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March 25, 2014

The Honorable Anthony Klein, Chairman
House Committee of Natural Resources and Energy
Vermont State House, Room 44
Montpelier, Vermont 05633-5301

RE: Vermont H. 104 – testimony regarding H. 104

Dear Chairman Klein,

I am writing from the Container Recycling Institute (CRI) to provide further information related to Vermont H. 104. In particular, we would like to answer clarifying questions asked by committee members about the relatively high cost to collect and process PET in recycling programs as well as the documentation of cost savings to municipalities after implementation of beverage container deposit programs.

There is a net cost for processing PET bottles in curbside recycling programs: example from Ontario’s Blue Box Program

It has been well-known among solid waste and recycling professionals for decades that collection of plastics and other lightweight materials is more expensive than collection of more dense and more easily compacted materials on collection routes. At MRFs, processing costs vary between material types as well. To illustrate the relative cost of collection and processing PET for recycling, we use data from the Province of Ontario, Canada.

Multi-material curbside recycling is offered to 99% of single-family residential households in the Province of Ontario, and is half-funded through an Extended Producer Responsibility (EPR) model. The following excerpt, from the nonprofit Stewardship Ontario website, describes the financing of their packaging EPR program:

“Stewardship Ontario collects fees from Industry Stewards—the companies that are the brand owners, first importers or franchisors of the products and packaging materials that end up in curbside Blue Boxes These fees help to fund the costs of collecting, transporting, recycling and safely disposing of waste across the province. Stewards share responsibility for the Blue Box Program with municipal governments, contributing approximately \$100 million per year (half the cost).”

The stewards collectively determine their share of costs through a financial model that uses activity-based-costing, and has been peer-reviewed. According to Stewardship Ontario, “The methodology for the activity-based cost allocation study has been developed over many years with stakeholders including municipalities, material and packaging suppliers and stewards. The methodology was reviewed by a third party, KPMG, in 2007 in conjunction with EEQ and MMSM.” Costs are allocated for labor, capital, and operating costs for collection and processing.

The following link describes the methodology for the Activity Based Cost Allocation Study in Ontario:
http://www.stewardshipontario.ca/wp-content/uploads/2013/04/ABC-study-exec-summary_Final-for-web.pdf.

Table 1. Province of Ontario Blue Box Program Costs

	<i>Gross Cost of Recycling (Collection and Processing), per ton, \$US</i>	<i>Revenues from Sales of Scrap Material, per ton, \$US</i>	<i>Net Cost of Recycling (Gross Cost Minus Revenues), per ton, \$US</i>
Aluminum Cans	\$880	\$1,106	-\$226
PET Bottles	\$1,012	\$336	\$676
HDPE Bottles	\$945	\$374	\$570
Clear Glass	\$107	\$21	\$87
Colored Glass	\$99	\$17	\$82

Source: Stewardship Ontario, data used to set fees for 2014, November 2013

Sheet: Table 2, Gross and Net Costs

All Canadian dollars multiplied by .79 to convert to US dollars

Note: negative "net cost" value for aluminum means that aluminum is recycled with a net profit

Table 1, above, provides a detailed breakdown of the gross collection and processing costs for common beverage container material types in recycling programs. The table also provides figures for revenues from sales of scrap material, as well as the net cost of recycling. On a net cost per ton basis, PET bottles are about seven to eight times more expensive to collect and process than glass bottles.

Container deposit programs relieve municipalities of the operational burdens and financial costs of collecting beverage containers. Lost revenue from material that is currently collected in municipal recycling programs is relatively insignificant when compared to the avoided collection and disposal costs, as well as litter cleanup and storm drain cleanout costs.

- According to analysis conducted by DSM Environmental Services Inc. for the Massachusetts Department of Environmental Protection an expanded bottle bill was estimated to reduce costs for municipalities in Massachusetts, even after netting out potential revenue losses. The final letter report estimated **the total savings to be between \$3.8 and \$6.5 million dollars annually**. Because material is diverted through the bottle bill, "the savings are primarily due to reduced collection and disposal costs."¹

- Independent research from the Congressional Research Service (CRS), which prepares reports for the U.S. Congress, states that both a deposit return program and curbside recycling are necessary to achieve high recycling rates and that having both programs result in less costs for curbside recycling. Specifically,

"Both systems can serve as elements of comprehensive recycling programs. Neither constitutes a comprehensive program by itself. Neither excludes the use of the other."

"Deposit systems skim potential sources of revenue from curbside programs, but they also reduce the operating costs of curbside programs. Local governments would appear to achieve greater diversion of solid waste from disposal at a lower cost per ton if both a bottle bill and a curbside collection program were in place."²

- More recent research undertaken in Europe for the Campaign to Protect Rural England¹ (a charity focused on preventing litter in rural England) takes a closer look at the notion that curbside recycling programs and deposit return are mutually exclusive. The report states that this argument is "pure speculation based on the unlikely scenario in which there is no effect on the logistics of the pre-existing system"³. In fact, the findings suggest that if the recovery of beverage containers through a deposit return program is very high (as is

¹ DSM Environmental Services, Inc for Massachusetts Department of Environmental Protection, "Analysis of the Impact of an Expanded Bottle Bill on Municipal Refuse and Recycling Costs and Revenues – FINAL LETTER REPORT": July 21, 2009.

² *Bottle Bills and Curbside Recycling: Are They Compatible?* James E. McCarthy, Specialist, Environment and Natural Resources Policy Division. January 27, 1993.

³ www.cpre.org.uk

currently the case in Vermont), then there is limited need to include bottles and cans in a curbside program. The curbside system can concentrate on optimizing the logistics of collecting the remaining materials such as newspaper, phone books, paper, cardboard, and other household-generated container packaging.

- In 1991, the Seattle Solid Waste Utility conducted its own analysis to determine the impact of a national bottle bill on the economics of the City's recycling program, one of the oldest and most successful curbside recycling programs in the nation. The study, titled *Potential Impacts of a National Bottle Bill on Seattle's Curbside Recycling Program*, found that 42% to 54% more beverage container tonnage would be diverted, while there would be an overall net system savings to the city between \$236,917 and \$632,774. They concluded, "A bottle bill would divert additional tonnage with no significant impact to either City costs or curbside recycling profits."⁴
- In the Province of Ontario, Canada, The Beer Store has documented taxpayer savings of \$40 million per year, due to the high recycling rate of the deposit-return program for alcoholic beverage containers.⁵

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.

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:

Representative Anthony Klein, Chair
Representative Rebecca Ellis, Vice Chair
Representative Michael Hebert, Ranking Member
Representative Robin Chestnut-Tangerman
Representative Robert Forguites
Representative Marianna Gamache
Representative Oliver Olsen
Representative Keshia K. Ram, Clerk
Representative Mary Sullivan
Representative Warren Van Wyck
Representative Michael Yantachka
Claire Bruno, Committee Assistant cbruno@leg.state.vt.us

⁴ <http://www.bottlebill.org/about/benefits/curbside.htm>

⁵ Press release from the Beer Store, "Beer Store recycling program saves Ontario Taxpayers, Environment, \$40 million," <http://www.thebeerstore.ca/sites/default/files/Stewardship%20Reports/Ontario%20-%20stewardship%20report%202013-2014%20-%20press%20release%20FINAL.2.pdf>
