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# 2005 WASTE DIVERSION SUCCESSES

**The Solid Waste Management Committee recommends the adoption of the recommendation contained in the following report, February 23, 2006, from the Commissioner of Transportation and Works:**

## 1. RECOMMENDATION

It is recommended that this report be received for information.

## 2. PURPOSE

The purpose of this report is to update Committee and Regional Council regarding the success of diverting materials from landfill in 2005.

## 3. BACKGROUND

Regional Council approved the implementation of a three-stream waste management system through the adoption of Clause 5 of Report No. 4 of the Transportation and Works Committee on April 12, 2001. This system separates household organic waste, Blue Box recyclable material and residual waste.

The objective of the three-stream system is to divert more waste from landfills. It was launched in September 2004, through the collection of source separated organics (SSO) by the Town of Markham within a pilot area. In July 2005, the SSO program was expanded to include the entire Town of Markham.

The three-stream system included the addition of new types of recyclable materials to the Blue Box program. The new materials were added in the pilot area within the Town of Markham and were expanded Region-wide on July 4, 2005 to correspond with the opening of the Region's new Waste Management Centre in the Town of East Gwillimbury.

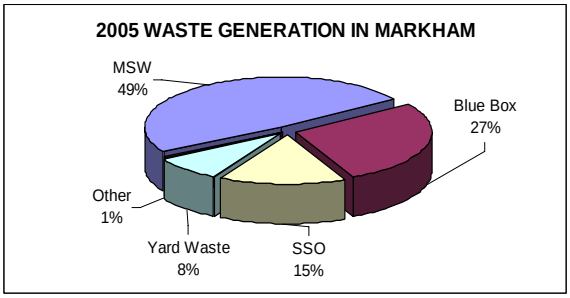
On October 21, 2004, Regional Council adopted Clause 2 of Report No. 10 of the Transportation and Works Committee recommending that the local municipalities be advised that yard waste in plastic bags will no longer be permitted. This ban took effect on January 1, 2005.

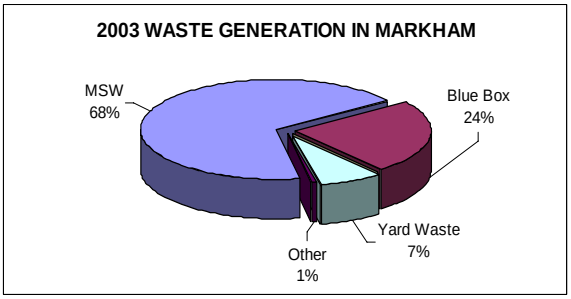
## 4. ANALYSIS

Regional and local municipal programs and the associated successes in 2005 are outlined below.

### 4.1 Source Separated Organics (SSO)

A major component in maximizing diversion from landfill is to remove household organics from the residual waste stream. In September 2004, the Region and the Town of Markham began a pilot project to collect source separated organic (SSO) waste and in July 2005 the project was expanded Town-wide.




Since the inception of the SSO program, the results have been very positive. The amount of SSO collected has remained in line with the forecasts, which infers that participation in the program is regular and stable. In 2005, approximately 12,000 tonnes of SSO was diverted from landfill.

### 4.2 Blue Box Recyclable Materials

Another key component in diverting material from landfill is to maximize the quantity of Blue Box recyclable materials collected. Regional Council's decision to add new recyclable materials to the Blue Box program and the switch to single-stream collection was very positively received by the public. In July 2005, all nine local municipalities added the new material types to their collection and made the switch to single-stream.

The opening of the Region's new Waste Management Centre on July 4, 2005, combined with an intensive promotion and education program, made an immediate impact on Blue Box diversion. The single-stream material recovery facility (MRF) is capable of a higher processing rate and can segregate more materials than the MRFs used by the Region in the past. By adding more materials to the Blue Box program, the collection rate of recyclable materials increased. On a monthly basis, since the opening of the facility in July 2005, the amount collected increased by an average of 16% as compared to the last half of 2004. This 16% is comprised of 3% population growth and 13% blue box material growth. In 2005, over 65,000 tonnes of Blue Box recyclable material was collected, which is a 13% increase over 2004.

These blue box material growth values include the annual increase of 4% growth in blue box recyclable materials collected. This means that by changing the collection method and adding new materials, 9% more blue box recyclable material was collected in 2005. This 9% is an increase in total blue box collection, not 9% for new materials. This infers that by simplifying the blue box collection system for the public, the participation rate increased resulting in an increase in the total amount of blue box materials collected.

### 4.3 Leaf and Yard Waste

Leaf and yard waste is another key program designed to increase diversion. To improve this program further, the Region implemented a ban on the use of plastic bags for the collection of leaf and yard waste. The ban was implemented in conjunction with an intensive promotion and education campaign that encouraged the use of kraft paper bags and open containers for leaf and yard waste. In addition to the regular curbside collection, the Region made several drop-off locations available to the public during the autumn months. This included two temporary drop-off locations, respectively located in the Town of East Gwillimbury and the Township of King.

Despite the unseasonably hot and dry summer, the amount of leaf and yard waste collected resulted in over 27,500 tonnes diverted from landfill. This is 28% greater than the total quantity of leaf and yard waste diverted in 2004.

### 4.4 Other Material Diversion

The Region diverts many other materials from landfill. Residents may deliver materials such as household hazardous waste (HHW), electronic waste, scrap metal and tires. *Attachment 1* provides data regarding the quantities of these materials received in 2005.

### 4.5 Summary

The Region-wide diversion rate for 2005 was 34%, as shown in Attachment 1. The comparable figure for 2004, using the same calculation methodology was 27%.

It is noted that the Province's Waste Diversion Ontario (WDO) will be releasing its own 2005 diversion rate for the Region later in 2006. This rate will differ from the above figure because it will include allowances for materials such as home composting, grasscycling, and other miscellaneous recyclable materials that are not handled by Regional facilities.

## 5. FINANCIAL IMPLICATIONS

There is no financial implication associated with this report.

## 6. LOCAL MUNICIPAL IMPACT

The switch to single-stream Blue Box recycling and the addition of new material types enabled more recyclable materials to be collected in less time. This benefits the local municipalities through greater collection efficiencies and reduced cost.

The introduction of the SSO program by the Region presents a significant opportunity for the local municipalities to increase the amount of diversion as demonstrated in the Town of Markham.

The ban on plastic bags for leaf and yard waste collection was well received by the public. It did not negatively affect the collection rate, as initially thought, but operational problems associated with the breakage of kraft paper bags were encountered by some of the local municipal collection contractors. Additional staff time to address questions and concerns from the public was also required.

## 7. CONCLUSION

The addition of new programs and the improvements to existing ones has increased the amount of diversion from landfill from 27% in 2004 to 34% in 2005. With the continued support of Regional and local Councils, the Region and its constituent local municipalities are making good progress in increasing the amount of diversion.

Diversion rates in 2005 currently vary by municipality, from 20% to over 50%. Forecasted diversion rates for the Town of Markham in 2006 (the first full year of organics collection) are 68%. Vaughan and Richmond Hill are planning to implement organics collection starting in 2006/2007. These three municipalities account for 74% of the Region's population and should, alone, drive the Region-wide diversion rate to 55% by 2008.

The Senior Management Group has reviewed this report.

*(The attachment referred to in this clause is included with this report.)*