering

for sale, such as a sales outlet or sales catalog or via the Internet.

P. "Stewardship organization" means an organization appointed by more than one producer to design, submit a plan for, implement, and administer a battery stewardship program in accordance with this section.

Q. "Wholesaler" means a person that offers for sale or sells in the State a covered battery or covered battery-containing product in a sale that is not a retail sale, as defined in Title 36, section 1752, subsection 11, with the intention that the battery or product be resold.

2. Product labeling. By January 1, 2020, a producer that sells, offers for sale or distributes for sale in the State a covered battery, either as a replacement battery or packaged with or contained in a covered battery-containing product, shall, to the extent feasible, ensure that the covered battery is labeled in a manner identifying the chemistry employed in storing energy in the battery to facilitate sorting of discarded batteries by recyclers.

3. Submission of plan. No later than 6 months after the effective date of this section, except as specified in subsection 6 or 10, each producer of a covered battery or covered battery-containing product, individually or through a battery stewardship organization, shall submit a plan for the establishment of a battery stewardship program to the commissioner for approval. The plan must include, at a minimum and where applicable:

A. Identification and contact information for:

- (1) The individual or entity submitting the plan;
- (2) All producers participating in the battery stewardship program;
- (3) A listing of the brands and the owners of the brands covered by the program; and
- (4) If a stewardship organization, a description of the organization and the tasks to be performed by the organization. The description must include information on how the organization is organized, including administration and management of the organization;

B. A description of the collection system, including:

- (1) The types of sites or other collection services to be used, including as applicable a description of how the program may use covered battery collection points that are established through other battery collection services;
- (2) A description of how the program will provide convenient, free statewide collection opportunities for discarded batteries adequate to serve the needs of all entities;
- (3) The criteria to be used by the program in determining whether an entity may serve as a collection location for covered batteries under the program. The plan must allow all retailers, wholesalers, municipalities, solid waste management facilities and other entities that meet such criteria to voluntarily serve as a collection location; and
- (4) A description of how the convenience and adequacy of the collection system will be monitored and maintained;

C. Information on how discarded covered batteries will be safely and securely transported, tracked and handled from collection through final disposition;

D. The names and locations of recyclers, processors and disposal facilities that may be used by the product stewardship program, and a description of the methods that will be used to ensure that the components of the discarded batteries are recycled to the maximum extent practicable or otherwise responsibly managed;

E. A description of how the amount of product and product components collected, recycled, processed, reused and disposed of will be measured;

F. A description of the education and outreach methods that will be used to establish, train and monitor collection sites, and to encourage participation by collection sites and consumers throughout the state on an on-going basis;

G. A description of how program performance will be assessed, including performance goals that include, at a minimum, at least 50% of Maine residents knowing how to recycle their covered batteries in the third year of program implementation and 80% in the sixth year of program implementation;

H. An anticipated budget for the program, broken down into administrative, collection, transportation, disposition, and communication costs. The annual budget must fund a minimum ½-time person dedicated to implementing the program in Maine, and funds to reimburse the department for its costs incurred in implementing the program. The budget must not include costs for legal fees or costs related to legislative efforts.

I. If the plan is submitted by an organization, a description of the financing method through which implementation of the plan will be funded. The financing method must:

(1) Allocate to producers of primary batteries and primary battery-containing products costs that are directly attributable to the collection, transportation and recycling of primary batteries, such as reclamation costs;

(2) Allocate to producers of small rechargeable batteries and rechargeable battery-containing products costs that are directly attributable to the collection, transportation and recycling of rechargeable batteries, such as reclamation costs; and

(3) Allocate all other costs on the basis of the weights of types of batteries collected or some other nondiscriminatory basis acceptable to participating producers of primary batteries, small rechargeable batteries, primary battery-containing products and rechargeable battery-containing products.

4. Approval of plan. The commissioner shall review a plan submitted under subsection 3 and make a determination of whether to approve the plan within 90 days of receipt of the plan. In conducting a review of a submitted plan, the commissioner may consult with producers, associations representing producers, covered battery stewardship organizations, retailers and recyclers.

A. If the commissioner determines that a submitted plan fails to meet all applicable requirements of subsection 3, the commissioner shall provide to the producer or organization that submitted the plan a written notice of determination describing the reasons for rejecting the plan. No later than 45 days after receiving a written notice of determination from the commissioner rejecting a submitted plan, the producer or organization may amend the plan and resubmit the plan to the commissioner for reconsideration. The commissioner shall review an amended plan, make a determination of whether to approve the amended plan and provide a written notice of determination notifying the producer or organization of the commissioner's decision within 45 days of receipt of the amended plan. A producer or organization whose amended plan is rejected by the commissioner may appeal the commissioner's decision in accordance with section 346.

B. If the commissioner approves a submitted plan, the commissioner shall provide to the producer or organization that submitted the plan a written notice of determination of the plan's approval. No later than 30 days after receiving a written notice of determination from the commissioner approving a submitted plan, the producer or organization shall make the approved plan available on its publicly accessible website, but is not required to make available any information contained in the approved plan protected under the Uniform Trade Secrets Act.

C. No later than 45 days after the commissioner's approval of a submitted plan, the department shall make available on its publicly accessible website a list of participants in and brands of covered batteries and covered battery-containing products included under the approved plan or provide instructions on how to obtain such information as provided by the producer or organization that submitted the approved plan.

5. Implementation of plan. A producer or organization that submitted a plan approved by the commissioner under subsection 4 shall implement the plan no later than the first day of the next calendar quarter after the date the plan is approved by the commissioner, except that if the period of time between the date the plan is approved and the first day of the next calendar quarter is less than 60 days, the producer or organization shall implement the plan within 60 days after the date the plan is approved.

6. Amendment of plan and termination of program. This subsection governs amendment of a plan approved under subsection 4 and termination of a program established under an approved plan.

A. An approved plan under subsection 4 may be amended at the discretion of the producer or organization that submitted the plan without approval from the commissioner if the proposed amendments are non-substantive and do not significantly alter the likelihood that the plan will result in the successful collection and recycling of discarded batteries. The producer or organization shall at the beginning of each calendar quarter notify the department of any amendments made to the approved plan in the previous calendar quarter that are non-substantive and do not significantly alter the likelihood that the plan will result in the successful collection and recycling of discarded batteries.

B. If proposed amendments to an approved plan are substantive and would significantly alter the likelihood that the plan will result in the successful collection and recycling of discarded batteries, including, but not limited to, amendments eliminating a substantial number of retail collection locations, adding or deleting battery chemistries to be collected, addressing threats to the financial viability of the organization or addressing disruption in transportation or service affecting the ability of the producer or organization or any service providers to collect or process covered batteries or covered battery-containing products, the producer or organization shall submit to the commissioner a revised plan describing the proposed amendments. The commissioner shall review the revised plan and make a determination of whether to approve the proposed amendments, in whole or in part, within 90 days of receipt of the revised plan. If the commissioner determines that the revised plan fails to meet all applicable requirements of subsection 3, the commissioner shall provide to the producer or organization a written notice of determination describing the reasons for rejecting the revised plan. No later than 45 days after receiving a written notice of determination from the commissioner rejecting a revised plan, the producer or organization may amend and resubmit the revised plan to the commissioner for reconsideration. The commissioner shall review an amended revised plan, make a determination of whether to approve the amended revised plan and provide a written notice of determination notifying the producer or organization of the commissioner's decision within 45 days of receipt of the amended revised plan. Review and consideration by the commissioner of a revised plan under this paragraph, including whether the commissioner will hold a hearing on the revised plan, shall be conducted in accordance with the department's rules concerning the processing of applications and other administrative matters. A producer or organization whose revised plan is rejected by the commissioner may appeal the commissioner's decision in accordance with section 346.

C. A producer or organization that submitted a plan approved under subsection 4 may terminate the program implementing that plan no earlier than 90 days after providing notice to the commissioner and to program participants of the program's termination. Prior to the termination of a program, each producer included in the program shall, individually or through a covered battery stewardship organization that has agreed to act on the producer's behalf, submit a plan for the establishment of a covered battery stewardship program to the commissioner for approval consistent with subsection 3 or join an existing organization.

D. A plan approved under subsection 4 remains in effect until a revised plan is adopted in accordance with paragraph B or the program implementing that plan is terminated in accordance with paragraph C by the producer or organization that submitted the plan.

7. Collection locations. This subsection applies to collection locations.

A. A retailer, a wholesaler, a municipality, a solid waste management facility and any other private or public entity may voluntarily serve as a collection location for discarded batteries under an approved and implemented program, so long as the operator of the program determines that the collection location meets

the criteria for collection locations established under the program's approved plan.

B. The participants in a program must fully underwrite the costs of battery collection containers provided to each collection location established under the program, including the costs of all materials necessary to comply with the safe collection requirements of subsection 12, as well as the costs of pickup and transportation of discarded batteries from each collection location, and may not charge a collection location for such items or services.

C. An entity serving as a collection location shall not be required to make available more than one battery collection container at a single location.

D. An entity serving as a collection location may not refuse collection of batteries based on the brand or brands of the batteries. The operator of the program may not refuse the pickup or transfer of collected batteries from a collection location based on the brand or brands of the batteries collected.

E. An entity serving as a collection location may not charge consumers any fee relating to the collection of discarded batteries at the collection point. An entity serving as a collection location may not impose any fee on the operator of the program as a condition of voluntarily agreeing to serve as a collection location.

8. Sales prohibition. This subsection governs the sale of covered batteries and covered battery-containing products in the State.

A. Beginning July 1, 2020, a manufacturer, distributor, wholesaler or retailer may not sell, offer for sale, distribute for sale or offer for promotional purposes in the State a covered battery or covered battery-containing product unless the producer of the battery or product has joined an existing covered battery stewardship organization or submitted a plan for the establishment of a covered battery stewardship program that has been approved by the commissioner.

B. Notwithstanding paragraph A, a manufacturer, distributor, wholesaler or retailer may continue to sell, distribute for sale, offer for sale or offer for promotional purposes in the State a covered battery or covered battery-containing product manufactured prior to July 1, 2020, but shall:

(1) By October 1, 2020, sell or otherwise divest or dispose of its remaining stock of covered batteries manufactured prior to July 1, 2020 by a producer that has not joined an existing covered battery stewardship organization or submitted a plan for the establishment of a covered battery stewardship program that has been approved by the commissioner; and

(2) By October 1, 2021, sell or otherwise divest or dispose of its remaining stock of covered battery-containing products manufactured prior to July 1, 2020 by a producer that has not joined an existing covered battery stewardship organization or submitted a plan for the establishment of a covered battery stewardship program that has been approved by the commissioner.

C. Notwithstanding paragraphs A and B, beginning July 1, 2021, a manufacturer, distributor, wholesaler or retailer of medical devices, as described in the Federal Food, Drug and Cosmetic Act, 21 United States Code, Section 321(h) (2012), may not sell, offer for sale, distribute for sale or offer for promotional purposes in the State a medical device containing batteries not included in a plan approved under subsection 4, except that a manufacturer, distributor, wholesaler or retailer may continue to sell, distribute for sale, offer for sale or offer for promotional purposes in the State a medical device manufactured prior to July 1, 2021, but shall, by October 1, 2022, sell or otherwise divest or dispose of its remaining stock of medical devices containing batteries manufactured prior to July 1, 2021 by a producer that has not joined an existing covered battery stewardship organization or submitted a plan for the establishment of a covered battery stewardship program that has been approved by the commissioner. Notwithstanding subsection 1, paragraph L, prior to July 1, 2022, a manufacturer, distributor, wholesaler or retailer of medical devices shall not be considered a producer under this section.

D. Notwithstanding paragraphs A, B or C, a hospital or other health care provider may until July 1, 2027

continue to sell or otherwise exhaust its existing inventory of medical devices containing batteries manufactured prior to July 1, 2020 and not included in a plan approved under subsection 4.

9. Producer exclusions. Notwithstanding subsection 1, paragraph K, a person that manufactures, sells, offers for sale or imports for sale in the State a covered battery-containing product is not considered a producer under this section if, no later than 45 days after receiving a request from the commissioner or an operator, the person:

A. Verifies to the commissioner or the operator that the product only contains batteries with visible, permanent labels clearly identifying the producer or brand of the batteries, that the battery is easily removed and that the producer or brand is a participant in or covered under the operator's program; and

B. Identifies the chemistry type of the batteries contained in the product and provides data on the estimated weight of batteries contained in the products sold in the State. In January of each year thereafter, the person shall notify the commissioner or the operator as to any changes to the chemistry type of the batteries contained in the product or the estimated weights of batteries contained in the products sold in the State.

An operator of a covered battery stewardship program that includes the covered battery contained in the person's covered battery-containing product shall list the person as a participant in and the product as covered under the operator's program. If the producer of the covered battery contained in the person's covered battery-containing product subsequently terminates its participation in a covered battery stewardship program in the State, or if the person ceases to use covered batteries in its covered battery-containing product that are produced by a participant in or are covered under an existing covered battery stewardship program in the State, the person shall be considered a producer under subsection 1, paragraph L, and must join an existing covered battery stewardship organization or submit a plan for the establishment of a covered battery stewardship program and have that plan approved by the commissioner.

10. New producers. A producer who seeks to sell, offer for sale or distribute for promotional purposes in the State a covered battery or covered battery-containing product not sold or offered for sale in the State prior to July 1, 2020 must notify the commissioner prior to the sale, offer for sale or distribution of the covered battery or covered battery-containing product in the State.

A. Upon receiving notification under this subsection from a new producer, the commissioner shall list the producer as a new producer on the department's publicly accessible website.

B. No later than 90 days following a new producer's notification to the commissioner, the producer shall submit a plan to the commissioner in accordance with subsection 3 or join an existing organization operating under a plan approved under subsection 4.

C. If a new producer fails to submit a plan or join an existing organization within the 90-day period under paragraph B, the producer may not sell a covered battery or covered battery-containing product in the State after the expiration of the 90-day period and a retailer may not sell that producer's battery or product in the State after 120 days following the expiration of the 90-day period.

D. Notwithstanding paragraph C, if a new producer submits a plan within the 90-day period under paragraph B and that plan is ultimately rejected by the commissioner under subsection 4 after the expiration of the 90-day period, the producer may not sell the covered battery or covered battery-containing product in the State after 45 days following the commissioner's final determination rejecting the submitted plan and a retailer may not sell the producer's battery or product in the State after 120 days following the commissioner's final determination rejecting the submitted plan.

A new producer that fails to submit a plan that is approved by the commissioner under subsection 4 or to join an existing organization within the time limits described in this subsection may not sell, offer for sale or distribute for promotional purposes a covered battery or covered battery-containing product not sold or offered for sale in the State prior to July 1, 2020 until the producer submits a plan for approval consistent with subsection 3 that is subsequently

approved by the commissioner or joins an existing organization.

11. Return of noncompliant products. If a plan approved under subsection 4 is subsequently determined by the commissioner not to be in compliance with this section, a producer who sells, offers for sale or distributes for sale in the State a covered battery or covered battery-containing product included in that plan shall, upon request by a retailer, designate a location to which the retailer may ship the battery or product for further handling and shall reimburse the retailer for costs incurred in shipping the battery or product to the designated location.

12. Safe collection. Any entity that collects covered batteries in the State, has a physical presence in the State and is operating under or in cooperation with a covered battery stewardship program shall ensure that all discarded covered batteries placed in its collection containers are protected from short-circuiting in accordance with applicable regulations of the federal Department of Transportation, 49 Code of Federal Regulations, Subtitle B (2015) and other applicable laws or regulations and take reasonable steps to prevent the placement of materials other than properly protected discarded covered batteries into its collection containers.

13. Reporting. By March 1st of the calendar year after the calendar year in which an approved product stewardship program is implemented, and annually thereafter, the producer or stewardship organization operating the program shall submit to the department a report describing activities carried out by the program pursuant to the plan during the previous calendar year. The report must include, at a minimum:

- A. Updated contact information for the program operator and all participating producers, a list of the brands of covered batteries and covered battery containing devices for which it is responsible.
- B. The weight of covered batteries collected by the program in the previous calendar year, reported to the extent feasible by:
 - (1) amount by county or by collection site;
 - (2) amount of primary batteries and amount of rechargeable batteries by chemistry type; and
 - (3) amount of battery-containing products.
- C. The location of and contact information for each collection point established under the program, and an assessment of the convenience of collection;
- D. A description of the manner in which collected covered batteries and covered battery-containing products were sorted, consolidated and processed by the program;
- E. A description of the methods and materials used for education and outreach, and an evaluation of the effectiveness of education and outreach efforts. Every 2 years, the report must include the results of an assessment of consumer awareness of the program completed by an independent 3rd party;
- F. A financial report on the program, including: the total cost of implementing the program, as determined by an independent financial audit, including a breakdown of administrative, collection, transportation, disposition and communication costs; and an anticipated budget for the next program year; and
- G. Any recommendations for changes to the product stewardship program to improve convenience of collection, consumer education and program evaluation.

14. Proprietary information. Proprietary information submitted to the department in a covered battery stewardship plan, in an amendment to a plan or pursuant to the reporting requirements of this section that is identified by the submitter as proprietary information is confidential and must be handled by the department in the same manner as confidential information is handled under section 1310-B.

15. Administration and enforcement of program. The department shall enforce this section and may adopt rules consistent with this section as necessary for the purpose of implementing, administering and enforcing this section. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375,

subchapter 2-A.

A. The department shall charge a reasonable fee to be paid by an applicant for review and approval of a covered battery stewardship plan. Fees established under this paragraph must be based on the actual costs to the department of reviewing and approving a covered battery stewardship plan and may not exceed \$25,000.

B. The department may establish a reasonable annual fee, to be paid by the operator of each covered battery stewardship program, to cover the department's costs for annual report review, oversight, administration and enforcement of the program. Fees established under this paragraph must be based on the actual costs to the department of annual report review, oversight, administration and enforcement of the program and may not exceed \$50,000 per year.

16. Limited private right of action. Except as provided in paragraph D, a nonprofit covered battery stewardship organization recognized by the United States Internal Revenue Service as exempt from taxation under Section 501 of the United States Internal Revenue Code, as amended, that has spent at least \$250,000 transporting, collecting and recycling covered batteries in the State in the previous calendar year, may maintain a civil action in Superior Court against one or more producers not participating in the organization's program to recover a portion of the organization's costs and additional sums, as set forth in this subsection.

A. Damages recoverable under this subsection shall be a fair share of the actual costs incurred by the plaintiff organization in collecting covered batteries of a defendant producer discarded in the State for which the defendant producer was required under this section to submit and implement a covered battery stewardship plan or join an existing covered battery stewardship program, as well as the plaintiff organization's costs incurred in handling, transporting and recycling or properly disposing of such batteries. Additional amounts recoverable under this subsection shall include an award of reasonable attorney's fees and court costs, including expert witness fees, and, if a defendant producer did not operate or participate in a covered battery stewardship program established under this section during the time period in which covered batteries of the defendant producer were collected in the State, transported and recycled by the plaintiff organization, a punitive sum of 3 times the damages award shall be assessed.

B. In an action by a plaintiff organization against a defendant producer that did not operate or participate in a covered battery stewardship program established under this section during the time period in which covered batteries of the defendant producer were collected, transported and recycled by the plaintiff, the plaintiff may establish the defendant's fair share of the plaintiff's actual costs by:

(1) Providing the court with market share data that the court finds reasonably represents the percentage of sales by the defendant into the State;

(2) Providing the court with data generated from discarded battery sorts involving a minimum of 500 pounds of discarded covered batteries collected at each of 3 or more collection locations in the State that are found by the court to have been collected in an unbiased manner and to be reasonably representative of the population of the State; or

(3) Through any other method that the court finds reliable in establishing the defendant's fair share of the plaintiff's actual costs.

C. In an action by a plaintiff organization against a defendant producer that operated or participated in a covered battery stewardship program established under this section during the time period in which covered batteries of the defendant producer were collected, transported and recycled by the plaintiff, the plaintiff may establish the defendant's fair share of the plaintiff's actual costs by providing the court with data establishing the relative weight of discarded covered batteries collected by the plaintiff for which the defendant was required under this section to collect, transport and recycle under a covered battery stewardship program compared to the weight of other discarded covered batteries collected by the plaintiff. This data may be generated by the plaintiff:

(1) Through the collection of data from discarded battery sorts involving a minimum of 500 pounds of discarded covered batteries collected at each of 3 or more collection locations in the State that are found by the court to have been collected in an unbiased manner and to be reasonably representative of the population of the State;

(2) Through an analysis of actual collections by the organization that is found by the court to be reasonably representative of total actual collections in the State; or

(3) Through any other method that the court finds reliable in establishing the defendant's fair share of the plaintiff's actual costs.

D. An action may not be commenced under this subsection against any potential defendant until 60 days after a plaintiff provides to all potential defendants a written notice of the claim setting forth the amount of the claim and the basis for the calculation of that amount.

E. No action may be brought under this subsection against a retailer or franchisor of retail outlets that was operating or participating in a covered battery stewardship program established under this section, individually or on behalf of its franchisees, to recover costs or additional sums incurred during a time period in which covered batteries were collected, transported and recycled by the retailer or franchisor.

F. The department shall not be a party to or be required to provide assistance or otherwise participate in a civil action authorized under this subsection unless subject to a subpoena before a court of jurisdiction.

17. Preemption. The State intends to occupy and preempt the entire field of legislation concerning the regulation of the stewardship of covered batteries and covered battery-containing products. Any existing or future order, ordinance, rule or regulation in this field of any political subdivision of the State is void.

18. Antitrust exclusions. A producer, a group of producers and a covered battery stewardship organization, and an agent, officer, director and employee of such entities, preparing, submitting a plan for, implementing or administering a covered battery stewardship program in accordance with this section, and a wholesaler and retailer that engages in conduct authorized by this section, are granted immunity, individually and jointly, from all applicable antitrust laws of the State for the limited purpose of establishing, implementing and administering a covered battery stewardship program and otherwise complying with the requirements of this section, and any activity undertaken by these entities in accordance with and authorized under this section is not an unlawful restraint of trade, a conspiracy or other violation of any provision of any applicable antitrust law of the State.

An action taken by a producer, a group of producers or an organization to increase the recycling of covered batteries in accordance with this section that affects the types or quantities of batteries recycled or the cost and structure of any covered battery stewardship program is not a violation of any provision of Title 10, chapter 201, except when such action constitutes an agreement establishing or affecting the price of covered batteries or the output or production of covered batteries or restricting the geographic area in which covered batteries will be sold or the customers to whom covered batteries will be sold.

Sec. 2. 38 MRSA §2165 sub-4 is repealed: Repealed.

4. Manufacturer responsibility. ~~A manufacturer of dry cell mercuric oxide or rechargeable batteries that are subject to subsection 1 shall:~~

~~A. Establish and maintain a system for the proper collection, transportation and processing of waste dry cell mercuric oxide and rechargeable batteries for purchasers in this State;~~

~~B. Clearly inform each purchaser that intends to use these batteries of the prohibition on disposal of dry cell mercuric oxide and rechargeable batteries and of the available systems for proper collection, transportation and processing of these batteries;~~

~~C. Identify a collection system through which mercuric oxide and rechargeable batteries must be returned to the manufacturer or to a manufacturer designated collection site; and~~

~~D. Include the cost of proper collection, transportation and processing of the waste batteries in the sales transaction or agreement between the manufacturer and any purchaser.~~

*Appendix D – Proposed changes to Maine’s Bottle Bill law***An Act to Improve Maine’s Container Redemption Law**

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

Sec. 1. 38 MRSA § 352. Fees Table II is amended to read:

3109, Redemption centers	Annual Processing Fee	Annual Licensing Fee
	\$0	\$100

Sec. 2. 38 MRSA §3102 sub-13 is amended, and subs- 16-A and 17-A are enacted to read:

13. Manufacturer. "Manufacturer" means a person who ~~bottles, cans or otherwise places beverages in beverage containers for sale to distributors or dealers;~~ offers beverages for sale in or into Maine under its brand or label or licenses other entities to offer beverages for sale in or into Maine under its brand or label, or imports a beverage into the United States that is manufactured by a person without a presence in the United States; and an out-of-state wholesaler of liquor that holds a certificate of approval in accordance with Maine law under Title 28-A.

16-A. Pick-up agent. "Pick-up agent" means the initiator of deposit, distributor, or contracted agent that receives and transports redeemed beverage containers from licensed redemption centers to recycling.

17-A. Proprietary information. "Proprietary information" means information that is a trade secret or production, commercial or financial information the disclosure of which would impair the competitive position of the submitter and which is not otherwise publicly available.

