



## STAFF REPORT ACTION REQUIRED

### Expansion of Acceptable Plastic Film Materials to the Blue Bin Recycling Program

<b>Date:</b>	April 1, 2015
<b>To:</b>	Public Works and Infrastructure Committee
<b>From:</b>	General Manager, Solid Waste Management Services
<b>Wards:</b>	All
<b>Reference Number:</b>	P:\2015\Cluster B\SWM\April\004PW (AFS#20852)

#### SUMMARY

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Beginning June 1, 2015 the list of plastic film materials accepted in the Blue Bin Recycling Program will be expanded. With the addition of this material, it is anticipated that approximately 3,500 additional tonnes will be recycled and diverted from landfill. This change will increase the amount of Blue Bin diversion by 2% and overall residential diversion by 0.35%.

Plastic shopping bags were added to the Blue Bin program in 2008. The change will expand the range of plastic film materials. Some examples include, but are not limited to, milk bags, dry cleaning bags, newspaper/flyer bags, in-store produce bags and frozen vegetable bags. A comprehensive communications campaign will be introduced to educate and inform the public of the new list of acceptable plastic film materials.

The additional revenues from the sale of the film, reduced landfill costs and increased stewardship funding will offset the additional operating costs, thus resulting in an annual net savings of approximately \$8,527 per year and \$4,974 in 2015 based on seven months of savings.

#### RECOMMENDATIONS

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**The General Manager, Solid Waste Management Services, recommends that:**

1. The Public Works and Infrastructure Committee receive this report for information.

## Financial Impact

It is anticipated that there will be a savings of approximately \$8,527 per year to add the plastic film materials to the Blue Bin Recycling Program. Revenues from the sale of the added plastic film materials, avoided landfill disposal costs and increase in Blue Box steward funding (due to the capture of these new materials), are expected to offset any potential increase in costs (including collection, transfer, processing, and promotion and education).

The following Table summarizes the estimated savings of this initiative:

<b>Estimated Net Expenditures</b>	<b>Total \$</b>
Processing Costs	\$402,500
Transfer Haulage	\$14,744
Cost of providing additional recycling bins/upsized/delivery	\$26,589
Reduced Landfill Costs	(\$229,600)
Sales of Recyclables	(\$35,000)
Stewardship Funding (Only for Residential Portion of Processing and Haulage)	(\$187,760)
<b>Net Expenditure (Revenue/Savings) per year</b>	<b>(\$8,527)</b>
<b>Net Expenditure (Revenue/Savings) for 7 months in 2015</b>	<b>(\$4,974)</b>

As a result, net operating impacts arising from the addition of these materials to the Blue Bin Recycling Program will be accommodated within the Approved 2015 Solid Waste Management Services Operating Budget.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

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## DECISION HISTORY

At its meeting of July 25, 26, and 27, 2006, City Council adopted Report No. 5, Clause No. 10, Works Committee staff report dated June 20, 2006 titled "Addition of New Materials to the Blue Box Program". This report recommended that plastic film be added to the Blue Box Program.

The City Council Decision Document can be viewed at:

<http://www.toronto.ca/legdocs/2006/agendas/council/cc060725/wks5rpt/cl010.pdf>

At its meeting of June 19, 20 and 22, 2007, City Council adopted EX9.1 titled “Proposed Initiatives and Financing Model to Get to 70% Solid Waste Diversion by 2010” with the following Motion #25, which states “Prior to adding new plastics to the recycling program, that staff be requested to submit a report to the Public Works and Infrastructure Committee on costs, diversion efficiency, material contamination, and material end use for each proposed plastic.”

The City Council Decision Document can be viewed at:

<http://www.toronto.ca/legdocs/mmis/2007/cc/decisions/2007-06-19-cc10-dd.pdf>

## **ISSUE BACKGROUND**

Increases to the City’s diversion rates are attributed to the introduction and implementation of various diversion programs and services. Increasing the amount of materials accepted in the Blue Bin Recycling Program will help the City to achieve its waste diversion target of 55% for 2015.

In 2014, the City marketed 2,055 tonnes of film plastic material from the Blue Bin Recycling Program. The marketed plastic film material was mostly composed of plastic film retail shopping bags and clear plastic bags used by residential and non-residential customers for setting out excess recycling.

