Report to the Joint Standing Committee on Environment and Natural Resources 127th Legislature, Second Session

Implementing Product Stewardship in Maine

January 2016

Contact:

Mark Bergeron, Director Bureau of Land Resources Phone: (207) 215-4397

Leslie Anderson, Acting Director Bureau of Remediation and Waste Management Phone: (207) 287-7890



MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 State House Station | Augusta, Maine 04333-0017 www.maine.gov/dep

INDEX

Exec	cutive Summary	Page 1
I.	Introduction	Page 2
II.	Performance of Existing Programs in 2014	Page 3
	Rechargeable Batteries	Page 3
	Mercury auto switches	Page 3
	Covered electronic devices	Page 4
	Mercury-added thermostats	Page 5
	Mercury-added lamps	Page 6
	Cell phones	Page 6
	Architectural Paint	Page 7
	Beverage Container Redemption Program	Page 7
III.	Additional Potential Candidate Products	Page 8
	Carpet	Page 8
	Mattresses	Page 9
IV.	Discussion and recommendations related to the mercury thermostat program	Page 9
V.	Conclusion	Page 12

Appendix A – PaintCare Drop-off sites in Maine, as of 11/23/2015	Page 13
Appendix B – Department's Memorandum of Understanding (pertaining to the 'Bottle Bill')	Page 16

Executive Summary

The Maine Department of Environmental Protection (Department) is submitting this report in accordance with 38 M.R.S.A. § 1772(1), which requires the Department to provide an annual update on the performance of existing product stewardship programs, as well as product or product categories that when generated as waste may be appropriately managed under a product stewardship program. This framework law was enacted in 2009 in order to regularize the process for creating new product stewardship mandates and to avoid the legislative "product du jour" approach that had been followed until that point. The framework law has been somewhat successful in normalizing this process, though we continue to see one-off product stewardship proposals introduced almost every legislative session.

From 1992 to 2009, Maine enacted five product-specific laws which require producers to establish programs to recover their products from Maine's waste stream and ensure proper handling and recycling, recovery, or disposal of these products. These products include: dry mercuric oxide and rechargeable batteries; mercury auto switches; electronic waste; mercury thermostats; and mercury lamps. In addition to these programs, Maine also has a product stewardship program for cellular telephones; however that law makes retailers responsible for the collection and recycling of unwanted cell phone, rather than the manufacturers. On October 1, 2015, the program for recycling architectural paint began, and was soon followed by the Department receiving administrative responsibilities for the state's beverage container redemption program, which previously had been furnished by the Department of Agriculture, Conservation and Forestry.

The following trends have been observed under the existing programs:

- Mercury auto switch recycling program recovered 2,977 switches in 2014, resulting in the removal
 of seven pounds of mercury from the environment, an increase from 2013 when 1,647 switches
 were recovered, for a total of four pounds of mercury;
- Maine's overall recycling rate of electronic waste per person remains among the top five states, at 8.93 pounds per person;
- Total pounds of mercury collected from thermostats rose from the 2013 collection effort, from 43 to 47 pounds; and
- Used cellular telephones are still a desirable commodity, and Maine continues to have a robust collection network.

Over the past year, the Department reached out to other New England states to identify additional, emerging product stewardship categories; those efforts are described within this report.

I. Introduction

The Maine Department of Environmental Protection (Department) is submitting this report in accordance with <u>38 M.R.S.A. § 1772(1)</u>, *Product Stewardship*. This law requires the Department to provide an annual update on the performance of existing product stewardship programs, a discussion of any additional products or product categories that when generated as waste may be appropriately managed under a product stewardship program, and recommendations for new product stewardship programs or revisions to existing programs. Maine currently has six extended producer responsibility laws (i.e., mandated product stewardship for manufacturers) that require producers to establish collection and recycling programs for their products. These include: dry mercuric oxide and rechargeable batteries, mercury auto switches, electronic waste, mercury thermostats, mercury lamps, and architectural paint. In addition, Maine's product stewardship law for cellular telephones requires cell phone retailers to collect and recycle unwanted cell phones.

