



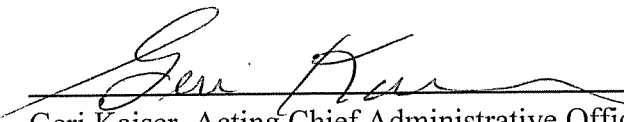
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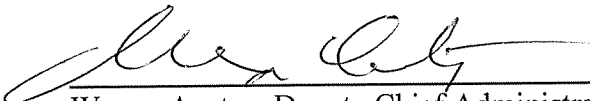
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Halifax Regional Council
August 7, 2007

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:


Geri Kaiser, Acting Chief Administrative Officer


Wayne Anstey, Deputy Chief Administrative Officer - Operations

DATE: July 31, 2007

SUBJECT: By-Law S-604 to Amend Solid Waste By-Law S-600

ORIGIN

At the February 27, 2007 Regional Council meeting staff was authorized to initiate the process to amend Solid Waste By-Law S-600 to:

1. Set the limit of six (6) bags/cans for residential refuse collection effective November 5, 2007;
2. Prohibit the mixing of source separated organics and recyclables with refuse at ICI properties; and
3. Require signage on commercial organic and recycling bins.

RECOMMENDATION

It is recommended that Council give first reading to By-Law S-604, as contained in Appendix "A", and set a date for a Public Hearing.

BACKGROUND

At the February 13 & 27, 2007 COW sessions, staff presented a series of Issues Review Papers that detailed opportunities to enhance HRM's solid waste diversion rate, from the current 55% to the 60% goal set by Regional Council in 1996. Staff was directed to proceed with the process to amend By-Law S-600, specifically for a reduction in the residential refuse bag/container limit, signage on commercial recycling and organic containers, and to ensure that source separated material collected from commercial properties are transported and remain in a source separated state. Attachment # 1 is the staff report dated February 1, 2007 (with two of the Issues Review Papers # 1A "Reducing Refuse Bag/Can Limit" and # 2A "Enhanced Enforcement of By-Law S-600"). Attachment # 2 contains the motion approved by Regional Council on February 27, 2007.

DISCUSSION

The following is an explanation of the proposed Amendments as per Appendix "A" (Attachment #3) Items 1 through to 6:

(1) Section 2.1 , DEFINITIONS:

A "commercial container" is defined as a container for the storage of waste or garbage. The amendment expands the definition to include commercial containers for source separated recyclable and organic materials.

A "commercial enterprise" is defined to include properties which are assessed a business occupancy tax or commercial tax rate, or (for clarity and consistency with the requirements of Section 6.(1) (d) as contained in the By-Law since 1999) an apartment building with one civic address and more than six (6) units.

(2) Section 6.1, COLLECTIBLE MATERIAL - PREPARATION AND RESTRICTIONS:

has been amended to change the residential refuse bag/container limit from ten (10) to six (6).

(3) Section 7.2 REGULATION CONTAINERS FOR MUNICIPAL COLLECTION:

has been amended to prohibit the use of red, yellow or transparent blue bags for mixed waste.

In many business sectors, the colour of bags is used to identify contents. Red bags are used by the medical/health care sector for biomedical anatomical waste; yellow bags are used to contain other biomedical waste - all materials that require special handling by the private sector. Biomedical waste is not eligible for residential collection, is banned by Provincial regulations from disposal in a landfill, and is not accepted at the Otter Lake disposal facility.

The use and placement of red and/or yellow bags curbside is a potential risk for the residential collector and the receiving/processing facility, as the contents are unknown and are viewed by both the collector and the processor as hazardous. It is for these reasons that red and yellow bags are not desired for residential use for waste.

The HRM has promoted the use of blue bags in the Blue Bag Recycling program since 1996, which is a continuation of recycling programs by the four former municipalities. The use of blue bags for waste is not desired as confusion by the collector (when collected as recyclables) would result in contamination when the material is delivered and processed at the Materials Recycling Facility. Conversely, the collector picking up waste may leave the blue bag, believing it contains recyclables.

(4) Section 12.2 INDUSTRIAL, COMMERCIAL, INSTITUTIONAL OR CONSTRUCTION WASTE:

has been amended to ensure that participation in composting and recycling programs is just as convenient as mixed waste disposal. The amendment requires property owners to post signage with recycling and organics instructions for the proper sorting of recyclables and organics, including on each floor if a chute is used for refuse; and to provide containers for organics and recyclables adjacent to the waste container.

This amendment is for the convenience of tenants to further support waste diversion. Ease of use is an incentive and has a direct relationship with participation in recycling and composting.

(5) Section 13 COMMERCIAL CONTAINERS:

has been amended to improve messaging of proper bin utilization to support proper separation. HRM has encountered ICI haulers using green bins and blue recycling bins for garbage.

The amendment will prevent the undesired use of aerated or other organics or recyclable containers as a refuse container. The amendment will also require identification, in the form of a sign or label, indicating what is permitted in each bin. Lettering is to be a minimum 10 centimetres in height and text as follows: Recyclables, Paper, Garbage and Organics.

The requirement to provide lettering has existed in By-Law S-600 for commercial waste/refuse containers since 1999, but not for recycling and organic containers. Examples of unacceptable containers and signage provided at large multi-unit apartment properties are contained in Attachments 4 and 5. This amendment is similar and consistent with By-Laws in other cities, notably CBRM, Toronto, and Tempe, Arizona.

The amendment includes the option of posting lettering (decals) not more than three metres from a commercial container, rather than on the container. This requirement recognizes that commercial containers for compost require washing/steam cleaning, resulting in lettering (decals) peeling off.

(6) Section 15 VEHICLES CARRYING WASTE:

has been amended to prevent haulers from mixing source separated materials in the same compartment of the collection vehicles with refuse. Mixing organics and/or recyclables with garbage in the same compartment of a commercial collection vehicle is contrary to the HRM strategy of keeping materials separate, which enables maximizing reuse/recycling and diversion from disposal.

Public Education Campaign - Personal Assistance Program

As detailed on pages 10 of Issues Review paper # 1A, a comprehensive public education campaign will precede the November 5, 2007 date Regional Council approved in principle when the amendments are to come into effect. The public education campaign will at the minimum include:

- announcement in the fall Naturally Green newsletter (delivery is scheduled for October);
- messages on local television stations;
- information through the Corporate Call Centre 490-4000;
- on HRM's website;
- as requested through the Corporate Call Centre, personal assistance, including information and home visits for those residents who need assistance;
- via Councillors' newsletters; and
- curbside monitoring of properties in excess of 6 bags will be conducted in advance of the effective date. SWR will issue correspondence to property locations and offer to conduct a personal visitation.

All other provisions of By-Law S-600, including refuse, organics and/or recyclables at the curb on the wrong day or week, will be administered in the normal manner by By-Law Enforcement.

BUDGET IMPLICATIONS

The public education campaign advising residents of the upcoming amendments will be accommodated within the existing Solid Waste Resources Operating Budget, account number R333-6912 "Advertising & Promotions".

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

One alternative, which is not recommended, is not to proceed with the amendments.

As the February 1, 2007 staff report and Issues Review Paper # 1A detailed, approximately 85% of HRM residents regularly recycle and compost. These amendment are intended to finally engage the approximately 15% of residents (20,000 homes) who are not recycling or composting, despite the HRM solid waste system operating since 1998/99, and provincial and HRM regulations requiring all organics and recyclables to be separated from mixed waste.

