March 13, 2017

The Honorable Thomas Saviello & Ralph Tucker, Co-chairpersons
Committee on Environment and Natural Resources
c/o Legislative Information Office
100 State House Station
Augusta, ME 04333

RE: LD 1204, “An Act To Fund the Maine Solid Waste Diversion Grant Program and to Phase Out Certain Containers from the Bottle Redemption Laws” – OPPOSE

Dear Chairpersons Saviello & Tucker,

The Container Recycling Institute opposes LD 683, entitled, “An Act To Fund the Maine Solid Waste Diversion Grant Program and to Phase Out Certain Containers from the Bottle Redemption Laws.” By reducing the scope of the State’s beverage container deposit law, LD 683 would be a step backwards for recycling. The bill would increase landfilling, increase costs for municipalities and taxpayers, increase consumer confusion, and increase the use of energy and the production of greenhouse gases. In addition, the bill would financially result in a big give-away to local and multi-national beverage companies at the expense of Maine’s municipalities, Maine’s small businesses, the State of Maine itself and local charities. The financial benefits of a new recycling fund are relatively small and do not come close to compensating municipalities for their losses. The losses to municipalities, the state and charities would continue indefinitely, while the beverage companies would make small payments into the recycling fund for only 5 years.

Financial Implications
It is notable that LD 683 would relieve the beverage industry from having to pay $1.7 million per year in handling fees for container collection. Conversely, Maine’s redemption centers and retailers will lose $1.7 million in handling fees every year as a result of the proposed changes.

Nearly ninety-five percent of the containers excluded by LD 683 are PET containers, nearly 5% are glass containers and the remaining 1% are metal cans, by unit count. By weight, LD 683’s containers are 56% plastic and 44% glass. LD 683 would leave all aluminum containers in the deposit program. Aluminum is the only material type that has a higher scrap value than the cost of recycling for municipalities. LD 683 is structured to unload the most costly containers onto municipalities and taxpayers. In addition, if the containers were taken out of the deposit program, any containers collected through curbside programs would have a lower scrap value than they do in the deposit program. In particular, PET plastic is worth 40% less when sold through curbside programs because of contamination. Furthermore, PET scrap prices have been very low for the last three years, so much so that virgin plastic has been cheaper than recycled plastic.
In the Province of Ontario, Canada, the curbside recycling program for packaging and printed paper is partially paid for by industry, and they have developed a very good set of peer-reviewed activity-based-costing statistics. Their cost model for 2016 shows that aluminum generates net revenues of $____ per ton, while glass has a net cost of around $____ per ton, and PET is the most expensive, at a net cost of $____ per ton. (These statistics are published on the Stewardship Ontario web site.)

The proposed new recycling revenues to be deposited into the grant account would be about $265,000 per year for five years, for a total of approximately $1.3 million. Meanwhile, municipalities in the state will experience increased costs from handling the larger beverage containers of more than $1.9 million each year, and these costs would continue every year, well into the future.

Part of the financial losses stem from the way materials are devalued by taking them out of the container deposit program. Container glass has little to no value in curbside recycling programs, and many of Maine’s municipalities can’t find markets for glass. In contrast, through the container deposit program, Maine’s glass bottles are recycled and made into new glass bottles, and there is a ready market for this.

**Maine’s container deposit program collects more beverage containers for recycling per capita than any other program in the United States.** The program collects more than 700 units per capita compared to roughly 200 units per capita collected in non-container deposit states. It is clear that Maine’s program has been a successful one, and the proposed changes would unnecessarily dismantle a portion of the program. Maine’s official recycling rate would be 41.8% for 2012 if the data from the container deposit program was included in the official totals.

**Figure 1: Per Capita Containers Recycled in Deposit and Non-Deposit States - All Container Types, 2010**

![Graph showing per capita containers recycled in deposit and non-deposit states.](image)
Consumer Confusion
Currently, nearly all beverage containers are included in Maine’s beverage container deposit law. This bill would exempt some of the containers that are currently covered by the law, namely, those 46 ounces and over in size. LD 683 would increase consumer confusion by applying the deposit to some containers and not others. This consumer confusion might negatively affect the recycling rate in Maine.

Some wine and liquor bottles would be included in the container deposit program, and some wouldn’t. Two-liter and three-liter soda bottles would be excluded from the deposit program under this bill, while the rest of soda would remain. The same is true for sparkling water, still water, sports drinks, and especially true for fruit juices.

