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WASTE DIVERSION STRATEGY OVERVIEW

The Solid Waste Management Committee recommends the adoption of the recommendation contained in the following report, December 13, 2006, from the Commissioner of Transportation and Works:

1. RECOMMENDATION

It is recommended that this report be received for information by Committee and Council.

2. PURPOSE

This report provides an overview of York Region's current and planned waste diversion strategy.

3. BACKGROUND

Between 2000 and 2003, the Region's diversion rate remained stagnant at approximately 25%. The Provincial average at the time, by comparison, was approximately 37%. Moreover, the Region's waste management infrastructure was limited to a small waste transfer station in Georgina and several rudimentary household hazardous waste (HHW) drop-off points. Other than a commitment to move towards a three stream waste management system, the Region had no overall waste management strategy.

In December of 2002, the Keele Valley landfill closed and York Region, like the City of Toronto and Regions of Peel and Durham was forced to begin exporting its waste. Since that time Committee and Council have supported a variety of new waste diversion initiatives including, most recently, the endorsement of a joint municipal diversion strategy developed in cooperation with all nine local municipalities.

On October 19th, 2006, Council adopted Clause 1 of Report No. 6 of the Solid Waste Management Committee approving the Joint Municipal Waste Diversion Strategy and its associated goal of 65% diversion from landfill by 2010.

4. ANALYSIS AND OPTIONS

The Region is currently undertaking an Environmental Assessment to determine options for the long term management of its residual waste (i.e., the portion of the waste stream that cannot be diverted economically through reuse or recycling). The amount of waste

requiring disposal is directly dependent on the extent and success of the Region's waste diversion strategy.

4.1 Current Waste Generation and Diversion Rates

In 2006, the Region's nine local municipalities generated an estimated 322,000 tonnes of waste. Approximately 126,000 tonnes was projected to be diverted from landfill through municipal diversion programs. The current waste composition and diversion rate are represented in Figures 1 and 2 respectively.

Figure 1
2006 Waste Composition of York Region Curbside Residential Waste Stream

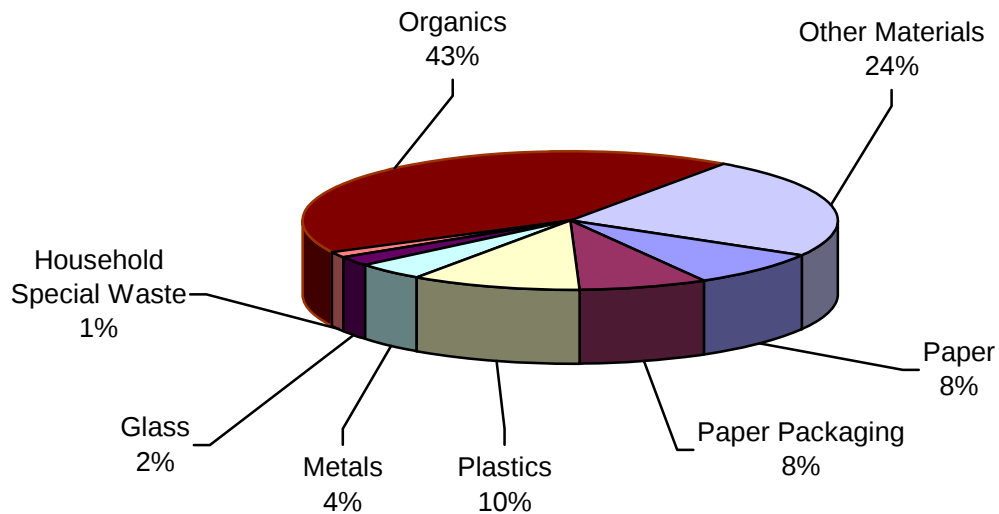
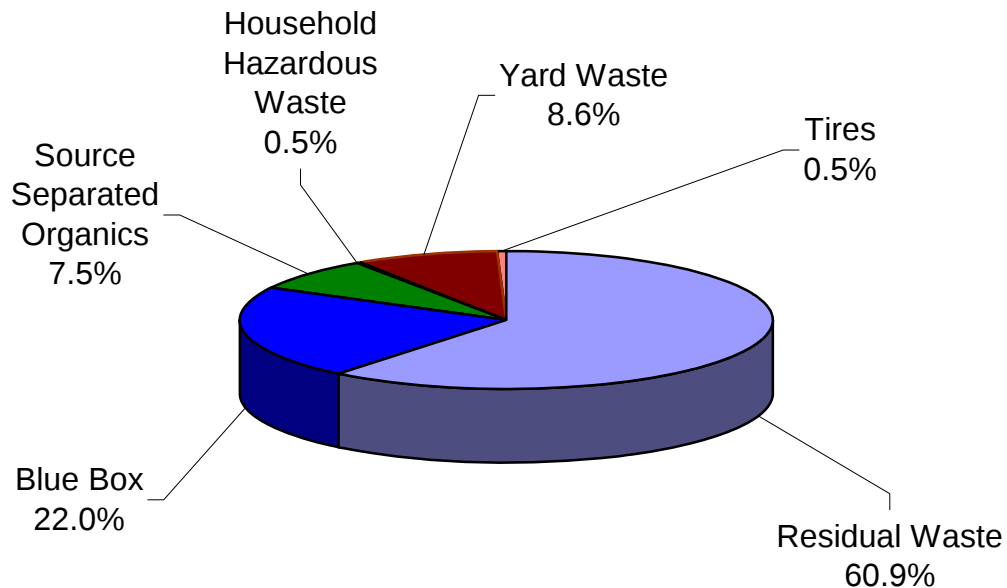