Markets for recyclables are continually developing and maturing. Solid Waste Management Services staff has been assessing the feasibility of expanding the list of acceptable plastic film materials since 2008, when the City added film plastic retail shopping bags to the Blue Bin Recycling Program. Solid Waste Management Services staff has been further investigating, establishing and working to solidify recycling markets for additional plastic film materials since securing state-of-the-art recyclables processing capacity at the Canada Fibres Ltd. material recovery facility. The facility is equipped with technology that creates an opportunity to effectively recover a variety of plastic film materials. A stable market for the expanded list of plastic film materials has now been established resulting in the opportunity to add new materials to the Blue Bin Recycling Program.

The end use of plastic film materials can be used to manufacture various plastic products including plastic bags. This grade of plastic can also be used to produce plastic wood products.

## **COMMENTS**

### **Waste Diversion Impact**

The expanded list of plastic film materials that will be added to the Blue Bin Recycling Program include:

- milk bags;
- select types of bread bags;
- sandwich bags (e.g. re-sealable type bags);
- bulk food bags;
- dry cleaning bags;
- newspaper/flyer bags;
- diaper and feminine hygiene outer bags;
- fresh or frozen produce bags;
- transparent recycling bags; and
- over-wrap from toilet paper, napkins, paper towels, water and soft drink packaging.

Biodegradable plastic film materials, black plastic film, and laminated plastic film (e.g. stand-up re-sealable bags) will continue to not be accepted in the Program.

There are approximately 16,599 tonnes of plastic film material available per year for diversion in the residential garbage and recycling streams. Single-family and multi-family waste composition audits show there to be approximately 7,542 and 9,057 available tonnes per year respectively. Using single-family and multi-family recovery rates for plastic, it is anticipated that approximately 3,500 tonnes per year of plastic film material will be diverted once added to the Blue Bin Recycling Program, and once residents become familiar with recycling these products. This additional diversion of material represents an estimated 0.35 % increase in waste diversion.

### **Collections Impact**

Single-family residents were informed of the option of upsizing or ordering an additional Blue Bin during the introduction of mixed rigid plastic materials to the Blue Bin Recycling Program in June 2013. It is estimated that approximately 850 orders for additional bins were requested during this time and that there were 2,500 requests for Blue Bin upsizing. Similar quantities of requests are anticipated during the addition of the new plastic film materials.

There is no anticipated impact to the cost of collection service delivery.

## **Processing Capability**

The capability to sort and capture the expanded plastic film materials is necessary in order to effectively market the product. The Canada Fibres Ltd. material recovery facility has demonstrated the ability to capture the expanded list of plastic film materials. The contract with Canada Fibres Ltd. has provisions for the acceptance of the expanded plastic film materials. This provision has already been exercised and absorbed in the annual operating budget for processing.

## **Public Education and Communication Campaign**

Public Education is an integral component of any waste diversion program. Solid Waste Management Services will be undertaking a comprehensive promotion and education campaign in order to inform the public of the expanded list of plastic film materials that will be accepted in the Blue Bin Recycling Program. The campaign will include, but not be limited to:

- Updates to the online search tool Waste Wizard;
- The addition of the list of acceptable plastic film materials to the Waste Collection and Recycling calendars and the website; and
- Tweets that will be sent out from the City's Strategic Communications and 311 twitter handles.

A communications plan will be developed and detail the full range of tactics to be used in order to successfully introduce the expanded list of plastic film materials.

## **CONTACT**

Derek Angove, Director, Processing & Resource Management, Solid Waste Management Services, Telephone 416-392-2447, Fax: 416-392-3722, E-mail: [DAngove@toronto.ca](mailto:DAngove@toronto.ca)

Annette Synowiec, Acting Director, Policy, Planning & Support, Solid Waste Management Services, Telephone: 416-392-8506, Fax: 416-392-4754, E-mail: [asynowi@toronto.ca](mailto:asynowi@toronto.ca)

## **SIGNATURE**

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E. (Beth) Goodger  
General Manager  
Solid Waste Management Services