

**Environment & Sustainability Standing Committee  
June 5, 2014**

**TO:** Chair and Members of Environment & Sustainability Standing Committee

Original Signed

**SUBMITTED BY:** \_\_\_\_\_  
Kathleen Llewellyn-Thomas, P. Eng, Acting Director, Transportation &  
Public Works

**DATE:** May 28, 2014

**SUBJECT:** NSE Solid Waste Regulation Review – Municipal Stakeholder Input

**INFORMATION REPORT**

**ORIGIN**

May 1, 2014 ESSC Session Item - Regional Chairs Update, Councillor Watts reported that Nova Scotia Environment (NSE) would be commencing consultation with the public and industry stakeholders on proposed changes to the NSE Solid Waste Management Regulations.

**ISSUE**

Review of the proposed changes and implications to Halifax's program and services.

**LEGISLATIVE AUTHORITY**

Solid waste regulations fall under provincial legislation. Changes to the legislation and regulations have a direct impact to municipal services costs in terms of administration, education, disposal, materials management, processing, compliance and enforcement. HRM Charter, Part XIII Solid Waste Management, Section 336 (a - j) refers to the authority to make by-laws respecting Solid Waste Management.

## **BACKGROUND**

Nova Scotia Environment (NSE) has been examining revisions to the solid waste regulations in support of meeting Environmental Goals and Sustainable Prosperity Act (EGSPA) targets. The changes being proposed are in support of environmental stewardship and improving system performance, with a focus on meeting the Provincial target of 300 kg/capita. Halifax currently stands at 393kg/capita. Attachment A outlines the assessed costs to Halifax of reaching the 300kg/capita target.

Preliminary discussions with Waste Management Regions (through Regional Coordinators and Regional Chairs) were initiated in February 2013 with a full day workshop facilitated by NSE. In June 2013, NSE provided a presentation to ESSC outlining proposed changes to the solid waste resource regulations. At that presentation, staff provided ESSC with a Briefing Note outlining issues and implications to Halifax programs and services based on the initial draft document. Those observations were subsequently provided to NSE in terms of a copy of the briefing note. (Attachment B)

On May 12, 2014, NSE launched public and stakeholder consultation with the release of a discussion document, “Revising Our Path Forward: A Public Discussion Paper About Solid Waste Regulation in Nova Scotia” <http://novascotia.ca/nse/waste/docs/solid-waste-public-discussion.pdf> - (Attachment C)

The review and discussion have focused on seven (7) areas:

1. Product stewardship
2. Disposal bans and approval requirements
3. Used tire management program
4. Removal of the requirement for regional solid waste management plans
5. Clarity on the rules for energy from waste and alternative technologies
6. Improving the enforceability of the solid waste regulation
7. Beverage container deposit-refund program

Planned meetings with municipal and industry stakeholders are being held. Meetings for municipal stakeholders are as follows:

May 28, 2014    Mariners Center  
45 Jody Shelley Drive, Yarmouth, NS  
(9 a.m. – 12 p.m. morning session and 1 p.m. – 4 p.m. afternoon session)

- May 30, 2014 NSCC Waterfront Campus  
80 Mawiomi Place, Dartmouth, NS  
(9 a.m. – 12 p.m. morning session and 1 p.m. – 4 p.m. afternoon session)
- June 9, 2014 Grand Lake Fire Hall  
1050 Grand Lake Road, Sydney, NS  
(9 a.m. – 12 p.m. morning session and 1 p.m. – 4 p.m. afternoon session)
- June 17, 2014 NSCC Campus – Truro  
36 Arthur Street, Truro, NS  
(9 a.m. – 12 p.m. morning session and 1 p.m. – 4 p.m. afternoon session)

The deadline for written feedback to be received by NSE is July 10, 2014.

## **DISCUSSION**

This process has been ongoing for over a year, with the current document being a revision to the initial draft issued to stakeholders last winter and updated last spring. The table in Attachment D reviews each of the seven focus areas, initial feedback provided by Halifax to NSE and an updated review based on the current discussion document (Attachment C).

In terms of NSE consultation objectives, they have outlined the following targeted questions for consideration in discussion with stakeholders:

1. Does the list of products proposed under a stewardship framework make sense? As the list would be phased in over time, what is a suitable time frame for implementing this policy shift for Nova Scotia?
2. In a product stewardship framework, what should be the role of manufacturer/producer, brand owner, distributor, retailer, consumers, municipalities and private recycling operators? Should this be different for different products?
3. Should the stewardship framework and material bans apply to all Nova Scotians, residents and businesses alike?
4. What is the appropriate timing for implementing disposal bans on construction and demolition materials like wood, wallboard/drywall, asphalt shingles and expanded polystyrene? Are there other materials you think should be banned from landfill?
5. The proposed changes present both opportunities and challenges for operators under approval with NS Environment; do you have any specific suggestions for maximizing these opportunities and reducing challenges associated with the regulation?

6. What other actions should be taken to support waste diversion goals for Nova Scotia and foster the sustainability of the recycling system?

Proposed changes to NS Solid Waste Management Regulations have direct and potentially substantial program and service delivery cost implications to Halifax. (Attachment A) In addition, there would be additional costs to administer disposal bans that are being proposed in the discussion document to include conducting inspections of materials received at landfill facilities with follow-up with waste generators. NSE proposes to work with municipal disposal sites to develop a standard method to undertake this “receiver” based system. The receiver based system places the responsibility on the facility to monitor and reject loads with banned materials. Halifax’s “source separation” system is a generator based system, not a receiver based system. Receiver based systems increase costs to municipalities to provide for administration, monitoring and enforcement of materials banned from landfill.

The planned introduction of Extended Producer Responsibility (EPR) mechanisms to Nova Scotia and the Maritimes as a means of generating additional funding for municipal solid waste service costs will also have implications to municipal service delivery programs. EPR has been introduced across the country in various models with varying levels of success. The programs continue to evolve. Staff contracted for a national scan assessment of EPR. The resulting report presented to ESSC in January 2014 is posted on the Halifax Solid Waste webpage at: <http://www.halifax.ca/boardscom/SCenv/documents/EPRFinalReport.pdf> (referred to as Attachment E; not printed with this report due to volume).

At the core of EPR is the introduction of involvement of private sector producers into end of life cycle materials management of all manner of packaging and products, and where possible diversion from landfill. How this model would take shape in Nova Scotia and what implications would evolve for Halifax is yet to be identified. NSE and RRFB are sponsoring a summit on this topic on June 25, 2014 at which staff will be participating.

The EPR model will require a change to the provincial legislative framework whereby manufacturers of designated waste products and packaging would play a role to fund the collection and processing of waste stream materials. This may or may not involve municipal infrastructure or system. Private sector stakeholders/manufacturers will look to utilize the most efficient mechanisms to address this requirement. They will employ system performance analysis which will discount ineffective and inefficient system outright in order to ensure product costs are not inflated any more than absolutely necessary to meet this requirement. This position is an evolving challenge to existing municipal services across the country. EPR shifts the burden of funding waste stream materials management from the municipal tax base to the consumer and producer. Potential funding levels for materials management, collection, processing and disposal programs can range from 50% to 100%. NSE and Resource Recovery Fund Board staff are currently leading the review and discussion with Regional Chairs and Coordinators evaluating options for an EPR model for Nova Scotia.

### **NEXT STEPS**

Following completion of the consultation phase, NSE staff will collect and review the submitted feedback. This will then be developed into a report for the Nova Scotia Environment Minister. This is currently the only identified opportunity for Halifax to provide Regional Council's view on these proposed changes. The concern is that the changes are not defined; they are intended as regulatory framework which will evolve into guidelines once implemented. There would then be further consultation and municipal involvement in the development of new guidelines for program implementation and management. Staff have serious concerns about the transparency of some of the proposals in terms of costs to tax payers and the transfer of responsibilities to municipalities (litter, illegal dumping) in terms of resources and costs. The timeline for this process is also not well defined but could be upwards of three to five years prior to any new funding being distributed to municipalities.

Staff recommends a letter from ESSC/Regional Council requesting more time to develop a consensus position on the proposals.

### **FINANCIAL IMPLICATIONS**

There are no financial implications with this report.

### **COMMUNITY ENGAGEMENT**

Engagement with the public and municipal stakeholders is being undertaken by NSE staff during the 60-day consultation period ending July 10, 2014. A series of meetings are being held and online web feedback is being solicited by the Province. Additional meetings are being undertaken with industry stakeholders.

### **ATTACHMENTS**

Attachment A – “Letter to Municipal Services – Program Costs” – HRM SWR, March 2014

Attachment B – Briefing Note – Nova Scotia Solid Waste Management Review – ESSC June 24, 2013 Item 3.1

Attachment C - “A Public Discussion Paper about Solid Waste Regulation in Nova Scotia” – NSE April 2014



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Attachment A



PO Box 1749  
Halifax, Nova Scotia  
B3J 3A5 Canada



March 19, 2014

Jeff Shute, C.A  
Director, Policy and Finance, Municipal Services  
Service Nova Scotia and Municipal Relations  
Maritime Centre, 14 North  
1505 Barrington Street  
Halifax NS B3J 2M4

Dear Mr. Shute,

Thank you for your interest in determining municipal costs of the Province's 300 kg/capita EGSPA waste reduction goal.