Product	Statute	Year imple- mented	Who participates	Funding mechanism	Disposal ban	Annual fees paid to DEP
Beverage containers	<u>38 M.R.S.A.</u> <u>§ 3101 et</u> <u>seq.</u>	1978	everyone	initiators of deposit internalize costs	No	Yes
Rechargeable batteries	<u>38 M.R.S.A.</u> <u>§ 2165</u>	1994	government agencies, and industrial, communications and medical facilities required	manufacturers internalize costs in product price	Partial	No
Mercury auto switches	<u>38 M.R.S.A.</u> <u>§ 1665-A</u>	2003	end-of-life vehicle handlers	manufacturers internalize costs in product price	Yes	No
E-waste (TVs, monitors, desktop printers, game consoles)	<u>38 M.R.S.A.</u> <u>§ 1610</u>	2006	households, small businesses, K-12 schools	manufacturers internalize costs in product price	CRTs, flat screens containing mercury	Yes
Mercury thermostats	<u>38 M.R.S.A.</u> <u>§ 1665-B</u>	2007	anyone	manufacturers internalize costs in product price	Yes	No
Cellular phone recycling	<u>38 M.R.S.A.</u> <u>§ 2143</u>	2007	everyone	manufacturers internalize costs in product price	Yes	No
Mercury lamps	<u>38 M.R.S.A.</u> <u>§ 1672</u>	2011	households only	manufacturers internalize costs in product price	Yes	No
Architectural paint	<u>38 M.R.S.A.</u> <u>§ 2144</u>	2015	households, businesses other than large quantity generators of oil-based paint waste	consumer pays fee at sale	No	Yes

Table 1 - Summary of Maine's Extended Producer Responsibility Programs

The Department's February 2015 *Implementing Product Stewardship in Maine* report to the joint Standing Committee on Environment and Natural Resources includes background information on each of Maine's extended producer responsibility programs. Section II of this report updates each program's performance data in that report with 2014 data, along with a brief discussion on collection trends for each program. The report also includes a more extensive discussion and recommendations related to the mercury thermostat program as directed by PL Chapter 83, as enacted by the first Session of the 127th Maine Legislature. Additionally, this year's report includes an update on the transfer of Maine's responsibility for administration of Maine's beverage container redemption law, a.k.a. the Bottle Bill program, from the Department of Agriculture, Conservation, and Forestry (DACF) to the Department, effective October 15, 2015, in accordance with PL. Chapter 166, from Session 1 of the 127th Maine Legislature.

Section III discusses two products that legislators have previously expressed interest in considering as candidates for new product stewardship program. This section includes information on potential future opportunities to pursue product stewardship efforts related to carpet and mattresses.

II. Performance of Existing Programs in 2014

A. Rechargeable batteries

Call2Recycle (C2R) annually provides the Department with Maine–specific data on the numbers and types of collection sites (business, retail, manufacturing, government) registered with their program as well as the amount of rechargeable batteries recycled from each. The weight of batteries collected and recycled by C2R from Maine decreased slightly from 34,337 pounds in 2013 to 33,210 pounds in 2014. The number of collection sites also dropped between 2013 and 2014, from 458 to 453.

B. Mercury auto switches

End-of-Life Vehicle Solutions¹ (ELVS) reported an increase in both the number and percentage of available mercury switches turned in for recycling from Maine in 2014 as compared to 2013. Table 2 shows this program's history for the past six years.

¹ The End of Life Vehicle Solutions Corporation (ELVS) was created by the automotive industry to promote the industry's environmental efforts in recyclability, education and outreach, and the proper management of substances of concern.

Year:	Number of switches recycled	Percentage of estimated number of switches available	Pounds of Mercury collected
2009	6868	33%	15
2010	5685	27%	13
2011	2236	12%	5
2012	7139	40%	16
2013	1647	11%	4
2014	2977	20%	7

Table 2 - Mercury Auto Switch Recycling 2008 - 2014

Data from the first three quarters of 2015, however, indicate a likely decrease in mercury switch collections in 2015. The number of mercury switches available for recycling continues to decline as they have not been placed in vehicles since model year 2003. Manufacturers have allocated funding for recycling auto switches from Maine that is anticipated to fund operations through the year 2022.

C. Covered electronic devices

Table 3 shows the total and per capita weights of covered electronic devices that have been collected and recycled each year from 2009 through 2014 through this product stewardship program, plus voluntarily reported weights collected and recycled from other programs. Both the extended producer responsibility program and voluntary recycling programs show a slight increase in the weight of electronics recycled for 2014.

	Maine Program - total pounds	Maine Program Per Capita	Goodwill-Dell ReConnect - pounds	Other non- program e-waste	Total pounds reported	Total Pounds Per Capita
2009	7,912,292	5.99	N/A	Not reported	7,912,292	5.99
2010	5,368,467	4.06	1,151,997	Not reported	6,520,464	4.93
2011	6,931,248	5.24	1,160,233	Not reported	8,091,481	6.12
2012	7,310,495	5.62	989,819	1,253,748	9,554,062	6.57
2013	8,218,434	6.19	1,462,587	2,017,233	11,698,254	8.81
2014	8,478,624	6.38	835,230	2,548,466	11,862,320	8.93

Table 3 - Electronic Waste Recycling in Maine

Collection data from January through June 2105 show a leveling off in the weight of electronics recycled. If this trend holds through 2015, it may be indicative of a decline in the number of the older, heavier

cathode ray tube (CRT) devices being collected, which has been anticipated, as they have been replaced by lighter, flat-panel devices.