The amendments to By-Law S-600 are intended to increase public participation in recycling and composting. Although public education is fundamental to the HRM solid waste/resource management system, education alone will not motivate every resident to recycle or compost. New policy in the form of the recommended amendments to By-Law S-600 is required to attain the goal of a 60% diversion rate set by Regional Council in 1996.

ATTACHMENTS

1. Staff report of February 1, 2007, with Issues Review Papers # 1A and # 2A;
2. Motion approved by Regional Council on February 27, 2007;
3. Appendix "A" Halifax Regional Municipality proposed By-Law S-604; and
- 4&5. Photos of inadequate containers at large ICI and apartment buildings.

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/agenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Laurie Lewis, Diversion Planning Coordinator, 490-7176



Report Approved by: _____
Jim Bauld, Acting Director, EMS, 490-6606



Financial Approval by: _____
Catherine Sanderson, Senior Manager, Financial Services, 490-1562

Attachment 1



PO Box 1749
Halifax, Nova Scotia
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Halifax Regional Council
February 13, 2007
Committee of the Whole

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

A handwritten signature in black ink, appearing to read "Dan English", written over a horizontal line.

Dan English, Chief Administrative Officer

A handwritten signature in black ink, appearing to read "Brad Anguish", written over a horizontal line.

Brad Anguish, Director, Environmental Management Services

DATE: February 1, 2007

SUBJECT: Solid Waste/Resources Management System-Diversion Opportunities

ORIGIN

- Regional Council approval in 1996, HRM Integrated Solid Waste/Resource Management Strategy with a 60% Waste Diversion Rate Target (Current 55% Diversion Rate);
- Solid Waste Resources Round Table - Issues Review Papers - Diversion Opportunities.

RECOMMENDATION

It is recommended that Regional Council authorize staff to:

- 1) Initiate the process to amend By-Law S-600, setting a limit of six (6) bags/containers for residential bi-weekly collection, effective August 20, 2007;
- 2) Proceed with a Clear Residential Bag Pilot Program commencing in the Spring of 2008;
- 3) Proceed with an amendment to By-Law S-600 to prohibit the mixing of source separated organics and recyclables with refuse at ICI properties; and
- 4) Proceed with amendment to By-Law S-600 to require signage on commercial organics and recycling bins.

Solid Waste /Resources Management System:

- Diversion Opportunities

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BACKGROUND

More than ten years has elapsed since Regional Council approved the Citizens' Stakeholder Committee's (CSC) Integrated Solid Waste/Resource Management Strategy as the basis for the placement of a new Integrated Solid Waste/Resource Management System (ISW/RMS) for the Region.

Considering that just over ten years ago that:

- the landfill in Upper Sackville had been closed for little more than a month;
- private sector partners and an Implementation Plan for the new ISW/RMS had not been finalized;
- no waste disposal facility existed within the Region; and
- the infrastructure for the management of organics and for the processing and disposal of mixed solid waste did not exist; that

the achievements in the management of solid waste/resources, including a waste diversion rate of over 50% since 2000 (currently at 55%), which is the envy of many municipalities, provinces and states around the world, is impressive. However, the task is not complete. The 60% diversion rate set by Regional Council has not yet been attained.

This report, accompanied by a staff presentation, provides:

- an overview of the past ten years of solid waste/resource management for the HRM; and
- potential diversion opportunities identified at the Solid Waste Resource Round Table session in November 2005.

DISCUSSION

A) Ten Year Review of HRM's ISW/RMS

In 1996, Regional Council approved the CSC Integrated Solid Waste/Resource Management Strategy as the basis of the placement of a new integrated solid waste/resource management system for the HRM. Attachment #1, the Executive Summary of the CSC's ISW/RMS, is provided for the information of Council members. Attachment #2 is a document dated December 19, 2006 entitled "A Ten Year Synopsis of HRM's Integrated Solid Waste/Resource Management System", which provides detail of:

1. the history of the circumstances that lead to the creation of the CSC and the new strategy;
2. an assessment completed by O'Halloran Campbell Associates in 2004 of the progress of HRM's ISW/RMS and potential opportunities to improve the Region's waste diversion rate;
3. the success of the "10% Challenge" which was launched in September 2004, to further the then 52% diversion rate (current diversion rate is 55%); and

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- Diversion Opportunities**

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4. specific opportunities identified at the Solid Waste Resource Round Table in November 2005 to further HRM's diversion rate.

To summarize, HRM has been a leader in the field of waste management since the full implementation of the system in 1999, with very few adjustments, being:

- weekly summer green cart collection for the convenience of residents, particularly in the urban core;
- the expansion of the FEP tipping floor, to accommodate more waste resulting from an increase in population and a strong local economy.

No other changes to the system has been required, a remarkable achievement considering no similar undertaking for the management of solid waste had been attempted before by a municipality. However, the goal of 60% diversion set by Regional Council in 1996, has not been attained. Other municipalities in Nova Scotia, and elsewhere in Canada, are now equal to or ahead of HRM's diversion rate. Audits in 2004 revealed that approximately 50% of the refuse in bags/cans/containers from residential and commercial properties is either organics (food or leaf and yard material) that has not been separated for composting, or paper, and/or food and beverage containers that have not been placed in a blue or grocery bag for recycling.

B) Solid Waste Resource Round Table-Issues Review Papers

To explore future opportunities for enhancing HRM's solid waste diversion rate, staff hosted a Round Table in November 2005, which provided an opportunity for input by members of the Solid Waste Resources Advisory Committee (SWRAC), Regional Council, HRM's partners/contractors, industry representatives, NSEL, RRFB, Clean Nova Scotia and solid waste staff from other municipalities. The following issues were identified as top priorities.

1. Enhancing Residential Diversion Through Municipal Policy by;
 - a) reducing the ten (10) bag limit and introducing tags for extra bags
 - b) requiring clear bags for residential refuse
2. Improve Compliance and Enforcement by;
 - a) enhancing the separation requirements of and the enforcement of By-Law S-600
 - b) improve the accessibility at recycling, HIW, C&D and compost facilities
3. Enhancing the Diversion of C&D Materials by;
 - a) making source separation a condition of all building permits
 - b) integrating the stewardship of materials from the generator to end user
4. Enhancing Commercial Waste Diversion of Recyclables and Organics by;
 - a) requiring clear bags, increasing monitoring and enforcement
 - b) implementing a standard training program for source separation

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- Diversion Opportunities

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Staff has completed an Issue Review Paper for each of the above opportunities. Issues 1(b) and 4(a) have been combined. Attachment #3 consists of the seven (7) Issue Review Papers, each one with a recommendation that is intended to enhance HRM's diversion rate. Issues Review Papers 1(a), 1(b)/4(a), and 2(a) will require an amendment to By-Law S-600.

BUDGET IMPLICATIONS

There are no immediate budget implications. The estimated cost of the Clear Bag Residential Pilot Program is \$65,300. The Resource Recovery Fund Board has agreed to provide funding for 50% of the project costs to a maximum of \$32,650. Funding for the remaining costs of the project will be determined through the 2007/08 budget process and will come forward to Regional Council for consideration within the context of the 2007/08 proposed operating budget.

