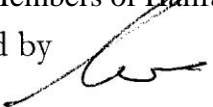


**Item No. 10.1.7 (i)**  
**Halifax Regional Council**  
**February 8, 2011**

**TO:** Mayor Kelly and Members of Halifax Regional Council

Original Signed by 

**SUBMITTED BY:**

Wayne Anstey, Acting Chief Administrative Officer

Original Signed by 

Mike Labrecque, Deputy Chief Administrative Officer

**DATE:** January 17, 2011

**SUBJECT:** By-Law S-607 to Amend Solid Waste By-Law S-600

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**SUPPLEMENTARY REPORT**

**ORIGIN**

At the December 7, 2010, Regional Council meeting, staff was authorized to initiate the process to amend Solid Waste By-Law S-600 to:

1. reduce the garbage bag limit from 6 to 4 bags/containers for residential collection services;
2. specify the use of clear bags for garbage for the residential and ICI sector(s); and,
3. specify commercial multi-unit property owners provide occupants with a kitchen counter top mini-bin.

**RECOMMENDATION**

It is recommended that Halifax Regional Council give Notice of Motion and First Reading to By-Law S-607, as contained in Appendix "A", and set a date for a Public Hearing.

## **BACKGROUND**

In February 2007, Council authorized staff to initiate the process to amend By-Law S-600 to support diversion in three key areas: to reduce the bag limit from 10 to 6; to prohibit the ICI mixing of blue bag and paper in the same bin and/or collection vehicle with garbage; and a requirement to designate stream signage onto commercial containers. Amendments to the By-Law were approved and became effective November 5, 2007. At that time, staff committed to conducting a follow up content analysis in two years to assess the impact of these changes and provide recommendations on further changes to increase diversion from land fill, the most costly component of the waste management program, and also increase recycling which generates revenue and/or reuses materials that otherwise would end up in land fill.

## **DISCUSSION**

The following is an explanation of the proposed Amendments as per Appendix “A” Items 1 through 4:

### **(1) Section 2.1, DEFINITIONS;**

A definition of a bag for privacy items has been added. A privacy bag is defined as a solid colour bag. This would be used to contain personal hygiene items or other items, so long as these materials are not intended for the blue bag, paper, recycling, or organics waste diversion programs.

A “mini-bin” definition is amended to acknowledge that this is a container supplied for the collection of organic materials prior to depositing into a regulation container, applicable to both properties provided municipal services as well as to include the ICI sector.

### **(2) Section 6.1, COLLECTIBLE MATERIAL – PREPARATION AND RESTRICTIONS**

**Bag Limit** – This section has been amended to change the residential refuse bag/container limit from six (6) to four (4) for single family dwellings. For the multi-unit residential dwellings (up to 6 units) eligible for municipal collection services, the bag limit is also being reduced to four (4) per unit, a change from the previous five (5) bags per unit limit.

**Privacy Bag Limit & Options** – This section has been amended to provide the following two options for privacy bag:

**Option #1** – The inclusion of one (1) privacy bag (standard size) within the four (4) bag limit.

OR

**Option #2** – The inclusion of one (1) grocery store bag or other retail bag of similar smaller size in each of the four (4) standard size clear bags for mixed waste. This option recognizes that residents use these bags as liners for small bins in the home and collection of this waste will be accommodated by allowing one of these bags in each of the standard size clear bags. Staff had intended for the By-Law amendments to offer residents flexibility and, therefore, there are two options for privacy bags.

**Residential Home Renovation Materials** – The By-Law acknowledges that those eligible for curbside services may place residential home renovation materials for collection. This section has been amended to reduce the limit of five (5) containers/bags or bundles of renovation materials to four (4) permitted in the container/bag or bundle limit. This limit of four (4) containers/bags or bundles is in place of the four (4) regular waste containers or bags. Residents may place a combination of the two types of materials out for collection but the total number cannot exceed four (4) containers/bags or bundles.

(3) **Section 7.2 REGULATION CONTAINERS FOR MUNICIPAL COLLECTION**

This section sets out the specifications of bags and containers acceptable for municipal collection.