D. Mercury-added thermostats

Table 4 shows the number of mercury thermostats and amount of mercury collected from Maine since this product stewardship program began in 2007. This includes thermostats recycled by the manufacturers through the Thermostat Recycling Program² (TRC) and by others through universal waste programs.

Year	TRC program (number)	Other collections (number)	Total t-stats	Pounds of mercury
2007	5,019	1,020	6,039	54
2008	5,746	1,176	6,922	62
2009	6,374	655	7,029	54
2010	6,523	170	6,693	60
2011	6,616	256	6,872	62
2012	6,679	333	7,012	63
2013	4,213	589	4,802	43
2014	4,341	841	5,182	47
Totals	44,514	5,040	49,554	447

Table 4 - Mercury Thermostat Recycling

TRC data reports from January through September of 2015 show that in this past year the TRC program is likely to collect a similar number of mercury thermostats to its 2014 collections.

Discussion and recommendations related to the mercury thermostat recycling program

In 2015, the 127th Maine Legislature passed P.L. 2015, Chapter 83, *An Act To Modify the Laws Regarding the Collection and Recycling of Mercury-added Thermostats*. Section 6 of this law requires the Department to review the financial incentive plan currently in place, and to report to the Legislature:

- "Recommendations regarding reduction of the complexity and costs of the manufacturer thermostat collection and recycling program...;"
- "Recommendations regarding improving the effectiveness of the manufacturer thermostat collection and recycling program, including changes in the mechanism for manufacturer payment of the financial incentive, the form of the financial incentive payment and the roles and responsibility of each participant in the program...;" and

² The Thermostat Recycling Corporation (TRC) is a non-profit stewardship organization founded by manufacturers of mercury-containing thermostats that facilitates and manages the collection and proper disposal of mercury-containing thermostats.

• "Recommendations regarding the continuation of the thermostat disposal ban under Title 38, section 1663."

P.L. 2015, Chapter 83 also requires the Department to make this information available by February 15, 2016, and provides the Department with the authority to include this information in this year's product stewardship report, which the Department has elected to do. Section IV of this report presents this discussion, and offers several recommendations for consideration in modifying the current program.

E. Mercury-added lamps

In 2014, the National Electrical Manufacturers Association (NEMA) program continued its trend of annually collecting more mercury-added lamps from households than the previous year, as shown in Table 5. This program provides free containers, shipping and recycling services to retail and municipal collection locations that participate voluntarily, and participating collection sites find it easy to use.

	# lamps recycled by NEMA	# lamps recycled by others	# lamps available for recycling	household lamp recycling rate
2011	6,634	163,196	688,000	24.68%
2012	50,492	155,159	708,889	29.01%
2013	97,743	149,191	844,576	29.24%
2014	109,337	128,859	1,042,750	22.84%

Table 5 – Household Mercury-added Lamp Recycling Rates

However, the total number of lamps collected by the municipal universal waste collection programs decreased in 2014. This decrease, when combined with an increasing number of covered lamps available for collection, caused a drop in the overall lamp recycling rate.

F. Cell phones

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

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

Although the collection network in Maine is robust, data from which to develop a quantitative assessment of program performance is not available. The plethora of internet outlets for the recycling of cell phones makes it infeasible to collect complete and accurate data on the number of cell phones

recycled in Maine each year. Consistent reporting to the Department by the cellular telephone service providers over the past six years highlights their commitment to making cell phone recycling easy and even financially beneficial for their customers. Given the current value of these products and the robust collection efforts, the lack of program performance data is not a concern – sufficient market incentives exist to make these efforts successful.

G. Architectural Paint

PaintCare, a non-profit organization established by the American Coatings Association to implement product stewardship programs on behalf of paint manufacturers, began implementation of its program in Maine on October 1, 2015. As of November 23, 2015, PaintCare reported enrolling 77 collection sites across the state for its program, and continues to actively recruit and train voluntary participants. The list of those collection sites is included as Appendix A. The first annual report by PaintCare on program performance is due to the Department by October 15, 2016.