Of note, there was a joint provincial-municipal steering committee, the Fiscal Review Steering Committee, which conducted a review of external expenditure pressures as well as revenue funding options. This resulted in the Fall 2013 release of *the Provincial-Municipal Fiscal report: Part 1: Current State of Municipal Governments in Nova Scotia*". This document identified increased operating costs for municipalities to achieve Solid Waste Diversion targets legislated in the Environment Act Regulations. The following data expands on the information in that report.

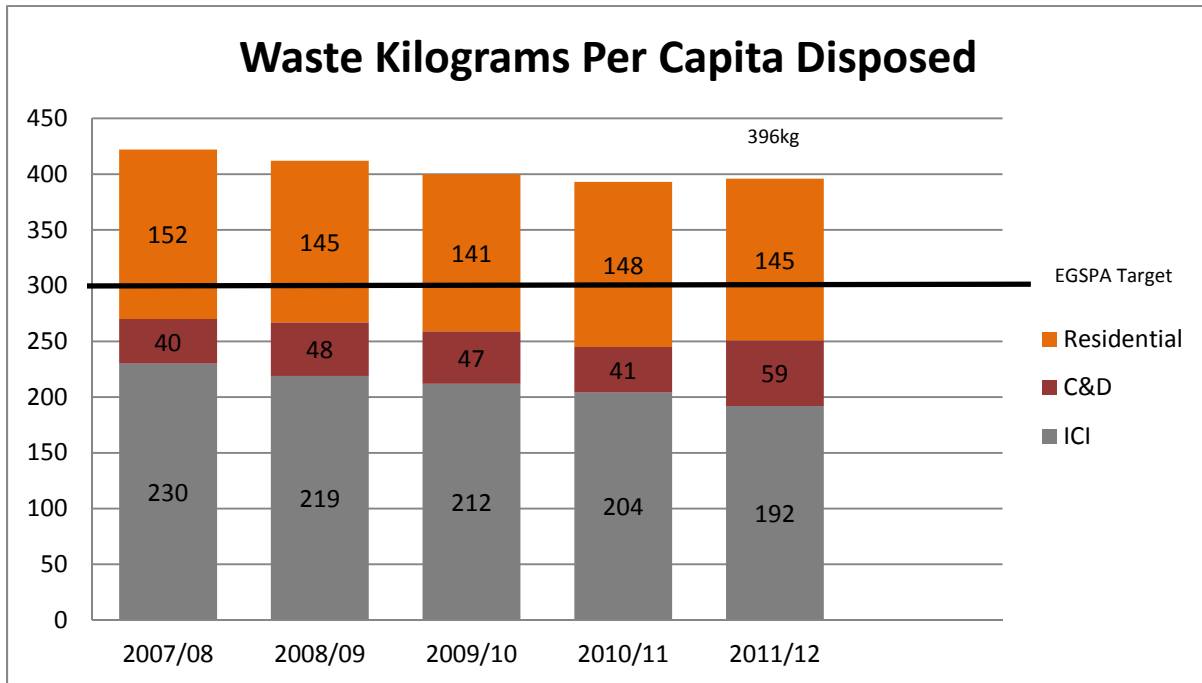
Halifax Regional Municipality (HRM), Municipal Waste Region 4, has assessed the requirements for both capital and operating costs specific to your questions:

*Q #1: "What is the estimated cost for each of the seven solid waste regions, along with a description of the steps and timelines necessary to meet the target (300 kg/person by 2015)?"*

*Q#2: "What is the cost for each of the seven solid waste regions to meet the target of 50% diversion (50% or more of the material put curbside is either recycled or composted instead of going to landfill)?"*

Table 1 on the following page outlines 5 years of data of per capita disposal rates by sector.

Table 1



In 2011/12, HRM disposed of 161,568 tonnes. Based on the corresponding resident population base of 408,000, the per capita kilogram rate of disposal was 396 kg.

As noted in Table 1, a significant portion of Industrial, Commercial and Institutional Waste (ICI) waste is generated in HRM. This material is processed at municipally-funded infrastructure. NS legislation banning recyclables and organics from landfill has not generated private sector development of processing facilities for all of these ICI materials.

To support Provincial legislation, municipalities must also deliver education and enforcement programs. Solid waste service program costs are funded by municipal taxpayers.

Table 2 on the following page outlines current mass balance by material stream and associated HRM processing costs to get to 396 kg/capita, towards achieving the EGSPA target of 300 kg/capita.



**Table 2**

<b>Fiscal 2011/2012</b>	<b>System Total</b>	<b>Facility Cost/Tonne</b>	<b>Total</b>	<b>Tip Fee</b>	<b>Net Cost</b>
Otter Lake	142,670	\$167	\$23,825,890	\$125	\$13,125,640
MRF	24,318	\$16	\$389,088		\$389,088
Private Recycling	43,000	\$0	\$0		\$0
Enviro Depots	7,500	\$0	\$0		\$0
Compost Facilities	51,328	\$165	\$8,469,120	\$75	\$7,121,760
Backyard Composting	5,000	\$0	\$0		\$0
C & D Facilities	92,268	\$0	\$0		\$0
HHW (Est.)	500	\$820	\$410,000		\$410,000
<b>Totals</b>	<b>366,584</b>				<b>\$21,046,488</b>

For HRM to reach the 300 kg/capita target, an additional 96 kg/capita reduction or diversion is required. This equates to 39,168 tonnes/year diverted from landfill.

HRM waste characteristic data identifies 60,294 tonnes of waste currently delivered to landfill as being recyclable or compostable materials targeted for diversion. To reach the 300kg target, HRM would have to divert 65% of this material. This is material that should have been separated at source by the residents and commercial sector generators.

The waste characterization studies also provided data on the composition of the waste streams targeted for diversion. In relation to the identified approximately 39,300 tonnes required to meet the target, Table 3 below breaks down the materials by category.

**Table 3**

	<b>Residential</b>	<b>ICI</b>	<b>Total</b>
Organics	6,800	9,000	15,800
Paper & OCC	3,600	9,000	12,600
Containers	2,000	3,700	5,700
C&D		4,800	4,800
HSW	400		400
<b>Total</b>	<b>12,800</b>	<b>26,500</b>	<b>39,300</b>

The redistribution of 39,300 tonnes from landfill disposal would result in HRM's net annual contractual waste stream processing costs increasing from the current \$21,046,488 to an estimated \$22,400,000 - an additional \$1.4 million/year. Table 4 on the following page details this cost adjustment.

**Table 4**

<b>Fiscal 2011/2012</b>	<b>System Total</b>	<b>Facility Cost/Tonne</b>	<b>Total</b>	<b>Tip Fee</b>	<b>Net Cost</b>
Otter Lake	103,370	\$175	\$18,089,750	\$125	\$10,337,000
MRF	33,618	\$55	\$1,848,990		\$1,848,990
Private Recycling	52,000	\$0	\$0		\$0
Enviro Depots	7,500	\$0	\$0		\$0
Compost Facilities	67,128	\$165	\$11,076,120	\$75	\$9,314,010
Backyard Composting	5,000	\$0	\$0		\$0
C & D Facilities	97,068	\$0	\$0		\$0
HHW (Est.)	900	\$1,000	\$900,000		\$900,000
<b>Totals</b>	<b>366,584</b>				<b>\$22,400,000</b>

In terms of per tonne cost for waste delivered to landfill, there is an inverse relationship. As tonnes are reduced, cost per tonne increases. HRM's current operating contract for the landfill processing and stabilization of waste has fixed annual cost components, not based on tonnage. This service cost is currently at approximately \$170.00/tonne.

To increase diversion, staffing resources would need to increase to support additional educational and compliance program initiatives to enhance diversion. Based on current diversion data, for every 1,300 tonnes diverted, an investment in 1 Diversion Planning Officer (DPO) is required. The diversion of an additional 39,300 tonnes equates to 30 FTE DPOs. This staffing cost is estimated at an additional \$2,070,000/year. Currently, HRM is contemplating hiring an additional 3 staff at a cost of \$207,000 per year. Barring other legislative changes, and or program changes, with the three additional staff, and existing staff numbers, achievement of the 300 kg/capita target will take ten years to complete.

Diversion also adds materials collection costs for the diverted material streams. Residential Recycling collection costs approximately ~ \$100/tonne more than Garbage/Organics collection as recycling is mostly collected with little compaction to maintain commodity value. Recycling is a weekly service in a different truck where garbage and organics are biweekly (alternating) in the same compactor truck. Diversion of the required 5,600 residential tonnes of recyclable containers and paper, as noted in Table 3, would equate to an additional collection cost of **\$560,000**. Additional weekly organics collection is estimated at **\$120,000** for expansion to all areas of the Municipality in July and August.

<b>Total Additional Operating Costs to Achieve 300 kg/capita</b>		<b>\$2,287,000 per year</b>
<b>Total Additional Infrastructure Capital Cost</b>	New Recycling Facility	<b>\$12,000,000</b>
	Increase Organics Capacity	<b>\$25,000,000</b>

Current municipal solid waste program costs are minimally offset by diversion credits received from the Resource Recovery Fund Board (RRFB). The FY2011-12 rate of diversion credit support is \$7/tonne. Notification by RRFB in the spring of 2013 was for a 47% reduction in that funding. This reduction is to be applied to FY2012-13 funding which is received late spring 2014. Based on the reduced funding model, the additional 39,300 tonnes equates to \$275,100. At the forecast reduced rate, this equates to \$ 129,297.00. This figure leaves over \$2,000,000.00 in additional municipal tax payer costs to support the diversion required to reach the EGSPA target of 300kg/capita. In addition, the provincially sponsored Hogg Report, 2011, identified the RRFB model fiscally unsustainable with a diversion credit balance of \$0.00 by 2016.