A review of the findings of the Pilot Program will identify if additional resources are required for Council approval of an expansion of the program to all HRM. If required, this element of the Program would be considered in conjunction with the 2009/10 Operating Budget.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

Each Issues Review Paper contains a recommendation which is designed to further HRM's solid waste diversion rate. One alternative, which is not recommended, is not to action any of the recommended initiatives.

Issues Review Papers IA "Reducing Refuse Bag/Can Limits" includes several options. Staff has already or will action shortly, those Issue Review Papers that do not have policy or budget implications.

**Solid Waste /Resources Management System:
- Diversion Opportunities**

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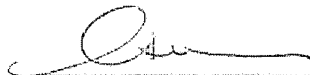
ATTACHMENTS

1. Executive Summary, Citizens Stakeholder Committee Integrated Solid Waste/Resource Strategy;
2. Ten Year Synopsis of HRM's Integrated Solid Waste/Resource Management System;
3. Round Table Issues Review papers (seven total).

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendase/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

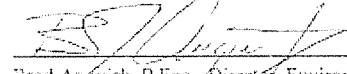
Report Prepared by: Jim Bauld, Manager, Solid Waste Resources 490-6606

Financial Approval by:



Catherine Sanderson, Senior Manager, Financial Services, 490-1562

Report Approved by:



Brad Anguish, P.Eng., Director, Environmental Management Services 490-4825

**Halifax Regional Municipality - Solid Waste Resources
Next Steps - Round Table Findings "Enhancing Diversion"
Issues Review Paper # 1A**

Issue Name: Reducing Refuse Bag/Can Limits

1.0 Objective:

To assess the implications and potential to enhance waste diversion by reducing the ten (10) bags/cans biweekly refuse limit to six (6) bags/cans per household.

2.0 Background:

In 1999 Regional Council approved the limit for refuse collected at residential properties.

The limit is 10 bags/cans of refuse, plus 1 large item (appliance/furniture, etc.) every two weeks for each household (i.e. Single family dwelling, or unit in a semi-detached house, rowhouse or townhouse). Multi-unit apartments (up to 6 units) have a limit of 5 bags per unit, up to a maximum of 30 bags of refuse, plus 2 large items. HRM has the highest bag/can limit for refuse in Canada, of all the municipalities with a multi-stream waste/recycling/organics collection program. The 10 bag/can limit for refuse has been in effect since 1999, since the adoption of By-Law S-600.

HRM was the first large municipality in Canada to implement curbside collection of organics with the introduction of green carts in 1998, which continues to be supported by a comprehensive education and communications campaign. A survey of NS municipal units, with biweekly collection services, revealed that 93% have a refuse bag/can limit of 6 or less, as outlined in Table 1.

Table 1

NS Municipalities Garbage Bag/Can Limits	
Municipality	Bag/Can Limit - Biweekly Collection Service
*Annapolis County, *Berwick, *Bridgetown, *Greenwood, *Kentville, *Kingston, *Middleton, *New Minas, *Wolfville, *Lunenburg (Town), *Mahone Bay, *Queens, *New Glasgow, *Pictou County, *Pictou (Town), *Stellarton	4
**Annapolis Royal, St. Mary's, **Cumberland	4
*Bridgewater, *Windsor, *Shelburne District, *Yarmouth (District), *Yarmouth (Town), *Argyle	5
**Clark's Harbour, **Lockport, **Shelburne (Town),	5
*Hantsport, *Truro, *Colchester, *Stewiacke, *East Hants	6
**West Hants, **Amherst, **Springhill,	6

*Chester, *Lunenburg (District), *Digby (District),	8
* Clare	*** 10 (includes combination of recycling and garbage bags)
*Digby (Town)	*** 12 (includes combination of recycling and garbage bags)

Notes:

* Municipalities with mature (more than 5 years in place) curbside organic green cart program.

** Municipalities with no organics collection services or only just recently (since 2004/05) have rolled out green carts or only have backyard composting options.

*** Bag limit is a combination of recycling and refuse.

Note: Municipality District of Lunenburg, Town of Lunenburg, Queens, Mahone Bay and Bridgewater have weight and volume limits.

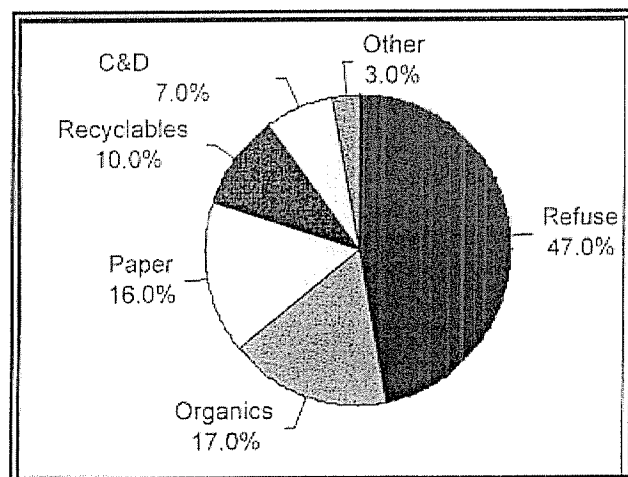
3.0 Discussion:

3.1 Measurement of Success: A Citizens Strategy:

While HRM is recognized worldwide as a leader in waste/resource management, success in maximizing diversion, as defined in the Citizens Solid Waste/Resource Management Strategy and as approved by Council in 1996, has not been fully achieved. One principle of the strategy is "Achieved Diversion Will Be a Key Measure of Success". Overall, diversion initially reached 56% in 2000 as source-separation of organics and full stream recycling programs became established; however, by 2002/03 the rate levelled off to 53%. In 2004, with the launch of the "10% Challenge" (an enhanced communication and education campaign), the overall diversion rate increased to 54-56%. However, the goal of at least 60%, set by Regional Council in 1996, has not been attained. A significant portion of the current diversion is attributed to the commercial sector with construction, demolition and renovation (C&D) building materials diverted to the HRM C&D licensed sites. Residential diversion is at 48.7% for the year ending December 2006.

What is left in the black refuse bag ?

To further pursue opportunities for residential diversion, audits were conducted at the Otter Lake landfill in 2003/04. The audits revealed that 43% of materials in the residential black refuse bags should have been diverted in the recycling and/or organics (composting) programs.



Recyclable materials comprise the single largest component (26%), consisting of metal/glass/plastic containers (10%) and recyclable paper (16%). Organics comprised 17%, C&D 7% (home renovation type materials) and Other 3% (i.e. HHW, including waste oil, batteries and tires) materials that are not acceptable at Otter Lake.

To measure the link between participation in curbside recycling and composting programs and bag limits, Solid Waste Resources (SWR) staff conducted curbside monitoring at 1,200 residential households in urban, suburban and rural areas, over a 3 year period (2004, '05 & '06). Monitoring included documenting the number of garbage bags placed curbside and participation in green cart and recycling programs. The monitoring was throughout all seasons. The following data was collected during the 2005 monitoring:

Table 2

Monitoring Residential Household Set Outs		
Number of Refuse Bags/Cans Placed Curbside	% of H/H	*Were there Recyclables and Green Carts Placement?
1 to 6	78%	Yes Majority of Occasions
7 to 8	17%	No, Not Always
9 to 10	4%	No, Never
Average of 3.5 bags/cans of refuse per household/biweekly		

***Note:** Recyclables were documented for weekly collection service in urban/suburban and during biweekly service frequency in rural areas.