Sec. 3. 38 MRSA §3105 sub-5 is amended to read:

5. Label registration. An initiator of deposit shall register the container label of any beverage offered for sale in the State on which it initiates a deposit. Registration must be on forms or in an electronic format provided by the department and must include the universal product code for each combination of beverage and container manufactured. The initiator of deposit shall renew a label registration annually and whenever that label is revised by altering the universal product code or whenever the container on which it appears is changed in size, composition or glass color. The initiator of deposit shall also include as part of the registration the method of collection for that type of container, identification of a collection agent, identification of all of the parties to a commingling agreement that applies to the container and proof of the collection agreement. The department may charge a fee for registration and registration renewals under this subsection. ~~Rules adopted pursuant to this subsection that establish fees are major substantive rules as defined in Title 5, chapter 375, subchapter 2 A and subject to review by the joint standing committee of the Legislature having jurisdiction over environmental and natural resources matters.~~

Sec. 4. 38 MRSA §3106 sub-5 is amended to read:

1. Dealer acceptance. Except as provided in this section, a dealer operating a retail space of 5000 square feet or more may not refuse to accept from any consumer or other person not a dealer any empty, unbroken and reasonably clean beverage container ~~of the kind, size and brand sold by the dealer,~~ or refuse to pay in cash the refund value of the returned beverage container as established by section 3103 unless that dealer has a written agreement with a local redemption center within 1 roadway mile to provide redemption services on behalf of that dealer. This section does not require an operator of a vending machine to maintain a person to accept returned beverage containers on the premises where the vending machine is located.

~~**2. Permissive refusal by dealer.** A dealer may refuse to accept from a consumer or other person and to pay the refund value on any beverage container, if the place of business of the dealer and the kind, size and brand of beverage container are included in an order of the department approving a redemption center under section 3109.~~

...

6. Obligation to preserve recycling value. Notwithstanding subsection 8, a distributor or its agent may refuse to accept, or pay the refund value and handling costs to a dealer, redemption center or other person for, a beverage container that has been processed by a reverse vending machine in a way that has reduced the recycling value of the container below current market value. This subsection may not be interpreted to prohibit a written processing agreement between a distributor and a dealer or redemption center and does not relieve a distributor of its obligation under subsection 8 to accept empty, unbroken and reasonably clean beverage containers. The department shall adopt rules to establish the recycling value of beverage containers under this subsection and the rules may authorize the use of a 3rd-party vendor to determine if a beverage container has been processed by a reverse vending machine in a manner that has reduced the recycling value below current market value. The rules must outline the method of allocating among the parties involved the payment for 3rd-party vendor costs. ~~Rules adopted under this subsection are routine technical rules pursuant to Title 5, chapter 375, subchapter 2 A.~~

7. Reimbursement of handling costs. Reimbursement of handling costs is governed by this subsection.

A. In addition to the payment of the refund value, the initiator of the deposit under section 3103, subsections 1, 2 and 4 shall reimburse the dealer or local redemption center for the cost of handling beverage containers subject to section 3103, in an amount that equals at least 3¢ per returned container for containers picked up by the initiator before March 1, 2004, at least 3 1/2¢ for containers picked up on or after March 1, 2004 and before March 1, 2010 and at least 4¢ for containers picked up on or after March 1, 2010. The initiator of the deposit may reimburse the dealer or local redemption center directly or indirectly through a party with which it has entered into a commingling agreement.

B. In addition to the payment of the refund value, the initiator of the deposit under section 3103, subsection 3 shall reimburse the dealer or local redemption center for the cost of handling beverage containers subject to section 3103 in an amount that equals at least 3¢ per returned container for containers picked up by the initiator before March 1, 2004, at least 3 1/2¢ for containers picked up on or after March 1, 2004 and before March 1, 2010 and at least 4¢ for containers picked up on or after March 1, 2010. The initiator of the deposit may reimburse the dealer or local redemption center directly or indirectly through a contracted agent or through a party with which it has entered into a commingling agreement.

C. The reimbursement that the initiator of the deposit is obligated to pay the dealer or redemption center pursuant to paragraph A or B must be reduced by 1/2¢ for any returned container that is subject to managed in accordance with a qualified commingling agreement that allows the dealer or redemption center to commingle beverage containers of like ~~product group, material and size. A commingling agreement is qualified for purposes of this paragraph if the department determines that 50% or more of the beverage containers of like product group, material and size for which the deposits are being initiated in the State are covered by the commingling agreement or that the initiators of deposit covered by the commingling agreement are initiators of deposit for wine containers who each sell no more than 100,000 gallons of wine or 500,000 beverage containers that contain wine in a calendar year. Once the initiator of deposit has established a qualified commingling agreement for containers of a like product group, material and size, the department shall allow additional brands to be included from a different product group if they are of like material. The State, through the Department of Administrative and Financial Services, Bureau of Alcoholic Beverages and Lottery Operations, shall make every reasonable effort to enter into may operate as a qualified commingling agreement under this paragraph with every other initiator of deposit for provided it allows the commingling of beverage containers that are of like product group, size and material as the beverage containers for which the State is the initiator of deposit.~~

D. Paragraphs A, B and C do not apply to a brewer who annually produces no more than 50,000 gallons of its product or a bottler of water who annually sells no more than 250,000 containers each containing no more than one gallon of its product. In addition to the payment of the refund value, an initiator of deposit under section 3103, subsections 1 to 4 who is also a brewer who annually produces no more than 50,000 gallons of its product or a bottler of water who annually sells no more than 250,000 containers each containing no more than one

gallon of its product shall reimburse the dealer or local redemption center for the cost of handling beverage containers subject to section 3103 in an amount that equals at least 3 1/2¢ per returned container.

8. Obligation to pick up and recycle containers. The obligation to pick up and recycle beverage containers subject to this chapter is determined as follows.

A. A distributor that initiates the deposit under section 3103, subsection 2 or 4 has the obligation to pick up and recycle any empty, unbroken and reasonably clean beverage containers of the particular kind, size and brand sold by the distributor from dealers to whom that distributor has sold those beverages and from licensed redemption centers ~~designated to serve those dealers pursuant to an order entered under section 3109.~~ A distributor that, within this State, sells beverages under a particular label exclusively to one dealer, which dealer offers those labeled beverages for sale at retail exclusively at the dealer's establishment, shall pick up any empty, unbroken and reasonably clean beverage containers of the kind, size and brand sold by the distributor to the dealer only from those licensed redemption centers that enter into a written agreement to provide redemption services for ~~serve the various establishments of the dealer, under an order entered under section 3109.~~ A dealer that manufactures its own beverages for exclusive sale by that dealer at retail has the obligation of a distributor under this section. The commissioner may establish by rule, in accordance with the Maine Administrative Procedure Act, criteria prescribing the manner in which distributors shall fulfill the obligations imposed by this paragraph. The rules may establish a minimum number or value of containers below which a distributor is not required to respond to a request to pick up empty containers. Any rules adopted under this paragraph must allocate the burdens associated with the handling, storage and transportation of empty containers to prevent unreasonable financial or other hardship.

B. The initiator of the deposit under section 3103, subsection 3 has the obligation to pick up any empty, unbroken and reasonably clean beverage containers of the particular kind, size and brand sold by the initiator from dealers to whom a distributor has sold those beverages and from licensed redemption centers designated to serve those dealers pursuant to an order entered under section 3109 and to ensure the containers are recycled. The obligation may be fulfilled by the initiator directly or indirectly through a contracted agent.

C. An initiator of the deposit under section 3103, subsection 2, 3 or 4 has the obligation to pick up and recycle any empty, unbroken and reasonably clean beverage containers that are commingled pursuant to a commingling agreement along with any beverage containers that the initiator is otherwise obligated to pick up pursuant to paragraphs A and B.

D. The initiator of deposit or initiators of deposit who are members of a commingling agreement have the obligation under this subsection to pick up and recycle empty, unbroken and reasonably clean beverage containers of the particular kind, size and brand sold by the initiator from dealers to whom a distributor has sold those beverages and from licensed redemption centers ~~designated to serve those dealers~~ every 15 days. The initiator of deposit or initiators of deposit who are members of a commingling agreement have the obligation to make additional pickups when a redemption center has collected 10,000 beverage containers from that initiator of deposit or from the initiators of deposit who are members of a commingling agreement.

The obligations of the initiator of the deposit under this subsection may be fulfilled by the initiator directly or through a party with which it has entered into a commingling agreement. A contracted agent hired to pick up beverage containers for one or more initiators of deposit is deemed to have made a pickup at a redemption center for those initiators of deposit when it picks up beverage containers belonging to those initiators of deposit.

9. Plastic bags. A dealer or redemption center has an obligation to pick up plastic bags that are used by that dealer or redemption center to contain beverage containers. Plastic bags used by a dealer or redemption center and the cost allocation of these bags must conform to rules adopted by the department concerning size and gauge. ~~Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.~~

Sec. 5. 38 MRS §3107 is amended to read:

Notwithstanding any other provision of this chapter to the contrary, 2 or more initiators of deposit may enter into a commingling agreement through which some or all of the beverage containers for which the initiators have initiated deposits may be commingled by dealers and operators of redemption centers as provided in this section.

The department shall determine that a commingling agreement is qualified for purposes of this chapter when: 50% or more of the beverage containers of like product group, material and size for which the deposits are being initiated in the State are covered by the commingling agreement; the initiators of deposit covered by the commingling agreement are initiators of deposit for wine containers who each sell no more than 100,000 gallons of wine or 500,000 beverage containers that contain wine in a calendar year; or commingling is implemented under the terms of a plan submitted and approved in accordance with paragraph 5.

An initiator of deposit that enters into a commingling agreement pursuant to this section shall permit any other initiator of deposit to become a party to that agreement on the same terms and conditions as the original agreement. Once the initiator of deposit has established a qualified commingling agreement, the department shall allow additional brands to be included from a different product group if they are of like material.

1. Commingling requirement. If initiators of deposit enter into a commingling agreement pursuant to this section, commingling of beverage containers must be by all containers of like product group, material and size. An initiator of deposit required pursuant to section 3106, subsection 8 to pick up beverage containers subject to a commingling agreement also shall pick up all other beverage containers subject to the same agreement. The initiator of deposit may not require beverage containers that are subject to a commingling agreement to be sorted separately by a dealer or redemption center.

2. Commingling of like materials. For purposes of this section, containers are considered to be of like materials if made up of one of the following:

- A. Plastic;
- B. Aluminum;
- C. Metal other than aluminum; and
- D. Glass.

3. Commingling of like products. For purposes of this section, like products are those that are made up of one of the following:

- A. Beer, ale or other beverage produced by fermenting malt, wine and wine coolers;
- B. Spirits;
- C. Soda;
- D. Noncarbonated water; and
- E. All other beverages.

4. Registration of commingling agreements. Not later than 48 hours following the execution or amendment of a commingling agreement, including an amendment that adds an additional party to an existing agreement, the parties shall file a copy of the commingling agreement or amendment with the department.

5. Commingling by a third party or stewardship organization. An initiator of deposit may enter into an agreement for its beverage containers to be managed in a commingling program administered by a third party or through a stewardship organization as defined in chapter 18, section 1771. The third party or stewardship organization shall submit a plan to operate a commingling program to the department for review and approval as a qualified commingling agreement.

The commingling program must require redemption centers to commingle all containers of participating manufacturers by like material, and shall establish containerizing standards to provide for fair apportionment of costs among participating manufacturers, either on the basis of the total weight of containers marketed or by unit count. An initiator of deposit shall report by the 20th day of the month following the end of March, June, September and December to the administrator of the commingling program its sales of beverages into Maine for the previous three months by brand and number of nonrefillable containers sold by product size and material type, and the average container weight by material type and size. The third party or stewardship organization shall assign

financial responsibility to participating initiators of deposit based on each initiator of deposit's proportion of the total weight of beverage containers marketed in Maine by material type or on actual unit counts.

The third party or stewardship organization may require a participating initiator of deposit to provide financial assurance in the form of a deposit of no greater than the cost of beverage container deposits, container handling fees for redemption centers and any contractual fees for up to 4 months of anticipated sales in Maine. The third party or stewardship organization shall retain the deposit funds in a separate account and may use the funds to pay program costs in the event the initiator of deposit fails to pay the third party or stewardship organization for incurred costs within 90 days of invoicing.

Sec. 6. 38 MRSA §3109 is amended to read:

1. Establishment. Local redemption centers may be established and operated by any person or municipality, agency or regional association as defined in section 1303-C, subsection 24, subject to the approval of the commissioner, to serve local dealers and consumers, at which consumers may return empty beverage containers as provided under section 3106.

2. Application for approval. Application for approval of a local redemption center must be filed with the department. The application must state the name and address of the person responsible for the establishment and operation of the center, ~~the kinds, sizes and brand names of beverage containers that will be accepted and~~ the names and addresses of ~~each~~ dealers with whom the redemption center has entered into a written agreement to provide redemption services in accordance with section 3106 sub-5 ~~be served~~ and their distances from the local redemption center, and a statement that the local redemption center will accept and manage all beverage containers registered in accordance with section 3105.

3. Approval. The commissioner may approve the licensing of a local redemption center if the redemption center complies with the requirements established under section 3113. The order approving a local redemption center license must state the dealers to be served and the kinds, sizes and brand names of empty beverage containers that the center accepts.

4. Redemption center acceptance refund account. A ~~local~~ licensed redemption center may not refuse to accept from any consumer or other person not a dealer any empty, unbroken and reasonably clean beverage container of the kind, size and brand sold in the state by a dealer served by the center as long as the label for the container is registered under section 3105, subsection 5 or refuse to pay in cash the refund value of the returned beverage container as established by section 3103. A redemption center or reverse vending machine is not obligated to count containers or to pay a cash refund at the time the beverage container is returned as long as the amount of the refund value due is placed into an account to be held for the benefit of the consumer and funded in a manner that allows the consumer to obtain deposits due within 2 business days of the time of the return.

~~**5. Posted lists.** A list of the dealers served and the kinds, sizes and brand names of empty beverage containers accepted must be prominently displayed at each local redemption center.~~

5-A. Beverage container handling. A redemption center shall tender only beverage containers sold in the state to pick-up agents in shells, shipping cartons, bags and other containers prepared to ensure accurate eligible beverage container unit counts.

6. Withdrawal of approval. ~~The District Court~~ department may, in a manner consistent with the Maine Administrative Procedure Act, withdraw approval-revoke the license of a local redemption center if there has not been compliance with the approval order or if the local redemption center no longer provides a convenient service to the public.

Sec. 7. 38 MRSA §3113 sub-1, sub-2, sub-3 and sub-4 are amended, and **sub-5 and sub-6** are enacted to read:

....

1. Procedures; licensing fees. The department shall adopt rules establishing the requirements and procedures for issuance of licenses and annual renewals under this section, including a fee structure. Initial rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A. ~~Rules adopted effective after calendar year 2003 are major substantive rules as defined in Title 5, chapter 375, subchapter 2-A and are subject to review by the joint standing committee of the Legislature having jurisdiction over environmental and natural resources matters.~~

2. ~~Criteria for licensing rules~~ Licensing criteria. In developing rules under subsection 1 for licensing redemption centers, the department shall consider at least the following:

- A. The health and safety of the public, including sanitation protection when food is also sold on the premises;
- B. The convenience for the public, including standards governing the distribution of centers by population or by distance, or both;
- C. The proximity of the proposed redemption center to existing redemption centers and the potential impact that the location of the proposed redemption center may have on an existing redemption center;
- D. The proposed owner's record of compliance with this chapter and rules adopted by the department pursuant to this chapter; and
- E. The hours of operation of the proposed redemption center and existing redemption centers in the proximity of the proposed redemption center.

3. Location of redemption centers; population requirements. The department may grant a license to a redemption center if the following requirements are met:

- A. The department may license up to 5 redemption centers in a municipality with a population over 30,000;
- B. The department may license up to 3 redemption centers in a municipality with a population over 20,000 but no more than 30,000; and
- C. The department may license up to 2 redemption centers in a municipality with a population over 5,000 but no more than 20,000.

For a municipality with a population of no more than 5,000, the department may license redemption centers in accordance with rules adopted by the department. ~~Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.~~

4. Exceptions. Notwithstanding subsection 3:

- A. An owner of a redemption center who is renewing the license of a redemption center licensed by the department as of April 1, 2009 need not comply with subsection 3;
- B. An entity that is a ~~food establishment or~~ distributor licensed by or registered with the department need not comply with subsection 3;
- C. A reverse vending machine is not considered a redemption center for purposes of subsection 3 when it is located in a licensed redemption center; and
- D. The department may grant a license that is inconsistent with the requirements set out in subsection 3 only if the applicant has demonstrated a compelling public need for an additional redemption center in the municipality.

5. Initiator of deposit annual report. Each initiator of deposit shall report annually by March 1 to the department concerning its deposit transactions in the preceding calendar year. The report must be in a form prescribed by the department and must include the number of nonrefillable beverage containers sold in Maine by container size, beverage type, delineated at a minimum into wine, spirits, and all other beverages, and the number of nonrefillable beverage containers returned by redemption value. The report required by this subsection is proprietary information and must be handled by the department in the same manner as confidential information is handled under section 1310-B.

6. Pick-up agent annual report. Each third-party pick-up agent shall report annually by March 1 to the department on redemptions for each initiator of deposit it served in the preceding calendar year. The report must be in a form prescribed by the department and must include the number of nonrefillable containers returned by redemption value except that a third-party pick-up agent may report by the average weight and total weight of containers returned by material type for containers managed within a commingling agreement established in accordance with section 3107 sub-5.

Sec. 8. 38 MRS §3115 is amended to read:

The department shall administer this chapter and has the authority, following public hearing, to adopt necessary rules to carry it into effect. The department may adopt rules governing local redemption centers that receive beverage containers from dealers supplied by distributors other than the distributors servicing the area in which the local redemption center is located in order to prevent the distributors servicing the area within which the redemption center is located from being unfairly penalized. Rules adopted pursuant to this chapter are routine technical rules pursuant to Title 5, chapter 375, subchapter 2-A except rules that establish or modify fees are major substantive rules as defined in Title 5, chapter 375, subchapter 2-A and subject to review by the joint standing committee of the Legislature having jurisdiction over environmental and natural resources matters.

Sec. 9. 38 MRS §3116 sub-2 is amended to read:

2. Aggrieved applicants. An applicant aggrieved by a decision made by the department may appeal the decision to the board pursuant to section 344(2-A) or by filing an appeal with the Superior Court and serving a copy of the appeal upon the department in accordance with the Maine Rules of Civil Procedure, Rule 80C. The appeal must be filed and served within 30 days of the mailing of the department's decision.

*Appendix E – Proposed changes to Maine’s cellular telephone law***§ Be it enacted by the People of the State of Maine as follows:****Sec. 1. 38 M.R.S. §2143** is amended to read:

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

A. "Cellular telephone" means a mobile wireless telephone device that is designed to send or receive transmissions through a cellular radiotelephone service as defined in 47 Code of Federal Regulations, Section 22.99 (2005). "Cellular telephone" does not include a wireless telephone device that is integrated into the electrical architecture of a motor vehicle.

B. "Cellular telephone service provider" means a provider of wireless voice or data retail service.

C. "Retailer" means a person, firm or corporation that sells or offers to sell a cellular telephone to a consumer at retail.

2. Collection system. Effective January 1, 2008, a retailer shall accept, at no charge, used cellular telephones from any person. A retailer required to accept used cellular telephones under this subsection shall post, in a prominent location open to public view, a notice printed in boldface type and containing the following language: "We accept used cellular telephones at no charge."

3. Disposal ban. Effective January 1, 2008, a person may not dispose of a cellular telephone in solid waste for disposal in a solid waste disposal facility.

~~**4. Reports.** By January 1, 2009, and every year thereafter, a cellular telephone service provider shall report to the department the number of cellular telephones collected pursuant to this section and how the collected cellular telephones were disposed of, reused or recycled. Annually, the department shall report on the collection system to the joint standing committee of the Legislature having jurisdiction over natural resources matters. The report may be included in the report required pursuant to section 1772, subsection 1.~~

Appendix F – Comments received on posted report



February 13, 2019

Mr. Mike Karagiannes
Director, Bureau of Land Resources
Maine DEP
17 State House Station
Augusta, ME 04333-0017

Mr. Karagiannes,

On behalf of the members of the Product Management Alliance (PMA), we appreciate the opportunity to express the Product Management Alliances' position on the Department of Environmental Protection's Annual Report to the Joint Standing Committee on Environment and Natural Resources, Concerning the Implement of Product Stewardship in Maine.

My name is Kevin Canan, and I serve as the Executive Director of the PMA. By way of introduction, the PMA is a coalition comprised of trade associations and corporations that represent a broad array of consumer products. Our mission is to support market-based extended producer responsibility (EPR) efforts, as well as voluntary incentives for increased recovery and sustainable products and package design. We were founded precisely as a response to the signing of LD 1631 into law in 2010, the law which compels this report.

PMA's members have long strived to voluntarily recover the products that they manufacture. The PMA understands and appreciates Maine's desire to seek ways to improve the recovery rates of goods. However, we believe that expanding current EPR programs and adding additional EPR programs for additional products, specifically the carpet and mattress industries enumerated in the report, would simply add costly and unnecessary mandates for both the state government to implement and run this program; as well as for retailers and manufacturers in Maine. These costs will ultimately be borne by taxpayers and consumers.

Additional EPR programs would set up a confusing and bureaucratic system of recovery for the residents of the state with similar types of products having very different end-of-life recovery schemes. In addition, these types of restrictive programs would likely to have a chilling effect on manufacturers and retailers doing business in Maine, and as a result business very well could be lost to neighboring states.

PMA members and businesses utilize sophisticated programs in place that continue to increase the amounts of products recovered and recycled through voluntary initiatives. Today recovery rates are at record levels, and they are continually striving to increase these numbers. The existence of these efforts illustrate that new mandates on producers are not necessary to reduce waste and increase recycling and the use of recycled content. Thus, we urge the DEP and the legislature to **strongly examine voluntary, market-based recovery efforts** for increased recovery of products and oppose any new or further expansion of EPR in the state that are enumerated in the report.

The members of the PMA, and the industries they represent, recognize the desire of the public and policymakers for environmentally responsible business practices. That is why our member companies are voluntarily involved in waste recovery programs, and support recycling where it is economically and logistically feasible.

We hope to have a positive and constructive working relationship with you.

Sincerely,

A handwritten signature in blue ink, appearing to read 'KCCa', with a long horizontal flourish extending to the right.

Kevin C. Canan
Executive Director

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**AF&PA Comments on the Annual Product Stewardship Report
Maine Department of Environmental Protection
February 2019**

The American Forest & Paper Association (AF&PA) appreciates the opportunity to comment on the 2019 Maine Annual Product Stewardship Report. AF&PA supports voluntary paper and paper-based packaging recovery efforts that seek to improve upon the existing recovery and recycling programs in Maine and the United States. AF&PA strongly believes that the voluntary recovery of paper and paper-based packaging is a recycling success story.

The AF&PA serves to advance a sustainable U.S. pulp, paper, packaging, tissue and wood products manufacturing industry through fact-based public policy and marketplace advocacy. AF&PA member companies make products essential for everyday life from renewable and recyclable resources and are committed to continuous improvement through the industry's sustainability initiative — *Better Practices, Better Planet 2020*. The forest products industry accounts for approximately four percent of the total U.S. manufacturing GDP, manufactures nearly \$300 billion in products annually and employs approximately 950,000 men and women. The industry meets a payroll of approximately \$55 billion annually and is among the top 10 manufacturing sector employers in 45 states.

In Maine, the industry employs more than 15,000 individuals, with an annual payroll of over \$814 million. The estimated state and local taxes paid by the forest products industry totals \$91 million annually.

Comments on the Product Stewardship for Packaging Proposal

AF&PA has concerns with the findings of the report which will be examined in more detail below. We believe that the paper industry's consistently high recovery rates, and the industry's ongoing efforts to increase voluntary recovery, make mandates like an extended producer responsibility (EPR) program for paper and paper-based packaging unnecessary and potentially counterproductive. Along similar lines, consumer packaging is too broad to be considered a single product for a product stewardship program.

Product Stewardship for Paper-based Packaging is Not a Solution

Recent changes in markets for recyclable commodities due to China's import ban have fueled discussion of EPR as an attractive funding mechanism for municipal recycling programs. While on the surface, additional funding may be used to improve some aspects of recycling programs, there are multiple fallacies and negative consequences that make EPR for packaging, in particular paper packaging, a poor policy choice compared to the market driven system in effect today.