Figure 2
Percentage of Curbside Residential Waste Stream Currently Diverted



4.2 Roles and Responsibilities

York Region and its nine local municipalities work collectively to deliver waste management services to local residents. Under the Municipal Act, the Region is responsible for waste disposal and diversion while the local municipalities are responsible for collection. In practice, therefore, the Region is responsible for the development of waste diversion programs (e.g., what materials are or are not included in the blue box program). The local municipalities by comparison, are responsible for how materials are collected (e.g., the use of boxes or carts for recyclables). Both parties have a significant impact on public participation in the Region's diversion programs through the program decisions they make.

4.3 Blue Box Recycling

In February 2002, the Region's blue box program was expanded to include: paint and aerosol cans, aseptic and gable top containers and aluminium foil. In June 2004, a further expansion of the program resulted in the inclusion of No. 3-7 rigid plastic household containers. The current program now allows residents to add almost all common household packaging and paper to their blue box with the exception of plastic film, Styrofoam, blister pack (i.e., theft proof packaging) and shredded paper. While these

materials represent less than 1% of the total waste stream, Regional staff is currently exploring options for their long term management.

In the fall of 2005, Regional Council entered into a partnership with the local school boards to permit the receipt of school generated blue box materials at the Garfield Wright Waste Management Centre. Implementation of the program has been completed with the York Region District School Board and is underway with the York Catholic District School Board. This partnership allows children in the Region to experience a consistent recycling program at home and at school.

In 2006, the Region also began recycling coroplast municipal election signs for the first time. During the recent municipal elections, a total of five tonnes of coroplast signs were diverted from landfill.

4.4 Organics Diversion

In March of 2004, the Region established a short term contract with Halton Recycling Ltd. in Newmarket to process Source Separated Organics (SSO), commonly known as “green bin” waste. An additional short term contract (i.e., three year) was subsequently established with GSI Environnement in Quebec to provide local municipalities with sufficient contingency capacity to allow them to start their collection programs with confidence. In September 2005, the first of two long term processing contracts (i.e., 10 year) was established with Conestoga Rovers and Associates and Orgaworld B.V. Under this contract, the joint partnership is obliged to build and operate a new organics processing facility in London, Ontario capable of managing 30,000 tonnes of food waste per year by the spring of 2007. Construction of this facility is currently underway. The remaining long term processing capacity required by the Region (estimated to be at least 30,000 tonnes/year) has yet to be tendered.