A provincial regulatory tool available to support municipal waste program funding pressure is Extended Producer Responsibility (EPR). EPR programs are mandated to fund all end of life cycle costs for management and disposal of materials. This includes funding for delivery of waste management programs for the collection, facility operations, education as well as enforcement by the producer of the waste product or packaging. The product cost is extended to the post-consumer stage of a product's life cycle. EPR shifts responsibility upstream in the product life cycle to the producer (i.e. brand owners, first importers or manufacturers) and away from municipalities and general taxpayers.

HRM supports the EPR model which has the producer of the product and packaging materials being consumed responsible for funding 100% of the municipal costs in the end of life cycle management of the product and its packaging materials. This policy approach can only be enabled through Provincial legislation and regulation. Of note, the EPR model must include measures to ensure all costs, including costs of materials not captured under voluntary drop off programs are identified and funded. Municipalities are currently not funded for materials not captured under existing voluntary drop off depot model programs.

Sincerely,

Original Signed

Gord Helm, MPA, PMP  
Manager, Solid Waste Resources  
Transportation and Public Works  
Halifax Regional Municipality

Attachment B



P.O. Box 1749  
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**Environment & Sustainability Standing Committee  
June 24, 2013  
Item: 3.1**

**SUBMITTED TO:** Chair and Members of Environment & Sustainability Standing Committee

**DATE OF MEETING:** June 24, 2013

**SUBJECT:** Nova Scotia Solid Waste Resource Management Regulation Review

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**BRIEFING NOTE**

**ORIGIN**

Environment & Sustainability Standing Committee, June 6, 2013 – Item 6.1.5:

*The Standing Committee requested that staff prepare and circulate briefing material outlining proposed changes to the solid waste-resource regulation and implications for HRM. Moreover, it requested that a meeting be scheduled in advance of the June 24, 2013 meeting with Nova Scotia Environment to review the material and identify points of consensus.*

**RECOMMENDATION/ DECISION REQUIRED**

None required in this case. For information and discussion only.

**BACKGROUND**

Nova Scotia Environment (NSE) is tasked with undertaking a review of the Nova Scotia Solid Waste-Resource Management Regulations. This is part of a process contemplated in the NS Solid Waste Management Strategy document “Our Path Forward” <http://www.gov.ns.ca/nse/waste/docs/Solid.Waste.Strategy-Our.Path.Forward.2011.pdf> issued in fall 2011. This document identified actions to achieve the provincial waste disposal target of 300 kilograms per person by 2015 as well as how to maintain Nova Scotia’s leadership role in waste diversion.

In January 2013, NSE launched preliminary discussions with Waste Management Regions (through Regional Coordinators and Regional Chairs) and with the RRFB to review the following 7 focus areas for potential revisions to the regulations:

1. Product Stewardship
2. Disposal of C&D waste
3. Beverage Container Deposit Refund Program Efficiency
4. Used Tire Management Program
5. Regional Solid Waste Management Plans
6. Regulatory Clarity on Energy from Waste
7. Improvements and Changes to the Enforceability of the Regulations

Input was gathered from Regional Chairs and Coordinators at a special full day workshop facilitated by NSE on February 7, 2013. This was the first stage in receiving input from designated stakeholders.

In May 2013, NSE issued a revised Discussion Paper (Appendix “A” attached) as the next stage in the stakeholder consultation process. Staff have highlighted where revisions have occurred as a result of preliminary stakeholder feedback.

**DISCUSSION**

The following is an overview of staff input framed for the 7 focus areas under discussion at the workshop with NSE.

**1. Product Stewardship**

Making brand owners and manufacturers of products and packaging responsible for the cost of managing end of life recovery through implementation of Extended Producer Responsibility (EPR) policy/regulation is critical to increasing diversion and sustaining materials management systems. EPR is an economic policy approach in which producers of products and packaging bear responsibility for ensuring materials are properly managed at end of lifecycle. It shifts the burden for materials management and recovery upstream to the product manufacturer and away from the taxpayer/municipalities. The true EPR models require manufacturers to “internalize” recycling and recovery costs in the price of the product as a cost of doing business and not apply the cost as an added fee/levy at point of purchase. Fees at point of purchase are considered “external” and are typical of collective industry led stewardship programs where the consumer pays the same in product levy, commonly referred to as “Eco” or “Recycling” fee, collected by an Industry Association/Group and every manufacturer member shares in the costs/benefits. However, under this model, there is no direct ownership or incentive to reduce waste or design for the environment.

Sweeping changes to product stewardship and EPR programs are now occurring across Canada, most notably in Ontario and BC. Ontario has recently proposed it will scrap its “Eco Fees” applied on products such as e-waste, paint and other special waste, as this form of product stewardship has not demonstrated success in achieving waste diversion targets. It has also proposed to eliminate the industry association, Waste Diversion Ontario (WDO), which collects the fees. The government proposes to introduce an EPR approach that includes clear diversion outcomes for industry including targets for recovery/recycling as well as to require producers to reimburse municipalities for collection and handling of materials.

The Ontario Waste Management Association (OWMA) recently (June 2013) issued a policy paper regarding EPR that advocates for an outcome based approach to EPR, “internalizing” recycling costs. The role of the provincial government is to establish and enforce environmental standards, set standards for accessibility to collection programs for specific materials and set waste diversion targets for industry to meet. OWMA identifies an EPR based approach as an effective means to reduce waste, increase diversion and ensure proper and safe management of waste.

In an outcome based approach, the hierarchy for materials management needs to focus first on reduction, especially packaging, and then on integration into existing curbside systems (for efficiency). Accessibility to existing curbside programs, making it easier to recycle, rather than drop off systems, is key to increasing diversion.

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As an outcome based approach to EPR, Regional Coordinators have discussed a set of standards and fundamental principles for industry to be held accountable. The following principles should be included in the NS Provincial Regulations for the Stewardship Framework:

- To recognize municipalities as stakeholders with industry to fund 100% of the cost where municipalities handle the stewarded materials that can be in the curbside recycling, organics and garbage streams and HHW collection programs.
- Require a minimum of 75% diversion achievement from landfill as the goal.
- Ensure industry accountability and adopt the CCME Canada Wide Action Plan for EPR National Performance Measures which provides outcomes that industry must complete to meet and sustain compliance.

Convenience to the public – the existing integrated waste management system relies on existing infrastructure investment by municipalities and taxpayers. Product stewardship plans should include a plan to recognize the significant capital and operating investment demanded of municipalities to support the Provincial waste management regulations, and utilize and capitalize on the accessibility, flexibility and efficiency of existing infrastructure and convenience of the existing curbside programs.

Current NS Provincial Regulations recognize stewardship with fees at point of purchase and currently, there is no incentive to reduce packaging waste. Post-consumer packaging is not currently designated for recovery. There are inconsistencies within the current regulation, Section 18B(1)(f) contemplates industry paint to include its container and contents, however the levy collected by ‘Product Care Association’ does not recognize the recovery of the empty paint can, ending up in the garbage stream. The municipality is left dealing with the cost to manage the empty paint can where a levy was charged at point of purchase and there is no recognition of municipal costs for this portion of the product. There is a need to recognize the municipal stakeholder role in collection of packaging and reimbursement for costs, including disposal, where this occurs and a product and/or packaging is not recovered in the stewardship plan.

It is crucial that existing curbside systems be the first priority for consideration in all EPR collection systems and that funding derived from the EPR programs be directed to fund the municipalities managing the existing systems.

A review of other jurisdictions where industry stewardship or Extended Producer Responsibility programs have been adopted show a patchwork of industry drop off collection programs and adds confusion to the system, in terms of “what do I take where”? For program simplicity, accessibility and efficiency, it is recommended that any stewardship programs for materials already in the curbside collection system remain in the curbside collection system. Typically, national programs benefit industry at the expense of not recognizing the integration within existing municipal waste management systems.

The Province of BC is in the forefront making changes to the landscape of the waste management industry with its new Recycling Regulation that recognizes the EPR approach. The regulation identifies a broad range of packaging and printed paper (PPP) for recovery by the



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product manufacturer, distributor or brand owner. In this model, industry becomes responsible for delivery of the recycling collection and processing of residential materials.

In this model, where there is an existing municipal curbside collection program in place for recycling, municipalities will be eligible for a financial incentive to offset collection, education and administration costs for program management. There will be additional financial incentives for municipalities based on performance to increase material capture rates. Post collection processing (MRF processing) will be the responsibility of industry, not the municipality. This shifts costs, but also drives how collection systems will operate. In the BC model, materials such as glass, plastic film and bags are not acceptable for inclusion with other single or 2 stream recycling programs, these are required to be collected separately or brought to a depot for drop off.

A multi-material stewardship organization, MMBC, has been set up in BC as an agency to provide producers with services to meet the regulatory requirements including entering into agreements with municipalities. This agency will also provide provincial education programming, funded by industry.