The Maine DEP report asserts that a product stewardship program for packaging will increase the recovery of materials for reuse and recycling, but this is not necessarily true. While funding could be raised to fund steps necessary to increase collection, EPR programs do not create end markets for recyclable materials. There are successful recycling programs in the state that would be disrupted,

rather than improved by the implementation of EPR. Product stewardship for packaging programs exist in other countries but whether they are more successful than our current system is widely debated. Global demand drives paper recovery, not government mandates. Global demand for recovered fiber has been growing at a rapid rate. Global recovered paper demand increased at an average rate of 1.3 percent a year from 2012 to 2017 and is expected by RISI to increase an average of 1.8 percent a year from 2017 through 2022.

Market-based paper recovery can be a model for other industries. The paper and paper-based packaging industry has set and met voluntary goals, and publicly reported on performance. The industry works with others in the private and public sectors to maximize paper recovery, the rate of which has doubled since 1990. EPR, though well-intentioned, falls short of the mark. Government can help support paper recycling's success by avoiding mandates and arbitrary rules that disrupt the current market-based system.

As history has demonstrated, the market operates efficiently when it comes to paper recovery and recycling. To impose an EPR scheme in hopes of marginal gains could be cost prohibitive and at the detriment of the success the industry has achieved. For paper and paper-based packaging, EPR could prove to be harmful and even counterproductive. The life path of paper-based packaging is not contained in one state. For instance, a box is made in one state and breakfast cereal is put into that box in a second state. The cereal is sold in a third state to a consumer living in a fourth state. It is hard to imagine logistically how a manufacturer or brand owner could be required to pay fees on the products it introduces into a global commerce stream.

Consumer Packaging is Too Broad to be Productive

Consumer packaging is a broad category of multiple packaging materials including paper, plastic, glass, aluminum and steel. Each of these materials has distinct challenges, advantages, and economics when it comes to recovery for recycling. Solutions that may work for one material do not necessarily translate to other materials. Some materials may require different strategies and financial investments. Fee proceeds from one material should not be used to subsidize recovery initiatives for other materials. Lumping all of these issues into one stewardship program makes it extremely unlikely that there could be a fair program for all participants.

The report acknowledges the difficulties in the choice between a program that shares responsibilities between manufacturers and municipalities but misses in the mark in that it does not also explore the potential difficulties of competing materials sharing the responsibility of managing recycling for the state. An EPR program holds major financial stakes for all industries impacted and measures to facilitate equitable representation of the products impacted by the program would be a necessity at minimum.

Paper Recycling is Successful

Paper recovery is an environmental success story, saving an average of 3.3 cubic yards of landfill space for each ton of paper recycled. Paper recovery has fostered a well-developed and dynamic marketplace that allows recovered fiber to find its highest value end use in manufacturing new products. That, in turn, helps encourage more recycling which part of why paper is the most-recycled material in the U.S. today. According to the U.S. Environmental Protection Agency, more

paper (by weight) is recovered for recycling from municipal solid waste streams than glass, plastic, steel and aluminum combined. 96 percent of the U.S. population had access to community curbside and/or drop-off paper recycling services, according to the most recent (2014) [survey of communities](#).

Based on results from the 2014 Community Access Survey, 80% of Maine residents have access to community curbside recycling programs for paper & paperboard and 90% have access to community drop-off systems. While the overall paper recovery rate is at 63% or higher for each of the last nine years, for OCC in particular, the recovery rate was 88.89% for 2017 and has exceeded 80% for the last nine years.

The paper and paper-based packaging industry's commitment to maximizing recovery of its products for recycling is real and longstanding. AF&PA and its member companies have a truly outstanding record on paper recovery. In 1990, when AF&PA began setting voluntary recovery goals, the recovery rate was a little more than one-third (33.5 percent) of the paper consumed in the United States. By 2017, thanks to voluntary industry initiatives and the millions of Americans who recycle at home, work and school every day, the recovery rate has almost doubled (65.8 percent). The recovery rate has met or exceeded 63 percent for the past nine years.

Impact and Market Adjustments After China National Sword

The current disruption in mixed paper markets is partially due to an unacceptable level of quality being generated and China's abrupt ban on mixed paper imports. The disruption caused by China's import policy has created a misperception that there is a systemic problem with the recycling system. In fact, the problem is with poor-quality recyclable materials being put into the marketplace by some processing facilities, in particular by mixed-waste processing facilities.

Fortunately, recovered fiber markets are dynamic and adapting rapidly. The paper and paper-packaging industry continues to innovate and adapt to market demands to drive future success. Communities that improve the quality of the recyclable materials in their recycling streams and improve the quality of the recovered paper bales produced by their MRFs will have greater success in recovered paper markets. Investing in improving consumers' recycling behavior and improving collection are needed steps that were made clearer in the wake of the implementation of China National Sword.

Product stewardship is not the answer to China's import policy and will not drive increased domestic consumption of recovered fiber. Instead of bringing in more capacity to handle the increase volume available, it will add another cost to already burdened paper mills in Maine.

Recovered paper consumption at domestic paper and paperboard mills increased in 2017 and during four of the past five years, rising more than four percent from 2012 to 2017. These increases were achieved even while U.S. paper and paperboard production declined three percent during that period. The fact is that quality matters and recovered fiber that meets the grade and quality requirements of mills is purchased while fiber that doesn't meet the requirements is not.

Opportunities to Improve Recovery

As an alternative to a product stewardship for packaging program, Maine should focus on hard-to-

recycle materials where there may not yet be a well-developed collection infrastructure or good recovery results. With a well-developed infrastructure for collecting paper and paper-based packaging, to increase recovery Maine should increase consumer education to drive increased participation across the entire supply chain.

The industry works with others in the private and public sectors to maximize paper recovery, with the obvious result that we have doubled our recovery rate since 1990. For example, AF&PA is an inaugural founder of The Recycling Partnership which creates public-private partnerships that promote voluntary recovery and increases communities' capability to improve the quality and quantity of recyclable materials produced by community materials recovery facilities. While the report finds the contributions (recycling carts for Portland) of the Partnership insufficient, there are potentially additional resources that are being underutilized by municipalities, such as the free Contamination kits that include tools and resources to improve the quality of what MRFs are collecting- facilitating behavior change through consumer education.

AF&PA also produces our own resources on recycling better- with recycling guides specific to the workplace, schools and the community and a guide on shredding and recycling important documents. The Responsible Package is a recycling curriculum that includes classroom activities, family take-home materials and a family recycling pledge to raise awareness about paper and paper-based packaging recycling and reuse. By targeting students in fifth grade (ages 10-11), along with their families and teachers, our program encourages students to be agents of change in their homes and schools to increase recovery through smart recycling. Jointly funded by paper-based packaging associations including AF&PA, the Carton Council, Fibre Box Association, PSSMA, TAPPI and AICC; The Responsible Package aims to reach 525,000 students around the country in 2019, an increase from 313,000 in 2018.

Conclusion

AF&PA believes responsibility for materials recovery must be shared across the entire supply chain and include consumers. The paper industry is doing its part by meeting or exceeding voluntary recovery goals for our products. We urge you to consider promoting increased participation in community recycling programs as an alternative to a product stewardship program for paper-based packaging. We hope that by sharing this information, any plan or legislation drafted to regulate the production and use of paper-based packaging will be based on sound policy to the benefit of the environment and best practices for doing business in the state.

We look forward to continuing our work with the state of Maine. Please feel free to contact Abigail Turner Sztejn, Director, State Government Affairs, AF&PA at (202) 463-2596 or abigail_sztejn@afandpa.org for further information.



February 14, 2019
Director Paula Clark
Division of Materials Management
August, Maine 04333

Re: American Chemistry Council comments to the Annual Product Stewardship Report

Dear Director Clark,

The American Chemistry Council (ACC) provides the following comments to the Annual Produce Stewardship Report to the Joint Standing Committee on the Environment and Natural Resources. ACC represents leading manufacturers of plastic resins¹ and we strive to be an expert resource on innovative plastics recycling and recovery programs and educational and outreach programs to improve plastics recycling and recovery nationwide.² ACC has a strong interest in sustainable materials management (SMM), plastics sustainability and recovery.³

We commend the Committee for seeking to improve the performance of its packaging recycling and to fully utilize the value of materials that are currently being wasted in landfills. At the same time, we do not believe that the mandatory extended producer responsibility is the best way to achieve these shared goals. Reliance on EPR can lead to an overemphasis on recycling to the exclusion of source reduction and the implementation of a true "sustainable materials management" system that uses life cycle analysis to better understand environmental impacts such as waste prevention and the use of energy, water and greenhouse gas emissions. We welcome the opportunity to work with Maine to grow plastics recycling and recovery and we encourage the state to:

- 1) Consider adopting a holistic sustainable materials management approach that incorporates life cycle analysis and accounts for source reduction and conversion to fuels and energy along with recycling;
- 2) Fully enforce Maine's existing recycling provisions and pursue collaborative policy approaches;

¹ ACC's Plastics Division represents leading manufacturers of plastic resins. From life-saving medical devices to packaging that extends shelf life, versatile plastics inspire countless innovations that help make life better, healthier and safer every day.

² See, for example, Keep America Beautiful's I Want to be Recycled campaign, The Recycling Partnership, WRAP Program.

³ Plastics Recovery on ACC.com



- 3) Embrace voluntary plastics recycling programs and tools;
- 4) Leverage national partnerships for grants, loans and assistance; and
- 5) Treat all post-use plastics as valuable materials for conversion to chemical and plastic feedstocks and fuels.

Please consider using the recommendations outlined in our detailed comments below. ACC would be pleased to be an ongoing partner to help reduce waste and then recycle and recover more of Maine's post-use plastics. I can be reached by phone at (518) 432-7835 or by email at margaret_gorman@americanchemistry.com for any questions or additional information.

Sincerely,

Margaret Gorman

Senior Director, Northeast Region, State Affairs
American Chemistry Council
11 North Pearl Street, Suite 1400
Albany, NY 12207



ACC comments to the Joint Standing Committee on the Environment and Natural Resources

Plastics Contributions to Sustainable Materials Management

Plastics help us to do more with less in many ways. Because plastics are durable, lightweight and versatile, the use of plastics can help reduce waste and the consumption of energy. Lighter packaging can mean that lighter loads or fewer trucks and railcars are needed to ship the same amount of product, helping to reduce transportation energy, decrease emissions and lower shipping costs.⁴

Plastics Recycling Today

Plastics' recycling creates economic and environmental value. The *2017 United States National Postconsumer Plastics Bottle Recycling Report* found that the total pounds of plastic bottles collected for recycling in 2015 was nearly 3 billion pounds.⁵ The two main types of bottles that are recycled are polyethylene terephthalate (PET) and high density polyethylene (HDPE). PET is often found in water and soda bottles and HDPE is often found in milk jugs and detergent bottles.

ACC tracks the recycling of plastic wraps, film, and bags. This category of plastics includes commercial shrink wrap, plastic wrapping around consumer products such as paper towels and bathroom tissue, protective packaging such as bubble wrap, and ordinary plastic shopping bags. The *2016 National Postconsumer Plastic Bag & Film Recycling Report* found that 1.3 billion pounds of postconsumer plastic film was recovered for recycling in 2016.⁶ This represents a doubling of material collected since 2005.⁷ Film, bags, and wraps can become contaminated when mixed with other materials, so are best not collected curbside. These materials can be collected at 18,000+ locations including most major grocery stores and retailers. Several years ago, ACC formed the Flexible Film Recycling Group (FFRG) to work to increase the recycling of polyethylene film. Its goal is to double polyethylene film recycling by 2020.

⁴ Impact of Plastics Packaging on Life Cycle Energy Consumption & Greenhouse Gas Emissions in The United States and Canada. 2014 <http://plastics.americanchemistry.com/Education-Resources/Publications/Impact-of-Plastics-Packaging.pdf>

⁵ The 2017 United States National Postconsumer Plastic Bottle Recycling Report. <https://plastics.americanchemistry.com/Reports-and-Publications/National-Post-Consumer-Plastics-Bottle-Recycling-Report.pdf>

⁶ The 2016 National Postconsumer Plastic Bag & Film Recycling Report <https://plastics.americanchemistry.com/2016-National-Post-Consumer-Plastic-Bag-and-Film-Recycling-Report.pdf>

⁷ Ibid



ACC also tracks the collection of non-bottle rigid plastics collected for recycling. Non-bottle rigid plastics can be found in many forms such as tubs, containers, lids, cups and clamshells as well as larger "bulky" items such as buckets, crates, toys, and laundry baskets. The *2016 National Postconsumer Non-Bottle Rigid Plastic Recycling Report* found that over 1.46 billion pounds of postconsumer non-bottle rigid plastic was recovered for recycling.⁸ Non-bottle rigid plastic recovered has increased by nearly 4.5 times since 2007.⁹ The emergence of many domestic markets for non-bottle rigid plastics has led to an increasing number of cities and counties collecting these plastics for recycling. The *Plastics Recycling Collection National Reach Study: 2012 Update* found that over 60% of the United States population has some form of access to recycle non-bottle rigid containers.¹⁰ Further, the increased amount of recycled material has driven increased reclamation opportunities in the United States.¹¹

Programs to Increase Plastics Recycling

ACC commends Maine for focusing on recycling more valuable post-use packaging instead of sending it to landfill. We believe Maine could benefit from leveraging ACC and our partners' education, outreach and technical assistance programs. Below are some recommendations on programs that can deliver results for increasing plastics recycling.

1) Pursue sustainable materials management as the long term goal.

Plastics are an important component to preventing wastes, such as food waste, from materializing. We recommend that the state consider an approach known as "sustainable materials management" that is consistent with the approach the U.S. Environmental Protection Agency (EPA) recently adopted.¹² Sustainable materials management utilizes a holistic approach, such as life cycle analysis, as a tool to evaluate the full range of potential environmental impacts (e.g., greenhouse gas (GHG) emissions, energy, water, etc.) attributed to material use. ACC's life cycle

⁸ 2015 National Postconsumer Non-Bottle Rigid Plastic Recycling Report.

<https://plastics.americanchemistry.com/2016-National-Post-Consumer-Non-Bottle-Rigid-Plastic-Recycling-Report.pdf>

⁹ Ibid.

¹⁰ Plastic Recycling Collection National Reach Study: 2012 Update,

<http://plastics.americanchemistry.com/Education-Resources/Publications/Plastic-Recycling-Collection-National-Reach-Study-2012-Update.pdf>

¹¹ 2014 National Postconsumer Non-Bottle Rigid Plastic Recycling Report.

<https://plastics.americanchemistry.com/Education-Resources/Publications/2014-National-Report-on-Post-Consumer-Non-Bottle-Rigid-Plastic-Recycling.pdf>

¹² U.S. Environmental Protection Agency Sustainable Materials Management. <http://www.epa.gov/smm>



inventories on plastics packaging¹³ including flexible coffee packaging¹⁴ tuna packaging¹⁵, and high density polyethylene (HOPE) milk jugs¹⁶ provide examples of how source reductions from plastics packaging can lead to important environmental benefits even if these packages are not mechanically recycled.

Moreover, focusing on just the recycling rate can be counterproductive. For example, composting or anaerobic digestion of organic waste is often counted as recycling. And, because a large portion of organic waste is landfilled, increased diversion of organic material is often viewed as a prime opportunity to increase diversion rates. However, ACC encourages Maine to explore the fact that a truly sustainable materials management approach recognizes the critical role that sophisticated packaging plays in preventing food from being wasted in the first place. It also recognizes the greater environmental benefits from preventing food waste compared to the environmental benefits of treating organics after foods have already spoiled.¹⁷ EPR policies ignore other sustainability considerations including greenhouse gas emissions and incentivize recycling at the expense of other environmental considerations.

2) Enforce existing laws and regulations and pursue collaborative policy approaches.

Quite simply, closing enforcement gaps and demonstrating an ability to enforce existing recycling laws and regulations should be pursued before new radical recycling schemes are enacted. Maine's existing bottle deposit law presents an opportunity to support recycling broadly. Unlike most other states, unclaimed bottle deposit receipts are not specifically earmarked to support local recycling programs or other statewide environmental programs. Because of a 2003 law, unclaimed bottle escheats have been directed to Maine's general fund. ACC recommends that Maine look to earmark its unclaimed bottle deposits to recycling activities and review how it spends its existing tipping fee surcharges before seeking out new sources of funding.

¹³ Impact of Plastics Packaging on Life Cycle Energy Consumption & Greenhouse Gas Emissions in the United States and Canada. <http://plastics.americanchemistry.com/Education-Resources/Publications/Impact-of-Plastics-Packaging.pdf>

¹⁴ LCI for Eight Coffee Packaging Systems. <http://plastics.americanchemistry.com/LCI-Summary-for-8-Coffee-Packaging-Systems>

¹⁵ LCI Summary for Six Tuna Packaging Systems. <http://plastics.americanchemistry.com/LCI-Summary-for-6-Tuna-Packaging-Systems>

¹⁶ LCI Summary for Four Half-Gallon Milk Containers. <http://plastics.americanchemistry.com/LCI-Summary-for-4-Half-Gallon%20Milk%20Containers>

¹⁷ U.S. Environmental Protection Agency. Sustainable Management of Food. <https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy>



3) Embrace Voluntary Plastics Recycling Programs and Tools

Maine should become a WRAP partner and adopt the Plastics Recycling Terms and Tools. Increasing the recycling of plastic film, wraps and bags represents a major opportunity to help Maine meet its objectives. Clean polyethylene film is a valuable feedstock for manufacturers and most major retailers in the United States collect post-consumer plastic wraps, bags and film at front-of-store locations. The WRAP program promotes brand owner adoption of the Sustainable Packaging Coalition's (SPC) "How to Recycle Label." Additionally standardizing plastics terms and images is a best practice for community education programs. Maine can encourage its communities to fully utilize the Plastics Recycling Terms and Tools to increase collection of post-use plastics and align with its goal of generating more reliable tracking and measurement data.

4) Leverage National Partnerships for Grants, Loans and Technical Assistance

Communities in Maine could benefit from two significant multi-million dollar initiatives led by the private sector. These initiatives are directly investing in communities and recycling systems across the country. The Recycling Partnership (TRP), of which ACC is a funder and board member, recently partnered with the Massachusetts Department of Environmental Protection (DEP) to reduce contamination and drive the collection of more and better material for recycling.¹⁸ Another important organization is the Closed Loop Fund (CLF), which was founded by Walmart and nine major global brands to provide no-interest loans to communities and private entities. Maine should explore a direct partnership with TRP and encourage its communities to apply for grants or loans from TRP or CLF. Lastly, Maine should support the Grocery Rigid Plastic Recycling Program.¹⁹ Research has shown that grocery store delis, bakeries, fish markets, and pharmacies use significant quantities of high-value rigid plastics every day. These plastics are often larger, bulkier items that contain things like cake batter, frosting, and fish fillets. Growing the total supply of non-bottle rigid plastics available for reclamation in Maine could potentially help establish markets for smaller communities as well.

5) Treat All Post-Use Plastics as Valuable Materials for Conversion Chemical and Plastic Feedstocks and Fuels

Encouraging new recovery technologies should aid Maine as it works to increase its total diversion rate from landfill. Unfortunately, many states have yet to recognize the

¹⁸ MassDEP to Collaborate with The Recycling Partnership. <https://www.recyclingtoday.com/article/massdep-the-recycling-partnership-collaborate/>

¹⁹ Recycle Grocery Rigid Plastics website. <http://www.recyclegroceryplastics.org/>



growing range of technologies available to convert post-use resources, including plastics, into useful products and materials. As a result, entrepreneurial manufacturers who seek to convert post-use materials into valuable products such as new chemicals and lower carbon transportation fuels are forced into regulatory schemes for recycling or disposal, when neither is an appropriate fit. Consider pyrolysis, an oxygen free process that can convert post-use plastics into chemical feedstocks for new plastics or fuels. Many state waste and recycling regulations were promulgated before these pyrolysis technologies were commercially viable, and as a result these facilities often are mischaracterized as waste disposal.

However, these facilities receive a feedstock, in this case post-use plastics, and produce a marketable commodity. These are manufacturing facilities, not waste disposal facilities. ACC developed a "Regulatory Treatment of Plastics-to-Fuel Facilities" document to provide permitting guidance to state and local regulators.²⁰ It includes a checklist of the typical federal, state, and local permits that are required to operate these facilities. These technologies also have considerable environmental benefits compared to disposing these resources in landfill.

ACC appreciated the opportunity to provide written comments to the Joint Standing Committee on the Environment and Natural Resources.

²⁰ Regulatory Treatment of Plastics-to-Fuel Facilities. <http://plastics.americanchemistry.com/Product-Groups-and-Stats/Plastics-to-Fuel/Regulatory-Treatment-of-Plastics-to-Fuel-Facilities.pdf>





The power of packaging in balance:

February 14, 2019

Mike Karagiannes
Maine DEP
17 State House Station
Augusta, ME 04333-0017

Re: AMERIPEN Comments on Product Stewardship Report, 2019

Dear Mr. Karagiannes and Department of Environmental Protection Staff,

The American Institute for Packaging and the Environment (AMERIPEN) is writing regarding the 2019 Annual Product Stewardship Report (the Report), and specifically on Section IV, A. which discusses *Product Stewardship for Packaging*. AMERIPEN does not support a product stewardship mandate as suggested in the report for Maine and notes that there are several factors that have not been considered in the report that should be articulated for full consideration of *whether* a stewardship program for packaging should be required in Maine.

AMERIPEN – the American Institute for Packaging and the Environment – is a coalition of packaging producers, users and end-of-life materials managers dedicated to improving packaging and the environment. Our membership represents the entire packaging supply chain, including materials suppliers, packaging producers, consumer packaged goods companies and end-of-life materials managers.

AMERIPEN supports programs and policies that improve recycling and works collaboratively to create cleaner recycling streams, expand access to recycling and increase the types of materials that can be recycled in states. However, we do not support product stewardship or extended producer responsibility for packaging in Maine as envisioned by the report, and encourage the Department to consider the following key issues.

1. Feasibility & Hidden Costs with Extended Producer Responsibility/Product Stewardship for Packaging

Extended Producer Responsibility (EPR) or product stewardship for packaging, as recommended by the Report, requires producers to take full or partial financial and management responsibility for products at the end of their life via product stewardship organizations (PSOs). This approach has not been proven as feasible in the U.S., and EPR has primarily been used elsewhere as a funding mechanism to implement end-of-life materials management programs where no funding source has been previously available. In the European Union, for example, funding from EPR was used to implement the widespread implementation of recycling programs *for packaging that had already been proven to be recyclable*. Most innovation funding for new recycling technology is not coming from EPR fees but rather through government and private funding mechanisms and EPR does not address that scenario. Maine should first consider and detail infrastructure investments needed to improve recycling capacity before jumping to financing solutions.

The Report supports EPR and cites its effectiveness in achieving three main goals (1) reduce costs to states or municipalities, (2) incentivize product design and (3) increase collection. However, currently, there is no

research demonstrating that EPR reduces costs to taxpayers¹, and none that support EPR's role in fostering packaging changes and innovation. While there are several reports that indicate EPR may help increase recycling rates, there are also a number that indicate an increase in recycling rate also incurs an increase in contamination and costs. In a 2015 publication² Dr. Calvin Lakhan noted that the Ontario BlueBox program had witnessed a 78% increase in fees in over a 10-year period. Dr. Lakhan notes that a 1% increase in recycling rate corresponded with a 9.4% increase in costs, which he attributed mostly to fluctuating market economics and the introduction of hard-to-recycle materials. These types of cost increases to process materials should be noted as a potential consequence of EPR for packaging in Maine. Additionally, it should be noted in the Report, that while paying more for PSO management of materials, local municipalities are not likely to return tax dollars or solid waste fees to constituents and that they will also be generally be paying more for consumer products.

Some of these same challenges face take-back programs for electronics which have a long history of experience with EPR in the U.S. These programs are witnessing significant increases in costs as states impose unattainable recycling targets not in line with material coming back through the collection system; states impose convenience standards that may not actually result in increased collection of e-waste but instead increase costs for manufacturers; or, in some cases, states set pricing without any market influence or competition among service providers resulting in the highest program compliance costs in the U.S. Additionally, EPR programs for electronics have not proven to incentivize product design. EPR does not always result in the achievements it's been touted to produce or at least not in a cost-effective manner for those ultimately fronting the bill. What started as a promising solution is now becoming a cost-burden on both states and manufacturers.