78% of households set out 1 to 6 refuse bags/cans every 2 weeks. The most frequent number of refuse bags set out was in the range of 2 to 4 bags per collection cycle. In households with 2 to 4 bags of refuse, blue bag recyclables, paper recycling and green cart set out occurred at every property. Households with set outs in the range of 4 to 6 refuse bags/cans, did not always participate in the blue bag, paper recycling or organics separation programs for the applicable collection cycle. The average set out rate for collection at the 1,200 households was 3.5 bags/cans per collection cycle.

21% of households set out in excess of 6 bags/cans of refuse. There was little to no participation in blue bag recycling, paper recycling or green cart programs when there were more than 6 bags of refuse curbside. While many HRM citizens are doing an outstanding job of separating the materials, many residents are not. The 10 bag/can refuse limit provides a convenient excuse/opportunity not to recycle or compost.

In 2005, as a component of the "10% Challenge", staff conducted door to door education where residents did not participate in the green cart, blue bag or paper recycling programs. This resulted in an initial increase in recycling and composting activity, however, this increase was not sustained (measured upon return monitoring).

For some residents, the 10 bags of garbage bag/can limit acts as a dis-incentive to continue to recycle and compost.

4.0 Measuring Public Opinion - Citizens Input on Bag Limits:

SWR staff have gathered public opinion data over the past 2 years, through surveys as well as a series of articles published in the HRM's Naturally Green newsletter. Feedback was solicited respecting changes to refuse bag/can limits via email, regular mail, website and by calling 490-4000.

4.1 Public Opinion Survey:

A public opinion survey conducted in 2005, supports the findings of the curbside monitoring program. A survey conducted by Corporate Research Associates asked residents to indicate the number of refuse bags they place curbside. Results revealed that **86% of residents indicated they place 6 or fewer refuse bags curbside**. The detail of survey results are as follows :

Table 3

"In HRM household refuse is picked up every two weeks. In an average two-week period, how many bags of refuse does your HH place curbside for pickup?"	
1 bag	19%
2 bags	26%
3 bags	18%
4 bags	12%
5 bags	6%
6 bags	5%
7 bags	1%
8 bags	3%
10 bags	1%

Note: Remainder 9% live in an apt not serviced by HRM municipal services

Residents have shown commitment to HRM's waste management programs and have indicated that they can do more to support recycling and composting programs. In a survey conducted in 2005, 60% of residents think it would be very, to somewhat easy, to increase the amount of blue bag recyclable materials they can place in the HRM recycling program. In the same survey, 56% think that it would be very, to somewhat easy, to increase the amount of green cart compostable materials for placement in the HRM green cart composting program. This public opinion supports a reduction in the refuse bag limit, with a resultant increase in recycling and composting.

4.2 Naturally Green Newsletter - Looking at Bag Limits:

In the Spring of 2005, SWR solicited public input on methods to reduce waste and encourage recycling and composting. A sample summary of public feedback on looking at bag limits, is as follows, received via letter, phone and e-mail transmission:

Public Feedback Sample Summary

1. "Thanks for your publication Naturally Green which my husband and I read from beginning to end. We strongly support the bag limit to 3. We are a family of 6 and have rarely put out 3 bags. This has to stop somewhere!"
Gail & Charlie Wainwright
2. "The garbage bag limit should be cut back to 5 bags per household. We have 4 people in our household and every second week we have 2 bags, so 5 bags is still over the amount of the average household should be placing at the curb."
Dave Whittle
3. "I normally have only 1 bag every 2-weeks with the occasional second with rarely a third bag. Your suggested change of bag limit will not bother me or my neighbours."
Charles Webber
4. "HRM is a leader in waste reduction and we should be limited in what we put out to the curb for landfill. Packaging is a problem, lets go back to the source, if its not recyclable, it is not acceptable".
Mike Hackett
5. "Each week I use 1 Sobeys bag for recycling papers, 1 blue bag and 1 garbage bag. 10 bags is far to high"
Dan MacDonald
6. "I say don't just reduce the limit to 6. I say reduce it to the average and make Halifax a greener city."
Dave Ciochetto
7. "I was surprised to note the bag limit was so high, and can't imagine why any household would require even half that number. We are a household of 2, and typically have from 1/3 to 1/2 bag of actual garbage very 2 weeks. A lower limit may convince some more residents to recycle and use their green bin more".
Bill MacDonald
8. "I think HRM is doing a good job, however we cannot become complacent and if we are last in raking in having the highest bag limit in Canada you should ACT."
Frances Jamieson
9. "Agree with reducing the bag limit and the even 6 bags is way too high. Voting for a much reduced limit of 2 to 3 bags."
Glen Frasier

5.0 Benefits & Risks:

HRM provides collection services to approximately 130,000 households (H/H). In 2005/06, 70,000 tonnes of residential waste was processed at the Otter Lake facilities. From the waste audits, up to 30,100 tonnes (43%) were recyclables or organics contained inside refuse bags.

From the data collected during the curbside monitoring over three years, 102,700 HH (78% of 130,000 HH) produce 6 bags or less, while 17% (22,100 HH) set out between 7 to 8

bags/cans, and 4% (5,200 HH) set out 9 to 10 bags/cans of refuse, every two weeks. If the 6 bag limit were applied to those 27,300 households, there is the potential to divert at least 6,000 tonnes annually to the recycling and composting facilities as follows:

5,200 HH x 3 bags x 4 kg/bag* x 26 collection days	= 1,622 tonnes
22,100 HH x 2 bags x 4 kg/bag* x 26 collection days	= <u>4,596 tonnes</u>
TOTAL	6,218 total tonnes

***Note:** 4 kg/bag measurement is conservative.

5.1 Revenue, Environmental Benefits and Costs

5.1.2 Revenue/Avoided Costs:

(A) Recycling Revenue:

HRM receives revenue from the sale of recyclable materials. Assuming that 80% of the 6,218 tonnes is diverted = 4,974 tonnes, and that 50% are recyclables which have a net market value of \$70/Tonne revenue for the HRM (\$70.00/tonne x 2,487 tonnes), equates to \$174,090 per year.

(B) RRFB Diversion Credit Revenue:

For every tonne of waste diverted from the Otter Lake landfill, HRM receives revenue in the form of Diversion Credits. The present value is \$22/tonne. Therefore, \$22/tonnes x 4,974 tonnes = \$109,428 additional diversion credit revenue for HRM each year.

(C) Avoided Costs - Landfill Savings - Operating and Capital

Operating:

A reduction in waste at the Otter Lake landfill benefits HRM in avoided operating costs. Avoided costs are specified in the contract in a band of 3,000 tonne increments.

In 2005/06, HRM generated 165,350 tonnes of waste, comprised of 70,349 tonnes residential, and 95,001 tonnes commercial, received at the Otter Lake Facilities. For every 3,000 tonne increment, the cost to HRM is an additional \$113,000. Reducing the bag limit has the potential to divert at least 4,974 tonnes from the Otter Lake Facilities, realizing \$113,000 in avoided costs for HRM yearly.

(D) Capital & Capacity Demand at Other Lake:

Capital costs are avoided at the Otter Lake facilities in the form of deferred capital construction costs associated with the building of landfill cells.