In NS, while there are merits to a Provincial education program, waste management program messages require integrated education programs designed around and aligned with municipal administered programs which can be different between municipal waste management Regions. Funding should be directly channeled to the municipal level to support residential and business education measures.

Curbside accessibility has been a major factor in encouraging program participation and diversion success to date. Setting up separate drop off programs for materials that are traditionally collected through blue bag recycling and organics programs impacts public convenience and program participation. Materials easily included in the recycling stream should be dealt with in the existing system with the provision that integration into existing models needs to be negotiated in terms of operational, processing and collection impacts.

The Depot drop off recovery models do not capture all program materials, those not voluntarily “dropped” off end up in the municipal waste system and the costs are incurred by the municipality. The depot drop off program requires consumers to voluntarily transport stewarded products to designated locations, which also results in a duplication of existing curbside collection and processing systems. These drop-off programs also leave out residents and consumers who do not have personal transportation means. Where there are existing municipal recovery programs in place for curbside recycling collection of a stewarded product, integration with these existing programs should be the requirement in a plan considered by the Minister.

BC has set a recycling target of 75% for each of the product categories. At present no visible eco fees are being proposed with the exception of the existing beverage container deposit program. As a materials priority list for EPR is being developed for NS, consideration should be given to those products with a well-established recovery program in other jurisdictions such as is the case for mercury containing bulbs, batteries and other special care waste. As another example, much research has already been completed in NS on the recovery for reclamation of disposable propane tanks; this special waste is a priority for diversion away from landfill.

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Both Producer Pay and Stewardship are recognized within the NS Environment Act. NSE is well positioned and needs to be encouraged to move EPR forward to be able to meet the EGSPA targets and remain a leader in waste management programs.

**2. Disposal Bans and Compliance Procedures**

Nova Scotia is unique in Canada having established material disposal bans; however, nearly 100% of the burden for compliance with the regulation rests with the municipality. As owner and operators of landfill disposal facilities, these banned items are included in the landfill operations and disposal approvals. Most municipalities, including HRM, mandate provision for source separation within municipal By-Laws. In the current NS regulatory approach, the burden of compliance rest almost exclusively with the landfill operator and not the generator or hauler.

Disposal bans for additional materials such as drywall/wallboard, asphalt shingles and coating free wood are supported. However, regulations should provide for the requirement for separation at source and hold all stakeholders (residential and ICI generators, commercial property owners and haulers) accountable in the chain of custody. The regulations should be changed to place responsibility and accountability more effectively encourage and support separation at source. There has been considerable discussion at Regional Coordinators and Chairs Committee regarding enhancing C&D materials diversion and including designated materials on the list of materials banned list. It has been discussed that the implementation of material bans should ensure there are 2 key fundamental elements in place:

- 1) Sustainable Diversion Opportunities for C&D materials;
- 2) C&D debris industry stakeholders accountable for separation at point of origin, not just processing sites.

C&D bans need to account for and incorporate acceptance of the after-use of C&D matrix products which might also be used in landfill operations. If there are outright bans on C&D matrix materials being used in landfill operations this needs to be very clear in advance. As noted in the discussion paper, the intention is to develop after use options for the materials other than just landfill. However, this should not preclude manufactured products from C&D materials being used in landfill operations, as is the case currently in HRM.

Sustainable diversion opportunities are less likely once C&D is mixed, crushed and ground into pieces under heavy equipment at job sites. Therefore, in order to ensure materials that are banned, and that can and should be recycled are protected to enable recycling, they must be planned for in advance, before structures are demolished. Planning for and properly managing construction materials is imperative to supply markets with separated, uncontaminated materials and enables further processing into value added products.

A variety of stakeholders have a role in planning, preparing and undertaking separation activity. There is no value in holding facility owners/operators accountable if the development contractors, demolition company and hauler are not likewise all to be held accountable. The example noted in the document would have a C&D facility operator “administering” notices to contractors, developers and haulers to have their materials properly sorted. This is not considered an effective approach to achieve the Province’s goal for effective diversion and after

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use of C&D materials. This approach also removes, in large part, any accountability of the generator or hauler to abide by the legislative objective. Material management plans need to be approved and haulers need to be held accountable to not remove mixed materials from C&D job sites.

C&D Facility operators can and should be required to monitor loads they're receiving; however, regulatory oversight and monitoring must also take place at point of generation. In the case of C&D, this includes the contractors' job sites by all responsible parties, not reception at the processing facilities. Source separation systems are based on the responsibility resting with the generator, not receiver. As is the case with all waste, including C&D material bans, if instituted, provincial regulations should provide for the requirement for separation at source and hold all stakeholders (residential and ICI generators, commercial property owners and haulers) accountable in the process.

Hauler licensing is another area of opportunity to ensure loads are properly sorted prior to collection and transportation. Non-compliance would be a simple case of suspending a license, access to facilities or fines. The issue is where accountability needs to be placed.

With respect to C&D, similarly if developers as well as contractors were required to have materials plans that were subsequently approved, then non-compliance would have a formal system to address compliance. There is no escape based on "someone else's job" claims. Both licensing haulers and materials plans permits are readily administered within existing by-law and waste management regimes.

**3. Beverage Container Deposit Refund Program Efficiency**

Staff conducted an analysis of the financial impact of modifications to the RRFB budget model and presented findings to ESSC in a report dated February 7, 2013 and onto Council for consideration. At the February 19, 2013, Halifax Regional Council Meeting, Council endorsed having correspondence sent to the Minister of Environment to request consideration for changes to the deposit-refund model rather than just increasing existing deposit fees to support the EGSPA goals as mandated by the Province.

RRFB operates the beverage container system and review of this program efficiency is prudent. RRFB reports net costs in excess of 10 million dollars to receive, transport, process and market approximately 13,500 tonnes of recyclable containers. HRM's net cost to collect, process and market approximately 24,300 tonnes of recyclable materials is 4 million dollars. Given the high commodity value of the deposit bearing containers, it is more than reasonably conceivable that these containers could be incorporated into the existing municipal recycling programs at a zero net cost and possibly yield a profit.

The idea of a floating fee (tax) on containers based on what they cost to collect, process, market and recycle externalizes true costs and there is no incentive to increase program efficiencies. This is not dissimilar to the eco fee approach which is not true EPR and passes down cost to the consumer and not upstream to the producer in the true EPR model. These fees typically do not drive innovation, efficiency or recycling.

Adding additional costs to support this unsustainable, and duplication of existing curbside service is not supported. HRM has identified benefits, both financial, and environmental. The RRFB system of depots, collection, transportation, processing, marketing and end of life management costs, based on RRFB provided figures, is estimated at \$777.00/tonne. By comparison, the HRM curbside collection, recycling processing and marketing systems would in fact earn a profit of \$50.00/tonne for the same load of materials. This variance brings into question the justification for maintaining the existing model for beverage containers where there is an alternative with improved access in curbside collection services with the objective to support and sustain diversion programs. Environmental benefits can accrue as the removal of trucks required for separate depot collection to processing centres can result in reduction in greenhouse gas emissions in the transportation industry sector.

#### **4. Used Tire Management Program**

Expansion of the program to include off road and industrial {agriculture} use tires would enhance diversion of these materials from landfill in support of HRM's objective to support diversion.

During the preliminary discussions with Chairs committee there was some discussion to modify existing drop off program. The existing program allows consumers to drop off tires at any tire retailer. Direct to retail is where consumers often visit for tire change and servicing where the retailer is currently required to provide for this drop off option. If NSE is to consider any changes to the return to retail model, there should first be a survey of public opinion regarding the value of the return to retail consumer convenience option and this option can be built into any new EPR model.

#### **5. Regional Solid Waste Management Plans – Regional Requirements**

Revising the regulation to reflect an updated target of having Regions achieve the EGSPA target goals as set under the act will require much more discussion and clarity to ascertain if this requires each Region to meet the 300 kg goal or if it is to remain a provincial goal as currently established.

The idea that the provincial targets would be redefined to be regional targets is not equitable in Nova Scotia where HRM is its own region. The concentration of population, business and industry within HRM verses the remainder of the Province makes this model unfair and would penalize HRM in any future programs for diversion credit funding. This model is not supported. Furthermore, this is the same issue which has been raised a number of times and which HRM has raised with the Province in terms of previous RRFB programs which provide equal payments in some special programs and initiatives to all 6 regions, regardless of the fact that one has 40,000 residents and one has 400,000 residents.

#### **6. Regulatory Clarity on Energy from Waste**

Staff are not aware of any permitted municipal solid waste incineration facilities in NS. To date, any facility that converts waste into energy has been considered as disposal.

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New technologies are evolving which should provide real, practical and viable alternative options to landfill for Nova Scotia. The key will be to ensure the focus of first priority remains diversion through recycling and composting programs such that these materials do not become a factor in materials management for the EFW systems.

With respect to residue garbage, as otherwise unviable resources, alternative to landfill disposal to create green energy, and reduce the waste's environmental footprint is an option that should be examined. However, this issue requires further examination on how it would be integrated into the existing and mature diversion model in Nova Scotia.