2. Market Challenges for Materials Recovery Must be Noted in the Report

AMERIPEN recognizes that increased efforts toward domestic processing can be a key strategy in reducing marine debris, improving environmental outcomes and increasing our economic competitiveness. However, the Report presupposes that if manufacturers are forced to manage the collection of packaging materials, then the technology and volumes of materials within the State are sufficient with today's existing technology. This is flawed.

Many plastic resins and mixed materials have a lack of end markets that makes it difficult to offer mechanical recycling solutions. Alternative recovery strategies such as plastics-to-fuel or other forms of energy recovery may be possible but are challenged by a lack of sufficient volume to meet their needs to process and scale, especially in Maine. The Report's belief in having all materials diverted to recycling is not likely to match the reality of capture and recovery methods and does not reflect the challenges of today's scrap trade for diverted materials.

There is ample evidence of this challenge:

- A. Recycle BC recently introduced a pilot program to collect and trial recovery efforts for multi-material plastic film packages, a product which is rapidly growing in the market. While a portion of this material collected has been stated to be designated towards R&D for mechanical recycling, they are clear that the majority of this material will be pelletized for waste to energy. To date there is no public reporting available on volumes directed towards R&D or pelletization or success rate in R&D.

¹ Miller, Chaz. "From Birth to Rebirth: Will Product Stewardship Save Resources?" American Bar Association. Section of Environment, Energy and Resources. 2011.

² Lakhan, Calvin. (Feb 2015) "[Diversion But At What Cost: the Economic Challenges of Recycling in Ontario.](#)" Resources, Conservation and Recycling.

- B. The city of Palo Alto, CA is also in a pilot with emerging company *BioCollection* to process hard-to-recycle plastics and films but their approach is to mix resins 2-4 and films in order to capture sufficient volumes for small trials. *BioCollection* is still considered an early-stage innovator and has yet to show proven success with recovery of this material.
- C. The Province of Nova Scotia recently partnered with *Renewology*, a commercially viable plastic to fuel technology, to help reduce plastic waste but this required changing Provincial statutes to permit for thermal recovery.

AMERIPEN and its member companies understand there is a need to increase the technologies available to process more packaging materials, but the challenges in the market right now require a focus on **end market development** and capturing **sufficient volumes** to ensure scale, especially in Maine. Many of our corporate members are supporting these efforts through investments into initiatives including *The Recycling Partnership*, *REMADE*, and the *Alliance to End Plastics Waste*.

However, until these investments identify new technologies or the best means to capture increased volumes of resin types, the ability to successfully re-process significant volumes of plastics 3-7 and other mixed materials will remain a challenge and the additional burden to collect, sort and process materials will slow any R&D contributions towards this goal.

3. Loss of Local Control and Solid Waste Management

While the Report does discuss different versions of shared and sole manufacturer financial responsibility under an EPR program for packaging and envisions local incentives for efficient municipal programs, it does not provide specifics on how this balance can truly be achieved to sustain both statewide collection of materials and local control.

AMERIPEN recommends that the Report clearly state that regardless of the approach, local municipalities may likely lose control and management responsibility for packaging waste under a true EPR approach. If PSO organizations are mandated to be responsible for managing packaging materials statewide, those organizations are not likely to continue to contract and support the diversity of Maine's solid waste structures within all of municipalities and local governments *and* be sustainable economically. Efficiency will be critical, especially in today's material markets, and any PSO will find it difficult to meet statewide service collection and maintain both local control and solid waste management jobs and responsibilities. Out of necessity this will result in statewide contracts for collection to those providers that can provide service that accomplishes PSO program goals but minimize variation and local cost issues. If a system is set up without this flexibility, then the alternative – costly bureaucratic duplication – is equally disruptive and unlikely to be publicly accepted.

4. Maine's Bottle Bill and EPR for Packaging

While the Report does discuss Maine's Bottle Bill program and notes where EPR and bottle bill programs exist in Canada, it does not provide a vision for how such a program would relate to EPR for packaging in Maine. Maine's privatized Bottle Bill program is unique and it is difficult to see both programs continuing to be able to operate and create enough volumes for either program to be successful – especially when the Bottle Bill in Maine appears to be in a crisis. This crisis is demonstrated by the amount of legislative interest in supporting the private system of the Bottle Bill this year. With this crisis, moving to an EPR program for all packaging, which would include beverage containers, may only exacerbate the program's current problems. If the Department intends to maintain two systems, the Report must articulate how they both could achieve economically viable volumes of materials and funds.



The power of packaging in balance.

1000 WestGate Dr • Suite 252 • St. Paul MN 55114
Phone: +1 651-288-3431 • Fax: +1 651-290-2266

Once again, AMERIPEN appreciates the opportunity to comment on the Annual Product Stewardship Report. While we do not support product stewardship as envisioned by the report, we look forward to working with the Department of Environmental Protection to work to address proactive policy solutions that improve access to recycling and find positive outcomes for recycled materials within Maine and beyond. We hope to continue a positive dialogue with the Department on these issues and with the Legislature as they are considered this year.

Sincerely,

A handwritten signature in black ink that reads "Andrew R. Hackman".

Andrew Hackman
Principal Lobbyist on behalf of AMERIPEN

CC: Melanie Loyzim, Deputy Commissioner, Maine DEP
Paula Clark, Director, Division of Materials Management, Maine DEP
Carole Cifrino, Supervisor, Recycling Programs, Maine DEP



founded 1881

February 14, 2019

Mr. Mike Karagiannes
Director, Bureau of Land Resources
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

RE: Comments – Annual Product Stewardship Report (January 2019)

Dear Mr. Karagiannes,

On behalf of the Consumer Healthcare Products Association (CHPA), the 137-year-old trade association representing the leading manufacturers of over-the-counter (OTC) medications, please accept our comments related to the Maine Department of Environmental Protection's (DEP) annual report, *Implementing Product Stewardship in Maine*.

Our specific interest in the document falls on page 20 where pharmaceuticals are mentioned as a candidate for a new extended producer responsibility (EPR) law in Maine. While EPR may make sense for some consumer products, it does not work for pharmaceuticals. In fact, the report admits that one of the more critical components of product stewardship – increasing recovery of material for reuse and recycling – cannot be met with a pharmaceutical EPR law. That being the case, we strongly recommend the State of Maine take alternative approaches to address concerns with pharmaceutical diversion and environmental impact. Rather than creating an expensive, inefficient, under utilized framework for broad pharmaceutical product stewardship (drug take-back), CHPA encourages the state to educate consumers about existing disposal and safe medicine storage options.

Disposal Options Already Exist

Walgreens, in a partnership with AmerisourceBergen, Prime Therapeutics, and Pfizer (a member of CHPA) already collects unused or unwanted medications at 1,500 of its drugstores across the country. Since the program began, more than 400 tons of medications have been collected and disposed of. Late last year, Walgreens also announced it would offer drug disposal options at every single one of its stores. Available at no cost to consumers, Walgreens will distribute a "safe medication disposal kit" upon request by any customer. Both programs make the disposal of medications easier and more convenient while helping reduce potential drug diversion from their intended use.

Similarly, CVS Health accepts unused pharmaceuticals in more than 750 of their locations, and they have donated more than 900 disposal kiosks to community locations such as police departments. Together, these units have collected more than 217 tons of unwanted and unused medication.

Walmart gives pharmacy customers "Dispose Rx" powder that can turn medications mixed into a pill bottle with warm water that is then disposed of in household trash. Rite Aid offers mail back envelopes people can use to return their extra medications. These retail efforts combined with existing Drug Enforcement Agency (DEA) pharmaceutical drug take-back days, provide consumers with a plethora of options for medicine disposal. Rather than re-creating a take-back system, we suggest educating the public about existing options; concentrating efforts on driving traffic to existing disposal sites.

Safe Storage vs. Safe Disposal

According to national surveys, at least half of individuals who misuse medications obtain them from a friend or relative. More than 60,000 young children end up in emergency rooms every year after getting into medicine while their parents or caregivers were not looking. Medications left unattended or not safely stored, no matter if they're expired or not, are prone to being diverted from their intended use. As such, educating Mainers about the importance of safe medication storage has a far greater impact on drug diversion control than does a disposal program.

To remind parents and caregivers about the importance of safe medicine storage, the Centers for Disease Control and Prevention (CDC) and the CHPA Educational Foundation, in partnership with the PROTECT Initiative, launched the Up and Away and Out of Sight educational program. The program is aimed to educate parents and caregivers about how they can prevent accidental overdoses. It reminds them to store medicines safely; providing them with the information and tools to keep their child/children safe; and encouraging them to take action.

Conclusion

OTC medicines play an important role in our nation's overall healthcare. Our members' products provide millions of Americans – including thousands of Maine residents – with safe, effective, and affordable therapies to treat and prevent many common ailments and diseases. These medicines are affordably accessible to patients, and help empower families to treat conditions with trusted, Food and Drug Administration (FDA) approved treatments. According to a study by Booz and Company, for every dollar spent on an OTC medicine, we save the U.S. Healthcare system \$6-\$7.¹ Without access to OTC medicine, over 60 million Americans would not seek treatment for their ailments at all.²

For these reasons, we take very seriously any potential disruption - regulation or otherwise- to the affordability of OTC healthcare. As the first and only line of defense for many Maine families, it is critical that state officials evaluate the opportunity cost (cost of medications vs. benefits of drug take-back) associated with the implementation of a mandatory, manufacturer funded drug take back program.

CHPA recognizes the importance of safe storage, and drug disposal, but we strongly disagree that an EPR program for pharmaceuticals is necessary in the State of Maine. Thank you for considering our concerns and please feel free to contact me directly with any questions on our position.

Respectfully submitted,

¹ The Value Of OTC Medicine To The United States, Booz & Co., January 2012.

² Ibid

A handwritten signature in blue ink that reads "Carlos I. Gutierrez". The signature is fluid and cursive, with the first name "Carlos" and the last name "Gutierrez" clearly legible.

Carlos I. Gutierrez
Vice President, State & Local Government Affairs
Consumer Healthcare Products Association
cgutierrez@chpa.org | 202-429-3521



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February 14, 2019

Mike Karagiannes
Maine Department of Environment Protection
17 State House Station
Augusta, Maine 04333

Re: Comments on the Maine Department of Environmental Protection (“DEP”)’s 2019 Annual Product Stewardship Report to the Legislature (“Report”).

Dear Mr. Karagiannes,

Conservation Law Foundation (“CLF”) is a nonprofit, member-supported, regional environmental organization working to conserve natural resources, protect public health, and promote thriving communities in the New England region with an office in Portland. Our Zero Waste Project aims to protect the regions’ communities from the dangers posed by landfills and incinerators, support the development of a circular economy, and lift the burden of waste costs from municipalities. Thank you for the opportunity to submit comments on Maine DEP in the 2019 Annual Product Stewardship Report.

CLF supports policies which strive to include producers in the end-of-life management of the products they place on the market, including the recommendations made by Maine DEP in the 2019 Annual Product Stewardship Report. Maine is a national leader in the implementation of extended producer responsibility programs, and we hope it continues to lead by expanding and adopting the policies in the Report.

For much of the history of waste management, producers have been disconnected from end-of-life care for the products they sell to consumers. Companies do not have an incentive to design products to be recycled or use recycled content in their manufacturing, and increasingly materials are used which cannot be easily recycled or recovered. Producers of hazardous waste like plastics and electronics flood the market and our landfills and incinerators with dangerous pollution. Solid waste facilities, which are overwhelmingly located in environmental justice communities, then expose the most vulnerable populations to health hazards. Waste costs extend beyond environmental and health concerns – municipalities are responsible for cleaning up litter and paying for trash and recycling regardless of whether they purchased the products, costing taxpayers tens to hundreds of thousands of dollars each year. Extended producer responsibility (“EPR”) policies require producer engagement in bearing these burdens, lifting costs from communities and incentivizing environmental stewardship from producers.

Maine is one of two states with an extended producer responsibility framework law, which has led to the adoption of product stewardship programs for a long list of products, including electronic waste, architectural paint, and beverage containers recovered through the Bottle Bill. CLF supports these programs and Maine DEP's recommendations for improvements. However, CLF cautions the DEP and Legislature with respect to any proposed statutory changes to the Bottle Bill. Maine's beverage container redemption law is highly efficient in its current form, recovering between 75 and 87% of all distributed beverage containers. The program provides jobs and a clean source of recyclable materials, while lifting the cost of recycling from the backs of municipalities. CLF agrees with the Natural Resource Council of Maine's comments on the Report that the Legislature should improve the program with:

- 1) Better data and reporting so that we may be more certain about the collection rate—this should be coupled with an automatic increase in deposit amount should collection targets not be reached;
- 2) Consideration of adding more containers into the redemption model;
- 3) Better ways to respond to issues of non-compliance; and,
- 4) Review of methods to streamline the commingling process based on input from the redemption center operators.

The Report also includes recommendations for five additional programs that the Legislature may consider: product stewardship for packaging, pharmaceuticals, carpets, mattresses and solar panels. EPR laws for each of these products exist in other U.S. states, including very successful programs in Rhode Island, Connecticut and California for mattresses, and statewide product stewardship for pharmaceuticals in California.

CLF is especially heartened by Maine DEP's focus on and insight into the implementation of an EPR program for packaging. The Report highlights the drastic increase of recycling costs for municipalities in 2018, caused by China's refusal to accept contaminated bales of mixed plastic and fiber. EPR programs for packaging in the European Union and Canada have lifted all or part of these costs from municipalities and taxpayers while pressuring producers to make the barrage of products flooding communities as recyclable as possible. In identifying program examples, Maine DEP describes the differences between recycling systems completely under producer control versus those in which municipalities maintain partial control. CLF believes that the Legislature should move quickly to adopt a shared model wherein producers are responsible for helping cover the costs of municipal recycling. Such a program will ensure that environmental goals for material recovery are met and that recycling remains under control of municipal government, not producers concerned with their bottom line.

While Maine may be a leader of EPR policies and programs, the rest of New England is also moving forward, especially Massachusetts, Connecticut, and Rhode Island. The Zero Waste Project promotes EPR programs regionally, including shared responsibility for packaging and expanded or strengthened deposit/return programs for beverage containers. EPR systems work,



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and regional adoption of product stewardship will only increase the efficacy of these programs, so we will be certain to share news of your hard work with other states.

CLF thanks Maine DEP for this thorough and motivating report, and for allowing us the opportunity to submit comments in support. We will urge the Legislature to vote favorably on EPR legislation under consideration this session, and to advocate for the future adoption of recommended programs. CLF stands ready to answer any questions or supply additional information if needed.

Very truly yours,

Kirstie L. Pecci
Director, Zero Waste Project, CLF

Cc: Sarah Lakeman, Sustainable Maine Project Director, Natural Resources Council of Maine
Sean Mahoney, Executive Vice President and Director, CLF Maine, Conservation Law Foundation



**RETAIL
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MAINE**
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February 14, 2019

Mr. Mike Karagiannes
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

Re: Comments on 2019 Maine Product Stewardship Report

Dear Mr. Karagiannes:

On behalf of the membership of the Retail Association of Maine, please accept the following comments regarding the 2019 Maine Product Stewardship Report. As noted in the report, the department is recommending changes to the framework law as well as four of the nine programs that currently exist. We will break our comments down in a similar fashion.

Framework Law Changes:

The report proposes a number of changes to Maine's product stewardship law most notably in Appendix A. We have some concerns:

- Each product and program is different and to mandate a permanent collection site within 15 miles of 90% of Maine's population within 1 year seems arbitrary. Given the majority of Maine's population follows the coastline, the bill would likely exclude collection in much of Maine beyond the coastal areas.
- Requiring that a program has a minimum of a ½ time employee is not clear. Must this person be located in Maine or would a program operating regionally suffice?
- The department is proposing an annual fee of up to \$100,000 per year to help cover annual report review, oversight, administration and enforcement. With the existing nine programs this seems excessive. How many DEP staff are needed to adequately monitor the programs? As the report demonstrates, some of the programs are operating efficiently and need very little ongoing oversight. Additionally, when the product stewardship law was first passed, it promised two things in addition to taking certain products out of the waste stream: drive down to cost of landfilling certain materials and to prevent individual legislative proposals for new product categories. While DEP demonstrates that Maine has increased recycling costs, no evidence is provided that EPR will actually lower costs. We believe neither of those promises have been kept.

- The department is proposing an annual survey by each of the nine programs to measure consumer knowledge and collection methods. It would seem to be more efficient to have one survey that covers all of the programs. Does it need to be done annually or would bi-annually suffice?
- In summary, the department is proposing a number of dramatic changes in Appendix A. We would recommend that a stakeholder group be formed to collaboratively work with the department on any necessary changes to existing programs. The stakeholders should include representatives from the existing product programs, retailers, and collection sites.

Mercury Lamps:

The marketplace for lightbulbs has changed dramatically in the last decade. For consumers, we have moved from incandescent bulbs to CFLs to LEDs. In fact, starting January 1, 2020, there will be new requirements on producers and retailers regarding high efficiency lamps thanks to the 2007 Energy Act. It is clear the department has concerns with the existing program and we cannot comment on the effectiveness of NEMA's program. However, we do think there is an opportunity for a wider discussion of this issue with Efficiency Maine and whether or not there can be additional incentives to replace CFLs.

Recently, Efficiency Maine ran a program that lowered the cost of LEDs lightbulbs to approximately \$.50 / bulb. The price was so good that it inspired me to replace all of the CFLs in my house with LEDs. However, now I am left with a good number of still-usable CFLs and it would seem silly to recycle them when they still have usable life. Could Efficiency Maine or Maine DEP provide a bounty on CFLs similar to the mercury thermostat program? Perhaps that would help drive up redemption rates.

Beverage Containers:

The report noted that Maine's beverage container redemption program is very successful with redemption rates of 75-87% compared to the national average of 34%.

We have a number of concerns with some of the proposals in the report:

- First, Mainers are well aware where they can take their bottles for redemption. Maine's program has been operating for so long that there should be no confusion as to who takes or does not take bottles.
- That being said, while we support the elimination of the redemption responsibility for retailers of 5,000 square feet or less, we cannot support the new requirement that retailers greater than 5,000 square feet must have a written agreement with a redemption center within 1 mile. As Mainers, we know we can take our bottles to a Clynk facility at Hannafords, or Shaws' redemption facility, or a stand-alone redemption center. We don't expect Reny's to redeem bottles. We don't expect Home Depot or Dick's Sporting Goods to redeem bottles. We have never understood the need for retailers to maintain written agreements with redemption centers as we are not aware of redemption deserts in Maine. In fact, our 75-87% redemption rate speaks to the success of the existing program.

- There are a large number of bills submitted this session looking to make changes to Maine's bottle redemption program so we know these issues will all get scrutinized and we welcome the discussion.

Batteries:

As the report noted, there was significant discussion in 2016 regarding the expansion of the battery stewardship program. We agree that batteries (generally rechargeable batteries) that are a fire hazard should not be in the waste stream and that additional efforts are needed to limit that risk.

However, when the discussion includes primary batteries, we are not sure those should be included in the program. Primary batteries are non-toxic and can be disposed of through the normal waste stream with no adverse effects and do not take up significant landfill space. Yet, consumers do not differentiate easily between rechargeable / recyclable batteries and primary batteries and often deposit both types in collection containers. In addition to the recommended language in the report, there is another bill title addressing batteries for legislative consideration. We look forward to participating in those discussions when those bills arise.

Cellular Phones:

We agree with the proposed changes to the cellular phone program.

Additionally, the report discusses other products for future consideration, namely *packaging, pharmaceuticals, mattresses, carpet and solar panels*. We are aware of a couple bill titles that will propose legislation regarding mattresses and pharmaceuticals as those issues have been discussed previously. There are existing programs in other states that will provide relevant information as to whether or not these products are ready for a product stewardship program in Maine.

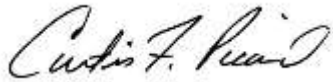
For packaging, the report highlights many of the challenges that currently exist but we wanted to mention a few other points.

- DEP claims that other provinces have had success with EPR without providing clear before and after evidence of success. Furthermore, they confess to not being able to measure changes in sustainable packaging as a result of EPR. We support increasing the use of sustainable packaging and believe that the state can work with businesses to achieve that end within the existing recycling scheme and create incentives to encourage sustainable packaging.
- DEP is conflating product EPR programs with EPR for packaging. The complications with creating an EPR scheme for packaging in Maine are significant and cannot be taken lightly. No state in the U.S. has approved an EPR law for packaging. In fact, the CT legislature directed a task force to study methods for reducing consumer packaging. In February 2018, that task force approved final recommendations that did not include EPR for packaging.
- DEP raises a number of important questions about EPR for packaging in their report but does not provide answers. If DEP wants to explore this issue, we recommend they convene a

stakeholder discussion, of which RAM would participate, to understand the opportunities, complications and factors the legislature would need to consider before approving an EPR program for packaging.

Thank you for the opportunity to submit our comments.

Sincerely,

A handwritten signature in black ink, reading "Curtis F. Picard". The signature is written in a cursive style with a large initial "C" and a distinct "F".

Curtis Picard CAE, President and CEO

Comments on Product Stewardship Report of Peter Welch Gaia, LLC

Hello Mike,

It was good to meet you up in the legislature at the time of the plastics bill hearing at ENRC. Please note that I have copied Carole Cifrino as well. I certainly wish to share openly my views with her, too, in the spirit of dialogue that she has so generously offered to me. Please know that I view this report with an understanding that the DEP is wanting to make improvements to the bottle bill & that this department bill is with the best of intention. However, the dialogue and concepts that are included in the Stewardship proposals fails to address the # 1 issue, handling fees.

Please allow this email to be my “comments” for purposes of public comment on the “Stewardship Proposal”.

Handling fees have not adjusted in nearly a decade. Proposals such as LD 360 do address this issue and the need is urgent. Hence, the “emergency” status is warranted. I would hope that the department and Governor Mills would see the need and support its passage. I speak as a bottle bill veteran since 1981. I speak as a major retailer in Maine for nearly 25 years. I speak as a wine importer who sells to wine distributors in Maine. I speak as a long-time former Maine Liquor Agent. I speak as an employer who voted for the minimum wage increase. I speak as a past appointed member by the Maine Legislature on multiple “bottle bill” study groups. I speak as a longtime supporter of the bottle bill & Maine’s environment.

Let me try to address the Stewardship proposal in the following prose.

The “catch all” is not a panacea- even if it were able to be implemented???? It is not well thought out, at all. The spirit of the idea is good. It would be somewhat helpful, in theory. It would only represent about 20% of the containers in the system, by my estimate.

Do you know of any entity that envisions themselves as the “Catch All”???? The state should be wary and cautious about getting stuck holding the bag here!!

However, this section improperly assumes that the only action and” labor” involved at a redemption center is: putting a can in a bag. It doesn’t save any storage space, whatsoever. And, the storage on site for 1000 containers is the same no matter how many sorts are involved. It may save some floor space for sorting, surely.

A customer brings a container to a redemption clerk- The clerk- inspects for the “deposit”(**often difficult to find and see due to poor or out of compliance labeling by IOD’s**)- requires counting the customers empties by those that are .05 separate from .15 & separating out containers not covered under the bottle bill- etc., etc. It does not include the labor needed to maintain & clean the redemption center and take care of ancillary recyclables (i.e.- cardboard & bags of which there is a lot- again envision yourself and how folks return empties) -- or trash- including the bazillion plastic bags consumers return empties in.

At some point and currently & usually once a week or every 2 weeks- the distributor picks up the containers and verifies with the redemption center the number of containers. The proposed “catch all” process is much more involved than that. Also, the idea of weights is flawed- even if you were to get

100% compliance from all these IOD's. Right now- we have containers that have ice in the bottom of them from fluid from sitting in people's garages. If anyone can picture your own empties- or what we see---- empties comeback with a variety of materials in them. First, they often have some amount of fluid or ice in them which would mess up the weight concept, completely.- Sometimes they have lemons and fruit, sometimes cig butts- sometimes straws, in the summer sand, etc- the list goes on. Also, IOD's are constantly changing and evolving their containers for marketing purposes, etc. Size, shape, and weight are regularly changing. Just recall the testimony at the Plastic Caps hearing about producers lowering the weight of their containers.

Sometimes very unsavory stuff is also in these containers. Deposits and weights don't match up & cannot be reconciled by bookkeeping.