Adverse Effects to Maine’s Recycling Rate and Increase Landfilling of Beverage Containers
Refundable deposits have been shown to be an efficient and effective way to significantly increase recycling rates of beverage containers. In the 10 states that have refundable deposits, the beverage container recycling rates average 84%. In all other states, the beverage container-recycling rate is below 25%. In non-deposit states, the recycling rate for glass beverage containers is 25%, while the rate for PET beverage containers is 20%. In contrast, deposit states have a recycling rate of 65% for glass beverage containers and a 48% recycling rate for PET beverage containers have. No other container-focused recycling program achieves these types of recovery rates like refundable deposit programs.

Increase of Greenhouse Gases
Using USEPA statistics, beverage containers make up about 5.5% of the waste stream by weight. Measuring waste quantities by weight is a relic of the past, and ignores more relevant environmental criteria. When measured by greenhouse gases that can be saved by recycling, beverage containers make up about 20% of the waste stream (source: USEPA). It is therefore extremely important to recycle beverage containers, and to make the materials into industrial feedstock.

It is sometimes said that car and truck travel for recycling of beverage containers is a negative impact, but reasoning fails to account for the greenhouse gas savings from recycling.

The Worldwide Trend is Toward Bringing More Beverage Containers into Deposit Programs
There are more than 45 beverage container deposit programs in the world. Since the year 2000, there have been 19 new and expanded container deposit laws around the world, bringing new
recycling programs to more than 100 million people. Container deposit programs have been expanded to include more beverage types, like water, in California, New York, Connecticut and Oregon. In Ontario, Canada, wine and liquor were added to their program in 2007. Hawaii and Germany both started new comprehensive deposit programs in 2005. 2011 brought new programs to Fiji, Guam, the Northern Territory of Australia, Turks & Caicos, while Lithuania implemented their container deposit law in 2015, and three states in Australia recently announced new container deposit laws. The worldwide trend is clearly to bring more and more beverage containers under deposit programs because of their success at increasing recycling and reducing beverage container litter.

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About CRI
CRI is a nonprofit organization and a leading authority on the economic and environmental impacts of used beverage containers and other consumer-product packaging. Its mission is to make North America a global model for the collection and quality recycling of packaging materials. We do this by producing authoritative research and education on policies and practices that increase recovery and reuse; by creating and maintaining a database of information on containers and packaging; by studying container and packaging reuse and recycling options, including deposit systems; and by creating and sponsoring national networks for mutual progress. CRI envisions a world where no material is wasted and the environment is protected. It succeeds because companies and people collaborate to create a strong, sustainable domestic economy.

The Container Recycling Institute urges you to reject LD 683 and to reject any measures that would reduce the scope of Maine’s container deposit program, the most effective recycling program in the State.

Thank you for the opportunity to submit comments on this bill. Please contact me with any questions you may have.

Sincerely,

Susan V. Collins
President
Container Recycling Institute

Cc:
Senator Thomas Saviello, Chair
Representative Ralph Tucker, Chair

Senator Geoffrey Gratwick
Senator Amy Volk
Representative Richard Campbell
Representative Robert Duchesne
Representative Jessica Fay
Representative Denise Harlow
Representative Jonathan Kinney
Representative John Martin
Representative Jeffrey Pierce
Representative Scott Strom
Representative Stanley Zeigler

Steven Langlin, Committee Clerk
Daniel Tartakoff, OPLA Analyst
### FINANCIAL ANALYSIS OF LD 683 (exclusion of containers of 46 oz. or larger from Bottle Bill)*