**7. Improvements to the Enforceability of the Solid Waste Regulation**

As noted in comments on the Material Bans issue #2, these restrictions for proper management of materials only apply to operators of disposal facilities. There is no provincial requirement for the generator of the waste to separate, while the municipality can be fined under the regulations for accepting materials banned from landfill where separation does not occur. The regulations should provide for accountability of waste generators and waste haulers, all key stakeholders in the waste management strategy. There is currently no provision for the provincial regulator to seek compliance for the separation of banned materials from the ICI sector and should be revised to include a definition of Waste Diversion and encouraging waste diversion by:

- (a) Establishing requirements for source separation of banned materials;
- (b) Establishing licensing for waste haulers;
- (c) Regulate waste diversion practices and or introduce materials management planning regulations for all materials at construction and demolition sites.

The Ontario Regulations(s) 101-105/94 and 103/04 "ICI Source Separation Programs" require the ICI to establish and maintain source separation programs for designated recyclable materials. These regulations (102/94) "Waste Audits and Waste Reduction Workplans" require the ICI to develop and implement waste management plans. These Regulations should be considered by NSE to encourage ICI program participation as waste generators.

**Litter Abatement - Flyers**

The distribution of flyers into driveways, bushes and for some, in their mail box, continues to be an issue raised by HRM Council. Residents complain these flyers create litter and in some cases, are unwanted. Currently the regulations recognize flyers as litter only if placed onto parked cars or attached to poles, a structure, fence or other thing without the permission of the owner of the pole, structure, fence or other thing. The regulations should seek to address unwanted distribution of flyers in addition to agreements with the industry sectors that identify the proper distribution of flyers and promotion of 'opt out' programs.

Responsibility for Litter Abatement is fostered in the Environment Act and regulations and demonstrates the Province's commitment to environmental sustainability. Litter abatement regulation has a long standing linkage to support the social norm that littering is unacceptable. Another unacceptable practice is the act of illegally dumping waste and should continue to be endorsed in Provincial regulations. There has been some concern expressed by NSE that these

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regulations are difficult to enforce when and if there are resources available. Regulations should be written with the ability to prosecute, if required and should be re-written to become enforceable. While recognizing that this activity may not be a high priority for deployment of enforcement resources, the littering provision in the regulation nonetheless can serve as a deterrent.

There is no identifiable advantage to the municipality to take on additional roles to enforce littering, illegal dumping and open burning activity where this is the current role of the province.

**COMMUNICATION ISSUES/OPPORTUNITIES**

The Province has indicated that this is the second stakeholder outreach stage which will be followed by further review with other Maritime Provinces. There will then be further internal review by NSE. NSE has indicated that regulatory change would subsequently include a public engagement phase, if it is decided to proceed.

**ATTACHMENTS**

NS Solid Waste-Resource Management (SWRM) Regulation Review – Discussion Paper, May 2013

**KEY STAFF CONTACT**

Gord Helm, Manager, Solid Waste Resources, 490-6606

Laurie Lewis, Diversion Planning Coordinator, Solid Waste Resources, 490-7176

Attachment C



**Revising Our Path Forward:  
A public discussion  
paper about solid  
waste regulation  
in Nova Scotia**

**We want your input on  
the way solid waste is  
regulated in Nova Scotia.**

April 2014

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**Revising Our Path Forward:**  
A public discussion paper about solid waste regulation in Nova Scotia

**All Nova Scotians can help to make a cleaner, greener, and more economically sustainable province for the future. The Nova Scotia Government is committed to working towards provincial waste diversion goals. However, government cannot do this alone. We need the help of industry, communities, and all Nova Scotians.**

## **What is Nova Scotia proposing to change?**

Nova Scotia Environment is proposing changes to the provincial solid waste regulations to keep the programs efficient and sustainable, to provide a high level of environmental protection, and to create economic opportunities in our province.

The department is proposing to make changes in seven areas:

- Product stewardship
- Disposal bans and approval requirements
- Used tire management program
- Removal of the requirement for regional solid waste management plans
- Clarity on the rules for energy from waste
- Improved enforceability of the solid waste regulation
- Beverage container deposit-refund program

**Today's  
strategy  
is almost  
20 years  
old.**

**The status  
quo is not  
sustainable.**

It is important to note that not all of the proposed changes would be immediate. In some cases, if enacted, they would change the way solid waste is managed by making the rules clearer on energy from waste and how the regulations are enforced. Other changes would be phased in over time, such as a framework for product stewardship that would see some stewarded materials introduced in 2015, with more products coming online in the following years. The details of each plan are explained below.

## How did Nova Scotia Environment get here?

Nova Scotia Environment has been working with industry, municipalities, and our stakeholders over a number of years to identify changes that are needed to the Solid Waste-Resource Management Regulation.

Nova Scotia's Solid Waste-Resource Management Regulation and Strategy were released in 1995. In 2007, a new ambitious goal for the province to dispose of no more than 300 kg per person per year by 2015 was set in the Environmental Goals and Sustainable Prosperity Act and the Environment Act. The strategy renewal process that began in 2008 concluded with the release of *Our Path Forward in 2011*. A core deliverable of *Our Path Forward* was to review the regulations.

Seven key areas of the regulations have been identified for potential amendment. These key areas address concerns heard from stakeholders during the entire strategy renewal process and were further refined based upon on-going discussions with stakeholders over the past year.

## Why we want your input

The rules regarding solid waste could affect everyone. Several options have been examined that would result in potential changes to the current regulation. These options are presented within this document for your review and feedback.

We encourage written comments about the proposed changes. Please submit your comments to the address or email below.

Nova Scotia Environment will also be meeting with industry, municipalities, and other partners for additional feedback. Once the comment period ends, the department will consider each submission carefully, and all input received will inform and guide any changes to the regulations that will be brought forward for consideration.

**Privacy notice:** Submissions received will be considered by Nova Scotia Environment as part of the public consultation process. Your submission may be made available to the public with the exception of your personal information, which will only be disclosed in keeping with the privacy provisions of the NS Freedom of Information and Protection of Privacy Act. Should you wish any of the information provided to be held in confidence, please clearly indicate this for consideration.



We  
welcome  
your  
feedback.

## Questions?

**Please contact:** Solid Waste Unit/ Nova Scotia Environment  
1903 Barrington St. Suite 2085  
PO Box 442, Halifax, NS B3J 2P8

**Tel:** (902) 424-4300  
**Email:** [policy@gov.ns.ca](mailto:policy@gov.ns.ca)  
<http://novascotia.ca/nse/waste/>

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A public discussion paper about solid waste regulation in Nova Scotia

## Proposed Changes to Nova Scotia's Solid Waste Resource Management Regulations

### Product Stewardship/Extended Producer Responsibility (EPR)

Product stewardship has proven to be an effective way to recycle materials and divert them from landfills. Examples of successful stewardship programs include electronics and consumer paint products. That is why Nova Scotia is looking to expand this approach. This approach shifts the responsibility for recycling and disposal costs from the taxpayer to the product producers and consumers.

Many provinces already have product stewardship and Extended Producer Responsibility Regulations (EPR) for products such as electronics, packaging and printed paper, and household hazardous waste. In Nova Scotia, all electronics brand owners must operate a stewardship program for the materials they sell in the province. Ontario, Manitoba, Quebec, Saskatchewan, and British Columbia have similar regulations. British Columbia has the most comprehensive list of products captured under stewardship regulation in Canada.

The British Columbia Packaging and Printed Paper Stewardship Program is expected to result in about \$84 million each year to support the recycling of packaging and printed paper.

This approach encourages producers to design their products with the environment in mind, helps to reduce unnecessary packaging, supports local solid waste programs, and creates economic opportunities.

**What we suggest:** *Add a section in the solid waste regulation that will guide product stewardship in a consistent manner across designated products.*

A product stewardship framework would require each brand owner of a designated product to submit a plan to the Minister of Nova Scotia Environment detailing how they would ensure products are recycled instead of going to landfills. Products would be designated according to a schedule, and brand owners would have to meet performance targets. The details of how products are managed at the end of life are to be proposed by the brand owners, in consultation with stakeholders and following the criteria and outcomes outlined in the regulation and policies set by government.

The list of products that Nova Scotia Environment recommends to be covered in a framework for product stewardship is as follows:

- ▶ Packaging
- ▶ Printed paper
- ▶ Products containing mercury
- ▶ Batteries
- ▶ Vehicle fluid products and the containers
- ▶ Oil, oil filters, oil containers
- ▶ Paint and coating products (as currently regulated) and their containers
- ▶ Paint thinners and their containers
- ▶ Single-use pressurized containers
- ▶ Safety flares
- ▶ Pharmaceuticals and sharps, including syringes
- ▶ Domestic pesticides and their containers
- ▶ Small quantity fuels and their containers—camping oil, lighter fluids, etc.
- ▶ Tar and roofing patch and their containers
- ▶ Adhesives (in containers greater than one litre)
- ▶ Electronic waste (as currently regulated)
- ▶ Microwaves
- ▶ Floor model printers
- ▶ Photocopiers
- ▶ Mattresses and box springs
- ▶ Carpet and plastic and synthetic flooring
- ▶ Pressure treated timbers
- ▶ Limited EPR for the following items:
  - Engineered and composite wood
  - Drywall and wallboard
  - Asphalt shingles

Costs associated with the recycling and/or disposal of these materials are currently covered through municipal taxes. Product stewardship aims to shift the responsibility for managing these designated products to brand owners or consumers or both. Limited EPR refers to an approach where producers would be required to partner with construction and demolition processors in Nova Scotia to divert more of these products from disposal.