In today's costs, HRM expends approximately \$15 million to construct a landfill cell that has the capacity for approximately 420,000 tonnes of waste. At the current rate of waste generation, a new cell is required every 3 years.

The 4,974 tonnes diverted away from the Otter Lake Facilities yearly, represents 3.5% of the capacity of a cell. Over the remaining design life of the landfill: 17 years x 3.5% = 7 months deferred capital construction and closure of cell #9, combined construction and closure costs of cell #9 at \$32.4 million x 4.5% carrying charges, equals savings of \$1,462,500 (\$86,029/yr). (As the avoided capital costs are not realized for 17 years, they cannot be included in this analysis.)

Annually, total refuse received, processed and disposed at the Otter Lake landfill, has increased on average of 2%. In 05/06, in excess of 165,000 tonnes of refuse was received at Otter Lake. A 2% increase annually will result in a demand for additional receiving and processing capacity.

The current contract with MIRROR NS, which expires in March 2010, guarantees the management of up to 177,555 tonnes, which at the current annual growth rate, would occur in 09/10. It is to be determined if an additional capital investment (i.e. expansion of the FEP tip floor or a third processing line) will be required, once the tonnage exceeds 177,555 tonnes annually.

A reduction of 4,974 tonnes annually, through a reduced refuse bag limit, provides an opportunity to delay potential expensive capital investment at Otter Lake by at least several years, perhaps longer.

5.1.3 Costs - Compost and Recycling Processing:

Processing additional recyclables results in increased costs to HRM. Assuming 50% of 4,974 tonnes are recyclables diverted to the Materials Recovery Facility (MRF), the incremental operating cost is approximately \$96,993/year. For the composting facilities, initially for 07/08, the addition of 3,000 tonnes annually will not result in additional processing costs, as this 3,000 tonnes can be accommodated within the 20,000 tonnes/year "put" defined in both contracts.

5.1.4 Collection:

It is not anticipated that the shifting of materials from the refuse bag to the recycling and/or composting stream will result in any additional costs for residential collection, as there will be no net increase in the volume of materials collected.

5.1.5 Summary of Annual Costs/Savings:

Additional Revenue:	
Recyclables	+ \$174,090
Diversion Credits	+ \$109,428
Avoided Cost:	
Otter Lake Operating	+ \$113,000
Otter Lake Deferred Capital	+ \$ 86,029 (excluded)
Total Revenue/Avoided Costs	\$396,518

Additional Processing Costs:

Recycling Facility	- \$96,993
Compost Facilities	-\$ 0 (Note: within 2 years, additional composting processing costs could occur when the 20,000 tonne put at both compost facilities is exceeded. At current per tonne processing rate, costs would be \$330,000/year)

Minus Education, Promotion and Compliance Program to communicate new limits - \$20,000

Net Savings/Yr (12 months) \$279,525 \$ 0 (future years)

Note: It is anticipated that the diversion of 4,974 tonnes would not be achieved until 18 months after the changes in bag/can limit.

5.1.6 Environmental & Societal Benefits:

From USEPA Data, diverting 4,947 tonnes away from landfill equates to the following:

- 6,121 megawatt electricity saved/yr;
- 34,706 trees saved/year;
- 58,830,000 litres wastewater not produced/year; and
- 61,215 kg. reduction in air emissions/yr.

5.2 Risks:

Potential risks could include:

- Public opposition to a perceived decrease in service levels;
- Illegal dumping;
- Increase in incidents of bags left at the curb and demands for By-Law Enforcement

5.2.1 Public Opposition:

Data from the public opinion survey indicates that 14% of residents have reported placing more than 6 bags of refuse out for collection, while actual curbside monitoring reveals that up to 21% of residents place more than 6 bags of refuse curbside. Therefore, between 79% and 86% of residents will not be affected by a change in the policy to a new limit of 6 bags of refuse biweekly.

Residents who will most strongly oppose a 6 bag/can limit, are those who are not recycling or composting regularly or not at all - as legally required by the HRM By-Law S-600 and the N.S. Solid Waste/Resource Management Regulations. A change in policy or By-Law will not impact the majority of residents who currently generate 6 bags/cans of refuse or less (the average is 3.5 bags/HH collection cycle).

Four principles of the HRM citizen's based strategy align and are consistent with a policy change to a 6 bag limit for refuse, which include:

- 1) Stewardship - We manage the materials we generate;

- 2) Success is Based on Separating Materials at Source;
- 3) The Waste/Resource Management System will Feature Citizen Involvement;
and
- 4) Achieved Diversion Will be a Key Measure of Success.

5.2.2 Experiences of Other Municipalities

The Valley Region, containing 13 municipal units, is one example where a reduction in refuse bags was successfully implemented. The Valley implemented a 4 bag limit for refuse for biweekly collection, jointly with the introduction of the green cart composting program. Previously, the bag limit for refuse was 4 bags every week. Excess waste is not collected and is the responsibility of residents to drop off at the waste management centres in Lawrencetown or Kentville.

In the Valley Region, bulky items (fridge, stove, furniture, etc.) are not collected curbside every two weeks. The current HRM residential collection policy, of the collection of one large item (i.e. stove, washer, dryer, sofa, bed, etc.) and up to 5 bundles of C&D material (included in the proposed six (6) bag/can or item limit) at residential properties biweekly, would continue. Other jurisdictions in NS do not provide biweekly collection of large items. The Valley has not made any change in their 4 bag limit since the introduction in 1999. Other municipalities, such as the District of Lunenburg, have similar experience as the Valley.

Currently, in HRM there is no correlation between the amount of refuse generated and residential property taxes. There is no economic incentive to reduce, recycle or compost. A lower bag limit of 6, supported by public education, monitoring and enforcement, has been proven effective in other NS municipalities. Table 4 identifies HRM's residential waste disposal rate, along with other NS municipal units and the refuse bag limits.

Table 4

Municipality	Disposal Rates - 2005	Bag Limits/Tags
HRM	530 Kg/HH/Yr	10 Bags - No Tags
Valley	430 Kg/HH/Yr	4 Bags - No Tags
Colchester	330 Kg/HH/Yr	6 Bags - No Tags

HRM has the highest residential waste disposal rate in Nova Scotia. The Valley Waste Regional Management Authority's 4 bag/can limit and Colchester's 6 bag limit, have reported lower rates of disposal than HRM.

5.2.3 Illegal Dumping

Other municipalities in NS and across Canada, have reported that they did not experience an increase in illegal dumping following a reduction in the bag limit for refuse. Illegal dumping is a systemic problem, often inter-generational, and occurs where there are no or low disposal fees for residential waste, and/or where the municipality collects a wide range of materials at residential properties, similar to the HRM.

Other jurisdictions, such as the Valley, have actioned enforcement for illegal dumping. Where dumping of household garbage has occurred, the owner has been identified by inspecting the material (bills, letter, etc). The Valley Region has a dedicated by-law officer that is resourced to investigate and prosecute illegal dumping cases. The Valley Region has a record of successful prosecutions, however, Judges' decisions on award of costs have, to date, not covered the full clean-up costs.

For HRM to combat the practice of illegal dumping, a separate strategy, supported by resources, including a dedicated Enforcement Officer, would be required. Illegal dumping, as shown by the experiences of other municipalities, is not a result of changes to refuse bag limits.