Also, if the measurement to the consumer is a "5 cent deposit" the only way to match this up is with the same. I can picture a scenario whereby each and every bag that departs a redemption center needs to be "weighed"- OMG- that will take time and labor! From a bookkeeping point of view, I picture an army of clerks and tally's even using scanners and technology.

Practically speaking- all these IOD's which, in theory, will be part of the "catch all"- all currently have the opportunity to sell directly and "solely" to a Maine distributor and thereby be part of those distributors that have a co-mingling group- (In theory). But they have voluntarily decided to NOT pursue this avenue. Or, they have not been permitted to join for some reason. This is by choice, assumable.

Also, there has been no oversight or review of the current co-mingling groups to verify annually that they continue to be in compliance with law and regulation. This should be done.

More importantly, the existing co-mingling groups were envisioned & required to allow other producers into their groups under the original enabling legislation. If that were happening, this issue is solved. But, still not a panacea!

There are also some other issues in this Stewardship report, too. I am for fees to be increased to assist the bottle bill and enforcement- but that MUST include IOD's and distributors- not just Redemption Centers. Yes, go ahead and double everyone's fees. I find it a little burdensome that that the side of the industry with fixed revenue is being asked to carry all the weight.

I do concur with getting a "solid reporting" regime of & for "ALL" containers BOTH SOLD & REDEMMEED IN MAINE. This is really slack at the moment. This should be done for containers subject to "escheat" and containers that are not subject to "escheat". "Trust & Verify", to quote Ronald Reagan.

As for the issue of Maine Liquor not meeting the "test" of a qualified commingle- well then- a "fiscal note" should be attached to this legislation as the state would owe ½ penny going back for several years on all the containers run thru its system. Because the State of Maine was envisioned as 100% of the product group in the original legislation; it was deemed compliant.

Unfortunately, I see this as well-intentioned but way off the mark of the focus needed. That is a handling fee increase such as envisioned in LD 360 and with a CPI adjustment whenever the CPI moves above the "BASE" rate by more than ¼ of a penny.

The section on “fraud” and “under bagging” at redemption, I see as somewhat of a red herring. Most and many redemption folks are hardworking, honest folks and this intonation is not fair. First, the distributor or pick up agent has the right to refuse a bag if they see or believe it to be short. Second, it makes no provision for being overfull. The system was designed on volume counts. At that has worked, well. THERE ARE NO IOD’S MORE THAN 100%!!! There is “NO” mention of unintentional or intentional fraud in the system by IOD’s. I submit this is more significant- due to “perhaps” unintentional acts- but still more significant. The fact that RSI had more contract IOD’s than Maine Revenue Services had filings for IOD’S & “escheat” is a bell weather. That should be a 1:1 and 100% correlation. THE CURRENT LAW REQUIRES IT, BUT IT IS NOT ENFORCED.

The bottom line is that the bottle bill is a “User Fee”- the single most effective piece of legislation with a 40-year history of success, delivering 80-95% return rate without a “Penny” of taxpayer money. I would think the Legislature and Governor would support this concept, universally. It does deliver 5%-10% of Maine’s MSW depending on who you talk too. If we had 5 more laws as effective as this- Maine would be at 50% recycling and meet our outdated goal. It saves property taxpayers and municipalities “statewide- rural & urban”. And BTW- the roads are clear of those containers and Maine DOT and towns do not need to employ staff to do this Vital Task in a tourist state. We are a tourist state whereby our hospitality industry is of great importance.

The Maine public has endorsed and supported the “bottle bill” with great zest and compliance. Twice rebuffing by great vote margins (85%-15%) industry efforts to dismantle and weaken the bottle bill. Wouldn’t it be grand if all of Maine’s Solid Waste legislation had this “SUCCESS”!

IT works!!-

The crux of the issue at the moment is that all manner of costs(property tax, insurances, utilities, supplies, on and on)-- have increased at the Redemption Center level since 2009 at the time of the last increase.

Significantly, the Maine minimum wage has rightly risen from 7.50/hour to 11.00/ hour starting 1.1.19. A 46% increase. Starting on 1.1.20, the minimum wage rises to 12.00/hour- a whopping 60% increase from 2009.

Maine state government has implemented this minimum wage. Maine state government implements the “handling fee”. Raising the “handling fee by .01 to .02 with a CPI adjuster” is: a matter of, FAIRNESS.

Over the past near decade, this amounts to less than 1/10 of 1 percent per year increase when related to the retail price of products such as liquor, wine, beer, soda and water.

I see the Dept. bill as perhaps well-intentioned but “noise” and distracting. I believe the Dept. had as a prerequisite, trying to do something positive- just so long as there was no fee increase. Hence, all version of mental exercises except the single most needed advocacy. I am certainly wishing to make myself available to and for the department in any manner that may be of assistance.

Thanks for letting me portray a point of view & providing me the opportunity to do so. If you would be so kind as to confirm receipt so that I know that I have properly delivered these comments; I would be thankful.

Sincerely yours,

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February 14, 2019

Mike Karagiannes
Maine DEP
17 State House Station
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mike.karagiannes@maine.gov

Re: Comments on January 2019 Report, Implementing Product Stewardship in Maine

Dear Mr. Karagiannes,

The International Sleep Products Association (ISPA) is the trade association for mattress manufacturers and component suppliers to the industry. ISPA has served as the voice of the mattress industry for over 100 years. We appreciate the opportunity to comment on the Department of Environmental Protection's (DEP) January 2019 report, *Implementation of Product Stewardship in Maine* (2019 Product Stewardship Report or Report). ISPA has concerns with mattresses identified as a candidate product for new Extended Producer Responsibility (EPR) programs as well as the proposed changes to the Product Stewardship framework law.

I. Mattresses as a Candidate Product for New EPR Programs

As noted in the Report, California, Connecticut, and Rhode Island each have mattress recycling laws. Each law requires a small visible fee to be charged on each mattress and box spring sold in the state to fund the respective recycling programs. In order to implement the mattress recycling programs required by these laws, ISPA created the non-profit organization, the Mattress Recycling Council (MRC) to oversee each of the programs. The Connecticut program launched in May 2015, California in December 2015, and Rhode Island launched in May 2016.

The current fee in each state is as follows:

California - \$10.50
Connecticut - \$9.00
Rhode Island - \$16.00

These fees are per unit. For example, an individual buying a mattress and box spring in California would pay \$21.00. Geography, population size and obligations imposed by the state all play a role in influencing the level of the fee. In each of the existing program states, multiple recyclers operated in the state prior to passage of the law. Currently, we are aware of no mattress recyclers operating in Maine, meaning that any such program would have to rely on out-of-state or foreign operators to recycle mattresses. In addition to likely higher processing costs, transportation costs will be significantly higher.

In the 2019 Product Stewardship Report, the DEP concluded that, “given Maine’s geographic size, low population, and lack of businesses to deconstruct mattresses, enacting a law with the same financing mechanism likely would result in a per unit fee at sale even higher than the \$16 fee in Rhode Island.” Instead the DEP proposed, “an EPR system for mattresses funded at least partially through cost internalization may be most appropriate for Maine.”

ISPA does not agree with either statement. We have no basis upon which to estimate the cost of recycling mattresses in Maine. It could require a fee higher or lower than the \$16 fee currently collected in Rhode Island. ISPA is prepared to work with DEP or others to explore options and estimate the actual cost of recycling mattresses in the state.

Likewise, funding mattress recycling through a combination of consumer fees and “internalized” costs has many disadvantages. The disadvantages include:

- The suggested mixture of consumer fees and internalized costs will not save the consumer any money. The internalized cost will be passed along to the consumer. Therefore, the consumer will pay for the full recycling costs regardless of whether it is funded exclusively by a consumer fee or not.
- In fact, the consumer may be required to pay more under the internalized cost approach. Collecting a fee at retail is relatively easy to implement and has proven highly successful in funding recycling programs in other states. If a state resident buys a mattress, the fee applies. This approach places all manufacturers and competitors on a level playing field. Under an internalized cost approach, however, an additional process will need to be established to verify whether each manufacturer is paying its proper share of the cost. This approach may be difficult to implement as well because a manufacturer that sells mattresses to retailers operating in multiple state will not necessarily know where the product will actually be used. As a result, the state recycling program will need to incur additional administrative costs to implement an internalized cost approach, and there will be a greater risk of “free riders” not paying their share of the costs. For these reasons, it is in fact likely that consumer will pay more to implement both a consumer fee and an internalized cost approach. Not pursuing an internalized cost approach will be more efficient.
- A consumer recycling fee that is collected at retail and that is clearly visible on the sales invoice or receipt provides the most transparent way for consumers to understand the cost of recycling. An internalized approach will serve to hide some of the costs that the consumer is incurring as a result of the recycling program. In order to be transparent with Maine residents, DEP should promote a process that clearly informs its residents about the actual costs of recycling, and not adopt a funding method that only obscures this fact.

The industry supports working with states to determine whether a practical mattress recycling programs is feasible. We remain concerned about the lack of available infrastructure in Maine to support a program at this time but are open to exploring alternatives for addressing these

issues and options for lowering related costs. ISPA remains committed to working with the DEP and the Legislature to explore all options that can promote the recycling of mattresses.

II. Proposed Changes to the Product Stewardship Framework Law

ISPA objects to the following changes that DEP has proposed to Maine's Product Stewardship framework law.

1. Imposing minimum standards for producers' or stewardship organization staffing.

DEP proposal:

"Minimum standards for producers' or stewardship organization staffing, e.g., a minimum ½-fulltime equivalent (FTE) to recruit, train and monitor collection sites. For example, the PaintCare program has employed 1-FTE to perform these functions for its program in Maine and Vermont since the inception of their program. This level of staffing has ensured that collection sites receive the support they need to safely and adequately implement the program as confirmed by Department staff field visits."

ISPA response:

There is no basis for this recommendation. Just because the PaintCare program has employed a ½ FTE in Maine does not mean that it is necessary or that it will be relevant to a new mattress recycling program. Not all recycling programs operate the same way. As a result, a "one size fits all" approach, even for a minimum, is not warranted here. For example, some recycling programs involve hazardous waste, others (like mattress recycling programs) do not. Although a heightened level of monitoring may be needed for more dangerous products, it is not warranted for others. Likewise, the level of monitoring will change over time. When a program first launches, staffing needs may be greater than are needed for a mature program.

DEP's recommendation may unnecessarily drive up mattress recycling costs in Maine. For these reasons, ISPA opposes DEP's recommendation to impose a standard minimum cost on programs that do not yet exist, regardless of whether there is a demonstrated need for such additional costs.

2. Financing for implementation and operations, including funding for regulatory oversight.

DEP proposal:

"Adequate financing for implementation and operations, including funding for regulatory oversight. Payment into the system to finance end-of-life management must be sufficient to cover materials management costs, consumer and collection site education, a minimum ½- FTE per stewardship program assigned to implement the program in Maine, on-going program evaluation and reporting, government oversight, and any incentives for collection."

ISPA response:

ISPA disagrees with this recommendation for similar reasons. EPR programs are intended to make producers responsible for the post-consumer management of products, shifting the

burden for dealing with discarded consumer products previously borne by state and local governments to the recycling program.

Although government oversight is important, stewardship organizations and/or producers are responsible for implementing the programs. Therefore, reimbursing the department for its costs incurred in “implementing the program functions of future recycling programs” may unnecessarily drive up the program’s costs. ISPA has further concerns with the draft legislative language in Appendix A that program budgets cannot cover legal fees or advocacy efforts. As separate legal entities, stewardship organizations are entitled to defend themselves and advocate on their own behalf. For these reasons, ISPA opposes reimbursing DEP for “implementing” the program and strongly opposes the language barring program budgets from accounting for legal and advocacy costs.

3. Minimum program standards for education and outreach, and on-going evaluation of the effectiveness of education and outreach efforts.

DEP proposal:

“No program can be successful without collection site staff and consumers knowing about the program and how it works. Staff turnover at collection sites (often retailers and/or solid waste facilities) is ongoing, as are changes in residents in Maine. Evaluation of education and outreach efforts identifies which initiatives are most effective, and where additional focus is needed. Manufacturers can use the information gained to achieve cost-effective continuous improvement in their programs.”

ISPA response:

ISPA agrees that on-going education and outreach is important to achieving a recycling program’s objectives. Nevertheless, we caution that not all recycling programs are identical. Different programs may require outreach to different stakeholders and each program should have the latitude to plan and develop an education and outreach program that is tailored to its objectives. For example, the mattress industry has found that for our products, targeted outreach to established collectors (retailers and solid waste facilities) and users (purchasers of new mattresses, families that are moving, hotels and institutions like universities, etc.) as opposed providing the same level of outreach to all state residents, is most effective and efficient. A minimum level of education and outreach for all Maine consumers may not achieve desirable benefits but could greatly increase program costs. For these reasons, ISPA opposes DEP’s proposed changes to existing Product Stewardship framework law.

4. Measurable, enforceable goals and defined consequences for non-compliance.

DEP proposal:

“Measurable, enforceable goals (e.g., recycling rate, consumer awareness, convenient collection), and defined consequences for non-compliance. When manufacturers are responsible for paying for the recycling of collected products, they have a disincentive to collect or to promote the existence or ease of use of a collection system. Minimum standards for locations of collection sites along with a ban on fees at collection are critical to counteracting the financial incentive manufacturers have to discourage consumer

participation. Repercussions for insufficient performance or non-participation on the part of manufacturers must be practical to implement. The Department must have the authority to direct program changes if the program fails to make sufficient progress toward achieving program goals.”

ISPA response:

ISPA disagrees with DEP’s recommendation. Where no recycling program currently exists, and neither the state nor the industry has any factual basis for understanding the challenges and unforeseen problems that lie ahead, a degree of flexibility and good faith give and take between the state and the recycling program is necessary to develop and implement a practical, efficient, and effective recycling program. For example, many recycling programs face fluctuations in end markets for recycled materials. Likewise, the volume of products discarded may change as the economy changes. The recycling program has no control over these external factors, yet they can have a substantial impact on the volume of materials recycled, the program’s total costs, and the overall efficiency of the program. A program needs the ability to absorb these fluctuations as they occur. While it is important that parties be held responsible for seeking to achieve goals that they have set (with input from the state), we think it would be impractical, unrealistic, arbitrary, and unfair to threaten a recycling program with a significant financial consequence if it cannot achieve established goals due to factors outside of its control. We disagree with DEP’s recommendation to the extent that it appears to assume that such external factors either will not occur or are irrelevant to whether “consequences” are appropriate. For these reasons, ISPA opposes the inclusion of enforceable goals in the Product Stewardship framework law.

5. Financial incentives for collection site participation and for consumers to return products to collection sites.

DEP proposal:

“Financial incentives for collection site participation and for consumers to return products to collection sites. Successful programs provide an incentive for collection to either consumers or third-party collection agents or both. Collections in Maine’s mercury thermostat recycling program increased significantly when the \$5 incentive was implemented, and again when a \$10 incentive was offered for a limited period of time. A similar jump in collections was achieved in Maine’s mercury auto switch recycling program when the \$4 incentive to collection sites was implemented. Maine’s Bottle Bill program consistently achieves the highest return rate, with consumers motivated by the deposit/return payment system.”

ISPA response:

ISPA agrees that financial incentives to collection sites and consumers may increase the number of units that a recycling program collects. Nevertheless, incentive programs also entail additional costs and challenges. Given DEP’s justified concern about whether mattress recycling in Maine can be achieved at a reasonable cost, ISPA would oppose changes to existing law that would require all recycling programs to provide these types of incentives. Once again, whether to provide incentives under a particular recycling program involves a number of factors that can vary significantly from one program to the next. It would be inappropriate to amend existing

law to adopt a “one size fits all” approach on this issue. For these reasons, ISPA opposes a change to existing law that would make financial incentives “necessary” for all recycling programs in Maine to “achieve program collection goals”. Instead, we propose that a decision on whether to include incentives in a program should be based on a full evaluation of the incentive as part of an entire recycling program.

* * *

We look forward to working with the DEP, the Legislature and other stakeholders to identify options for promoting mattress recycling in Maine.

Please contact the undersigned should you have any questions regarding these comments.

Sincerely,

Marie Clarke
VP, Policy and Government Relations
International Sleep Products Association
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mclarke@sleepproducts.org



54 STATE STREET, SUITE 304, ALBANY, NY 12207 | 518.449.5370 | **PhRMA.ORG**

Mike Karagiannes
Maine DEP
17 State House Station
Augusta, ME 04333-0017

Dear Mr. Karagiannes,

The Pharmaceutical Research and Manufacturers of America (PhRMA) represents the country's leading innovative biopharmaceutical research and biotechnology companies, which are devoted to discovering and developing medicines that enable patients to live longer, healthier, and more productive lives. PhRMA respectfully submits these comments in response to the Department's Annual Product Stewardship report, submitted to the Legislature in January 2019. Specifically, we wish to offer comment regarding the Department's identification of pharmaceuticals as a candidate program for a new Extended Producer Responsibility ("EPR") program.

The biopharmaceutical industry in the United States remains committed to working with multiple stakeholders to help address issues associated with prescription medication adherence and prescription drug abuse, safe disposal of prescription medicines.

PhRMA believes that any stakeholder approach should focus on educating patients on how to securely dispose of unused pharmaceutical products. PhRMA launched MyOldMeds in 2015 to educate patients on how to quickly, safely, and securely dispose of unused medicine. Instead of implementing a flawed and potentially unsuccessful program, we urge Maine to consider meaningful, measurable and comprehensive mechanisms to educate consumers on how to safeguard medicines in the home, how to ensure patients are taking their medicines as prescribed – thereby significantly mitigating unused medicines in the first place – and how to safely and securely dispose of their truly unused medicines in the household trash.

In-home medicine disposal offers many benefits. It removes the medicines from the home immediately so that the medicine is not available for misuse or abuse, and it does not create any additional environmental impact or cost. It also gives community members the ability to handle medicine disposal discretely and independently, and protects medical privacy when done properly.

The "MyOldMeds" Program (<http://myoldmeds.com>) is a consumer education program that instructs patients on how to safely dispose of medicine in the home or where to find current

take back programs in their community. To safely dispose of medicines in the home, PhRMA recommends these easy steps:

- Step 1: Pour medication into a sealable plastic bag. If the medication is in solid form (pill, liquid capsule, etc.), add water to dissolve it.
- Step 2: Add kitty litter, sawdust, coffee grounds or another mixing material to the plastic bag to make the solution less appealing for pets and children.
- Step 3: Seal the plastic bag and put it in the trash.
- Step 4: Remove and destroy all identifying personal information (for example, the prescription label) from the medication containers before recycling them or throwing them away. This helps to ensure medical privacy.

Research demonstrates that household trash disposal is effective for disposing of unused medicines. For many, in-home medicine disposal offers a simple, convenient way to dispose of unwanted, unneeded or expired medication. Because all households already participate in the collection of household trash, in-home drug disposal is a safe and preferred way of disposing of unused, unwanted or unneeded medicine.

Further, in-home disposal effectively manages any potential environmental issues given that household waste in the U.S. is either incinerated or disposed of in capped, double-lined landfills equipped with leachate collection and treatment systems. Both technologies effectively isolate waste from the physical environment. In-home disposal also avoids the environmental carbon footprint and costs of trips to a collection site and of separately shipping the collected pharmaceuticals for destruction¹.

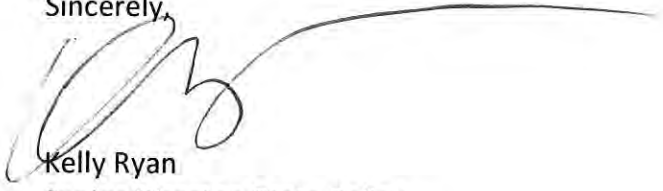
Other approaches to disposal of unused medicines bring additional complexities. The DEA requires any collector of unused medicines to have a DEA registration to collect at the site of the registration. This means sites are limited to healthcare facilities, pharmacies, a manufacturer's DEA registration address, and law enforcement locations. Many takeback programs have had challenges in securing community-wide kiosk locations. And for good reason: kiosks are necessarily a collection point – a very visible one – for prescription medications. Unfortunately, this also makes them a target for diversion, so we understand why pharmacies do not want to take on this liability.

However, educating patients on how to dispose medicines at home, as described above, avoids the complexities of Federal law and regulation and ensures that medicines are not aggregated in the community, which creates a risk of medicines being diverted or abused. Further, simply shifting funding and coordination activities of a stewardship to manufacturers does not mitigate the compliance obligations of local pharmacies and law enforcement agencies under federal law.

¹ Sherri M. Cook, Bryan J. VanDuinen, Nancy G. Love, and Steven J. Skerlos. Department of Civil and Environmental Engineering, and Department of Mechanical Engineering. *Life Cycle Comparison of Environmental Emissions from Three Disposal Options for Unused Pharmaceuticals*. <http://pubs.acs.org/doi/abs/10.1021/es203987b>.

We appreciate the opportunity to comment on the Annual Product Stewardship report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kelly Ryan', with a long, sweeping horizontal line extending to the right.

Kelly Ryan
Senior Director, State Policy



National Electrical Manufacturers Association
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DATE: February 14, 2019
TO: Mike Karagiannes
Bureau of Remediation and Waste Management
Maine Department of Environmental Protection
FROM: The National Electrical Manufacturers Association (NEMA)
RE: NEMA Comments on Maine DEP “Annual Product Stewardship Report,” dated January 2019

The National Electrical Manufacturers Association (NEMA) is the primary trade association representing the interests of the US electrical products industry. Our nearly 325 member companies manufacture products used in the generation, transmission, distribution, control, and end-use of electricity, constituting the very foundation of the worldwide infrastructure for supplying power.

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

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

Our comments on the 2018 report – which focus mainly on the department’s recommendations - are presented below in the order in which the topics appear in the report.

Framework law – 38 M.R.S. chapter 18

GENERAL COMMENT

In its report, the DEP contends that Maine’s existing “Framework Law” contains “*significant deficiencies . . . that would allow for approval of a manufacturer program plan which would not result in an effective program (sic).*” The department presents a number of recommended changes to address these perceived shortcomings but cites no evidence that they would achieve their intended effect. The report simply contends that a “*program plan designed only to meet the basic requirements in the Product Stewardship framework law will not be guaranteed to be successful.*”

In truth, no government mandated program – whether funded and operated by regulated stewards or the government itself – can ever be **guaranteed** to be successful. For “Extended Producer Responsibility” (EPR) programs such as those addressed by the report, the most obvious and pertinent reason for this is that behavior needed to ensure success is out of the control - and the authority - of the program operators; *i.e.*, product manufacturers.

For most products, manufacturers are at least two steps removed from the parties that control the product at end of life and determine where and how to discard it. Manufacturers sold the unit into the market years or even decades in the past, to a customer that later removes it from service. The manufacturer has no involvement with or authority over that person’s decision to recycle or dispose, yet is held responsible by the law for the outcome nonetheless.

It is therefore unproductive to focus so pointedly on the behavior of manufacturers as the key determinant in whether an EPR program is achieving to its “highest” potential. Yet virtually all of the proposed changes to the “Framework Law” seem guided by this presumption.

That being the case, the department is recommending changes that, if enacted, would create the most burdensome and intrusive oversight framework of any state in the U.S. It would strip manufacturers and their collective stewardship organizations of independence and flexibility and allow virtually no limit on DEP’s requests for greater expenditure. In addition to supplying funds for repetitive analyses of metrics (discussed below), the department seeks to impose highly specific financial directives - *e.g.*, an annual remittance to DEP of as much as \$100,000 for oversight; funding a *“minimum ½-time employee of each producer or stewardship organization dedicated to implementing the program in Maine (sic).”*¹

Integrating these requirements into new and existing EPR programs in Maine would impose dramatically higher costs on the industry stewards who not only fund the programs but (in most cases) continue to sell the targeted products to Maine consumers. These higher costs of managing old products within the state in turn would force manufacturers to raise prices of new products to absorb the expense, which likely would encourage cross-border purchases of lower priced products and loss of tax revenue.

PERFORMANCE STANDARDS

DEP is requesting authority to require programs to undertake potentially limitless expenditures towards amorphous goals such as *“effective education and outreach”* and *“consumer awareness,”* as determined through third-party surveys. Mandatory “Performance Goals” that would become part of every program could include awareness thresholds of 50% within three years or recycling rates that must reach 80% within 6 years.

No recycling program for any product, in any jurisdiction in the world, has achieved a collection rate of this level – with the exception of lead acid automobile batteries that have high intrinsic value and are recovered through a unique, reverse distribution framework that is not possible for other products.