<table>
<thead>
<tr>
<th>Who Wins?</th>
<th>Who Loses?</th>
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<tr>
<td><strong>Material Recovery Facilities (MRFs)</strong></td>
<td><strong>Beverage Companies</strong></td>
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<tr>
<td>Handling Fees Paid by Beverage Distributors to Redemption Centers (a)</td>
<td></td>
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<tr>
<td>Payments to New Recycling &amp; Composting Grant &amp; Loan Fund (b) <em>(Municipalities would receive some portion of grants, but private companies would also be eligible for grant funding. We assumed a 50/50 split.)</em></td>
<td>MRFs, or the companies that own them, would be eligible for grant funding.</td>
</tr>
<tr>
<td>Label Registration Fees paid to the State of Maine to fund Program Administration &amp; Enforcement (c)</td>
<td></td>
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<tr>
<td>Unredeemed Deposits (d)</td>
<td></td>
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<tr>
<td>Collection, Processing, Disposal (e)</td>
<td>MRFs would receive some portion of containers removed from bottle bill program, as well as processing fees and scrap revenue.</td>
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<tr>
<td>Sale of Scrap Material (f)</td>
<td></td>
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<tr>
<td>Deposit Refund (g)</td>
<td></td>
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<tr>
<td>Annual Total for Each Stakeholder, for First Six Years (h)</td>
<td>$290,728</td>
</tr>
<tr>
<td>5-Year Total for Each Stakeholder (i)</td>
<td>$1,453,640</td>
</tr>
<tr>
<td>Annual Savings/(Costs) After First Five Years (j)</td>
<td>$555,386</td>
</tr>
<tr>
<td>10-year Total for Each Stakeholder</td>
<td>$4,230,569</td>
</tr>
</tbody>
</table>

*See opposite side of sheet for notes, sources, and assumptions.
### Notes, sources, and assumptions for CRI Financial Analysis of LD 683 (exclusion of containers of 46 oz. or larger from the Bottle Bill):

(a) Based on excluding 52.9 million containers sold (46 oz. & up) x 3.5 cent average handling fee x 90% redemption rate.

(b) Payments to new recycling fund estimated at half a cent per container x 52.9 million (excluded) containers sold (46 oz and up).

(c) Registration fees of $1 per label for wine and $4 per label for all other beverages, size of 46 oz. & up only. State of Maine, [http://www.maine.gov/dacf/qar/bottle_bill/documents/rcregistrationlist.xls](http://www.maine.gov/dacf/qar/bottle_bill/documents/rcregistrationlist.xls)

(d) Beverage companies that commingle currently keep unredeemed funds; companies that do NOT commingle turn over all unredeemed funds to the state. In 2014, $1.8 million escheated to the State.

(e) Who wins/Beverage companies: assumes 2017 estimated sales, $0.01/unit cost, and 90% redemption. For municipalities: tipping fees and MRF processing fees are on a per-ton basis. "Collection, processing and disposal" is estimated to be 60% disposal and 40% recycling. Disposal costs are $80 collection and $70 disposal, for a total of $150 per ton. Who loses/Municipalities: "collection & processing" is estimated at a weighted average (disposal and recycling) of $136 per ton for glass and $602 for PET, before scrap sales, based on Ontario, Canada results. Who loses/Redemption Centers: a 10% profit (and 90% cost) on handling fees is assumed.

(f) Sale of scrap material: beverage containers currently have a 90% return rate in the deposit program, but would have a return rate of 40% in curbside programs. Scrap value of glass is zero in curbside programs and $20/ton in deposit programs. Recent PET prices are $0.18/lb for deposit material, but only $0.12/lb for curbside material. Containers per pound data for large size containers obtained from NAPCOR and CalRecycle.

CRI estimates that in 2017, 52.9 million glass and plastic bottles were sold in sizes 46 ounces and greater, weighing about 5,563 tons. An estimated 5,098 tons (or 90%) were recycled through the deposit program. If these larger sizes are excluded from the bottle bill, we estimate that a maximum of 40% of containers sold (or 2,225 tons) will be recycled through curbside and dropoff programs; the remaining 60% (3,338 tons) will be thrown in the trash. In other words, 2,873 tons of new trash will be created (5,098 - 2,225): all of which was once clean, highly marketable deposit material. The 2,225 tons that are collected for recycling through curbside and dropoff will be subject to contamination, and will not command as high a price as deposit material.

(g) Deposit refunds: containers of 46 ounces and more comprise 4% of deposit beverages sold in Maine, and this 4% is estimated to be 52.9 million containers sold in 2017. We assumed the same percentage for redeemed deposits (90% redemption), and used a 5-cent deposit value. Charities are assumed to return 5% of total containers redeemed.

(h) Sum of all the above cells in each column.

(i) Annual total x 5.

(j) For the beverage companies: the sum of avoided annual handling fees; label registration; collection, processing, and disposal costs; unredeemed deposits and the sale of scrap material. Recycling fund fees would sunset after 5 years. For all other stakeholders: equal to the sum of annual costs/savings.

(k) In reality, redemption centers and retailers would not be able to reduce costs over the short term, because most of their costs are fixed.

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Prepared by the Container Recycling Institute, 3/13/17