5.3.1 Education/Monitoring/Compliance

A reduction in the bag limit for refuse will require resources for a NEW public education campaign, for a period of approximately three months. The public education campaign would commence in advance of a policy change and would consist of a minimum of:

- Notification in HRM Naturally Green Newsletter, distributed to all households in HRM;
- Eastlink advertising;
- HRM SWR website update;
- Newspaper ads, if required; and
- Corporate Call Centre 490-4000.

SWR successfully delivered the major public education campaign in 1998/99, which included changes to collection frequency (weekly to biweekly), eligibility of properties, and the introduction of the green cart program. In comparison to the major systematic changes in 1998/99, which impacted the entire population, a change of the bag/can limit (from 10 to 6) will impact only those residents who are not participating in the green cart or blue bag and paper recycling programs. The magnitude of the proposed bag/can limit change is moderate in context of the 1998/99 campaign. However, an enhanced education and communication campaign, valued at \$20,000 would be a no net cost for HRM.

5.3.2 Larger Families - Personal Assistance Program:

None of the municipalities in NS with a six (6) bag/can limit or less, have experienced an issue respecting larger families being non compliant. Six (6) bags/cans, each .5m x 1m, to a maximum of 25kg, as specified in the By-Law, totals 125kg (275 pounds) or equivalent to the volume of a trunk of a small car, biweekly. One bulky item (i.e. furniture/appliance) would continue to be collected biweekly.

Many residents currently do not fill to capacity the standard refuse bag, often leaving the top 1/3 of the bag empty. Statistics Canada indicates that 2,300 households (1.8%) in HRM have 6 or more family members. Testimonials from families with 6 members, advise that by recycling and composting, they rarely put out 3 bags of refuse biweekly.

Larger families who regularly recycle and compost, will not be affected by the changes in refuse bag/can limit.

Recognizing that larger families may need support, staff will provide a personal assistance program. The program would consist of residents being advised to call the HRM Corporate Call Centre (490-4000) line to request the receipt of educational material. Should a resident desire additional assistance, they will be transferred to the Solid Waste Resources department, where staff will advise how to maximize recycling and composting; and, if requested, will arrange personal home visitation. This personal assistance program for larger families, will be promoted in the June edition of the Naturally Green newsletter, on the HRM website and through the Corporate Call Centre

6.0 Options with a Reduced Bag Limit

6.1 Option #1: 6 Bag/Can Limit with Seasonal Fall/Spring 10 Bag Limit:

From weigh scale data at Otter Lake, the peak weekly tonnage from residential waste is in the Spring and early Fall. During these two weeks (one week in Spring, one week in Fall), the 6 bag/can limit may be a challenge for some residents, compared to the remainder of the year. An option would be an increase to a 10 bag/can limit for one week in May and one week in October. Those weeks with a 10 bag/can limit would be promoted in the Naturally Green Newsletter, HRM website as well as the annual Corporate Calendar.

6.2 Option #2: User Pay - Tags for Excess Bags:

Numerous municipalities in Canada and the USA, have implemented either a full or partial user pay system, i.e. utility approach for solid waste/resource services. In each case a low bag limit (approximately 3 every two weeks), or a smaller receptacle for refuse is provided within the general tax rate. Residents pay a fee for the disposal of additional bags or a larger container for refuse.

For bags, the fee is in the form of a tag which is purchased by the resident if/when required. Tags are purchased at local retail outlets, municipal offices or online through municipal website. The additional cost for tags or a larger refuse container is an incentive for residents to reduce their waste and recycle and compost more.

Tags are often used in other jurisdictions with a lower bag limit (i.e. usually 3 or less). The tags enable residents to place additional bags curbside, for a small fee (\$1.50 to \$3.00 per bag).

The following table outlines an example of the user pay programs of two municipalities in Ontario with reduced bag/can limits for refuse. More than 200 municipalities across Canada and the USA, have adopted a tag system or variable can rate approach.

Table 5

	Markham, ON	Region of Peel, ON
Population	268,500	1,000,000
Refuse Collection	3 bags biweekly (over 3 bags requires tag)	3 bags weekly* (over 3 bags requires tag)
Recyclables	Weekly	Weekly
Organics	Weekly	Curbside organics collection is not region wide
Change in garbage after program was implemented	-8%	-4%
Diversion Rate	65%	45% (no full organics collection program)
Cost of tags	Free - 12 free tags each year	\$1/bag (329,000 purchased in 2004)
Options for additional waste	Drop off at City of Toronto transfer stations at cost to resident	No limit to number of tags able to be used
Average set out rate	3/bags/biweekly	1.6 bags/week

***Note:** Region of Peel does not yet have full scale curbside organics collection implemented throughout the Region.

In both examples, a very low bag limit in conjunction with tags appears to have reduced residential refuse.

6.3 Implementation of Reduced Bag Limit - Timing

From weigh scale records at Otter Lake facility, February, August and December are the lowest months for residential refuse tonnage. The implementation of a six (6) bag/can limit biweekly for residential refuse requires amendment to By-Law S-600, typically a 2 to 3 month process. Accordingly, an opportune time to reduce the bag limit for residential refuse is August 2007, supported with an enhanced education and communication campaign.

7.0 General comments

There is good public support for a reduction in the bag/can limit for refuse. A behavioural change will be required for those residents who, despite eight years of public education, are still not recycling or composting. Other municipalities in N.S. with the green cart system have a lower refuse bag limit than HRM.

8.0 Conclusion & Recommendation

Based upon the public survey and data analysis, reducing the refuse bag/can limit of ten (10) to six (6) has the potential to achieve an increase in recycling and composting , at no net cost for the HRM. Reducing the residential bag/can limit to 6, without tags, will:

- bring HRM in line with other municipalities;
- finally engage those residents who are not recycling and composting; and
- contribute to achieving the minimum 60% diversion target set by Regional Council in 1996.

Staff will complete an assessment, 18 months after the implementation of a 6 bag/can limit, to determine the requirement of a further reduction in the bag/can limit, in conjunction with a tag program for additional bags.

Submitted by	Shannon Betts Waste Resource Analyst
	Andrew Carter Collection & Processing Officer
	Fred Wendt, Waste Resource Analyst
Reviewed by	Laurie Lewis Diversion Planning Coordinator
Approved by	Jim Bauld, Manager

**Halifax Regional Municipality - Solid Waste Resources
Next Steps - Round Table Findings "Enhancing Diversion"
Issues Review Paper # 2A**

Issue Name: Enhanced Enforcement of By-Law S-600

1.0 Objective:

Identify initiatives to further diversion through policy and by-law changes respecting enforcement of Halifax Regional Municipality (HRM) By-Law S-600 - *Solid Waste Resource Collection and Disposal By-Law*.

2.0 Background:

HRM has an internationally recognized and award winning solid waste resource management system. As specified in the HRM By-Law S-600 and the Provincial Regulations, blue bag recyclables, fibre recyclables and organic material are banned from landfill disposal. Accordingly, a source separation program for these materials is required at all residential and industrial, commercial and institutional (ICI) properties in HRM.