Moreover, collection rate is a questionable basis for judging a program because the amount of product available to be recovered in a particular jurisdiction in a given year – the denominator of

¹ Requiring industry stewards to hire in-state employees to implement mandatory programs suggests that regulated parties (manufacturers) are being tasked with the responsibility of enforcing compliance with state laws. Enforcement is a state function and represents the state’s contribution to the “shared responsibility” framework supposedly embodied in Product Stewardship policies.

the rate calculation – most often cannot be determined with precision. Among other complications, manufacturers of widely used products sell into vast distribution systems and can provide only rough estimates of the number of units sold in a specific state. Once purchased, products can then be stored for long periods, after which they have widely variable “lifespans” due to their conditions of use.

For these and other reasons, collection rate figures are as much guesswork as science and do not constitute a sound basis for evaluating recycling programs. They are simply one, inexact factor out of many that should be used to evaluate an recycling program. The Maine DEP is recommending, however, that it be used to judge the success of the state’s EPR programs and justify seemingly unfettered demands by the department to “*implement specific changes,*” such as financial incentives.

With regard to education and outreach, NEMA does not question the need for EPR programs to contain an outreach component, carefully designed to focus on parties that use or dispose of the product. Outreach and “education” efforts should emphasize the importance of recycling the product, **especially** if the law is accompanied by a disposal ban that renders other management options illegal.

The program must also strive to make the “generator” of the waste product aware of the collection sites and events that are available across the state, and to ensure they are sufficiently distributed to ensure all residents have reasonable access. The collection network obviously must reflect the population distribution of the state, as it makes no sense to establish numerous sites in rural, sparsely populated areas, which adds significant cost but does little to raise collection totals.

A reasonable accessibility standard is therefore a useful feature of a program plan, mainly because providing access is within the control of the program operators. NEMA supports an accessibility metric as a way of assessing an EPR program’s value and performance. Education and outreach, as described above, is a necessary and complementary activity to providing access.

Regrettably, the DEC proposes to employ “*consumer awareness*” – a vague and hard to measure concept that does not lend itself to objective assessment - as the key determinant of whether a program is performing adequately. How does one assess this concept in an individual or community within an acceptable margin of error? More importantly, to what extent does “awareness” translate into behavior, and at what point does the onus transfer from a program’s efforts to notify consumers to a generator’s responsibility to recycle?

The programs established for NEMA Member products (mercury-added thermostats, mercury-added lamps) devote substantial resources to growing awareness among relevant target populations. Moreover, because mercury has been widely proclaimed for more than two decades as a potential threat to human health and the environment, a high percentage of consumers are predisposed to keeping products with mercury out of the waste stream. And there is no suggestion that education and outreach activities be discontinued, as long as the program is mandated to operate under the law.

At some point, however, rising investment in “education and outreach” generates little, if any, return. People who are inclined to recycle will do so while endless messaging to those who are not so inclined becomes a waste of time and money. This is particularly true of long-standing

programs that recover ubiquitous, broadly discussed products such as mercury-added lamps and consumer electronics, as well as other common household recyclables.

NEMA welcomes discussion of how to drive higher recycling rates in the context of each specific program and product, where characteristics such as the age and history of the program, target audiences, market dynamics, sales and distribution channels, number of producers, and other factors will help determine the most promising approaches. We urge the legislature to avoid the 'one-size-fits-all' prescription that DEP seeks to integrate into Maine's EPR programs.

INCENTIVES TO RECYCLE

Another of the DEP's prescriptions for the state Framework Law is the authority to require the *"implementation of financial incentives or a deposit/refund system if appropriate for the product"* if the department determines the program has failed to *"make adequate progress"* towards its goals.

Over the years, Maine has continually touted the impact of financial incentives in motivating recycling behavior in the state's mercury thermostat program. The department now offers this as rationale for potentially require all mandated programs to *"finance . . . any incentives necessary to achieve program collection goals . . ."*

As NEMA and the industry-funded Thermostat Recycling Corporation (TRC) have consistently demonstrated, however, financial incentives – or "bounties" – have not shown to be effective at driving higher recycling rates in Maine or Vermont, the other state that requires manufacturers to pay \$5 for each mercury thermostat returned to a collection site. In reality, thermostat recycling in Maine and Vermont has followed the trend typically observed in all states/regions over the years. Enactment of a disposal ban stimulates use of voluntary programs and when recycling becomes mandatory, compliance rises dramatically and large volumes of units that previously had been in storage fill collection bins. Collection rates ultimately moderate and decline when no new units are sold or installed and that has been the case over time in VT and ME.

Close inspection of year-by-year collections generally reveals that incentives reward contractors for behavior they were exhibiting already, and in other cases motivate them simply to switch collection sites. Also, a significant portion of incentive payments in ME and VT have gone unclaimed each year – if the payments truly motivated behavior, this would not happen.

Finally, bounty systems are costly, complicated, and vulnerable to fraud and abuse. Artificially placing a value on a waste product creates the potential for illicit trade practices (*i.e., shipping products in from nearby states*) and transactions that result in incentives going to parties for whom they were not intended. We urge the legislature to examine this issue carefully before imposing such a requirement onto any new or existing EPR programs.

Mercury Lamps – 38 M.R.S. § 1672

The Maine DEP report recommends a significant modification to the statute governing the state's EPR program for mercury-added lamps. NEMA opposes these changes in part for the reason discussed in the previous section. Similar to the Framework Law, DEP is seeking changes to the mercury-lamp statute that would greatly expand the department's administrative control over the program, force manufacturers to undertake virtually limitless "investments" in activities that likely will produce very little return, and rely on amorphous performance standards that likely will be a recipe for failure.

There are two additional, more substantive reasons why the DEP's proposed changes to this law are objectionable. First, the department seeks to extend the scope of "covered products" beyond waste lamps generated by households; thereby incorporating lamps disposed by commercial, industrial and institutional (CII) users. This amendment is entirely unnecessary and would seriously impact the independent providers of lamp recycling services who currently serve those generators.

The reality of the lighting market is that the **vast** majority of mercury-added lamps are purchased for and used within the CII sector. In almost all situations, generators within that sector are required under Federal Universal Waste (UW) Law to recycle those lamps at end of life.² An entire independent lamp recycling industry has been in place for nearly 20 years providing these services through private, individual contracts with retailers, commercial buildings, local governments, schools, stadiums, shopping centers, and other parties subject to the UW requirements (see www.ALMR.org). There simply is no need for the State of Maine to intervene in and disrupt these private service arrangements.

Yet the most compelling reason against expanding Maine's lamp recycling program is that the products it was most intended to capture – compact fluorescent lamps (CFLs) - are disappearing from the US market. CFLs have been displaced by light emitted diode (LED) products that, since the law was enacted, have become widely available at comparable price points. Moreover, CFL lamps no longer meet U.S. EPA ENERGY STAR specifications and thus no longer qualify for utility rebates. In 2018, NEMA estimates CFLS comprised approximately 7% of the consumer light bulb market, and the industry expects them to be virtually eliminated within the next few years. (See Appendix I for NEMA's latest shipment data for LED, Halogen, and CFL products)

In summary, when establishing priorities among environmental initiatives during the 2019-2020 session, revisiting the lamp recycling program in Maine rightfully should be at the bottom of the list. The overwhelming portion of mercury-added lamps entering the waste stream stem from CII facilities that are required to recycle them under Federal Law, while the far smaller numbers that emanate from households will soon be gone from the market.

Note also that homeowners seeking to recycle the remaining CFLs as they come out of use have ample access to collection sites both within and outside of the industry-funded program. An internet search using www.earth911.org of Piscataquis County - Maine's least populated region - produced a number of alternatives within a 20 mile radius including TruValue and other hardware stores as well as municipal transfer stations.

The problem that Title 38 § 1672 was enacted to address has been **resolving itself** in the intervening years. There is nothing to be gained by "ramping up" the program at this late date aside from forcing manufacturers to redirect large amounts of money and resources away from more productive uses.

Consumer Batteries (38 M.R.S. § 2165)

The NEMA Dry Battery Section encompasses the most prominent, US-based manufacturers of primary (*i.e.*, single-use) batteries including Energizer, Duracell, Panasonic, and Rayovac. As noted in the DEP report, these manufacturers promoted introduction of an "all battery" recycling

² Maine's Universal Waste regulations impose similar requirements – see https://www1.maine.gov/dep/waste/hazardouswaste/lamp_disposal.html

bill in the Maine legislature in 2016 and supported its passage, which did not occur. A number of factors over the intervening period have led the industry to change its position on the issue and we therefore urge the legislature not to accept DEP's recommendation to enact all battery recycling legislation in the current session.

The legislative framework that NEMA stood behind in 2016 would have established a fair and economically stable system for recycling batteries in Maine in that it required **all** parties that introduce primary batteries to the market to contribute to the cost of collection and processing, proportionate to their sales. Regrettably, this "shared responsibility" approach was rejected by many influential stakeholders who sought to avoid this obligation through 'carve-outs' in the legislative language, thereby acting as "free-riders" and increasing the burden of cost and program management on the manufacturers who sponsored the law. It became an increasingly untenable situation for NEMA members, who eventually withdrew their support.

NEMA has no reason to believe the same scenario will not repeat itself in the current legislature. There are simply too many political factors at play for a fair and equitable program structure to emerge from the legislative process. The same dynamics have occurred in other states that considered this issue as well.

In addition, NEMA has affirmed in the ensuing years that recycling primary batteries is in almost all cases a **net negative** for the environment, more harmful in many ways than disposing them in landfills. Primary, single use alkaline batteries (e.g., AA, AAA, C, D, and 9-volt) are classified as non-hazardous solid waste per applicable US EPA test protocols.³ Manufacturers eliminated toxic metals such as mercury and cadmium from these products in the early 1990s. At least two states – Connecticut and Massachusetts - advise their citizens to put spent alkaline batteries in regular trash to be landfilled.

A variety of studies have shown that recycling systems require conditions that virtually never exist for recycling primary batteries to be environmentally preferable to landfill disposal (e.g., high percentage of material recovery to beneficial uses, limited transport distances). In a recent evaluation by scientists affiliated with the Massachusetts Institute of Technology, recycling scored lower than landfill disposal in **seven out of ten environmental indices**, including Global Warming Potential.⁴

Before primary batteries reach a recovery or recycling facility, significant amounts of vehicle fuel and electricity are consumed during collection, sorting, storage and transportation. Each of these steps generates waste products and other environmental impacts – factors that must be considered when assessing the life cycle of battery products in the context of alternative, end-of-life management options.

For these reasons, NEMA respectfully recommends that the legislature not enact a mandate to recycle primary batteries in Maine before conducting its own evaluation of whether doing so would constitute a net benefit for environment and public health. NEMA members would appreciate the opportunity to lend their expertise to and participate in such an effort.

³ See <https://archive.epa.gov/epawaste/hazard/web/html/batteries.html>. Primary batteries do not exhibit any of the characteristics identified in 40 CFR part 261, subpart C.

⁴ Olivetti, Elsa and Gregory, Jeremy, Camanoe Associates, March 2018, "Life Cycle Assessment of Alkaline Battery Recycling, A report for the Corporation for Battery Responsibility,"

Maine Joint Standing Committee on Environment and Natural Resources
February 2019

Contact

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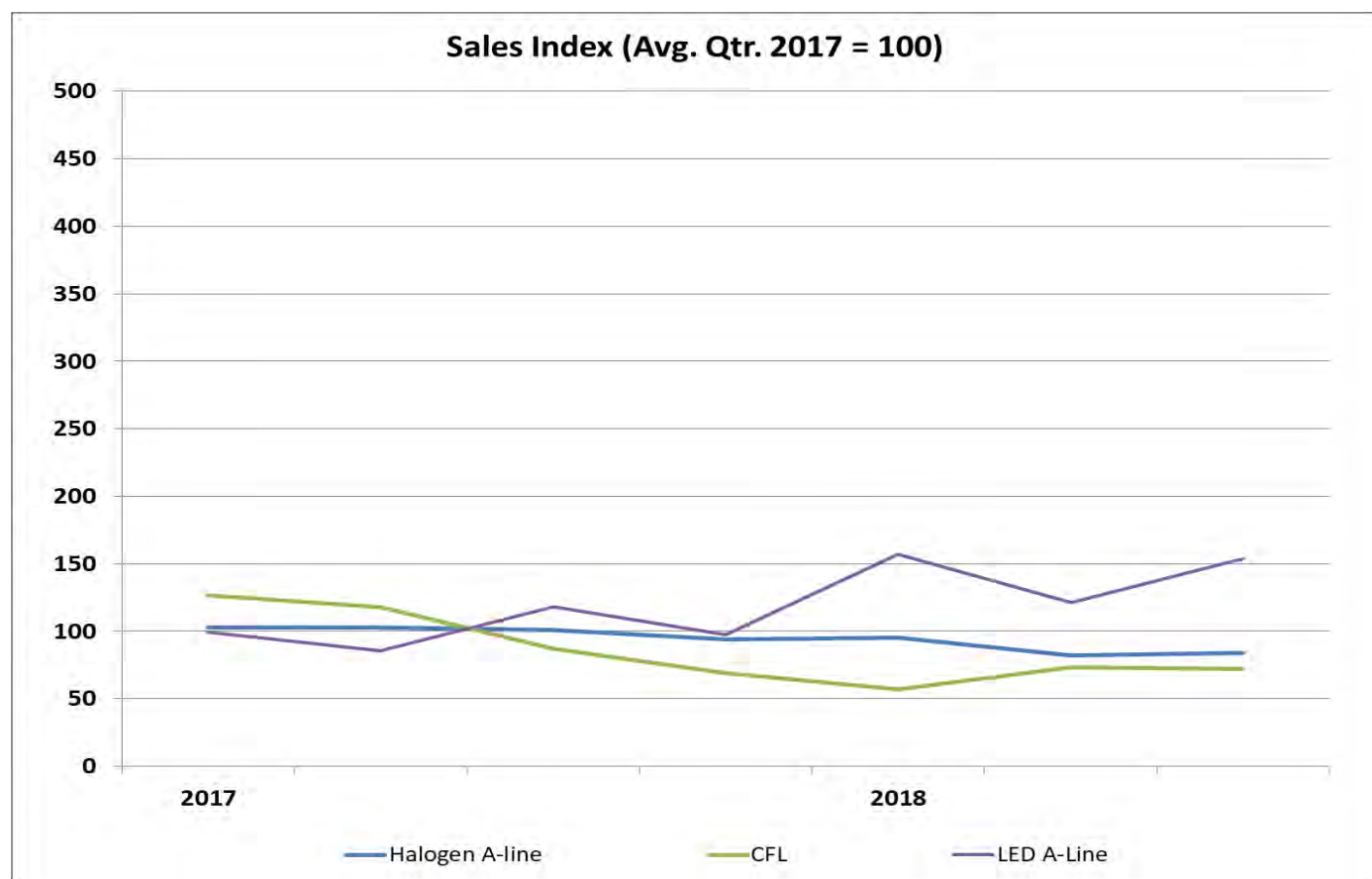
APPENDIX 1

LED A-line and Halogen Lamp Shipments Increase in Third Quarter 2018 December 2018

NEMA's A-line Lamp Index has been updated. To appreciate the changes we have made please read [our announcement here](#)

LED A-line shipments increased 27 percent compared to 2Q 2018 and 30.6 percent compared to 3Q 2017. Halogen A-line lamps posted an increase in shipments in 3Q 2018 compared to the previous quarter (1.7 percent), and a decrease compared to the same quarter a year ago (16.8 percent.) CFL A-line lamp shipments decreased compared to 2Q 2018 and 3Q 2017 (2.3 percent and 17.3 percent, respectively.)

LED A-line lamps account for 65.1 percent of the consumer lamp market, followed by halogen A-line lamps which account for 28.1 percent. CFLs comprised the remaining 6.7 percent of the A-line consumer market.



The NEMA Lamp Shipments Indices are composite measures of NEMA-member companies' U.S. shipments of compact fluorescent, halogen, incandescent and LED replacement lamps. Product shipments data are drawn from NEMA statistical surveys and are adjusted for seasonal fluctuations.



Contact

Laurie Miller
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703-841-3269

February 14, 2019

Mike Karagiannes
Maine DEP
17 State House Station
Augusta, ME 04333-0017

Via email: mike.karagiannes@maine.gov

SUBJECT: Comments on Implementing Product Stewardship in Maine, 2019

Dear Mr. Karagiannes:

The Plastics Industry Association (PLASTICS) is the national trade association that represents the entire plastics supply chain, the third largest US manufacturing sector employing almost one million people, 3,170 of whom live and work in Maine. Plastics play an important role in the Maine economy, and over 192,200 Mainers work in sectors dependent on plastics. We are grateful for the opportunity to comment on the Annual Product Stewardship Report and express our concerns about additions to the framework law and listing packaging as a candidate product.

We support the idea that manufacturers play an important role in being good stewards of the environment. This is why our industry implements sustainable materials management strategies – concepts that consider the entire lifecycle of a product. This approach requires looking beyond just the end-of-life aspects of a product and giving credit to manufacturing practices and the advantages of different materials which garner positive environmental benefits. We are opposed to extended producer responsibility (EPR) programs namely because they are an inefficient use of resources, are not flexible to changing waste streams, can hurt small businesses, do not fairly represent all manufacturers, and further hide the cost of recycling and recovery from consumers. Nevertheless, we would appreciate the opportunity to work with the Maine DEP on more impactful efforts to increase plastics recovery in the state.

Changes to Framework Law

While we understand the intent of the changes to the framework law, we believe this would further complicate the law without making it operate more efficiently or effectively. For example, the law already requires convenient and adequate collection systems, but the recommendation attempts to further specify what that collection should look like. Other administrative burdens from the recommendations we believe would detract from program success. We're also concerned with how the department would determine adequate progress and what specific changes it may direct on manufacturers.

Packaging as a Candidate Product

We understand the importance of making sure plastic packaging is recycled or reused. We also recognized the important role that plastic packaging serves in lowering the environmental impact of packaging production and protecting the products they contain from going to waste. We also want to note that important environmental, social and business decisions are made when choosing the design elements of packaging – often leading to plastic being a prime candidate.

In addition, the industry is already taking many important and valuable voluntary steps to make sure that plastic packaging is recovered after the end of its useful life. Some of these efforts are:

- educating the public on how to properly recycle or dispose of the packaging,
- supporting the expansion of collection opportunities,
- developing new end markets that increase demand for recycled plastics,

- promoting the design of plastic products in a way that facilitates recovery,
- promoting clean-ups, and
- ensuring plastics are managed properly at manufacturing sites through programs like Operation Clean Sweep and Zero Net Waste.

Despite these efforts and the role of packaging, states continue to look for methods of implementing EPR programs for packaging, even though packaging come in many shapes, sizes and materials. For multiple reasons, they have found that EPR programs for packaging would not be sustainable. In 2017, the state of Connecticut's Task Force to Study Methods for Reducing Consumer Packaging that Generates Solid Waste did not recommend implementation of extended producer responsibility. PLASTICS recommends the Maine DEP review the recommendations of that task force before pursuing packaging EPR.

Additionally, we do not think that packaging meets the candidate criteria for a stewardship program, nor the four that are specifically mentioned in this report. Those criteria and our response are below.

Criteria B: Increase the recovery of materials. Mandating added administrative costs on manufacturers will not alone change consumer behavior.

Criteria C: Reduce the cost of waste management to local governments and taxpayers. The additional cost to manufacturers will be passed down to consumers.

Criteria D: There has been success in other states or countries. As mentioned earlier, Connecticut did not determine that EPR was a viable solution; and the examples in the report are not representative of US consumers.

Criteria E: Voluntary efforts are insufficient. The report states that voluntary efforts have not taken place in Maine, but this ignores the fact that the industry is in the process of making successful projects scalable and replicating them in other states.

PLASTICS advocates for the responsible recycling, reuse, and recovery of all plastic products. We do not wish to see any of our products used irresponsibly or disposed of incorrectly. While we respectfully oppose the listing of packaging as a candidate program, we reiterate our request to work with the Maine DEP to develop meaningful and practical solutions ensuring the responsible recovery of all plastics.

Respectfully,



Shannon V. Crawford
Director, State Government Affairs



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P: 207-446-3430

To: Mike Karagianees, Maine DEP
17 State House Station, Augusta, ME 04333

From: Newell A. Augur, Executive Director

Re: Comments to Implementing Product Stewardship in Maine, January 2019

Date: February 14, 2019

On behalf of the Maine Beverage Association, the trade group representing Coca Cola Northern New England, Pepsi Beverage Company, Poland Spring and Polar Beverages - the local distributors of regular and diet beverages, water, juices and sports drinks, among other refreshing non-alcoholic products - thank you for the opportunity to provide comment on the report, Implementing Product Stewardship in Maine. Our remarks are specific to that portion of the report addressing Maine's beverage container redemption law, also known as the bottle bill.

Overview

When the beverage industry first started to develop in this country, local distributors - on their own initiative - put a deposit on containers in order to reuse them, long before there was ever any legislation forcing them to do so. In the mid 1960s, distributors realized that collecting, washing and reselling these containers was unsanitary and extraordinarily expensive. They also discovered that their customers didn't like refillable containers. When local distributors transitioned away from that model, they did so at a time when our country was beginning to appreciate the importance of safeguarding clean air, clean water and a pristine environment. As beverage containers - which previously had a deposit and were being returned to the distributor - suddenly began appearing on the side of the road, the local distributors became a natural target.

The bottle bill was passed as a means to address litter. In the ten remaining states that still have one, the bottle bill has morphed, unnaturally, into a recycling program. The program has been very successful cleaning up litter caused by beverage containers and recycling beverage containers. But its success is limited to beverage containers and they make up only 4% of the total waste stream.

The bottle bill should not be classified a product stewardship program. It is a mandate that forces the use of a particular delivery and pickup model for certain beverage packages. The model is designed to replicate the operation of a refillable-based system for bottles – a delivery system broadly rejected by consumers nearly 40 years ago. An authentic product stewardship program would include all producers selling any beverages in any packages; Maine’s bottle bill excludes all milk and milk derivatives, certain cider and blueberry juices, a number of other specialty products, and several additional categories of beverage packaging.

Moreover, product stewardship is epitomized by the flexibility it gives producers to address the lifecycle impacts of their products. Producers design and manage their own collection and processing programs to fulfill that responsibility. Government sets goals and performance standards, and producers determine the most cost-effective means of achieving those targets. Beyond that, product stewardship programs operate with minimal government involvement.

In marked contrast, the bottle bill is proscriptive, not cost-effective, limits producer flexibility, and has significant government involvement.

Costs

Bottle bill handling taxes exceed \$35 million dollars every year. This tax is paid directly to the redemption centers by the local distributors. Distributors incur additional costs transporting containers from redemption centers, crushing and bailing those containers, and selling them in the materials market. When the materials market is robust, the amount of money a distributor receives from the sale of those materials can cover all other processing costs. It has never been robust enough, however, to offset handling taxes.

We are not entirely convinced that a label registration system is the most efficient means to combat non-compliance given the proliferation of alternative routes to market and given the significant investment of time maintaining that registry requires. Having said that, we appreciate the Department’s efforts to streamline the process by which distributors register labels for every beverage product sold in Maine. Previously, distributors were required to provide photocopies of labels for every product sold. The Department has simplified this to allow distributors to certify that their product labels are in compliance. The Department also has developed an electronic filing system that has facilitated the online registration of products.

Fraud

The MBA Commingling Group (Coca Cola Northern New England and Pepsi Beverages Company) estimates that of the 219 million containers it redeemed in 2017, 24.2 million of those are fraudulent. Factoring the 5 cent redemption, the 3.5 cent handling fee and a 2 cent pick up and processing cost on every container, fraud costs the members of our commingling group – and ultimately our customers - \$2.54 million each year.

We made a similar calculation 10 years ago as directed by the Legislature and submitted those findings to the Department of Agriculture. Neither the bottle bill nor our total sales numbers have changed much, if at all, during the past decade so those calculations remain relatively accurate. There is a slight increase - from \$2.48 to \$2.54 million - that reflects the increase in the handling

fee - from 3 cents to 3.5 cents - in 2011.

There are two primary sources of fraud: 1) containers purchased out of state (usually New Hampshire) that are brought into Maine and redeemed here; and 2) the shorting of bags by redemption centers to distributors (i.e. when a redemption center gives us a bag that ought to have 324 twelve ounce cans in it, but has given us something considerably less than that.

A conservative estimate for the total amount of fraud in Maine's bottle bill would be \$7.5 million per year. The total number of containers in the bottle bill is in the neighborhood of 900 million - 1 billion a year, so \$7.5 million discounts the experience of non alcoholic distributors.