Technical and financial support was provided to the Town of Markham in 2004 and City of Vaughan in 2005 for the launch of their “green bin” programs. Regional staff anticipate working closely with the Town of Richmond Hill and “Northern Six” municipalities on the launch of their “green bin” programs in April and September of 2007 respectively.

In 2005, the Region also authorized a long-term contract to Miller Waste Systems (Miller) for the management of its leaf and yard waste. Public drop-off sites for leaf and yard waste were also established in the Township of King, at Miller’s Richmond Hill composting site and at the Region’s waste management centre in East Gwillimbury in order to improve service to local residents (*see Attachment 1*). Similarly, a temporary drop-off and processing site was established by the Region for the City of Vaughan to permit management of yard waste potentially infected by the Asian Long-Horned Beetle (ALHB). The ALHB site is expected to continue operations until at least 2008.

4.5 Reuse Initiatives

In 2004, the Region began working with local charities to improve diversion of textiles and reusable goods. Four collection events were held throughout the Region in 2006 in partnership with Goodwill Industries. These efforts diverted almost 17,500 kgs (17.5 tonnes) of reusable goods. Several of the local municipalities have also followed the Region's example by partnering with local charities to establish local drop-off locations. Most recently, the Region held its first joint collection of reusable building materials in cooperation with Habitat for Humanity. This single event diverted an estimated 1800 kgs of waste. Additional events are planned for 2007.

4.6 Household Hazardous Waste Diversion

The Region currently operates four Household Hazardous Waste (HHW) depots located in the Towns of East Gwillimbury, Georgina and Markham, and City of Vaughan (*see Attachment 2*). At these facilities, residents can drop off a broad range of used and unwanted household chemicals, paints, pharmaceuticals and electronics free of charge (*see Attachment 3*). In the summer of 2006, the Region ran an extensive campaign to raise resident's awareness of the depot service and need to manage HHW properly. During the first two months of the campaign, public participation increased over 12% and the Region's newest facility in the City of Vaughan experienced a 122% increase in drop-offs. A total of 2200 tonnes of HHW was collected in 2006 representing a 28% increase over the previous year. Continued promotion of HHW diversion is planned for 2007.

4.7 Promotion and Education (P&E) Initiatives

Over the past two years, Regional staff has worked aggressively to upgrade and expand the Region's promotion and education materials and provide related support to the local municipalities. Thus far, every major promotional campaign launched by the Branch has been formally recognized by the two leading waste management associations in Ontario.

Table 1
Promotion and Education Awards
(2005 – 2006)

Organization	Event	Campaign / Program	Award
Recycling Council of Ontario	Ontario Waste Minimization Awards	Yes! Campaign	2006 Gold - Promotion Award
Recycling Council of Ontario	Ontario Waste Minimization Awards	Waste Management Centre	2006 Bronze – Waste Diversion Program Operator
The Association of Municipal Recycling Coordinators	Promotion & Education Awards	Yes! Campaign	2005 Winner – Best Campaign

The Association of Municipal Recycling Coordinators	Promotion & Education Awards	Yard Waste Campaign	2005 Winner – Best Print Ad
The Association of Municipal Recycling Coordinators	Promotion & Education Awards	Yard Waste Campaign	2005 Finalist – Best Promotional Tool
Recycling Council of Ontario	Ontario Waste Minimization Awards	Yard Waste Campaign	2005 Gold - Promotion Award
Recycling Council of Ontario	Ontario Waste Minimization Awards	Litter Campaign	2005 Finalist - Municipality Award

Blue box, yard waste and household hazardous waste diversion levels have seen significant increases over the past two years partly as a result of these efforts (i.e., 47%, 21% and 46% respectively). Continued growth in per capita use of blue box is expected as local municipalities in the Region move to weekly collection.

Each year, the Region also organizes annual litter pick up events by local schools. In 2006, over 4,891 students and teachers participated picking up an estimated 7,100 kgs of garbage from local streets, parks and school yards.