If this change happens, Nova Scotians will be able to place more materials at the curb for recycling; other products may need to go to collection depots. Some products may have a fee at the time of purchase to cover recycling costs, while some brand owners may absorb the cost. The benefit is that these products will be safely and responsibly recycled rather than going to a landfill.

**Responsibility  
shifts from  
municipal  
taxpayers to  
brand owners.**

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A public discussion paper about solid waste regulation in Nova Scotia

## Disposal Bans and Approval Requirements

Many construction and demolition (C&D) materials are reused in the marketplace. For those that are typically not reused, research and experimental markets have demonstrated many valuable options. For example, gypsum in wallboard, combined with waste wood, can be used to make animal bedding, while asphalt shingles can be used to create multi-use trails or new pavement, or used as an alternative fuel.

Several other materials are already being successfully diverted from landfill through recycling or diversion programs across Nova Scotia.

**What we suggest:** *Add more materials to the list of items banned from disposal, and strengthen requirements for disposal site operators to adhere to the bans.*

**Certain items shouldn't go to the landfill.**

The goal is to increase the diversion of these designated materials from landfills and support the creation of value-added products from C&D debris. Also, because of its weight, diverting C&D material will play a major role in the province reaching its disposal goal of no more than 300 kg per person per year. This will also encourage new and more efficient methods of managing C&D debris from the point of generation to the site of processing, and lead to more businesses opportunities and processing jobs in Nova Scotia.

Strengthening the requirements for all disposal sites to build awareness and identify banned materials, conduct random inspections, and carry out follow-up procedures to ensure these materials are not disposed of in their sites will aid in the diversion of materials from landfill. To foster this requirement, the department

proposes to work together with disposal sites to identify appropriate standards and methods that will enable a smooth transition to implementing and adhering to disposal bans.

The department proposes to ban the following materials from disposal in landfills. These would be phased in over time, and for the products that fall within the product stewardship framework, the bans will become effective as stewardship programs come into place.

- ▶ Packaging
- ▶ Printed paper
- ▶ Products containing mercury
- ▶ Batteries
- ▶ Vehicle fluid products and the containers
- ▶ Oil, oil filters, oil containers
- ▶ Paint and coating products (as currently regulated) and their containers
- ▶ Paint thinners and their containers
- ▶ Single-use pressurized containers
- ▶ Safety flares
- ▶ Pharmaceuticals and sharps, including syringes
- ▶ Domestic pesticides and their containers
- ▶ Small quantity fuels and their containers— camping oil, lighter fluids, etc.
- ▶ Tar and roofing patch and their containers
- ▶ Adhesives (in containers greater than one litre)
- ▶ Electronic waste (as currently regulated)
- ▶ Microwaves
- ▶ Floor model printers
- ▶ Photocopiers
- ▶ Mattresses and box springs
- ▶ Carpet and plastic and synthetic flooring
- ▶ Pressure treated timbers
- ▶ Clean wood
- ▶ Drywall and wallboard
- ▶ Asphalt shingles
- ▶ Textiles
- ▶ Non-packaging expanded polystyrene

Many materials such as food waste and newsprint are already banned from the landfill. We will be asking Nova Scotians to recycle these additional banned materials and products the way they do with the bans already in place. By continuing to separate materials before they are sent for disposal, Nova Scotians will help to effectively reduce the volume of materials going to landfills.

Page 9 highlights all of the materials that are currently banned from disposal in Nova Scotia, called Schedule "B" in the regulations. The new materials would be added to this schedule in the regulations.



## **Questions?**

**Please contact:** Solid Waste Unit/ Nova Scotia Environment  
1903 Barrington St. Suite 2085  
PO Box 442, Halifax, NS B3J 2P8

**Tel:** (902) 424-4300  
**Email:** [policy@gov.ns.ca](mailto:policy@gov.ns.ca)

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**Schedule "B" - Materials Banned from Landfills and Incinerators**

<b>Designated Material</b>	<b>Implementation Date</b>
Beverage containers	April 1, 1996
Corrugated cardboard	April 1, 1996
Newsprint	April 1, 1996
Used tires	April 1, 1996
Lead-acid (automotive) batteries	April 1, 1996
Leaf and yard waste	June 1, 1996
Post-consumer paint products, formerly known as waste paint	April 1, 1997
Ethylene glycol (automotive antifreeze)	April 1, 1997
Compostable organic material	June 1, 1997
Steel/tin food containers	April 1, 1998
Glass food containers	April 1, 1998
Low-density polyethylene bags and packaging	April 1, 1998
High-density polyethylene bags and packaging	April 1, 1998
Televisions	February 1, 2008
Desktop, laptop and notebook computers, including CPUs, keyboards, mice, cables and other components in the computer	February 1, 2008
Computer monitors	February 1, 2008
Computer printers, including printers that have scanning or fax capabilities or both	February 1, 2008
Computer scanners	February 1, 2009
Audio and video playback and recording systems	February 1, 2009
Telephones and fax machines	February 1, 2009
Cell phones and other wireless devices	February 1, 2009

Schedule "B" amended: O.I.C. 2002-94, N.S. Reg. 24/2002; O.I.C. 2007-102, N.S. Reg. 61/2007.

**Since 1996,  
Nova Scotia  
has enacted  
21 different  
materials  
bans.**

## Used Tire Management Program

Quantities of used tires currently go to landfills that could be effectively recycled in Nova Scotia. By adding off-the-road tires for all-terrain vehicles (ATVs), mining equipment, and farm tractors to the regulation, more tires would be diverted from landfill through the existing used tire management program.

**What we suggest:** *Expand the current definition in the regulation to include off-the-road tires (OTRs).*

A one-time environmental fee is collected on the sale of new passenger tires in Nova Scotia. This fee supports the collection and processing of used tires. Changing the regulation to include more tires within the definition would divert more tires, provide industry with more options for diversion, reduce illegal dumping, and improve the cost effectiveness of the used tire program in Nova Scotia.

Nova Scotia would also be more consistent with other provincial jurisdictions that include these tires in their diversion programs.

Nova Scotians who purchase off-the-road tires would see a modest fee added to the price of their tires at the point of sale. These tires would then be incorporated into the used tire management program with all other tires collected.

**Harmonize  
Nova Scotia's  
tire program  
with other  
provinces.**



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## Regional Solid Waste Management Plans – Regional Requirements

In 1997 the province established solid waste management regions to support achieving 50 per cent solid-waste diversion by the year 2000. Each region was asked to prepare a solid waste management plan to tell the province what actions they would take to achieve this goal. Since that time the province has revised the solid waste goals under the Environment Act and the Environmental Goals and Sustainable Prosperity Act to achieve 300 kg per person per year.

**What we suggest:** *Revise the regulation to update the geographic regions as they are operating today and to reflect that the regions will collectively support achieving the provincial goals as set under the act.*

The 300 kg per person per year goal is recognized as a province-wide goal, not a regional goal. This reality should be reflected within the regulation. The regions will be encouraged to do regional planning to help support achieving the provincial goals as set under the act, as they do today. The change would mean that developing regional plans would no longer be required by law.

## Regulatory Clarity on Energy from Waste

Many technologies available today for the thermal treatment of municipal waste with energy recovery were not in existence, or not viable, when the regulations were first drafted in 1997. Today's innovative thermal technologies may present an opportunity when applied to the solid waste stream. However, it is important to ensure that environmental protection measures are put in place as required. One way to achieve this is to consider all thermal treatments of mixed municipal waste the same under the solid waste resource management regulations.

**What we suggest:** *Consider revising the definition of "incinerator" in the regulations.*

**Clarify rules  
on new and  
emerging  
technologies.**

A revised definition would provide clarity on how to assess the application of new and emerging technologies when they are used to process mixed municipal solid waste. A change to the definition of an "incinerator" could include other similar technologies that thermally process mixed municipal solid waste (for example, pyrolysis, gasification, plasma) as is done in other jurisdictions.

If such a change to the definition were made, this would ensure that Nova Scotia's disposal bans would apply to all of these new technologies when they are employed to process mixed municipal solid waste.

## Improvements to the Enforcement of the Solid Waste Regulations

Nova Scotia Environment is responsible for delivering effective and efficient regulatory management for the protection of our environment. Some sections of the solid waste regulations are outdated or inconsistent with other regulations, making them confusing for stakeholders.

**What we propose:** *Update the solid waste management regulations so the definitions are up to date and consistent with other regulations under the Environment Act. Update sections pertaining to litter abatement and open burning of municipal solid waste to focus the department's activities on risk.*

Definitions that will be revised:

- a. Construction and demolition debris
- b. Municipal solid waste
- c. Leaf and yard waste
- d. Yard waste
- e. Solid waste

Nova Scotia Environment is focusing its efforts on activities with a potential for higher risk to the environment. To that end, greater emphasis will be placed on working collaboratively with the municipalities or non-government organizations on the delivery of litter reduction and abatement programs and responding to open burning issues. Nova Scotia Environment will still respond to more complex and significant illegal dumping issues, but would rely on municipalities and other enforcement agencies to deal with littering issues and open burning situations that may pose a lower risk to the environment. This adjustment will allow department Inspectors to focus on more complex and higher-risk environmental issues.