We appreciate the Department's efforts to address bottle bill fraud. We believe that giving the Department the unqualified ability to revoke the license of a redemption center deliberately shorting bags or knowingly accepting containers from outside of Maine should lose their license will help address the problem.

The root of the problem, however, is identifying who those bad actors are. Current law does not allow an initiator of deposit to adjust what is paid to a redemption center even if the amount of containers collected is substantially less than what the redemption center claims has presented for pick up. Further, the Department does not have staff or resources to visit redemption centers and conduct audits on a monthly or even yearly basis to determine which redemption centers are providing accurate counts, and which are not.

Given the logistical challenges of picking up containers from more than 400 redemption centers across the State, catching one bad actor one time has little if any practical impact on reducing fraud. Because there are no immediate fiscal consequences for shorting bags or accepting foreign containers, initiators of deposit are literally powerless to stop it from happening.

We will be presenting proposed legislation to introduce an auditing procedure for beverage containers pick-ups that we believe, along with the licensing changes proposed by the Department, will have a more meaningful impact in addressing fraud.

Commingling

The legislation that created commingling groups was passed in 2003. At the time, redemption centers were advocating for an increase in the handling fee. They also were advocating separately for legislation that would require local distributors to allow redemption centers to commingle beverage containers— as is done in Oregon and Michigan – so as to reduce the number of sorts that redemption centers have to perform and save them space in their facility.

The Legislature essentially combined the two bills. They created a framework to allow distributors to establish commingling agreements and then created incentives to “encourage” distributors to enter into those agreements. These incentives included putting a ½ handling fee increase on all beverage containers that were not commingled and requiring distributors who could not commingle to remit their unclaimed deposits to the state. As a practical matter, the only distributors who were capable of commingling were the ones who had a significant employment presence in Maine. The Legislature then gave the distributors nine months to form qualified commingling groups and register those entities with the Department of Agriculture.

The investment that local distributors made – and continue to make today – in time and money is significant. The two major existing commingling groups have been in existence for fourteen years (a third one was formed earlier in this decade) and this has prevented a considerable amount of additional sorting for redemption centers. Our product lines continue to change, but for the most part the number of sorts the members of the Maine Beverage Association are responsible is incredible small given their total volume. For example, the MBA Commingling Group sold approximately 250 million containers in 2017; all those containers can be sorted into eleven boxes.

The MBA Commingling Group has brought in several smaller distributors over the past fifteen years of its existence. The group would readily admit additional members – regardless of their size - who can identify the number of cases that they sell in Maine. We also stand ready to provide technical and legal assistance to the Department’s in its effort, as set out in the report, to create a new commingling group for out of state distributors.

As the report notes, distributors are not required to provide reports regarding marketed and recycled materials. However, the MBA Commingling Group and the Polar/Poland Spring Commingling Group have provided this information on several occasions at the request of the Department of Agriculture and at the request of the Office of Program Evaluation and Government Accountability as part of June 2018 evaluation of the bottle bill.

Conclusion

Thank you for the opportunity to provide these comments. We would be pleased to provide any additional information in this regard.

February 14, 2019

Mike Karagiannes
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017
Via email: mike.karagiannes@maine.gov

Re: Comments on *Implementing Product Stewardship in Maine (January 2019) Report*

Dear Mr. Karagiannes,

The Consumer Technology Association™ (CTA) respectfully submits these written comments on the “Implementing Product Stewardship in Maine” (January 2019) report from the Maine Department of Environmental Protection (DEP). CTA appreciates Maine DEP’s annual review of the implementation of product stewardship laws in Maine and opportunities to improve existing programs.

CTA is the trade association representing the U.S. consumer technology industry, which supports more than 15 million U.S. jobs. For over 10 years, CTA members have participated in Maine’s product stewardship program for electronic waste (e-waste). CTA appreciates this opportunity to provide comments and share insights on our industry’s product stewardship experience with the Maine DEP.

CTA supports competitive markets that drive operational efficiencies which in turn lower costs for the entire recycling system. CTA does not support any policy approach that stifles competition in the recycling market or brings the currently competitive system under government control/operation. CTA supports approaches that advance the collection and recycling infrastructure in the U.S. while being responsive to product innovation.

With that in mind, CTA would like to provide the following comments to the “Implementing Product Stewardship Maine” (January 2019) report.

- **Framework Law** [Section II(B), Section III(A) and Appendix X of the Report]
There are several items of concern CTA has with the proposed changes to the framework law primarily centered around the inclusion of prescriptive requirements that may not be appropriate for all types of EPR programs.
 - Minimum Staffing Levels: The minimum staffing standards proposed are not necessary for all types of EPR programs. Inclusion of this language to require a ½ time full time equivalent (FTE) position may be overly prescriptive given the variation in EPR program structures among product categories and should be excluded from the recommendations. An option to determine and handle on a case-by-case basis based on specific program structure would be more appropriate.
 - Convenience Requirements: The prescriptive nature of requiring “permanent collection

sites within 15 miles of 90% of Maine residents” is not necessary for all product types and may not actually increase collection and recycling rates among residents. As consumer technology companies have experienced in various state electronics EPR programs, these convenience requirements lead to increased compliance costs with no specific correlation to increased recycling rates. Additionally, permanent collection sites are not always the most appropriate solution for certain geographical areas that might be appropriately and cost effectively served by collection events. CTA recommends removing this requirement from the proposed legislation.

- Recycling Targets: Has the Maine DEP defined what diversion methods would qualify under a “recycling rate”? Does that include waste to energy? Even in EPR programs with high recycling targets, there is flexibility on how “recycling” is defined. Additionally, very few mature EPR programs are achieving 80% recycling rates. Setting unattainable, perspective goals does not benefit stakeholders and may create unintended consequences of increasing costs for producers as programs struggle to meet recycling goals. CTA recommends removing this requirement from the proposed legislation.
- Financial Incentives: Financial incentives for consumers to return products should not be part of an EPR program. EPR programs are designed to provide end of life management opportunities for hard to recycle items or items where there is a negative recycling value. Financial incentives send the wrong message to consumers that there is value in the recycling stream which is not always the case. While the proposed changes found in Appendix A make financial incentives optional, CTA encourages removal of this language.
- General:
 - CTA disagrees with the statement “when manufacturers are responsible for paying for the recycling of collected products, they have a disincentive to collect or promote the existence or ease of use of a collection system”. We have found with many of our member companies that they readily promote collection infrastructure that they financially support including in states where there is no legal obligation for them to do so. A blanket statement such as this is disheartening to read when there are industries and/or companies that have demonstrated otherwise.
 - CTA is pleased to see that language was included to allow for a point of sale fee to be assessed to consumers as an additional funding option for further consideration under an EPR structure.
- **Consumer Batteries** [Section III(C) and Appendix C]:

CTA is concerned with the proposed sample language for the consumer battery EPR program found in Appendix C. CTA’s concern primarily lies in the potential for duplicative and overlapping mandates on a product and one of its components through two separate EPR programs. Batteries found in consumer electronics are captured for recycling through Maine’s manufacturer-funded e-waste program as devices come back through the recycling stream, thus making this proposal unnecessary and redundant for batteries contained in our industry’s products.
- **Product Stewardship for Packaging** [Section IV(A)]

CTA does not support EPR as an effective solution for managing packaging material. CTA strongly cautions against a state-by-state approach for packaging material which is a large, complex waste stream with a significant number of responsible producers.

Maine is not the first state to explore a packaging stewardship program. The state of Connecticut established a Task Force to Study Methods for Reducing Consumer Packaging that Generates Solid Waste in 2016. The Task Force released its recommendations in February 2018 after a year of

stakeholder meetings, expert testimony, and public comments.¹ The final recommendations did not recommend product stewardship as a means of reducing consumer packaging that generates solid waste. The justifications outlined by the Task Force included concerns over the creation of a recycling monopoly through a product stewardship organization, pushing Connecticut recycling firms out of business and forcing higher costs on the collection and recycling system as a whole. There was also acknowledgement among the Task Force members that a state-by-state approach would not achieve the results touted under EPR programs in other countries.

It is unclear what the potential economic impact and costs of a packaging stewardship program would be to businesses operating in Maine. A full economic impact analysis is needed that quantifies impacts to all stakeholders (Maine DEP, producers, collectors, recyclers) and strongly encouraged prior to moving forward with any mandatory policy approach. Additionally, there are a few aspects of the Maine report that CTA would like to address:

- Can Maine DEP provide reference/supporting documentation to or quantify the statement “a large portion of the current municipal waste stream is comprised of various types of consumer packaging. Much of it is not recyclable.”. How much (in terms of a % or tons) is a “large portion”? How does that break down among packaging material types? How is Maine DEP defining “recyclable”? For example, some plastics may be recyclable but just don’t have readily available recycling opportunities in Maine.
- The waste characterization study referenced in the Report is from 2011. Does Maine DEP intend to have an updated waste characterization study completed? Many significant changes have occurred in the municipal waste stream throughout the U.S. over the last several years (commonly referenced as the “evolving ton”). Updated waste characterization study data would be key to any economic impact analysis as material type significantly impacts end of life management costs.
- Regarding voluntary efforts by industry, the Report notes that DEP is “unaware of any other direct contributions by these organizations to recycling programs in Maine.” It is worth noting that organizations like The Recycling Partnership and Closed Loop Fund do not provide blanket funding; rather, there is an application and evaluation process before funds are dispersed. A handful of states have started to work in conjunction with these organizations to encourage local governments or industry to apply for grants or funding. CTA encourages Maine to explore if promotion of these programs is appropriate for DEP.

CTA supports programs and policies focused on increasing recycling of packaging material by the consumer such as Pay-As-You-Throw programs and lists of mandated recyclables; increasing access to recycling; and supporting public education campaigns to reduce contamination, provided that the policy also has support from the jurisdiction and the infrastructure to execute the policy. CTA opposes mandates that would stifle packaging innovation; impact the safe delivery of products in a cost-effective manner; and/or raise costs for consumers.

- **Electronic Waste** [Section V(A)]: CTA requests that the Maine DEP think about restructuring the following sentence in a way that captures more fully the various factors impacting the collection rates for electronics under the EPR program.

¹ The Final Report of the Connecticut Task Force to Study Methods for Reducing Consumer Packaging that Generates Solid Waste can be found under the “Final Report” section of the “Meetings” portion of the Connecticut General Assembly website at https://www.cga.ct.gov/env/taskforce.asp?TF=20170216_Task%20Force%20to%20Study%20Methods%20for%20Reducing%20Consumer%20Packaging%20that%20Generates%20Solid%20Waste. Additional meeting documents including presentations, written comments and meeting notes can also be found under the “Meetings” portion.

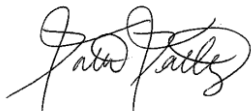
February 14, 2019

- Original: “Overall, e-waste collection continues to level off, likely due to light-weighting in the electronics industry”.
- Revised Language Proposal: “Overall, e-waste collection continues to level off, likely due to the success of the program in removing older, heavier electronics from the recycling stream and increased material efficiencies historically resulting in lighter weight electronic devices”.

Conclusion

CTA appreciates this opportunity to provide the above comments to the Maine DEP. CTA and its members strongly support responsible management of electronics and associated packaging in Maine in ways that are both effective and efficient. If you have any questions regarding these comments, please do not hesitate to contact me.

Sincerely,



Katie Reilly

Senior Manager, Environmental and Sustainability Policy

(703) 625-0054

kreilly@cta.tech

cc: Paula Clark, Director, Division of Materials Management
Carole Cifrino, Supervisor, Recycling Programs



February 14, 2019

Paula Clark
Director, Materials Management Division
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

Carole Cifrino
Supervisor, Recycling Programs
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

Comments on the Maine Department of Environmental Protection's Annual Product Stewardship to the Legislature

Dear Ms. Clark and Ms.Cifrino,

Thank you for the opportunity to submit comments on the Department of Environmental Protection's January 2019 Annual Product Stewardship Report to the Maine Legislature. The Natural Resources Council of Maine (NRCM) is a strong advocate for policies that help to create a more circular materials economy through product stewardship and extended-producer responsibility laws. We believe that businesses, governments, and consumers should work together to innovate and design waste out of the system so that we can sustain our resources and reduce our cumulative impact on our environment. It is with nearly 20 years of knowledge and experience relevant to the product stewardship laws and programs referred to in this report that we submit these comments.

Highlighting the Importance of Product Stewardship:

NRCM believes that the success and expansion of our extended-producer responsibility laws depend upon the extent to which the Legislature and the public embrace the concept of product stewardship. Waste and litter management has historically been a public sector problem and taxpayer expense, although the public has had essentially no choice over what materials are thrust upon them to deal with at the end of a product's useful life. Producers of waste are often reluctant to take responsibility for the design and collection systems for their products, and instead lay blame on the consumer by saying they are "meeting consumer demand." Then they leave the public sector to clean up the mess created by those products. The theory behind product stewardship is that, ideally, there would be more shared responsibility between everyone involved in a products lifecycle. This includes a higher level of forethought and planning between design, use, and collection of materials so that we can prevent more valuable materials from being wasted or polluting our environment, which benefits everyone.

To do this, we need to take a more preventative approach to our waste issues by looking up the chain at product and packaging design, and then proactively engaging producers to institute sustainably funded collection systems that can internalize all costs associated with the recovery of waste materials. Without this, we will always have piece-meal, inefficient waste management

programs, funded by taxpayers, and our environment and future generations will continue taking the brunt of the damage. Maine has been a leader in the U.S. in adopting product stewardship programs; our policies have served as blueprints for other states. NRCM is very supportive of adding many more product categories to our suite of laws. We are encouraged by the 2019 Annual Product Stewardship Report because of the thoughtful, forward-thinking approach and recommendations for the expansion of our policies. We have a few specific thoughts to consider below.

Recommendations for Changes to Existing EPR Laws

For the most part, we support each of the proposed statutory changes for the laws regarding the framework of new product stewardship programs, mercury lamps, consumer batteries, beverage containers, and cell phones. We encourage the committee to move forward with reporting out a bill for each of these proposals in Appendices A through E, though we have a few points to consider:

- A. Framework law: The changes proposed are based on experience with implementing existing programs and if adopted would make new programs more effective. NRCM believes that each of our existing programs should also be updated to adhere to the framework law, as proposed.
- B. Mercury lamps: Referenced above, this is an example of a policy that should be changed to reflect the proposed changes to the framework law. This has been an underperforming program for years, primarily because there is a disincentive for the producers of mercury lamps to expand their outreach and encourage people to recycle. There is also a lack of a mechanism for DEP to request and require changes that would improve effectiveness.
- C. Consumer batteries: Consumer batteries are a big problem in our waste stream because they pose a risk to human health and the environment if they are not managed properly. Further, the Call2Recycle rechargeable battery program is experiencing problems because non-rechargeable batteries are ending up in the bins, but the producers who made them aren't part of the program. If the Legislature only takes one proposal forward from this report, then expanding the rechargeable battery law to include all consumer batteries should be it. Maine consumers and municipalities *need* a solution for recycling all consumer batteries, and this expansion would also solve the problem of “free riders” in the existing program. Since this policy language has already been vetted in the Legislature before, it is a strong proposal that is ready for action. We strongly encourage the Legislature to report out a bill with the language from Appendix C.
- D. Container Redemption: The 2018 OPEGA review of the “bottle bill” brought attention to some of the real *or* perceived inefficiencies in the program. We urge the Legislature to proceed with any changes with caution. Overall, the existing program is very effective and is working to recover the vast majority of beverage containers for recycling. This provides jobs and a source of clean recycled commodities. It also reduces litter, provides charities with a source of funds, and takes the burden of managing the containers away from municipalities and taxpayers. NRCM believes that there should be 1) better data and reporting so that we may be more certain about the collection rate—coupled with an automatic increase in deposit amount should collection targets not be reached, 2) consideration given to adding more containers into the redemption model, 3) better ways

to respond to issues of non-compliance, and 4) review of ways to streamline the commingling process based on input from the redemption center operators.

- E. Cell Phones: NRCM supports DEP's recommendation to repeal the reporting requirement by cell phone companies, since it does not provide useful data.

Candidate Products for New EPR Programs

We commend DEP for their thoughtful and forward-looking approach with the consideration of future product stewardship programs for packaging, pharmaceuticals, mattresses, carpets, and solar panels. Here are some specific thoughts on those proposals:

- A. Packaging: DEP did a remarkable job making the case for the consideration of packaging materials as a potential candidate for an extended-producer responsibility program. This is an extremely timely product category since it makes up 30-40% of the total MSW stream, and many of the municipal programs that manage these materials are currently facing steep increases in costs of recycling and are either abandoning or scaling back their programs. We appreciate that the DEP took the effort to estimate the costs to municipalities and taxpayers for managing packaging waste at an astounding \$16-\$17.5 million each year. This type of policy is critical to moving forward with more sustainable and resilient recycling programs, as is shown in more than 40 jurisdictions throughout the world. We urge the DEP and the Legislature to move forward with urgency when developing policy language that would establish a new EPR program for packaging in Maine, and a good place to start will be to support a resolve to do just that this session.
- B. Pharmaceuticals: Since 2012, five states have established producer-funded drug take-back programs: MA, VT, WA, NY, and CA. Twenty-three U.S. cities and counties have done so, too. Managing these programs costs manufacturers only pennies on a prescription, and does not increase medication cost to consumers. Benefits of this program would include decreased risk of accidental poisoning and drug overdoses by preventing unused medications, like opioids, from accumulating in homes and getting into the wrong hands; establishing an environmentally safe alternative to landfilling or flushing of unwanted drugs; relief for Maine communities, police stations, and others from the burden of organizing and staffing sporadic collection events for unused drugs, saving time and taxpayer money; and creation of a standard way that Maine people can dispose of unwanted drugs, so they know what disposal options are available throughout the year. We are pleased that DEP has signaled support for this policy, and we hope that the Legislature will pass a bill to establish this program in Maine this session.
- C. Mattresses: We agree with DEP's assessment on why mattresses are an ideal product category, and also with the assessment of why establishing a program in Maine could be tricky. Unlike CT, RI, and CA, where mattress take-back programs are in place and successful, our state has more pronounced geographic constraints, low population density, and no facilities to process the deconstruction of mattresses. We concur with DEP that if we were to pursue a program in Maine, that at least some cost-internalization is necessary so that the per-unit fee does not overburden the consumer. However, we do urge DEP to consider establishing a smaller unit-fee paid at the point of sale that is used to help municipalities manage mattresses, similar to a bill that was considered by the previous Legislature.

- D. Carpet: Like mattresses, this is an ideal product category but Maine has unique limiting factors dealing with this bulky material. NRCM agrees with DEP that funding a program only through a user-fee would be overly burdensome on the consumer, and doing so would not incentivize a redesign of carpet to be more readily recyclable. We hope that over the next couple of years there will be more discussions and consideration given to how we can establish a carpet take-back program that makes sense for Maine.
- E. Solar panels: As the use of solar panels to create renewable, clean energy continues to rise, the disposal of older panels will begin to become more of an issue for municipalities to deal with. We like that DEP is forward thinking in its approach so that cost of collection can be anticipated and internalized now, rather than later. However, we are concerned that with lack of similar take-back programs for other forms of energy production such as oil tanks, this would create a disadvantage for companies providing our communities with a cleaner, more sustainable form of energy. We look forward to working with the DEP in the future to establish a fair product stewardship program for solar panels.

Implementation Status for Maine's Other EPR Programs

Maine's other programs for electronic waste, mercury-containing auto switches and thermostats, and architectural paint are performing satisfactorily and any potential changes we may like to see to these programs fall low on the priority list proposals in this report. DEP does mention the plastic bag recycling law that requires retailers that use plastic bags to have a receptacle for recycling, but they do not have a recommended change. NRCM believes that a statutory change to this law is indeed needed since, as a result of initiatives led by concerned citizens in communities throughout Maine, many retailers are no longer distributing plastic bags at check-out, but they are still selling products wrapped in plastic film. Consumers rely on these collection bins for recycling all film plastic, not just check-out bags. We urge the Legislature to amend the plastic bag law (Title 38§1605) so that it would require retailers that sell or provide any film plastic to continue to provide the recycling receptacles.

Overall, this report was very well done and encouraging. We urge the Legislature to place a high priority on moving forward with an expansion of the consumer battery recycling program and moving forward with an extended-producer responsibility program for packaging. Thank you for the opportunity to provide these comments. We request that these comments be submitted to the Legislature with the 2019 report.

Sincerely,



Sarah Lakeman
Sustainable Maine Project Director
Natural Resources Council of Maine



February 14, 2019

Mr. Mike Karagiannes
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine 04333

Re: Maine Department of Environmental Protection Annual Product Stewardship Report 2019

Dear Mr. Karagiannes:

As a follow up to our meeting with DEP staff on February 6th, PRBA – The Rechargeable Battery Association submits these supplemental comments on the DEP’s Annual Product Stewardship Report (2019). Our comments below focus primarily on the DEP’s recommendation that the existing battery collection and recycling law for nickel cadmium (NiCd) and small sealed lead acid (SSLA) batteries be repealed and replaced with an EPR law covering all consumer batteries. For the reasons we noted during our February 6th meeting with DEP staff and as explained in more detail below, we do not believe this is the correct approach for a consumer battery EPR program in Maine.

INTRODUCTION

PRBA was formed in 1991 to respond to the growing need for workable NiCd and SSLA battery collection and recycling programs in the United States. To that end, PRBA members established pilot battery recycling programs in several states. Based on the success of these pilot programs, PRBA supported establishment of a not-for-profit public education and battery recycling program to be implemented nationally. That program is now known as the Call2Recycle® program.

Attached on page 5 is a Call2Recycle summary of the batteries collected in Maine in 2018. In fact, Maine was ranked by Call2Recycle as the 12th best state in terms of battery collection based on weight of batteries collected as a function of state population. See data on right.



In the years since PRBA was formed, lithium ion batteries have replaced NiCd and SSLA batteries in most consumer applications. Notably, these lithium ion batteries do not contain the potentially-hazardous heavy metals used in predecessor products. The existing Maine consumer

battery law was, of course, designed to address environmental concerns with those metals. (Similarly, although PRBA does not focus on non-rechargeable (single use) consumer battery issues, it merits note that the mercury that historically resulted in environmental concerns with those products has now been removed from them.)

PRBA members currently manufacture approximately 65% of the rechargeable lithium ion battery cells produced in the world today. Our members also include leading manufacturers of consumer, medical, and defense products that are powered by those battery cells, battery recyclers, retailers, and large distributors of lithium batteries and equipment powered by them. Virtually all of our members are “stewards” with the Call2Recycle[®] program and support battery product stewardship programs in the U.S. and Canada.

CONSUMER BATTERIES IN THE WASTE STREAM TODAY

Rechargeable consumer batteries constitute a miniscule contribution to the content of Maine’s waste stream: the 2011 Maine Residential Waste Characterization Study (the most recent study available), found that all types of consumer batteries – both rechargeable and non-rechargeable, taken together – made up only 0.23% of the state’s overall waste stream.

As to rechargeable batteries, this low volume reflects the fact that most rechargeable batteries reach consumers as components of products, and typically last as long or longer than the products’ useful life. This is a very different situation than existed when Maine enacted its existing NiCd and SSLA battery statute, when easily removable batteries were common. It also is notable that many of those products (including their batteries) are collected for recycling under Maine’s electronic waste and used cell phone statutes.

Moreover, those used rechargeable batteries that are available for disposal already are collected, without the need for further legislative mandate, under the Call2Recycle[®] program and similar programs operating in Maine, municipal collection sites, facility-sponsored programs (*e.g.*, hospitals), and by e-waste recyclers.

For these reasons, if the DEP’s concern is with reducing large volumes of waste entering landfills and preserving landfill space, products that account for significant volumes of waste (*e.g.*, carpet and mattresses) would be a logical first step for new product stewardship initiatives to help achieve Maine’s waste reduction and recycling goals. Similarly, if the concern is to reduce the volume of hazardous constituents that reach landfills or incinerators, the focus need not be on consumer batteries.

LITHIUM ION BATTERIES AND PRODUCT STEWARDSHIP LEGISLATION

Paragraph C on page 8 of the DEP report addresses a number of issues related to lithium ion batteries that warrant further comment to put them into proper context.

