

**Item No. 10.3.1**  
**Halifax Regional Council**  
**May 24, 2011**

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

Original Signed

**SUBMITTED BY:**

Councillor Peter Lund, Chair, Environment and Sustainability Standing  
Committee

**DATE:** May 6, 2011

**SUBJECT:** Blue Bag Additional Plastics Stream

---

**ORIGIN**

The Environment and Sustainability Standing Committee May 5, 2011 meeting.

**RECOMMENDATION**

It is recommended that Halifax Regional Council authorize the inclusion of additional plastics (#3, #5, & #7) and include hard plastics of #6, other than foam type plastics, in the blue bag for municipal collection and processing.

## **BACKGROUND**

The Environment and Sustainability Standing Committee considered the inclusion of additional plastics in the blue bag at its May 5, 2011 meeting.

Additional information can be reviewed within the attached staff report dated April 26, 2011.

## **DISCUSSION**

During the discussion, staff clarified that the September 12, 2011 start date is to allow for public education and notification. Members urged staff to be proactive in its communication with Miller Waste respecting overseas marketed materials.

## **BUDGET IMPLICATIONS**

As identified in the April 26, 2011 staff report.

## **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 Environment and Sustainability Standing Committee meetings are open to members of the public.

## **ALTERNATIVES**

No alternatives were provided by the Environment and Sustainability Standing Committee.

## **ATTACHMENTS**

Staff Report dated April 26, 2011.

---

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: Krista Tidgwell, Legislative Assistant, Municipal Clerks Office, 490-6519

---



P.O. Box 1749  
Halifax, Nova Scotia  
B3J 3A5 Canada

9.1

**Environment & Sustainability Standing Committee**  
**May 5, 2011**

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

**SUBMITTED BY:** Original Signed  
Ken Reashor, Director, Transportation & Public Works

**DATE:** April 26, 2011

**SUBJECT:** Blue Bag Additional Plastics Stream

**RECOMMENDATION REPORT**

**ORIGIN**

Staff

**RECOMMENDATION**

It is recommended that the Environment & Sustainability Standing Committee recommend to Council that they authorize the inclusion of additional plastics (#3, #5, & #7) and include hard plastics of #6 other than foam type plastics in the blue bag for municipal collection and processing.

**BACKGROUND**

HRM's Blue Bag Program currently accepts plastics #1 PETE plastic bottles and containers, #2 HDPE plastic bottles and containers, film plastics (bags which are #4 LDPE and #2 HDPE) along with glass jars, steel/aluminum cans, foil plates, milk containers and all deposit bearing beverage containers, for processing at the HRM owned Materials Recovery Facility (MRF). The facility, located at 20 Horseshoe Lake Drive, Bayers Lake Industrial Park, is contracted for recycling plant operations, inclusive of material processing and marketing functions.

## **DISCUSSION**

In the most recent award of contract services at the MRF, effective April 1, 2009, Miller Waste Systems was the successful proponent, as approved by Council, for the next 5 years of operations. In the contract for services there is a provision for HRM to exercise its option for the inclusion of additional plastics in the blue bag program; the following additional types are identified:

<b>Additional Plastic Types</b>	<b>Examples of Containers</b>
PVC #3 (polyvinyl chloride)	Non food containers such as dish detergent bottles
PP #5 (polypropylene)	Food grade containers such as yogurt and margarine tubs
PS #6 (polystyrene)	Coffee lids, plastic cutlery, food packaging, clamshell containers (no foam)
Other #7	Beverage and food bottles and containers

The quantity of recyclables processed at the HRM recycling plant by 2009/10 year end was 22,733 tonnes, of which approximately 80% by weight is the fibre stream and 20% blue bag materials. The plant is equipped to manage a capacity of up to 28,000 tonnes annually. HRM staff have reviewed data and studies respecting plastics for capture and project the addition of these plastics have the potential to add up to 500 tonnes annually to the recyclables received at the plant.

In accordance with the contract, the addition of these plastics is contingent upon the contractor having completed blue bag capital line infrastructure upgrades. Upgrades to the blue bag line configuration were completed at the end of December 2009. This has increased sorting efficiency and reduced residue so as to also permit the inclusion of additional stations on the line for capture of the mixed plastics stream.

As a result of the completion of capital works upgrading the processing line, and the consistent desire of HRM residents to add remaining plastics to the blue bag recycling stream, discussions with Miller Waste were held to identify and secure a viable market for additional mixed plastics. Markets have been identified both overseas and domestically and the following is an overview of these market provisions and HRM's due diligence expectations for securing markets.

### **Overseas Market & Due Diligence**

The majority of all mixed plastics collected by other Nova Scotia municipalities are baled for shipment to overseas processing plants. Other Nova Scotia municipal units typically collect all plastic types 1 – 7 except for Styrofoam in the curbside collection program. Miller Waste has also identified that overseas markets exist for all plastic types, except for Styrofoam.