**New definitions will make the regulation more consistent with the other regulations under the Environment Act.**

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## Beverage Container Deposit Refund Program Efficiency

The Beverage Container Deposit Refund Program is operated by the Resource Recovery Fund Board Nova Scotia (RRFB) and is regulated within the Nova Scotia Solid Waste Resource Management Regulations. The program came into effect on April 1, 1996—nearly 18 years ago. Since that time, Nova Scotia has achieved and maintained one of the highest beverage container return rates in North America at 79.6 per cent in 2013.

To date, the beverage container deposit refund program has helped divert and recycle more than three billion beverage containers from landfills and significantly reduce beverage container litter. Recycling beverage containers has a cost. That cost has continued to rise over the past 18 years, while the deposit refund that pays for the program has never increased.

**What we suggest:** *Change regulations to a deposit with a refund and a separate recycling fee.*

**Maintain the high-level service that makes Nova Scotians proud.**

This change will not be seen or felt by consumers in the short term, but rather is an internal system change to allow for flexibility. Currently, upon the purchase of a beverage container, a consumer pays a 10-cent deposit. Half, or 5 cents, is returned to the consumer for refund when the bottle is brought back to an Enviro-Depot, while the other 5 cents pays for collection, transportation, recycling, and marketing of the recycled materials, along with education programs, research and development, and more.

Under proposed changes, consumers would still pay 10 cents upon the purchase of a beverage container and receive as a refund their 5-cent deposit. In this new system, however, the other 5 cents is called a "container recycling fee" that is designated to cover program costs. By making this system change to administration of the beverage container program, the container

recycling fee could be changed in the future based on changing market conditions (if needed) and could synchronize with other Canadian provinces. This flexibility ensures the continued success of the beverage container program. A process would be established to regularly review and set the beverage container recycling fee.

These changes are needed if the beverage container program is to remain sustainable and to maintain the high levels of performance and service delivery that have made Nova Scotians so proud to date.

## **Your Review and Feedback is Welcome**

As you consider the changes proposed in this paper, you are invited to share your comments on the questions below or any other aspects of the solid waste resource management regulations.

1. Does the list of products proposed under a stewardship framework make sense? As the list would be phased in over time, what is a suitable time frame for implementing this policy shift for Nova Scotia?
2. In a product stewardship framework, what should the role of manufacturer/producer, brand owner, distributor, retailer, consumers, municipalities, and private recycling operators be? Should this be different for different products?
3. Should the stewardship framework and material bans apply to all Nova Scotians, residents and businesses alike?
4. What is the appropriate timing for implementing disposal bans on construction and demolition materials like wood, wallboard and drywall, asphalt shingles, and expanded polystyrene? Are there other materials you think should be banned from landfill?
5. The proposed changes present both opportunities and challenges for operators under approval with Nova Scotia Environment. Do you have any specific suggestions for maximizing these opportunities and reducing challenges associated with the regulation?
6. What other actions should be taken to support waste diversion goals for Nova Scotia and foster the sustainability of the recycling system?

## **Questions?**

**Please contact:**

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1903 Barrington St. Suite 2085  
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**Email:** [policy@gov.ns.ca](mailto:policy@gov.ns.ca)

<http://novascotia.ca/nse/waste/>

Attachment D

<b>NS Solid Waste Management Regulation Review- Stakeholder Consultation/Input 7 Key Areas of Focus</b>		
<b><u>Focus Area</u></b>	<b><u>June 2013 Municipal Stakeholder Consultation - ESSC Input Summary</u></b>	<b><u>2014 Public Consultation Underway Areas of Change (if applicable) from 2013 and Questions for Discussion</u></b>
<p><b>1. Product Stewardship</b> Making brand owners and manufactures of products and packaging responsible for the cost of end of life recovery.</p> <p>To shift the cost from municipal tax base upstream to product/packaging manufacturer.</p>	<p><b><u>Product Stewardship &amp; Municipal Stakeholder Funding</u></b></p> <ul style="list-style-type: none"> <li>• Need to recognize municipal stakeholder role in collection of packaging and reimbursement for costs, including disposal.</li> <li>• Product steward (brand owner/manufacturer) need to fund 100% of cost where municipalities handle the stewarded materials, inclusive of materials collected curbside for recycling, organic stream and where stewarded materials are deposited into the garbage collection programs.</li> <li>• The Depot drop off models do not capture all banned program materials, those not voluntarily “dropped off” end up in the municipal waste stream and costs incurred by the municipality.</li> <li>• Funding should be directly channeled to the municipal level to support residential and business education.</li> <li>• Product stewardship plans should include a plan to recognize the significant capital and operating investment demanded of municipalities to support the Provincial waste management</li> </ul>	<p>New – All products designated for stewardship (EPR) will be “banned” from landfill disposal. Costs to manage banned materials that arrive at landfill are not considered.</p> <p>New – Document cites a “Products will be safely and responsibility recycled rather than going to landfill”</p> <p>Question: How will residual items, stewarded products that arrive at landfill, be recovered and who pays?</p> <p>New - C&amp;D materials will have “limited EPR” where producers partner with C&amp;D processors to divert materials. – Potential Questions for Clarification:</p> <ol style="list-style-type: none"> <li>1. What is meant by limited EPR if a material is banned from landfill?</li> <li>2. How will this impact municipal residential home renovation waste curbside collection currently in the garbage stream?</li> </ol> <p>New – Refers to “other”</p>

<b>NS Solid Waste Management Regulation Review- Stakeholder Consultation/Input 7 Key Areas of Focus</b>		
<b><u>Focus Area</u></b>	<b><u>June 2013 Municipal Stakeholder Consultation - ESSC Input Summary</u></b>	<b><u>2014 Public Consultation Underway Areas of Change (if applicable) from 2013 and Questions for Discussion</u></b>
	<p>regulations.</p> <p><b><u>Product Stewardship &amp; Public Convenience</u></b></p> <ul style="list-style-type: none"> <li>• For program simplicity, accessibility and efficiency, it is recommended that any stewardship program for material already in the curbside collection system remain in the curbside collection system.</li> <li>• Materials easily included in the recycling curbside stream should be dealt with in the existing system with the provision that integration into existing models needs to be negotiated in terms of operational, processing and collection impacts.</li> <li>• Existing curbside systems where established be the first priority for consideration in all EPR collection systems and that funding derived from the EPR programs be directed to fund the municipalities tasked with managing the systems.</li> </ul> <p><b><u>Industry Stewardship Plans and Performance Standards</u></b></p>	<p>products to go to collection depots - not identified – possible impact on public convenience if depot drop-off is only option as is the current state.</p> <p>In November 2013, Regional Council unanimously passed the following 2 part motion:</p> <ol style="list-style-type: none"> <li>1. “ Staff consider potential improvements to the recycling system for seniors and persons with disabilities, in order to address concerns regarding access to the program for those who cannot get electronics to depots”;</li> <li>2. “Request Minister of Environment reviews their recycling services to make them accessible to as many residents as possible”.</li> </ol> <p>The concern was raised for ease of access to recycling programs including other bulky items such as printers, TV’s, etc...</p> <p>Municipal Regions have been collaborating over the past year to bring together</p>

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	<ul style="list-style-type: none"> <li>• Municipal Regions have discussed a set of standards and fundamental principles for industry to be held accountable as part of stewardship plans approved by the province, these include:                             <ul style="list-style-type: none"> <li>✓ Where there are existing municipal recovery programs in place for curbside recycling collection of a stewarded product, integration with already existing curbside program should be required, for the plan to be considered by the Minister</li> <li>✓ Require a minimum of 75% diversion achievement from landfill as the goal.</li> </ul> </li> </ul> <p><b><u>Product Stewardship &amp; Education</u></b></p> <ul style="list-style-type: none"> <li>• While there are merits to a Provincial education program, waste management program messages require integrated education programs aligned with municipal programs.</li> </ul> <p><b><u>Product Stewardship – Priority Product List</u></b></p> <ul style="list-style-type: none"> <li>• As a materials priority list for EPR is being developed for NS, consideration should be given to those products with a well-established recovery program already proven and working well in</li> </ul>	<p>standards for the operational, education and administration functions for stewardship programs which involve the municipalities managing waste stream materials where applicable.</p> <p>New - List of materials developed - Priority ranking not developed – opportunity for municipal input to identify criteria for priority ranking. This may include materials that are an environmental hazard, materials already captured in the recycling and special handling programs for industry stewardship diversion and municipal funding.</p> <p>Halifax Program Observation: In terms of materials banned from landfill, such as glass containers, it is desired that</p>

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	<p>other jurisdictions such is the case for mercury containing bulbs, batteries, disposable propane tanks and other special care waste.</p>	<p>regulations allow for review of the environmental merits of a ban if recycling is in fact a greater environmental impact than internment of inert materials in landfill. Likewise, for materials which may support alternative technologies, and or be added a fuel products in production processes, consideration be given to enabling review of where and how materials can be re-used, such as mixed plastics, which have very limited market but could be used in cement processing and or a plastics to fuel process. The key is ensuring re-used materials are included in diversion, and alternative technologies are approved under the legislation.</p>
<p><b>2. <u>Disposal Bans and Approval Requirements</u></b></p>	<p><b><u>Regulatory Compliance – Municipal Approval Permits</u></b></p> <ul style="list-style-type: none"> <li>Currently 100% of the burden for compliance with the “disposal bans” rests with the receiver, which in most cases is the municipality as the landfill owner and disposal approval permit holder. Halifax source separation program model and By-law system is based on the separation of waste at point of generation, not at a receiving facility. Currently NSE regulation holds the receiving facility solely accountable</li> </ul>	<p>New – The province proposes to require all disposal sites to conduct random inspections and carry out follow-up procedures to ensure banned items are not disposed of in their sites. To foster this requirement, NSE proposes to work with disposal sites to develop appropriate standards and methods to implement disposal bans.</p>