4.8 Infrastructure Development

By 2021, the Region's population is forecast to grow to between 1,200,000 (Regional Official Plan) and 1,300,000 (Province – Places to Grow) and will generate at least 450,000 tonnes of waste. In the summer of 2005, the Region commissioned the \$39 million Garfield Wright Waste Management Centre (WMC) and Vaughan HHW depots. The new WMC became the first major piece of waste management infrastructure owned by the Region and enabled local municipalities to switch to a commingled blue box program potentially reducing collection costs by over 20%. The facility currently processes approximately 78,000 tonnes of blue box material annually and is capable of handling up to 90,000 tonnes. Staff is currently looking at options for the expansion and/or upgrading of this facility to accommodate future growth in population and blue box diversion efforts. The forecasted need is imminent and will require expanded capacity as early as 2008. Funding for future expansion and/or upgrades to the facility is intended to be paid for by a reserve fund established by Regional Council in 2004 using funds received by the Region from the Waste Diversion Ontario.

York Region also has plans to build a series of Community Environmental Centres (CEC) to divert reusable and recyclable materials that can not be readily collected curbside. Centres are currently under development in Richmond Hill and Vaughan and Council has requested expressions of interest (Report No. 5, Clause 3 of the Solid Waste Management Committee, September 14th, 2005) from the Towns of Aurora and

Whitchurch-Stouffville and Township of King to build a third site in one of their communities.

In September, 2004, Regional Council also authorized staff to begin exploring the feasibility of constructing a Regional organics waste composting facility. Successful construction of such a facility would be the next step for the Region towards sustainability in the management of its waste. Staff is currently exploring options to pursue this directive.

4.9 Waste Management Strategy

In September of 2006, Regional Council in partnership with the nine local municipalities approved a joint municipal waste diversion strategy and associated goal of 65% diversion from landfill. Regional Council further endorsed a recommendation of the Solid Waste Management Committee that the strategy's goal be achieved by 2010. This strategy provides a common framework for local municipalities and the Region to work from in the development and timing of new programs. Moreover, it clarifies the Region's expectations about the amount of residual waste that will need to be managed through a joint residual waste Individual Environmental Assessment process with Durham Region. Staff will be reporting back to Committee and Council in 2007 with a more in-depth analysis of cost and resource implications of the various initiatives embodied in the strategy.

5. FINANCIAL IMPLICATIONS

The estimated costs to operate the Region's waste diversion programs in 2007 are shown in Table 2 below. It is expected that waste diversion program costs will be approximately \$14 million and will divert an estimated 48% of the waste generated by local municipalities.

Table 2
2007 Waste Management Program Costs

Material	Tonnes	2007 Budget \$	Cost/Tonne \$
Household Hazardous Waste	1,885	0.894 million	474.27
Source Separated Organics	52,760	8.814 million	167.06
Residual Waste (<i>includes 5,650 tonnes blue box residual</i>)	171,250	13.663 million	79.78
Yard Waste	25,494	1.749 million	68.60
Blue Box	75,332	2.333 million	30.97
Asian Beetle Yard Waste	3,709	0.350 million	94.37
Total	330,280	\$27.803 million	

6. LOCAL MUNICIPAL IMPACT

Regional and local municipal staff continue to work closely to ensure the effective and efficient roll-out of the waste management initiatives and programs at both levels as evidenced by the successful development of the Joint Municipal Waste Diversion Strategy.

7. CONCLUSION

The Region and local municipalities have made significant progress in the development of local waste diversion programs and initiatives. The coming year's discussion will include important decisions about the possible development of additional Regional waste management infrastructure versus the continued use of contracted services and the implementation of the joint municipal waste diversion strategy within the timeframe proposed by Regional Council.

For more information on this report contact Michael J. Birett, Manager, Waste Diversion of the Solid Waste Management Branch at extension 5738 in the Transportation and Works Department.

The Senior Management Group has reviewed this report.

(The attachments referred to in this clause are attached to this report.)