H. Beverage Container Redemption Program

P.L. 2015, Chapter 166 transferred responsibility for the administration of Maine's beverage container redemption law, a.k.a. the "*Bottle Bill*" from the Department of Agriculture, Conservation, and Forestry (DACF) to the Department of Environmental Protection, effective October 15, 2015. DACF and Department staff met regularly to develop and enter into a Memorandum of Understanding (MOU) to implement this change (Appendix B). This MOU provides DACF with the resources needed to have its field inspectors continue to inspect beverage container redemption centers and dealers (i.e., businesses that sell beverages in containers which are subject to the Bottle Bill). This arrangement preserves the efficiency of one inspection visit to assess compliance with the multiple licensing and health and safety requirements enforced by DACF, which apply to these businesses.

By early December, the Department achieved multiple objectives in implementing operations to administer the program. These included:

- 1) Integration of redemption center license tracking into DEP's multi-sector licensing system and the State's "Advantage" accounting system to ensure license fee administration meets state financial auditing standards.
- 2) Configuration of Department computer systems to enable inter-department access to label registration data. This allows DACF field inspectors to access label registration data which is updated daily by Department staff.
- 3) The updating of all program forms, and the Department web site to reflect the changes in responsibilities.
- 4) A smooth transition experience for the regulated community.

The Department effected program procedures based on guidance provided by DACF, including providing almost 300 redemption centers with pre-populated renewal applications due in November and December, and over 800 pre-populated "initiator of deposit" renewal application forms with information

on almost 33,000 container labels. Department staff continues close consultation with DACF staff for guidance in managing non-typical situations and the Department sincerely appreciates all the help provided by DACF staff to make this transition as seamless as possible.

Next steps

Once it moves beyond the initial stages of implementation, the Department intends to initiate rulemaking to replace DACF's 01-001 Chapter 360, *Responsibilities of Manufacturers, Distributors, Dealers, Initiators of Deposit, Contracted Agents, and Redemption Center under the Returnable Beverage Container Law* with a new chapter within the Department's jurisdiction. More clarity regarding the status of this rulemaking (i.e., routine technical or major substantive) may be needed to enable the Department to move forward expeditiously to make the rules consistent with statutory changes.

III. Additional Potential Candidate Products

A. Carpet

Similar to the recycling of other products, carpet recycling involves collection, transportation, sorting, processing and sale of the resulting commodities. Carpet consists of two primary components: the face fiber; and, backing. As long as the net costs of commodities recovered from carpet is less than the cost of virgin materials, the market will drive voluntary recycling. For example, the economics of carpet recycling drive some manufacturers to include recycling of select waste carpet (e.g., nylon face fiber carpet) with the sale of new carpet for large commercial replacement projects, and carpet installation companies anecdotally report utilizing such programs.

The Department's exploration of opportunities to increase voluntary waste carpet recycling in 2015 included discussions with carpet processors, carpet installation companies, facilities with multi-fuel boilers, and municipal representatives. Voluntary carpet recycling increases when supported by market economics; industry representatives identified the need to decrease collection/transportation/processing system costs as much as possible to incentivize and encourage more recycling of used carpet. Transportation costs are minimized by utilizing the nearest processor(s), and/or taking advantage of trucking back haul opportunities. Along with high transportation costs from Maine, the nearest carpet processor (located in North Attleboro, MA) in early 2015 identified the cost of handling and disposing of PET carpet (which currently has no commodity value) as a major monetary drain on the carpet recycling system. Based on this information, DEP researched the options for utilizing PET carpet shreds as an alternative fuel in multi-fuel boilers in Maine, with the potential for reducing transportation costs through backhauling arrangements. However, the additional handling and emissions monitoring required to utilize an additional fuel stock in multi-fuel boilers significantly overrides any economic advantages that could be gained from transportation back hauls. Due to the increasing amounts of PET carpet in the waste stream and the lack of consistent affordable outlets for disposal of this material, the carpet recycler in North Attleboro, MA ceased operations in the second half of 2015.

As long as PET carpet remains in commerce without significant end-of-life commodity value, and given Maine's geographic distance from any carpet recycling processors, the outlook for increasing voluntary carpet recycling in Maine remains dim. Carpet manufacturers, however, are actively pursuing the

development of new end markets for recycled PET carpet.³ Some of the work developing new markets for PET carpet is at least partially funded through California's product stewardship program, which also is working to maintain collection and processing infrastructure until a self-sufficient economically sustainable recycling solution is found. The Department will continue to monitor the progress of these voluntary recycling efforts.

B. Mattresses

From a waste management perspective, mattresses pose disposal challenges – they take up a significant amount of space, cause increased wear and tear on landfill machinery, and have a tendency to "float" in landfills, potentially disturbing cover systems. Although mattresses are made of readily recyclable materials including wood, foam, steel, and fiber, deconstructing mattresses to recapture these materials is labor-intensive. The value of these recovered materials is usually less than the cost of labor and management needed to recover and recycle them.