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	<p>for waste not properly source separated.</p> <ul style="list-style-type: none"> <li>• The provincial regulations and policies need reorientation to shift accountability for source separation and compliance to the generator of the waste, not solely the municipal facility approval holder.</li> <li>• With respect to C&amp;D material bans, it was noted that the intention is to develop value added and after use options for materials.</li> </ul>	<p>Halifax Program Observation: On the face of it, this places a significantly greater burden and cost to municipalities for administration and compliance for management of banned materials. Clarification is required to confirm the Province's intention to provide a transfer of funding to support this increased transfer of accountability for these financial and administrative functions. In addition, clarity is needed in terms of defining the role of the municipalities, NSE and the waste generators in the chain of custody.</p> <p>New – As noted above, the list of products slated for EPR are all to be banned from landfill. However there appears to be no requirement to consider municipal or private processor costs in the administration of the material bans. These collections include provision for separate collection, processing, marketing and education.</p> <p>Halifax Program Observation: C&amp;D/home renovation type materials (clean wood, drywall, wallboard, asphalt shingles and pressure</p>

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		<p>treated timbers and carpet) are all now slated to be “banned from disposal” - unacceptable for landfill.                      Question for clarification :</p> <ol style="list-style-type: none"> <li>1. Does this include currently permitted small quantities of household renovation and replacement materials, such a carpet, wood, cabinets?</li> <li>2. Is this directed at municipal home renovation residential garbage collection?</li> <li>3. Is there a planned mechanism for funding the cost of recycling/diverting this material?</li> <li>4. Who will administer and pay for the program to ensure C&amp;D waste is separated at point of commercial renovation or demolition activates?</li> </ol>
<b>3. <u>Used Tire Management Program</u></b>	<ul style="list-style-type: none"> <li>• Expansion of the program to include off road and agricultural used tires would enhance diversion away from landfill.</li> <li>• Regional Chairs and ESSC noted that the program continue to include return to retail option.</li> </ul>	<p>No changes from 2013 consultation on this subject noted</p> <p>Halifax Program Observation: Seek confirmation that the revision will include off road racing tires in the program expansion.</p>

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<b>4. <u>Regional Solid Waste Management Plans</u></b>	<ul style="list-style-type: none"> <li>Revise the regulation to reflect a Provincial, not Regional EGSPA target as set under the act to meet the goal to reduce waste to 300 kg/pp by 2015.</li> </ul>	<p>New – The 300 kg per person per year goal is recognized as a province-wide goal, not a regional goal. Proposal to revise the regulation to update geographical regions as they are operating today and to reflect that Regions collectively will support provincial goals as set out under the act. The change is the removal of a requirement for Regional Waste Management Plans.</p>
<b>5. <u>Regulatory Clarity on Energy From Waste</u></b>	<ul style="list-style-type: none"> <li>New technologies are evolving which should provide real, practical and viable alternative options to landfill for Nova Scotia. The key will be to ensure the focus of first priority remains diversion through recycling and composting programs.</li> <li>With respect to alternative to landfill disposal to create green energy and reduce the waste’s environmental footprint alternative options should be examined.</li> </ul>	<p>No change– Proposal remains to revise definition of incineration to include alternative technologies – not recognized as diversion.</p> <p>Halifax Program Observation: This issue, inclusion of alternative technologies as “incineration” would prevent them from being an option for municipalities. This is troubling since some of these technologies, such as plastics to fuel, and the inclusion of some low/no revenue yielding materials (mixed plastics) could be used in processes which may be effectively banned as part of the municipal/Provincial solid waste regime. The regulations require greater</p>

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		debate and flexibility. It is assessed that there should be an opportunity to further discuss criteria for EFW options which could be considered in a waste management hierarchy as diversion – in terms of re-use and as an alternative to landfill disposal.
<b>6. <u>Improvements to Enforcement of Solid Waste Regulations</u></b>	<p style="text-align: center;"><b><u>Generator Source Separation</u></b></p> <ul style="list-style-type: none"> <li>• There is currently no provision for the provincial regulator to seek compliance for the separation of banned materials from the ICI sector and should be revised to include a definition of Waste Diversion and encouraging waste diversion by:                             <ul style="list-style-type: none"> <li>✓ Establishing requirements for source separation of banned materials;</li> <li>✓ Examining accountability mechanisms for all stakeholders including waste haulers;</li> <li>✓ Regulate waste diversion practices and or introduce materials management planning regulations for all materials at construction and demolition sites.</li> </ul> </li> </ul> <p><b><u>Litter Abatement</u></b></p> <ul style="list-style-type: none"> <li>• Responsibility for Litter Abatement is fostered in the Environment Act and regulations and demonstrates the Province’s commitment to</li> </ul>	<p>New – Proposal is to shift existing provincial authorities’ responsibility for enforcement of littering, illegal dumping and open burning of garbage to municipal and non-governmental levels of government.</p> <p>The Provincial justification for this download is to allow provincial department inspectors to focus on more complex and higher risk environmental issues.</p> <p>Halifax Program Observation: This is a direct download, with conflicting jurisdictional overlap. Example: Highway litter would now potential fall to municipalities to clear and manage. Illegal dump sites would fall to municipalities to rectify once identified, and</p>

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	<p>environmental sustainability. Litter abatement regulation has a long standing linkage to support the social norm that littering is unacceptable. There has been some concern expressed by NSE that these regulations are difficult to enforce when and if there are resources available. Regulations should be written with the ability to prosecute, if required and should be re-written to become enforceable. While recognizing that this activity may not be a high priority for deployment of enforcement resources, the littering provision in the regulation nonetheless can serve as a deterrent.</p> <p><b><u>Illegal Dumping</u></b></p> <ul style="list-style-type: none"> <li>Another unacceptable practice is the act of illegally dumping waste and should continue to be endorsed in Provincial regulations. There is no identifiable advantage to municipalities taking on additional roles to enforce littering, illegal dumping and open burning activity - this is the current role of the province.</li> </ul>	<p>potential subject to Provincial demand for remedy. Clarification is required to clarify how litter and illegal dumps would be dealt with in the provincial realm and how this enforcement responsibility would be funded if it is to be carried out by the municipal level of government – a resource management cost.</p>
<p><b>7. <u>Beverage Container Deposit Refund Program Efficiency</u></b></p>	<ul style="list-style-type: none"> <li>The fees paid by consumers would increase to reflect the cost of recycling. The components of the fee would include .05 refundable deposit plus a variable recycling fee</li> </ul>	<p>New – Recycling Beverage containers has a rising cost proposed to be paid by a separate recycling fee to cover the status quo RRFB</p>

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	<p>that would change to cover any increased costs of recycling. The idea of a floating fee (tax) on containers provides no incentive to increase program efficiencies. These fees typically do not drive innovation, efficiency or recycling.</p> <ul style="list-style-type: none"> <li>• Staff conducted an analysis of the financial impact of modifications to the RRFB budget model and presented findings to ESSC in a report dated February 7, 2013 and onto Council for consideration. At the February 19, 2013, Halifax Regional Council Meeting, Council endorsed having correspondence sent to the Minister of Environment to request consideration to change the deposit-refund model not to increase fees, rather review alternative collection and processing models.</li> <li>• The Hogg report, review of the RRFB beverage container program, concluded the current operating model is unsustainable.</li> </ul>	<p>program delivery model which includes costs of depot collection and processing, transportation, recycling processing and marketing.</p> <p>Halifax Program Observation: Halifax has assessed the existing depot model for beverage containers as significantly more costly than integration with curbside collection. The Province's position is the depot system for other banned and EPR program managed materials cannot survive the loss of review resulting from the beverage container program. Their interest is maintaining the businesses and jobs related to this program model. However, this is contrary to the edicts of the EPR program where industry must fund the costs of the recovery and end of life system. The previous version of this document recommended increasing the fee to 15 cents plus the 5 cent deposit. This is to maintain the system. However, these figures are not articulated in the document. It is anticipated that public concern for this increased tax would be considerable as it was when</p>

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		<p>mentioned last summer. The ongoing review by HRM of the Beverage Container collection integration with curbside programs shows an opportunity to increase potential funding transfer through integration with curbside and maintenance of the 10 cent model.</p> <p>Transparency on this change is not apparent in the revised wording of the intended action. As worded, the recycling fee would be an increase in the price to the consumer who would be funding the maintenance of the system for multiple products. Also is this increase in process cost going to translate to 100% of costs being recovered in floating fee on beverage containers, such that the province will support equitable funding levels for recycling other containers and packaging materials that are handled by the municipal recycling program delivery?</p>

Attachment E

<http://www.halifax.ca/boardscom/SCenv/documents/EPRFinalReport.pdf>