**Clear Plastic Bag** – The By-Law has been amended to identify the specifications of a bag to contain mixed waste as being a clear transparent bag and that these bags must be non-coloured clear transparent. The privacy bag (one solid colour bag) cannot be red, yellow or transparent blue bags. This is not a change from current practice, that is to say, these are not permitted for mixed waste collection. Colour coding of bags is used as a means to identify a material stream. For example, red bags are used to contain and collect anatomical waste and yellow bags are used for biomedical waste, all of which are unacceptable for mixed waste processing at Otter Lake, and will not be extended for use as a privacy bag. This is a workplace health and safety issue.

**Containers** – Secure containers, which may be a bag or a metal or plastic container (garbage can), are required to prevent litter and debris from scattering due to bags being damaged by birds or other animals. This is not a change to the By-Law. It should be noted that no loose mixed waste is to be placed in a container for collection. Loose materials placed in a container can become scattered by wind and contributes to litter, which is why bags are required. Bags inside containers are required to also allow for the inspection of the materials to ensure they are properly separated and do not include recyclables or organics. Home renovation type materials, as well as bulky items, are not required to be bagged, as these are generally too large to be accommodated in a bag and easily identifiable. The use of a bag will provide the hauler the ability to view recyclable or compostable materials in clear transparent bags for garbage prior to emptying into the back of the collection vehicle.

The By-Law container size has also been amended to accommodate containers up to 80 centimetres in height from the previous 76 centimetres in height. This acknowledges that retailers are selling new containers on wheels (no larger than 120 litres).

It should be noted that collectors are unable to pick up or reach inside to the bottom of some of the newer oversized tote style containers {similar to the large green bins} due to OH&S risks. Therefore, they are not accommodated in the By-Law. While retailers continue to stock these oversized unacceptable containers, staff has advised retailers to post signage to residents who may be unaware that these are unacceptable for residential use, and are intended for industrial/commercial use only.

(4) Section 12 INDUSTRIAL, COMMERCIAL, INSTITUTIONAL OR CONSTRUCTION WASTE

**Tenant Mini-Bin** – Section 12.2 of the By-Law has been amended to include the requirement for supply of mini-bins to ICI tenants by property owners. As noted in the previous staff report, the provision of mini-bins has proven to enhance diversion.

**Clear Bags** – The By-Law – Section 12.2 of the By-Law has been amended to identify that mixed waste generated from the ICI sector is also to be contained in clear bags. Clear bags provide for identification of tenants not properly separating and are a tool for compliance by both the property owner and HRM.

**Occupant** – The By-Law Section 12.4 has been amended to include both property owner as well as tenants making them both responsible for provision of bins for source separation. In many instances, the requirement for bins provision is the responsibility of the tenants in the lease agreement with the property owner and therefore the By-Law is updated to reflect that tenants may also be held accountable.

**Public Education & Program Implementation**

There will be a requirement for public communication, education and a phased in program implementation plan to transition the residential curbside bag limit changes as approved, and the switch from dark coloured garbage bags to the use of clear bags.

With final Council approval projected to occur in March, staff is suggesting that there be a six month period over which a public education campaign will occur prior to the requirement for compliance – projected for implementation effective November 1, 2011.

Staff propose a six month period consisting of the following three phases for implementation:

1. Education Phase

A public education campaign and communication program will occur over the entire 6 month period and carry on to include the following elements:

- The HRM Naturally Green Newsletter (Delivery to all 160,000 households)
- Messages on local television stations & cable
- Messages in local newspaper & radio stations
- HRM Website & highlight on GNGN Facebook site
- Information via HRM Corporate Call Centre 490-4000
- Councillor Newsletters
- Information and home visits. This allows for residents to call and request assistance in meeting the bag limit. An education officer will visit the resident to verify recycling and composting activities and to provide suggestions on waste reduction activities.
- Workshop meetings with haulers
- Letters to retailers re: transition to stock clear bag for retail shelving
- Letters to Property Management Groups

2. Notification Phase

During this phase, HRM will initiate targeted communication for the residential and ICI sector as follows:

- Curbside monitoring – This occurs where residential haulers will identify to SWR staff locations of properties in excess of four bags and where clear bags are not being used for follow up. Letters with an accompanying information package will be supplied to the resident that will include a What Goes Where Guide, and sample clear and blue bag packs.
- ICI Monitoring – Inspections of ICI loads at Otter Lake landfill for clear bag compliance as well as inspections at commercial properties will occur. Follow up with property management firms, building owners and tenants will occur and they will be provided with information packages.
- Mail Outs – Notices to advise of changes that affect the ICI sector can be distributed via HRM internal customer tipping fee billings which occur on the first of each month. As well, there are targeted sector notices for mailings to apartment property management firms, haulers and business sector associations.