An audit of waste received at the Otter Lake Facilities has determined that significant tonnage of recyclables and organics are hidden in the residential waste stream as follows:

<u>Potentially Divertable Material</u>	<u>Tonnage/Year</u>
Fiber	- 11,539
Polycoat	- 325
Glass	- 672
Metals	- 936
Plastic	- 6,032
Organics	- 10,016
Haz-Material	- 285

Total Divertable - 29,805 tonnes

The total residential tonnage received for the same time period was 58,750 tonnes. This indicates that approximately 50% of the residential waste stream has the potential to be recovered, without changing those materials included in the HRM's recycling and/or composting programs.

2.1 Residential Compliance Practice:

Currently, residential monitoring is completed by the collection contractors who applies a rejection sticker for refuse materials over the ten (10) bag limit and for materials improperly prepared for collection. The stickers identify why materials were

not collected and the proper preparation requirements for collection. The resident is required to take the material(s) back in, correct the problem, and properly place the same out on the next collection day.

Provisions exist in By-Law S-600 where residential non-compliance could result in an issuance of a Summary Offence Ticket (SOT), including where residents are not participating in source-separation programs. No SOT's have been issued for residential non-compliance in the recycling and composting programs. To date, the focus has been on education (including rejection of improperly prepared material or material over the collection (bag/can) limits).

2.2 Current ICI Compliance Practice:

The following enforcement approach is used at ICI properties:

- Solid Waste Resources staff visit properties that have been reported noncompliant;
- Upon inspection, where noncompliance is confirmed, a warning in the form of a Notice is sent to the property owner and/or recognized agent outlining the noncompliance issue. A follow-up inspection is carried out after 14 days;
- Upon re-inspection, at properties that remain noncompliant, a SOT is issued in the amount of \$215.00;
- When dealing with repeat offenders, consideration is given to proceed with prosecution, in addition to the enforcement response outlined above. Under long form prosecution, the maximum fine is \$5,000.00 per offence.

One full-time staff member, the Solid Waste/Resources Diversion Planning Officer, is responsible for effecting compliance of By-Law S-600, to achieve source separation at all ICI properties.

2.3 Current Monitoring at the Otter Lake Facilities:

The facility operator (MIRROR NS) at the Otter Lake Waste Management Facilities, visually inspect loads of ICI waste. Loads that contain unacceptable materials are issued a Waste Discrepancy Report (WDR). A copy of the WDR is sent to the HRM Diversion Planning Officer for follow-up (246 WDRs were issued in the 05/06 fiscal year). The generator and hauler of the ICI waste are contacted and in most cases, the generator is visited to confirm the existence of a source-separation system. Repeat offenders are subject to a rejection at the facility.

HRM partners with Nova Scotia Environment and Labour (NSEL) twice each year for joint inspections of ICI loads at the Otter Lake facility. More thorough inspections of loads are completed with appropriate follow-up procedures.

2.4 Other Current Enforcement:

By-Law Enforcement Officers, under Police Services, are responsible for enforcing other sections of By-Law S-600. This includes sections relevant to placement of materials, collection times, placing waste from non eligible premises, etc.

2.5 Current Education on Enforcement:

Enforcement initiatives are regularly promoted through advertisements, Naturally Green, and public events. SWR Collection and Processing Officers regularly hold workshops for the contractors responsible for residential collection services, where an emphasis is placed on curbside education and stickering activities. The SWR Collection and Processing Officers (2) also regularly hold workshops for the HRM Corporate Call Centre staff, to keep current on what is required at residential and ICI properties in HRM. The Diversion Planning Officer provides MIRROR's staff with advice on methods to improve inspections of ICI loads at the Otter Lake facility.

3.0 Discussion

3.1 Potential Increased Residential Diversion Through Curbside Inspections:

Increased monitoring and curbside inspections at residential properties will identify residents who are not participating in the green cart and recycling programs. Once identified, a warning could be issued before issuance of a SOT to the property owner for non-compliance. This approach would require either additional HRM enforcement staff, or the residential collector to document each violation, and possibly have the authority to issue SOT's. Staff could not locate any municipality where the residential collector has this responsibility.

3.2 Potential ICI Diversion Through Enhanced Enforcement:

The Diversion Planning Officer currently administers all reports of ICI properties that are not source-separating. Expanding enforcement requirements for the Diversion Planning Officer is not an option as the current workload is being maximized. Re-allocation of some duties that currently fall under the Diversion Planning Officer, with other SWR staff, is not a viable option to effectively enhance enforcement initiatives.

Since the creation of the Diversion Planning Officer position in 2004:

- 1,658 ICI properties has been inspected;
- 526 notices issued to non-compliant properties;
- 85% compliance rate, after issuance of a notice; and
- 31 SOT's were issued, two were challenged but upheld, with one long form successful prosecution (fine of \$5,000).

Increasing the number of officers in SWR to conduct enhanced enforcement provides an opportunity to increase inspections and compliance.

3.2.2 Amend By-Law S-600:

An opportunity exists to amend By-Law S-600 to strengthen HRM's diversion programs. Amending By-Law S-600 to require waste haulers to provide services that support our waste management strategy is one way to increase waste diversion.

Two specific opportunities to amend By-Law S-600 are:

- (A) The first is to address situations where ICI haulers mix source separated materials (i.e. separated recyclables and/or organics) in same compartment of the collection vehicle with refuse. Currently, the By-Law does not address this particular situation with ICI waste haulers.
- (B) The second addresses communication and proper bin utilization to support proper separation. HRM staff have encountered ICI haulers utilizing green totter bins (organic green compostainers) for garbage and blue recycling bins (toters on wheels) also used for garbage. There is currently no requirement for the commercial sector to use proper "color" bins for organics or recyclables. Signage is also not required, however, the By-Law does specify lettering, text, and size requirements for signage on containers for waste. Many private commercial waste haulers are using containers for organics and recyclables without signage and are not concerned about the bin color or size. This leads to confusion for the property owner/tenant and is counter productive to waste diversion.

The hauler (owner of the commercial bins) is not obligated to provide their clients with information on the requirements for source separation. The client, in many cases, is only provided one bin for garbage, resulting in the property being in violation of By-Law S-600. Many private contracts with haulers do not include information on the requirements for separate bins for organics and recyclables, as required by municipal law. This causes problems for HRM staff when following up with property owners who frequently state that they are not aware of the requirements for source separation and have been provided one bin by their hauler, assuming all is in order, "as required by By-Law S-600."

An amendment to By-Law S-600 could include the requirement for proper bins for source separation and labeling of organics and recycling receptacles, as well as requiring haulers to provide clients with information on source separation receptacles. The requirement for proper bins and labeling is required in other jurisdictions for commercial garbage and recycling collection, specifically in Toronto.

4.0 Resource Requirements

4.1 Residential Compliance:

Additional costs for an enhanced level of curbside inspections by the residential collector and/or SWR staff, requires resources not currently contained within the SWR operating budget.

4.2 ICI Compliance:

Statistics for the 05/06 fiscal year are as follows:

- ICI property inspections: 903
- Number of non-compliant ICI properties that were issued a warning Notice: 296
- Number of apartment buildings contacted for follow-up: 268 (13,754 units)
- Number of SOTs Issued: 22
- Compliance Rate: 85%

A second Diversion Planning Officer has the potential to double the number of properties inspected annually, to achieve compliance with By-Law S-600.