Over the past few years, and in response to product stewardship laws, the International Sleep Products Association (ISPA) has focused on creating a workable system for used mattress recycling. In 2013, California, Connecticut, and Rhode Island adopted mattress recycling legislation in close collaboration with ISPA. The mattress recycling programs in these three states are administered by an industry-led nonprofit, the Mattress Recycling Council, with state government oversight. Collection site participation is voluntary, and the program is funded by a visible fee that is levied on new mattress purchases (\$9 per unit in Connecticut; \$11 per unit in Rhode Island and California). The fee is established based upon population distribution, geographic considerations, and other factors. The Department will continue to monitor these newly established programs in other states to determine if this type of effort would make sense in Maine. At this point in time, these fees remain high and could be even higher in Maine based on population and geographic constraints faced in our rural state. Until these issues are addressed, it would be premature to pursue any mandates regarding this specific product type in Maine.

IV. Discussion and recommendations related to the mercury thermostat program

In 2015, the 127th Maine Legislature passed P.L. 2015, Chapter 83, *An Act To Modify the Laws Regarding the Collection and Recycling of Mercury-added Thermostats*. Section 6 of this law requires the Department to review the financial incentive plan currently in place, and to report to the Legislature:

- "Recommendations regarding reduction of the complexity and costs of the manufacturer thermostat collection and recycling program...;"
- "Recommendations regarding improving the effectiveness of the manufacturer thermostat collection and recycling program, including changes in the mechanism for manufacturer payment of the financial incentive, the form of the financial incentive payment and the roles and responsibility of each participant in the program...;" and
- "Recommendations regarding the continuation of the thermostat disposal ban under Title 38, section 1663."

³ See <u>Carpet Reclamation Update: Demand for recycled fiber continues to fall – Aug / Sep 2015</u> at www.floordaily.net/floorfocus/carpet reclamation update demand for recycled fib.aspx

Historically, Department staff meets annually with TRC's Executive Director to discuss program performance, the effect of any new initiatives by TRC to improve program performance, and possible changes to increase the effectiveness of the program. Additionally, the Department and TRC regularly correspond regarding information and possible response to tips, complaints, and knowledge gained through visits to collection sites, as well as about TRC's annual report. The recommendations in this section were developed by Department staff based on information contained in TRC's annual report, and conversations and correspondence with TRC staff.

In its annual report on program activities for calendar year 2014, TRC draws several conclusions related to the effectiveness of its program, including:

- "TRC outreach improves frequency of bin returns."
- "Education and promotion efforts in Maine seem to have little substantive impact on contractor/technician participation in the program."
- "The data indicates that improving contractor/technician access to the program impacts collections to a far greater degree than education and promotion."
- "Direct contractor participation is limited and has not increased since 2008."
- "From TRC's analysis there is no indication that additional promotional efforts will have a substantive impact on program participation, particularly the contractor/technician incentive program. The issues with the program are structural and further efforts to promote participation will be negated by these issues."

These conclusions highlight the opportunity to build off the success of TRC's outreach program to improve the return to TRC of the bins containing the returned mercury-containing thermostats, and modifying the incentive payment system for contractors and technicians, to simplify it for contractors and technicians while decreasing administrative costs for TRC. Currently, the \$5 per thermostat returned incentive program at wholesale and contractor locations involves the following steps:

- Staff at collection location sets up collection bin (opens bin, sets up plastic liner, makes a 3part paper coupon available to technicians, retains shipping label & paperwork);
- For each thermostat returned, that technician must do the following with the 3-part coupon:
 - o place the sticker barcode on the thermostat, and place the thermostat in the bin;
 - o complete their name & address information on \$5 incentive coupon;
 - o pay postage and mail the coupon to TRC; and
 - o retain barcoded receipt as record.
- At least once each year staff at collection location prepares the bin for shipment (closes plastic liner, closes bin and secures with plastic ties, completes and applies shipping label, calls FedEx for pick up).
- TRC issues a paper check to the technician only when they confirm receipt in Minnesota (where the thermostats are processed/recycled) of thermostats with bar code tags that match coupons mailed separately and received in Virginia, where TRC's administrative offices are located.

TRC has indicated to the Department that the most common form of failure in the incentive payment system is that they do not receive coupons at their offices in Virginia to match all the tagged thermostats received at the mercury retort facility in Minnesota. Even when coupons matching tagged thermostats are received by TRC, there is an unpredictable and potentially long lag time between when the technician

turns in a thermostat and when they receive their incentive payment, potentially many months or even up to a year.