3. Compliance Phase – Effective November 1, 2011

- Bags/containers will be left behind with education stickers to inform residents of materials unacceptable for collection.
- Warnings and rejections of materials upon inspection by compliance officers at commercial property sites.
- Warnings and rejections of ICI materials upon inspection at Otter Lake landfill.

### **BUDGET IMPLICATIONS**

In order to prolong the useful life of a cell from three years to four years, approximately 22,000 tonnes of waste must be diverted from Otter Lake each year over and above the current levels. As a result of this increased diversion, HRM will require one less landfill cell over a 12 year span. In today's dollars, a landfill cell costs an estimated \$20 million. This figure is subject to change as Solid Waste Resources is currently in contract negotiations with facility operators on a number of items. The financial analysis of this initiative points to a breakeven position over the near term, however, revenue and cost savings have been conservatively estimated in this figure, so there is an opportunity to see a net gain once the program is fully implemented. Other considerations requiring Council approval will also affect the forecasted figures as will market prices for recyclables and funding levels available from the Resource Recovery Fund Board. The above items will affect the potential revenue as well as cost savings and depending on the outcome may decrease the estimated yearly savings of the initiative. Any potential savings that may be realized will be done so through a reduction to reserve contributions (Q123 - Waste Resources Capital Reserve) from the operating budget. Refer to Appendix B for additional information.

### **FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN**

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

### **COMMUNITY ENGAGEMENT**

The Solid Waste Strategy is a citizen led initiative with the motivation for staff moving forward to support enhancing diversion based on survey results indicating over 90% of residents are satisfied or very satisfied with HRM's waste strategy.

### **ALTERNATIVES**

One alternative that is included in the report is for the privacy bag to be either a standard size coloured bag included in the four (4) bag limit or to allow for a small grocery sized bag, coloured or opaque, nested in each of the four clear bags. This option should be discussed by Council. This option is intended to provide flexibility in the program, however, there is a risk of it negatively impacting the implementation through confusion and/or abuse of the use of nested bags. Based on conversations with other municipalities that have implemented clear bag programs, the consensus is that the one standard sized privacy bag is the more manageable option of the two.

**ATTACHMENTS**

Appendix "A" Halifax Regional Municipality proposed By-Law S-607  
Appendix "B" Cost Analysis

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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.

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Financial Approval by: \_\_\_\_\_  
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Ken Reashor, P.Eng., Director, TPW

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## **Appendix “A”**

### **HALIFAX REGIONAL MUNICIPALITY BY-LAW NUMBER S-607**

#### **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 (w) of Section 2.1 of said By-Law S-600 is repealed and the following substituted therefor:
  - (w) “mini-bin” means a small container used for the collection of organic materials prior to deposit in an organic materials regulation container or a common area container or a commercial container for organics collection.
- (2) Section 2.1 of said By-Law S-600 is amended by adding immediately after clause (ffb) the following clause:
  - (ffc) “privacy bag” means a solid color bag.
2. (1) Clause (i) of Section 6.1 (a) of said By-Law S-600 is repealed and the following substituted therefor:
  - (i) A maximum of four (4) regulation containers per mixed waste collection day per unit, including either one (1) large privacy bag in the limit of four (4) mixed waste regulation containers or four (4) small privacy bags, one (1) inside each of the limit of four (4) mixed waste regulation containers.
- (2) Section 6.1 (a) (i) is further amended by adding immediately after clause (i) the following:
  - (ii) a large privacy bag shall be no larger than 88 centimetres by 100 centimetres and a small privacy bag shall be no larger than 51 centimetres by 56 centimetres.
- (3) Subsection 6.1 (b) of said By-Law S-600 is amended by deleting the words “five (5)” and substituting therefor the words “four (4)” in the first sentence.
- (4) Subsection 6.1 (b) of said By-Law S-600 is further amended by deleting the words “six (6)” and substituting therefor the words “four (4)” in the second sentence.