5.0 Recommendations:

1. Amendment to By-Law S-600 requiring proper bins and signage for organic and recycling containers
2. Amendment to By-Law S-600 prohibiting the mixing of source separated materials, by the ICI hauler, from ICI properties (i.e. recyclables and organics) in the same collection vehicle compartment as refuse.
3. Subject to the impact upon diversion of the proposed amendments to By-Law S-600 for the ICI sector, staff will complete an assessment of the benefits of an additional Diversion Planning officer position, commencing in the spring of 2009.

6.0 Conclusion:

Increasing SWR enforcement staff and amending By-Law S-600, will achieve higher compliance by both the residential and ICI sector, thereby diverting more materials from the Otter Lake Landfill.

Submitted by: Grant McKenzie, Collection Officer
Bryan Hartlin, Diversion Planning Officer
Reviewed by: Laurie Lewis, Diversion Planning Coordinator
Approved by: Jim Bauld, Manager

12.5 Solid Waste/Resource Management System - Diversion Opportunities

- The following item was addressed at an earlier Committee of the Whole session and was now before Council for ratification.

MOVED by Councillor Karsten, seconded by Councillor Wile, that Regional Council authorize staff to:

1. Initiate the process to amend the By-Law S-600, setting a limit of six (6) bags/containers for residential bi-weekly collection, effective November 5, 2007;
2. Proceed with an amendment to By-Law S-600 to prohibit the mixing of source separated organics and recyclables with refuse at ICI properties; and
3. Proceed with amendment to By-Law S-600 to require signage on commercial organics and recycling bins.

MOTION PUT AND PASSED UNANIMOUSLY.

12.6 Joint Public Lands Plans

- The following item was addressed at an earlier Committee of the Whole session and was now before Council for ratification.

At the request of Councillor Johns, each item was voted on separately.

PART 1

MOVED by Councillor Sloane, seconded by Councillor Hendsbee, that Regional Council:

1. Adopt in principle the Joint Public Lands Plans respecting the Grand Parade/Province House and the Spring Garden/Queen Street areas and direct staff to develop and execute an updated Memorandum of Understanding between HRM and the Province for the implementation stages of the Plans.

MOTION PUT AND PASSED UNANIMOUSLY.

PART 2

MOVED by Councillor Sloane, seconded by Councillor Hendsbee, that Regional Council:

Appendix "A"

**HALIFAX REGIONAL MUNICIPALITY
BY-LAW NUMBER S-604**

**Respecting Amendments To By-Law No. S-600,
Solid Waste Resource Collection and Disposal By-Law**

BE IT ENACTED by the Council of the Halifax Regional Municipality, that By-Law S-600, the Halifax Regional Municipality Solid Waste Resource Collection and Disposal By-Law, be amended as follows:

1. (1) Clause (f) of Section 2.1 of said By-Law S-600 is repealed and the following substituted therefor:
 - (f) "commercial container" means any container used for the storage of ICI waste or any container used for the storage of organic materials or recyclable materials originating from industrial, commercial or institutional premises on properties located in the Municipality for collection by a hauler.
- (2) Said Section 2.1 is further amended by adding immediately after clause (c) the following clause:
 - (ca) "chute" includes a sloping or vertical channel, tube or slide, which is capable of conveying ICI waste from one level or floor to a lower level or floor.
- (3) Clause (h) of Section 2.1 of said By-Law S-600 is repealed and the following substituted therefor:
 - (h) "commercial enterprise" means an enterprise which is assessed a business occupancy tax or commercial tax rate by the Municipality or an apartment building having one civic address and more than six (6) units but does not include a business located in a residential dwelling such as, but not limited to, a home occupation or a professional office.
2. (1) Clauses (i) and (ii) of Section 6.1 (a) of said By-Law S-600 are repealed and the following substituted therefor:
 - (i) A maximum of six (6) regulation containers per mixed waste collection day per unit.
- (2) Clauses (i) and (ii) of Section 6.1 (f) are repealed and the following substituted therefor:

- (i) A maximum of six (6) regulation containers per mixed waste collection day per eligible commercial or institutional premises.
- 3. Section 7.2 (a) (i) of said By-Law S-600 is amended by deleting the period after “collection” in (C) and adding a semi-colon, and adding the following clause:
 - (D) bags must not be of a yellow, red or transparent blue color.
- 4. Said By-Law S-600 is further amended by deleting Section 12.2 and substituting the following clause therefor:
 - 12.2 The property owner of an industrial, commercial or institutional premises shall ensure that:
 - (a) adequate space is provided on the premises to accommodate containers for the collection of source-separated ICI waste, organic materials and recyclable materials generated at the premises;
 - (b) signage of sufficient size and number is to be posted to provide occupants with specific recycling and organics instructions for proper sorting of blue bag recyclables, fibre recyclables and organic materials. Signage for the sorting of blue bag recyclables, fibre recyclables, organic materials and ICI waste is to be located within 3 metres of the commercial container(s);
 - (c)
 - (i) the location of the commercial container(s) for blue bag recyclables, fibre recyclables and organic materials shall be within 3 metres of the container(s) for ICI waste; or
 - (ii) signage is posted adjacent to the container(s) for ICI waste directing persons to the location of the commercial containers on the premises for blue bag recyclables, fibre recyclables, and organic materials; and
 - (d) where industrial, commercial or institutional premises have a chute, signage is required to be posted on every floor where access to a chute is provided to instruct tenants to the location of commercial containers for blue bag recyclables, fibre recyclables and organic materials.
- 5. (1) Clause (a) of Section 13.1 is amended by adding immediately after subclause (vii) the following subclauses:
 - (viii) has displayed thereon the following message “GARBAGE” or “WASTE” or “REFUSE”, where ICI waste is to be deposited in the commercial container;

(ix) has displayed thereon the following message "RECYCLABLES" or "BLUE BAG RECYCLABLES", where blue bag recyclables are to be deposited in the commercial container;

(x) has displayed thereon the following message "PAPER and CARDBOARD" or "FIBRE", where fibre recyclables are to be deposited in the commercial container;

(xi) has displayed thereon the following message "ORGANICS" or "COMPOST", where organic materials are to be deposited in the commercial container;

(xii) where it is not possible to display the appropriate messages as outlined in this subsection (xi) of section 13.1(a) directly on the commercial container(s), then appropriate signage shall be posted within 3 metres of the commercial containers(s) with the message(s) indicating the materials(s) to be deposited therein, and

(xiii) any message required by this section shall use lettering that is not less than 10 centimetres in height and 4 centimetres in width.

(2) Clause (j) of Section 13.1 is deleted and substituted therefor the following clauses:

(j) (i) Subject to subsection j (ii), the owner of any industrial, commercial or institutional premises may make use of aerated or other organic or recyclable materials commercial container(s) specifically designed and approved by the Administrator for the storage and collection of source-separated organic or recyclable materials from industrial, commercial or institutional premises provided that the owner complies with the other applicable requirements of this Section 13.1.

(j) (ii) Any commercial container used pursuant to subsection 13.1 (j) (i) shall not be used for the storage of ICI waste.

(6) Said By-Law S-600 is further amended by adding immediately after subsection 15.1, the following subsection:

15.2 Persons who collect and transport ICI waste, recyclable materials and organic materials that have been placed for collection in accordance with Section 12.3 (b) at industrial, commercial or institutional premises or properties shall transport that ICI waste, recyclable materials and organic materials in a source-separated condition and deliver the same material in a source-separated condition to the appropriate receiving facility in accordance with the Municipality's waste resource management system.