Recommendation 1: Simplify the manufacturer financial incentive payment system implemented at wholesaler and contractor locations by implementing a one-step system for the return of multiple thermostats at one time by an individual.

<u>Discussion</u>: In place of the three-part coupon system, this could be accomplished by TRC utilizing an invoice form for technicians at wholesale and contractor collection locations similar to the one utilized by retail locations to claim incentive payments. Using this form, a technician could complete a one-step process to claim the incentive for the return of multiple thermostats. They would package and place the claim form with the thermostats in a produce-type lightweight plastic bag in the TRC bin. When the bin is returned, TRC can quality control the returns and provide feedback to individuals if they are returning ineligible thermostats. This would be similar to the paperwork system utilized by ecomaine to provide individuals with the \$5 incentive for turning mercury thermostats in for recycling at its collection location. Simplifying the paperwork to encourage multiple returns at a time could lead to a reduction in TRC's administrative costs.

Recommendation 2: Revise the collection goals in 38 M.R.S.A. § 1665-B.5 to realistic goals based on peer-reviewed data, and explore the potential for penalties to be paid by manufacturers for failure to reach these goals, should they be reestablished.

<u>Discussion</u>: The collection goals at 38 M.R.S.A. § 1665-B.5 were established based on the best available information at the time the law was passed (i.e., that 27,000 mercury thermostats would be available annually for recycling). In June of 2015, the Skumatz Economic Research Associates (SERA - www.serainc.com) published a report, *Estimated Annual Outflow of Mercury-Containing Thermostats in the State of Maine*, describing their research and methodology to develop an estimate of the projected number of mercury-containing thermostats that annually will become waste in Maine over the next several decades. For the years 2015 – 2024, the SERA report predicts 16,000 mercury thermostats will be removed annually in Maine. This report has yet to be peer reviewed, so caution should be exercised in application of its projections of the number of thermostats available for recycling to measure program performance or set recycling goals. The results, however, provide a good indication that the collection goals established in statute are very likely unrealistic. In order to establish attainable statutory goals, further, peer-reviewed data should be developed before making this policy change.

Once new collection goals are established based on reliable data, it may be advisable to explore implementing enforceable collection goals. Other states with mercury thermostat laws have implemented various enforceable goals as a strategy to increase collections.

Recommendation 3: Maintain Maine's disposal ban on mercury-added thermostats.

<u>Discussion</u>: The disposal ban is one of Maine's strongest tools for encouraging recycling of mercury thermostats, and the State should retain its disposal ban on mercury thermostats.

V. Conclusion

Product stewardship programs impose costs on to manufacturers that are ultimately passed on to consumers. This may be viewed as a way to internalize some of the externalities created by manufactured goods. While the costs created by such programs are easy to quantify, it is difficult to establish the benefits that accrue / the externalities avoided.

While new product stewardship programs may make sense in the future, Maine should move forward deliberately. Given Maine's vast geography and lack of population density, economics will severely limit the type of programs that will make sense for our State. At this time, our best course of action is to continue monitoring emerging programs in other states, as legislative action at this time is premature.

Appendix A

77 PAINTCARE MAINE DROP-OFF SITES, as of 11/23/2015

County / Site Name	Address	City	Zip
ANDROSCOGGIN 4			
Sherwin Williams	1168 Lisbon St	Lewiston	04240
Maine Building Materials Exchange	102 Lisbon Rd	Lisbon	04250
Aubuchon Hardware	572 Lisbon St	Lisbon Falls	04252
Depot Square Hardware	9 Depot Square	Mechanic Falls	04256
AROOSTOOK 6			
Sherwin Williams	118 Bennett Dr Ste 180	Caribou	04736
S W Collins Co	6 Washburn St	Caribou	04736
Quigleys Building Supply	35 W Main St	Fort Kent	04743
S W Collins Co	57 Bangor St	Houlton	04730
Sherwin Williams	2 Smyrna St	Houlton	04730
S W Collins Co	21 Rice St	Presque Isle	04769
CUMBERLAND 17		-	
Hayes True Value Hardware	204 Portland Rd	Bridgton	04009
Sherwin Williams	179 Pleasant St	Brunswick	04011
Cooks Hardware	57 Main St	Gorham	04038
Gray Transfer Station	Seagull Dr	Gray	04039
Aubuchon Hardware	499 Roosevelt Trl	Naples	04055
Aubuchon Hardware	832 Stevens Ave	Portland	04103
Maine Hardware	274 Saint John St	Portland	04102
Riverside Portland HHW Facility	910 Riverside St	Portland	04103
Dunstan Ace Hardware	636 US Hwy 1	Scarborough	04074
Sherwin Williams	166 US Rte 1	Scarborough	04074
Oak Hill Ace Hardware Inc	Oak Hill Plaza 29 Gorham Rd	Scarborough	04074
Maine Paint Co	153 Ocean St	South Portland	04106
Sherwin Williams	180 Waterman Dr	South Portland	04106
Sherwin Williams	100 Larrabee Rd	Westbrook	04092
Aubuchon Hardware	777 Roosevelt Trl	Windham	04062
Sherwin Williams	859 Roosevelt Trl	Windham	04062
Maine Paint Co	431 US Route 1	Yarmouth	04096
FRANKLIN 2			
Aubuchon Hardware	361 Wilton Rd	Farmington	04938
Rangeley Lakes Builders Supply	2742 Main St	Rangeley	04970
HANCOCK 3			
Paradis True Value Hardware	31 Holland Ave	Bar Harbor	04609
Sherwin Williams	43 Downeast Hwy	Ellsworth	04605
Southwest Trustworthy Hardware	345 Main St	Southwest Harbor	04679
KENNEBEC 5			
Aubuchon Hardware	10 Bangor St	Augusta	04330