- (5) Subsection 6.1 (d) of said By-Law S-600 is amended by deleting the words “five (5)” and substituting the words “four (4)” and deleting the words “thirty (30)” and substituting the words “twenty-four (24)” in the first sentence.
- (6) Clause (i) of Section 6.1 (f) is repealed and the following substituted therefor:
  - (i) A maximum of four (4) regulation containers per mixed waste collection day per eligible commercial or institutional premises, with a maximum of one (1) large privacy bag included in the limit of four (4) mixed waste regulation containers or four (4) small privacy bags, one inside each of the limit of four (4) mixed waste regulation containers.
- (7) Section 6.1 (f) (i) is further amended by adding immediately after clause (i) the following:
  - (ii) a large privacy bag shall be no larger than 88 centimetres by 100 centimetres and a small privacy bag shall be no larger than 51 centimetres by 56 centimetres.
- 3. (1) Clauses (i) of Section 7.2 (a) of said By-Law S-600 is repealed and the following substituted therefor:
  - (i) clear transparent plastic bag specifications:
- (2) Subclause (i) (D) of Section 7.2 (a) of said By-Law S-600 is repealed and the following substituted therefor:
  - (D) bags must be non-coloured clear transparent bags;
- (3) Clause 7.2 (a) (i) of said By-Law S-600 is further amended by adding immediately after subclause (D) the following:
  - (E) a privacy bag must not be of a yellow, red or transparent blue color.
- (4) Clause (ii) (B) of Section 7.2 (a) of said By-Law S-600 is amended by deleting the words “76 centimetres” and substituting therefor the words “80 centimetres”;
- (5) Clause 7.2 (a) (ii) of said By-Law S-600 is further amended by adding immediately after clause (E), the following:
  - (F) loose mixed waste is not eligible for collection.
- 4. (1) Section 12.2 of said By-Law S-600 is amended by adding immediately after subsection (d) the following:
  - (e) tenants are provided a mini-bin

(2) Section 12.3 of said By-Law S-600 is amended by adding immediately after subsection (b) the following:

(c) place ICI waste in clear transparent plastic bags.

(3) Section 12.4 of said By-Law S-600 is amended by adding the words “and/or occupant” following the words “property owner”.

<b>Appendix "B" Financial impacts to Facilities by passing proposed changes to By-Law S-607</b>	
	<b>Diversion required to increase cell life 1 year</b>
<b>OPERATING</b>	
Processing Costs	
Materials Recycling Facility (R330)	\$560,000
Burnside Compost (R324)	\$284,000
Ragged Lake Compost (R325)	\$868,000
Total Additional Costs ("+" = Additional Cost)	<u>\$1,712,000</u>
Revenue Adjustments	
MRF Sales on Recycled Materials (R322)	-\$146,000
Organic Tip Fee (R324 & R325)	-\$225,000
Otter Lake Tip Fee Decrease on Diversion (R321)	\$1,481,000
Total Revenue Adjustments ("+" = Additional Cost)	<u>\$1,110,000</u>
Internal Administration - New Education Officer	\$63,000
Financial Impact ("+" = Additional Cost)	<u>\$2,885,000</u>
<b>Additional Areas of Opportunity</b>	
RRFB Diversion Credits (Dependent on Funding Levels) (R322)	-\$345,000
Otter Lake Increase of CPI (2.4%) on ICI Tip Fees (R321)	-\$217,000
Otter Lake Staff Adjustments (Currently being negotiated) (R329)	-\$400,000
MIRROR Tonnage Band (Currently being negotiated) (R329)	-\$258,000
Total ("+" = Additional Cost)	<u>-\$1,220,000</u>
<b>Yearly Financial Impact on Operating ("+" = Additional Cost)</b>	<b><u>\$1,665,000</u></b>
<b>CAPITAL</b>	
Capital Deferral for New Cell Construction (Reserve Q123)	
Estimated Cell Construction and Closure Costs (Today's Value)	\$20,000,000
Years of Achieved Diversion Target to Defer A Cell Construction	12.00
<b>Capital Impact of Program</b>	<b>-\$1,666,667</b>
<b>Financial Cost/Benefit for HRM (Yearly Assuming No Inflation)</b>	
<b>("+" = Additional Cost) (Effect on operating transfers to Q123)</b>	<b>-\$1,667</b>
*Figures are based on 2010/11 estimates and do not include inflation.	