First, the safety issues associated with the proper handling, transport, collection, and storage of lithium ion batteries have been well documented by various federal agencies and national organizations. There are regulations and guidelines published by the U.S. Department of Transportation, Consumer Product Safety Commission, Occupational Safety & Health

Administration, and National Fire Protection Association, just to name a few, that adequately address these safety issues. These regulations and guidelines are frequently updated to account for new developments involving lithium ion batteries. We therefore do not believe a consumer battery EPR bill is the right vehicle to address these safety issues.

Second, it is generally recognized that 85 -90% of lithium ion consumer batteries enter the marketplace installed in products like cellular phones, notebooks, tablets, e-readers, and other portable electronic products. According to the DEP, from January 2006 through December 2017, Maine residents recycled more than 97 million pounds of electronics.¹ Many of these products contain lithium ion batteries that are removed by e-waste processors and recycled or refurbished for reuse in similar products. Moreover, the refurbishing of used lithium ion batteries for reuse (often referred to as “secondary use”) is a relatively new phenomenon that is not accounted for when considering the collection and recycling of these batteries. Furthermore, even though Maine’s current rechargeable battery recycling law does not cover the now-predominant power source in consumer products, lithium ion batteries, these batteries are already collected in large volumes through the Call2Recycle[®] program, e-waste processors, and other battery collection programs in the state.

Third, the DEP report contains in Appendix C a draft of potential consumer battery product stewardship legislation. PRBA did support such legislation in 2016, but we no longer do. In significant part, that is the result of the debate over Senator Saviello’s 2016 proposed legislation and similar bills in other states, which demonstrated the strength of political influences that would preclude the adoption of any bill that treated all suppliers equitably. We thus must strongly urge DEP to reconsider this approach embodied in the draft bill included in its report.

To further explain our concern: the legislation in Appendix C, if introduced as a legislative proposal, will garner a significant amount of industry opposition as it did in 2016. That opposition always results in “carve outs” during the legislative process that are equivalent to the “free rider” problem Call2Recycle currently struggles with under their existing program. When these types of carve outs are granted (as was the case in Vermont in 2016 when their primary battery (single use) recycling law passed), battery suppliers and a subset of product suppliers ultimately incur all the costs of collecting and recycling even batteries they did not place on the market – which constitute the vast majority of the used rechargeable batteries collected. This is not fair or equitable.

In short, at least as to batteries, the concerns reflected in the DEP report are far more complex and merit much greater consideration before any specific legislative action is considered for introduction. Instead of moving immediately to legislation, we strongly recommend convening a panel of experts from the DEP, battery industry and other interested parties to brief the ENR committee on the history and experience of Maine and other states with battery recycling and e-waste laws, and the status of battery collection and recycling in the U.S. This might be accompanied by the preparation of a more complete study of consumer rechargeable battery recycling, and subjecting it to public comment before finalization, in order to provide all

¹ See <https://www.maine.gov/dep/waste/ewaste/#la>

interested parties an opportunity to weigh in on the issues over the course of the year. The ENR Committee could then review the study and decide on the appropriate actions, legislative or otherwise, to pursue.

* * * *

We appreciate DEP's consideration of our comments and look forward to working with the agency and the legislature on these important issues to our members. Please contact me at 202.719.4109 or gkerchner@wileyrein.com with any questions regarding these issues.

Sincerely,

A handwritten signature in blue ink, appearing to read "George Kerchner", with a long horizontal flourish extending to the right.

George A. Kerchner
Executive Director



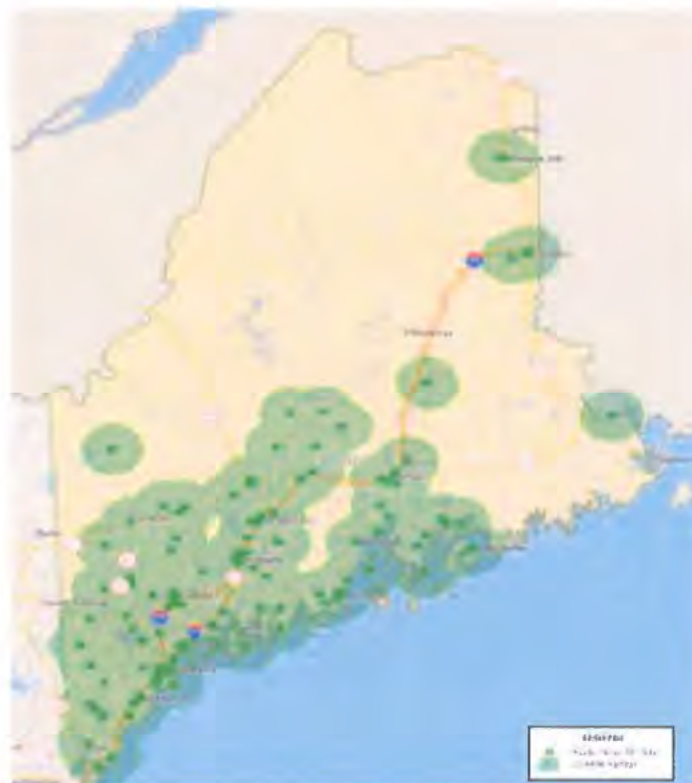
Leading the charge for recycling.

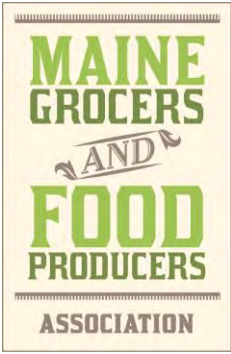
Consumer Battery Collections Maine - 2018

In 2018, the Call2Recycle® program collected over 31,000 pounds of consumer batteries, single use and rechargeable, in Maine from 182 collection sites. Nearly 50% of the batteries collected were from public agency sites (i.e., municipal transfer stations). Below please find the summary of Call2Recycle’s battery collections in the state.

2018 Battery Collections in Maine by Collection Site Type		
Collection Site Type	Pounds of Batteries Recycled	# of Participating Sites
Retailers / Wholesalers	14,174	83
Municipal / Public Agency	14,752	85
Other	2,264	14
Totals	31,190	182

All sixteen Maine counties have at least two collections sites generating batteries through the Call2Recycle® program. Currently, 85% of the state’s population lives within 10 miles of a Call2Recycle collection site. Below please find a map representing Call2Recycle’s collections sites throughout the state.





Maine Grocers &
Food Producers
Association
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February 14, 2019

Mr. Mike Karagiannes
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

Re: Comments on 2019 Maine Product Stewardship Report

Dear Mr. Karagiannes:

I am submitting comments on the 2019 Maine Product Stewardship Report on behalf of the Maine Grocers & Food Producers Association, a business trade association representing 250 members of Maine's food community; main street businesses including independently owned and operated grocery stores and supermarkets, and food and beverage industry partners.

The report addresses policy changes to minimize the negative impacts of products and packaging throughout their life-cycle. We will address the Framework law as enacted in 2009 and also a selection of the laws related to consumer products and the grocer and food producer industry.

Framework Law (38 M.R.S. Chapter 18)

- Due to the large geographical size of the state, requiring collection sites within 15 miles of 90% of Maine's residents would be troublesome for rural areas leaving some without an adequate place to recycle. The varying size and types of materials require individual recycling site implementation.
- We would like to see further clarity on the staffed employee responsibilities required to oversee each of the stewardship programs. If one-full time employee is currently in place for the PaintCare program (ME&VT), we have concerns that a more complex program may require additional time for full circle implementation and vice versa for established programs.
- To generalize annual fees across the wide, breadth of the program is concerning. We would like to see a formalized breakout of costs to ensure fair budgeting expectations for the producers absorbing the program implementation.
- The program performance goals are very specific in awareness and recycling rates. Is there history from other programs or studies to ensure these objectives can be met? Can they be applied across all products?

We recognize the Department's interest in making these changes to the Framework Law so that high collection rates may be achieved along with data to support the initiatives becomes available. Prior to implementation, we would ask that you conduct additional research for feedback from all parties specifically speaking to changes in the Framework Law to ensure all the proposed changes are attainable. Others involved in the day to day can help provide additional insight on what is working and how to address areas for needed improvements.

Beverage Containers (38 M.R.S. Chapter 33)

Our industry recognizes and supports efforts to help refine the Bottle Bill to make the process easier and more viable for our beverage manufacturers/bottlers as well as retailers selling and our partners in the redemption process.

We are pleased that there is a 75-87% recycling rate for bottles which in comparison to the national avg. (34%) is quite high. We are hesitant to make drastic changes to the program that would negatively affect any of the participating players causing additional costs, present challenges, or have unintended consequences to the success of the program.

- Data reporting requirements: we express hesitation for the additional administrative costs of reporting the number of non-refillable beverage containers sold and the number of non-refillable beverage containers returned by redemption value. It may also be a challenge for larger corporations to implement these changes to comply with state regulations/reporting requirements in the global market of obligations.
- Supportive of the removal of the provisions of the law which indicate redemption centers must have written agreements to provide redemptions services for dealers and only accept containers of the kind, size brand sold by those dealers. This eliminates administration burden from redemption centers.
- Supportive of the elimination of redemption responsibility for retailers with less than 5,000 sq ft of retail space.
- Oppose redemption-centers or dealers with 5,000 sq ft or retail space of more without an agreement (with a stand alone redemption center within 1 mile) be required to redeem all beverage containers within the program. A one-mile radius, especially in rural Maine, is too restrictive. We would propose a wider acceptable radius for a partnering redemption center. It may also be out of certain store's business plans to administer a redemption program within the storefront.
- Title 22 defines a Locally owned grocery store as "Locally owned grocery store" means a grocery store at least 51% of which is owned by one or more residents of the State and that has a gross floor area of 25,000 square feet or less. Possibly the Department wants to evaluate the sq. ft threshold to exclude slightly larger store fronts from the redemption responsibilities.
- We recognize the efficiencies that may come with a "catch all" commingling group for redemption centers, we can support the effort of sorting by like materials to minimize the sorting labor. However, the "catch all" commingling group would be based on manufacturers being truthful about their portion/share of sales within the container weights. We would like to see a checks and balance system to ensure equality amongst participants.
- We are not supportive of any changes in legislation that would require additional remittance of unclaimed deposits to the State as these dollars are used within the IoDs budget to remain viable.
- We are supportive of compliance and enforcement procedures that ensure fairness amongst redemption centers and pick-up agents/IoDs. If manufacturers will be held responsible for the program than redemption centers must be accountable for their part of the process and honesty in full bag redemptions.
- While not a substantial increase, a \$50 increase for a redemption center license will add a bit more of an investment into the interest in operating the redemption center.

We look forward to working with the ENR Committee this session addressing the multitude of bills submitted this session addressing the bottle bill.

Batteries (38 M.R.S. § 2165)

Grocers commonly sell batteries as a part of their common, household item product line.

- A January 1, 2020 implementation date for a battery manufacturer to change their labeling may be too short. Most batteries are manufactured by large corporations with big distribution networks. Less than a year may be difficult to comply. What would also happen to those batteries still on the shelves? Would they need to be

credited back, returned, recycled without even being used? What leeway would there be for remaining inventory?

- There should be some concern given to manufacturers whom may opt not to comply and decide to stop offering their product in Maine.
- Submission Plan, “the plan must allow retailers, wholesalers, municipalities,” etc to “voluntarily serve as a collection location.” We are supportive of a voluntarily option but not supportive of stricter collection site requirements at the point of retail.

Plastic Bags (38 M.R.S. § 1605)

No specific amendments were proposed to address plastic bags within the Stewardship Report. We look forward to working with the ENR Committee this session on the three proposed bill titles addressing plastic bags.

Candidate products:

Packaging

As noted within the report the market for packaging is vulnerability and unpredictable. We are supportive of the industry’s efforts to ensure their packaging is developed in a thoughtful and environmentally friendly manner. The report states there is a lack of data on packaging generation and municipal recycling and disposal costs. The report references somewhat outdated information from 2011 and references statistics from Europe and Canada which may not be a fair comparison to the state’s actual numbers. We recognize the interest to learn more and would be supportive of further studies to ensure suggestions for manufacturers would be feasible. We would look to learn more about a proposed division of responsibilities between packaging producers and municipalities.

Overall:

As with any program in which the producers and manufacturers are responsible for recycling programs, the likelihood of increased product costs will occur and our Maine residents, the customers, will inevitably incur the costs of the recycling programs. We express an overall concern for any programs that may cause an imbalance for the manufacture to comply while still offering quality, reasonably priced products.

Thank you for the opportunity to provide testimony.



Christine Cummings
Executive Director
christine@mgfpa.org
207-622-4461



500 Office Center Drive – Suite 400 | Fort Washington, PA 19034 | thermostat-recycle.org

Via Email

February 14th, 2019

Mike Karagiannes
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

Re: Thermostat Recycling Corporation's (TRC) Response to MEDEP 2019 Annual Product Stewardship Report to the Joint Standing Committee on the Environment and Natural Resources

Dear Mr. Karagiannes:

Three prominent manufacturers of thermostats – Honeywell, White-Rodgers, and General Electric – voluntarily established the nonprofit, Thermostat Recycling Corporation (TRC) in 1998 to facilitate the proper management of mercury thermostats at end-of-life. TRC now has 30 corporate members and is the only U.S. based national program dedicated to recycling mercury thermostats. We have recycled more than 2.4 million mercury thermostats nationwide, thereby diverting more than 11 tons of mercury from the solid waste stream. In Maine, the program has recycled tens of thousands of these units.

TRC welcomes the opportunity to comment on the Maine Department of Environmental Protection's January 2019 Annual Product Stewardship Report (Product Stewardship Report). Our comments circle around the Department's proposed changes to 38 M.R.S § 1776, *An Act to Improve Maine's Product Stewardship Law*, and are presented below.

THE ROLE OF MANUFACTURERS AS PART OF A THREE-LEGGED STOOL

Mercury thermostats are regulated under 38 M.R.S. § 1665-B, Maine's *Mercury-added Thermostats law*. The law requires that manufacturers who have sold mercury-added thermostats into the state pay for their collection and disposal and provide a financial incentive with a minimum value of \$5 for the return of each mercury-added thermostat to an established recycling collection point. This legislation has been in place since 2006. We have concerns on how the Department characterized manufacturers (a.k.a. producers) as having "*the greatest ability to affect the life-cycle impacts of products*". The Department concedes that others, including distributors, retailers and consumers, also have a role. In our twenty years of operating, we have continually stressed that **other stakeholders (distributors, retailers, or generators of waste) also have an equal, if not more important, role in recovering this material and the manufacturer does not bare sole responsibility**. Yet, there is no mention of these entities (other than the passing reference) and their requirements to promote safe disposal or safely dispose of this material.

In the Department's proposed changes to 38 M.R.S § 1776, the Department suggests placing increased requirements on producers. Such requirements include mandates to achieve a recycling rate of 50% in the third year of a program and an 80% recycling rate within the sixth year. These targets would inequitably place the responsibility for consumer and generator behavior directly on manufacturers. TRC does not support setting recycling rates based on the behavior of others, and TRC does not support a framework where there is no clear mechanism for the Department to regulate and enforce the actions of these actors. The three-legged stool of responsibility crumbles when only manufacturers are responsible for the actions of the other two involved parties (collection networks and generators of waste).

The Department also incorrectly states that “*when manufacturers are responsible for paying for the recycling of collected products, they have a disincentive to collect or to promote the existence or ease of use of a collection system*”. This is not the case in TRC’s experience. We promote TRC’s collection and disposal program to the best of our ability. The Department should acknowledge a diminishing law of returns for increased efforts, and should base any conclusions on a cost-benefit analysis related to program performance. TRC believes the Department should remove this statement.

SPECIFIC CHANGES TO FRAMEWORK PRODUCT STEWARDSHIP LAW

As the Product Stewardship Report has provided, Maine currently has nine laws related to the end-of-life management of specific consumer products that may be considered to be product stewardship laws. The Department stated that, “*Maine’s experience in implementing its great variety of EPR laws, it is now apparent the framework law does not include adequate provisions to ensure implementation of effective programs*”. Further, the Department states that, “*there are certain elements that contribute to an EPR program achieving high rates of diversion from disposal*” **but the Department does not cite any sources of where this has been the case or studies that support the recommendations listed in the Product Stewardship Report.** We disagree with these characterizations and do not believe they are well supported, as evidenced by the lack of citations in the Product Stewardship Report.

TRC has concerns with the Department’s specific recommended changes to the legislation, which include:

1. **A requirement that each program maintain a minimum standard for the producers’ or stewardship organization staffing: “a minimum ½-fulltime equivalent (FTE)” with the work product of working to “recruit, train and monitor collection sites”.** It has been TRC’s experience that more hours of effort and resources do not necessarily equate to more collections. Also, this recommendation leaves no flexibility for other ways to cover extended producer responsibility (EPR) related site collection work, such as outsourcing activities or working with the Department staff. Department staff visit retailers in the state and drive economies of scale when they can ask about other EPR programs such as thermostat, batteries, lamps, or paint while there. The Department is essentially going to burden each collection site with up to 4 times as many visits with representatives of stewardship groups. It is also our experience that Department staff have better and more impactful conversations with collection locations than EPR groups because of the perception of being from the government. Lastly, there is no other precedent for this in other states with EPR programs for good reason, since it is an inefficient use of resources.
2. **Measurable, enforceable goals (e.g., recycling rate, consumer awareness, convenient collection), and defined consequences for non-compliance. The rates will use a description of the methodology and the relevant historic sales data used to develop the rate.** The Department acknowledges anti-trust concerns in the report. Sharing such information such as historic sales data may not be available to provide to the Department or the Department may not be the appropriate clearinghouse. TRC has consistently contended that collection targets do not make good public policy. Goals by themselves do little to encourage other actors to participate and place all of the ownership of the target strictly on the manufacturer.
3. **Using a permanent collection site within 15 miles of 90% of Maine residents within one year of the start of product collections.** TRC has concerns with mandates to place a collection site in a location to simply satisfy an arbitrary geographic requirement. Placing collection locations in a state is more nuanced than choosing something arbitrary such as geography to population or even a location in each county. Population centers should inform where to place collection locations and not geographic distance. By this same logic, Maine should put in place hospitals or schools within 15 miles of 90% of the population. Many current EPR laws define collection locations based on the prior sales channel

they were sold through. It is possible the sales channel is not nearby and cannot possibly satisfy such a prescriptive requirement, particularly in light of sales through online outlets. As we mentioned above, this requirement would put the ownership completely on the EPR program and not on the collection site themselves. Whenever an EPR law defines a collection location with a mandate to collect, there cannot be an accurate way to blanket the entire state if those outlets do not exist in the required regions. Mandating this also stifles innovation by legislating out the possibility of other potential collection mechanisms such as smaller/shippable containers or developing pick-up schemes. Further research and a thorough review of accessibility for Maine's population should be completed before imposing a blanket approach on EPR programs related to geographic distance and percentage within population calculation.

CONCLUSION

TRC would caution the Department from applying a "one-size-fits-all" approach to end-of-life product management. TRC spends significant time with other EPR groups reviewing programmatic elements and the constant theme is that each EPR program is different. These programs do not all share common characteristics and should not be managed in the same fashion.

TRC, as one of the first EPR programs in the nation, remains available to answer questions or clarify components of its collection program with Department staff and specifically these comments. As mentioned above, we applaud the Department's willingness to have EPR groups weigh in on these proposed changes. Please don't hesitate to contact me at your convenience at ryan.kiscaden@thermostat-recycle.org or 267-513-1727.

Sincerely,



Ryan L Kiscaden
Executive Director

CC:

Paula Clark
Carole Cifrino

Mark Ward comments on Annual Product Stewardship Report

I am writing to express my thoughts on the draft of the Annual Product Stewardship Report (compiled by the DEP in January 2019). I have reviewed this report and commend the authors for having compiled an extremely thorough and thoughtful presentation of their findings and recommendations.

I strongly encourage the legislature to consider the recommendations made to modify existing Maine laws to strengthen the state's current Extended Product Responsibility efforts. As the state entity responsible for implementing and overseeing these efforts, the DEP is uniquely positioned to understand what is and is not working in the laws as they are currently written. Because the recommendations are compiled as separate appendices, the legislature can choose to adopt all of the proposed changes or to select those that it deems most pressing (making sure, of course, that if it were to adopt a piecemeal approach that it consider the implications on the whole of Title 38, Chapter 18 Product Stewardship). Among the recommendations that I see as being especially important are the proposals to: 1) strengthen the Framework Law, 2) make the mercury lamp law more consistent with the framework, and 3) make changes to the consumer batteries section to include lithium and lithium-ion batteries to minimize the risk of fires at Materials Recovery Facilities. I also support the recommended changes to the bottle bill (38 M.R.S., Chapter 33) most notably the establishment of the "catch-all" commingling provision for containers of the same material type.

In addition, I appreciate the DEP efforts to identify candidate products for new EPR programs. I am especially enthusiastic about the potential to enact a new EPR program for packaging. The analysis provided suggests that a packaging program in Maine would best be designed through a shared responsibility model with a carefully crafted set of municipal incentives.

Mark Ward, 28 Poor Farm Road, Bristol, ME 04539



February 12, 2019

VIA: E-Mail

Mr. Mike Karagiannes
Maine DEP
17 State House Station
Augusta, ME 04333-0017

Comments Re: Implementing Product Stewardship in Maine, 2019

The Carpet and Rug Institute, representing carpet manufacturers who produce over 90% of the carpet made in the United States, appreciates the opportunity to comment on Maine's 2019 Product Stewardship Annual Report and the state's consideration of EPR legislation.

The carpet manufacturing industry is working independently, and together with others, to reduce the amount of carpet going to the landfill each year. More than 15 years ago, the carpet industry entered into a voluntary agreement with many states, including Maine, the EPA and NGOs to find solutions that would facilitate the diversion of carpet from landfills.

More recently, over the past two years, CRI has collaborated with Maine's Department of Environmental Protection (DEP), the Maine Retail Association and the Carpet Americas Recovery Effort (CARE) to develop voluntary pilot programs aimed at finding solutions for carpet disposal in the state. Based on our June 2018 meeting with DEP, we look forward to continuing to pursue a number of ideas that would increase diversion to energy in Maine without a new mandate for EPR. We are particularly interested in the potential to connect installers with organizations that utilize carpets in energy recovery. Since 2002, our industry has invested in excess of \$300M on this effort and we have had continued to see growth in our diversion numbers.

The carpet and rug industry is committed, above all else, to serving our customers, our communities and the millions of people who benefit from our products every day. Our industry has long been committed to creating sustainable and beautiful products for people in their homes, schools and commercial spaces, and we continue to innovate to minimize the environmental impact of carpet products and manufacturing in Maine and throughout the U.S.

The carpet industry takes a holistic approach to sustainability that is responsible, proactive, and seeks to balance to various stakeholder needs and interests. Carpet manufacturers focus on reducing water and energy use, strive to create zero waste, integrate renewable chemistry into the manufacturing process, incorporate recycled content in new carpet products, and recycle



carpet to reduce the amount of discarded carpet that goes into landfills. In fact, over the past 17 years, carpet manufacturers have invested in creating a carpet recycling industry that has diverted more than 5 billion pounds of carpet from landfills ([2017 CARE Annual Report](#)). In recent years, the carpet industry's investments in innovation and design have focused on ensuring that the products we are manufacturing today are constructed to facilitate recycling and recovery. Like many other industries, that transition is still under way. Carpet that is reaching its end of life today remains highly complex and challenging. We are continuing to invest both in technology and to further develop a market that will make even broader adoption of carpet recycling possible.

The public is best served by our continuing to invest in solutions, rather than unnecessary, distracting and expensive additional regulation that stands to do more harm than good – including putting tens of thousands of jobs at risk. It should be noted that alternative, non-legislative options in South Carolina, for example, have led to steady job growth while diverting carpet from landfill.

California, which has a higher population density and established infrastructure, enacted EPR legislation in 2010 that in many ways remains a work in progress. In addition to the very difficult chemistry and market realities faced in every state, Maine faces more challenging infrastructure and density challenge.

Carpet is an important US-based manufacturing industry, with more than 98 percent of carpet used in the United States manufactured in our country. Carpet manufacturing is one of the last major industries primarily based in the United States. More than half a million American jobs depend on the U.S. carpet manufacturing industry, in manufacturing, transportation, installation, retail sales, recycling and more. (Pending results of member economic impact survey.)

We encourage the state of Maine to work with us on existing voluntary efforts and incentivize market-based solutions. The carpet industry is committed to continue seeking solutions and has a plan to go to the next step. Legislation will only hinder our progress, cost jobs in the US, and, will not lead to the best environmental solutions to the challenges we face.

Sincerely,



Jennifer L. Stowe
Vice President, Government Relations