Sherwin Williams	68 Western Ave	Augusta	04330
China Transfer Station	191 Alder Park Rd	China	04358
Aubuchon Hardware	485 Kennedy Memorial Dr	Waterville	04901
KNOX 3			
Sherwin Williams	96 Park St	Rockland	04841
E L Spear Inc Lumber and Hardware	10 Payne Ave	Rockland	04841
St George Transfer Station	176 Wallston Rd	Tenants Harbor	04860
LINCOLN 1			
Louis Doe Home Center	92 Mills Rd	Newcastle	04553
OXFORD 4			
Tri Town Transfer Station	208 S Hiram Rd	Hiram	04041
Aubuchon Hardware	138 Main St	Norway	04268
Aubuchon Hardware	65 Falmouth St	Rumford	04276
Wilton Transfer Station	158 Weld Rd	Wilton	04294
PENOBSCOT 7			
Color Concepts	840 Hammond St Ste 3	Bangor	04401
Sherwin Williams	625 Broadway Ste 3	Bangor	04401
Aubuchon Hardware	484 Wilson St	Brewer	04412
Aubuchon Hardware	245 W Broadway	Lincoln	04457
S W Collins Co	302 W Broadway	Lincoln	04457
Aubuchon Hardware	80 Moosehead Trl	Newport	04953
Aubuchon Hardware	486 Stillwater Ave	Old Town	04468
PISCATAQUIS 2			
Dover Foxcroft Transfer Station	66 Landfill Rd	Dover Foxcroft	04426
Greenville Transfer Station	7 Minden St	Greenville	04441
SAGADAHOC 1			
Rogers Ace Hardware	55 Congress Ave	Bath	04530
SOMERSET 4			
Aubuchon Hardware	9 Commercial St	Skowhegan	04976
Sherwin Williams	257 Madison Ave	Skowhegan	04976
Quinn True Value Hardware	125 Waterville Rd	Skowhegan	04976
Skowhegan Transfer Station	29 Transfer Station Dr	Skowhegan	04976
WALDO 3			
Aubuchon Hardware	231 Northport Ave	Belfast	04915
Sherwin Williams	15A Starrett Dr	Belfast	04915
Searsport Transfer Station	Dump Rd	Searsport	04974
WASHINGTON 1			
Sherwin Williams	305 North St	Calais	04619
YORK14			
Sherwin Williams	420 Alfred St	Biddeford	04005
Aubuchon Hardware	400 Narragansett Trl	Buxton	04093
Plummers Buxton Hardware	241 Parker Farm Road	Buxton	04093
Cornish Hardware	13 Maple St	Cornish	04020
Plummers Limerick Hardware	42 Central Ave	Limerick	04048
Limerick Transfer Station	86 Doles Hill Rd	Limerick	04048
	14		

Aubuchon Hardware	640 Main St	Springvale	04083
Springvale Hardware	489 Main St	Springvale	04083
Sherwin Williams	544 Main St	Springvale	04083
Plummers Waterboro Hardware	1009 Main St	Waterboro	04087
Waterboro Transfer Station	132 Bennett Hill Rd	Waterboro	04030
Aubuchon Hardware	1165 Post Rd	Wells	04090
Sherwin Williams	1521 Post Rd	Wells	04090
Eldredge Lumber & Hardware	627 Blue Star Memorial	York	03909

Appendix **B**

MEMORANDUM OF UNDERSTANDING BETWEEN THE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORSESTRY (DACF) DIVISION OF QUALITY ASSUR ANCE & REGULATIONS (QAR) AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) BUREAU OF LAND RESOURCES (BLR)

PROJECT: Identification of the reallocation of certain administrative tasks and responsibilities for implementing the provisions regarding returnable beverage containers under 32 MRS Chapter 28, as directed by Public Law 2015, Chapter 166.