As part of the contract and in conducting best practices, HRM requires the contractor to undertake reasonable due diligence to ensure that materials are being recycled in a responsible manner. HRM requires the documentation of where materials are going, who will be recycling the material, and that a Quality Management System or similar type program exists. This documentation and reporting will assure HRM that all materials are being processed responsibly. For overseas marketed materials, HRM requires Miller Waste to provide this information. It is only under these strict due diligence conditions, as fundamental principles of the HRM waste program developed by residents, that HRM would consider adding the additional plastics into its blue bag plastics stream.

Miller has obtained disclosure that the receiving facility is licensed and permitted by the relevant local regulatory authorities, conforms to international labour laws and standards, does not employ child or forced labour and the manufactured product has been identified. Miller has a relationship with this overseas market where the mixed plastics are processed into pellets. This is the raw material used for the manufacture of drain pipe and flower pot products and more recently included as recycled content material in plastic packaging.

### **Domestic Market**

There is recent development in the domestic market for mixed plastics. With the support of Stewardship Ontario, established by the Province of Ontario and funded by industry, there has been funding to support implementation of new technology to enable the more efficient processing of mixed plastic materials. This is an alternative to shipments overseas. Miller Waste Systems has been monitoring the progress of these developments with its MRF operations in Ontario where it operates plants for the Region of York and other municipalities in Ontario.

Miller Waste officials have visited this processing plant. The plant has optical sorting, grinds the plastics and extrudes to sell to the auto industry and packaging manufacturers. HRM staff have met with the Canadian plant owner during his visit to view the HRM MRF and have discussed his process and markets. Miller and HRM are familiar and have had past dealings with the company as it has been a market for other materials and has remained stable over a number of years.

While this processor is currently receiving all mixed plastic types from Ontario curbside programs, there is limited marketing opportunities with #3 PVC plastic.

The overseas market can sustain all the mixed as noted above, including #3 PVC plastic at this time.

The domestic processor has indicated to Miller Waste they will be able to accommodate HRM mixed plastic materials commencing in July 2011. HRM will continue to have Miller market film plastics, HDPE#2 plastic bottles and plastic beverage containers separate from the other mixed plastics.

### **Start Date & Communications**

HRM is required to provide Miller Waste with 3 months written notification for the commencement of service changes implementation. This will enable the operator to provide for the hiring of 2 additional staff on the process line and to finalize market arrangements and transportation.

This 3 month notification period will also allow HRM to formulate public communication pieces to message this service enhancement of additional recyclable plastics. It is anticipated that HRM could commence addition of plastics as early as the week of September 12, 2011, given approval by Committee and Council.

### **BUDGET IMPLICATIONS**

The cost for processing additional plastics is projected to be \$89,000 per year (2 additional sorters are required). As with all commodities the price for this material will fluctuate. Based on current market prices, revenues net of transportation costs are expected to be approximately \$30,000 per year. This will result in a projected net cost of \$59,000 per year. The 2011/12 net cost for this initiative will be approximately \$30,000 due to the timing of implementation which is expected to be mid September 2011. During the budget process \$89,000 was included in Solid Waste (R330) for this proposal. Revenues were not budgeted. As a result a potential budget surplus of \$59,000 may be realized.

The addition of these plastics to the collection program does not impact HRM collection contracts. The municipal collection contracts are based on a monthly price for each service and are adjusted for new units added in each collection area (not tonnage or volume based). As the program matures and diversion to the recycling stream increases there may be an impact on collection operations as a result of capacity in the trucks. HRM recycling trucks do not compact their loads. HRM staff are aware of this and will work with the haulers to monitor the impact of the addition of the new plastics to the blue bag stream. Issues related to the inclusion of the additional plastics will be addressed in future RFP tenders for the collection contracts.

### **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**

Enhancing diversion away from landfill supports the citizens based solid waste resource management strategy. HRM staff and Councillors have received positive feedback from the

public to advance the addition of mixed plastics to the blue bag stream. This feedback includes emails, phone calls and letters to support moving forward with this report.

**ALTERNATIVES**

1. Committee can choose to not approve moving forward with including additional plastics in the blue bag. This will create an \$89,000 surplus in the Solid Waste budget.
2. Implement this program during the next round of collection contracts in 2012/13. This will ensure that the potential increase in collection costs for this service are known and can be budgeted for in addition to the processing costs as outlined above.

**ATTACHMENTS**

None

---

A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/cc.html> then choose the appropriate Community Council and 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

Original Signed

Report Approved by: Gord Helm, Manager, Solid Waste Resources, 490-6606

Original Signed

Financial Approval by: Bruce Fisher, MPA, CMA, A/Director of Finance/CFO, 490-6308

---