Through Public Law 2015, Chapter 166, administration of provisions assigned to DACF under 32 MRS Chapter 28, have been transferred to DEP. Where certain responsibilities for the administration of the returnable beverage container program remain with DACF (32 MRS Chapter 27), this Memorandum of Understanding (MOU) sets forth the expectations and responsibilities of each Department, reflecting the intent of Public Law Chapter 166, to ensure both a seamless transition of the responsibilities being transferred to DEP and the continued successful implementation of the returnable beverage container program.

Department of Environmental Protection, BLR, agrees to:

- 1) Administer the product (beverage container) registration process.
- 2) Review submitted beverage container labels for approval. Coordinate with the Bureau of Alcoholic Beverages & Lottery Operations (BABLO), as appropriate.
- 3) Provide all fee collections including: label registration fees; and redemption center, initiators of deposit, and contracted agent license fees.
- 4) Oversee all program data management needs, including administration of program licensing and label registration databases and relevant data entry; provide for 'real-time' data availability on licensed redemption centers, initiators of deposit, contracted agents and label registration for DACF staff.
- 5) Work with DACF to revise current DACF regulations (Rule Chap 360) to identify DEP as the administering agency, and other revisions as may be identified.
- 6) Provide for licensing of redemption centers, initiators of deposit, and contracted agents. Issue determinations for new redemption center requests.
- 7) Coordinate with DACF to identify priority facilities for annual inspections prior to license renewals, and request DACF to perform targeted inspections as needed to respond to credible tips and complaints.
- 8) Review reports from relevant facility inspections conducted by DACF to ensure program compliance. Coordinate with DACF on issues of concern, including possible criminal investigations for overredemption and investigating/pursuing allegations of fraud.
- 9) Provide assistance to manufacturers regarding program applicability.
- 10) Create a single point of contact, within DEP, for all correspondence related to the returnable beverage container program, whether initially received by DEP or not, and establish a permanent record for program correspondence.
- 11) Provide funding on a timely basis to DACF, upon receipt of quarterly invoices including detailed

expenditure queries, for their work applicable to the returnable beverage container program. Allowed expenses include personal services for up to the value of two FTE consumer protection inspector positions; associated administrative costs (STA-CAP & DICAP); and vehicle costs (not to exceed \$20,000 per fiscal year).

Department of Agriculture, Conservation and Forestry, QAR, agrees to:

- 1) Continue providing food and sanitary inspections, including review of practices related to the returnable beverage container program, at applicable facilities.
- 2) Conduct inspections of retail establishments, reverse vending machines, redemption centers, contracted agents, warehouses, beverage manufacturers and other facilities, for compliance with the returnable beverage container program requirements including label registration audits, and including inspections as requested by DEP in response to credible tips and complaints.
- 3) Remove from sale non-compliant products identified by inspectors, and notify DEP of this action and the product name and manufacturer.
- 4) Conduct annual redemption center inspections associated with license renewal coordinated with DEP.
- 5) Submit relevant facility inspection records to DEP.
- 6) Notify DEP if DACF staff identifies compliance or other implementation issues related to those program provisions administered by DEP. With DEP, consult with the Attorney General's Office regarding potential enforcement approach to identified violations.
- 7) Track staff time spent on program activities through a TAMS project task code and issue quarterly detailed personal services and associated administrative costs (STA-CAP & DICAP) to DEP.
- 8) Retain administration of the Total Environmental Control (TEC) database and responsibility for OIT costs. Any enhancements to the TEC database requested by DEP shall be paid for by DEP.
- 9) Remit all payments received to administer the returnable beverage container program to DEP and not deposit funds into DACF's bottle bill enforcement fund that were due after November 1, 2015.
- 10) DACF billing to DEP will begin effective November 1,2015, including payroll from November 4, 2015.

Both parties agree that this MOU is for the period of one year from the date of signing and may be reviewed, revised or modified in writing at any time upon agreement of both parties.

Signed this day <u>11/20/2015</u>

Avery Day, Acting Commissioner Department of Environmental Protection

Walter Whitcomb, Commissioner De Department of Agriculture, Conservation & Forestry