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BLUE BOX INITIATIVES AND PILOT PROJECTS FOR 2008

The Solid Waste Management Committee recommends the adoption of the recommendations contained in the following report, September 4, 2007, from the Director, Solid Waste and Administration:

1. RECOMMENDATIONS

It is recommended that:

1. Council approve the following pilot programs subject to approval of the 2008 Solid Waste Management Branch operating budget:

- 1.1 The Town of Richmond Hill and the Township of King pilot to examine opportunities to optimize the Region's blue box program in the first quarter of 2008.

- 1.2 The three-stream waste management pilot in the Town of Newmarket's Tom Taylor Trail system and neighbouring parks during the summer of 2008.

2. Staff be directed to work with Housing York Inc., to explore opportunities to pilot waste management initiatives in their social housing portfolio.

3. The Regional Clerk forward this report to the local municipalities.

2. PURPOSE

This report identifies potential pilot programs to further the diversion initiatives outlined in the 2006 Joint Municipal Waste Diversion Strategy and to introduce a strategy to explore multi-residential waste management options through pilots executed within the Housing York Inc., social housing portfolio.

3. BACKGROUND

At the October 19, 2006 meeting of Regional Council, (Clause 3 of Report No. 6 of the Solid Waste Management Committee) the Joint Municipal Waste Diversion Strategy was adopted. The Strategy has been endorsed by all local councils and sets direction for the expansion of the Region's existing programs and development of new programs over a 15-year time frame. At the meeting, Council also adopted a goal to divert a minimum of 65% of the Region's waste from landfill by the year 2010.

4. ANALYSIS AND OPTIONS

Among the waste diversion options outlined in the Strategy was the optimization of blue box diversion. Optimization of the existing blue box program, as described in the Strategy, includes alternatives ranging from the addition of new materials to the use of alternative collection containers.

The Strategy also identified that non-traditional diversion opportunities, including multi-residential diversion options, need to be addressed. This recommendation is consistent with intensification targets set out in the Province of Ontario's *Places to Grow Act (2005)* and Council's recent decision (June 21, 2007) to provide additional allocations to multi-residential developments which, among other things, incorporate three-stream waste management systems into their designs.

Achieving Council's goals of 65% diversion of residential waste from landfill by 2010 and 75% diversion over the life span of the Joint Waste Diversion Strategy will require development of new programs and aggressive efforts to improve the efficiency of existing programs. These efforts will include diverting more recyclable materials currently being placed by residents in their household trash and capturing additional quantities of blue box and green bin wastes from non-traditional sources.

4.1 Capacity and Litter Issues Associated with the Blue Box Program

The blue box has become the most widely used container in Ontario for collecting residential recycling material. Over the years, however, there have been significant changes to York Region's blue box program. These include the addition of new recyclable materials to the blue box and the introduction of a co-mingled recycling system.

The addition of new materials to the program created new opportunities for residents to divert more materials. However, these materials represent a large increase in volume making it difficult for residents to fit everything into their blue boxes. Previous work done in other jurisdictions suggests that the capacity of the blue box limits participation, in that people stop recycling when their blue box is full. Additionally, litter from overfilled blue boxes is a growing issue. The northern six local municipalities will begin weekly collection of blue box materials September, 2007. While this is an increase in the current service provided for the majority of the northern six municipalities, the Town of Georgina has provided weekly blue box collection for a number of years. While weekly collection will assist residents with increased blue box capacity, it will continue to be a limiting factor in program participation because of the size and volume of packaging materials included in the single-stream program.

In order to overcome the blue box capacity as a limiting factor to program participation, consideration needs to be given to alternative containers. After discussions with staff

from the Town of Richmond Hill and the Township of King, it was decided that Regional and local municipal staff would work together to address this.

It is proposed, therefore, that Council authorize a series of pilots and related research to explore alternative collection systems with the local municipalities including, but not limited to, plastic bags, reusable containers, and automated carts.

4.1.1 Bag and Reusable Cart Pilots in King and Richmond Hill

It is proposed that collection alternatives be piloted in the Town of Richmond Hill and the Township of King during the first quarter of 2008. The purpose of the pilots will be to test the use of plastic bags and reusable containers in urban and rural environments during inclement weather conditions. Operational issues (e.g. debagging curbside and at the Region's Materials Recovery Facility), financial costs, environmental impacts and residential preferences will also be considered as part of this work.

Automated cart collection is in use extensively throughout the United States and has been tested in a variety of communities throughout Canada, including the Town of Markham. The City of Toronto has also completed an exhaustive evaluation of carts and bags and recently announced that they will be switching the City over to cart based collection. Staff proposes to review these existing programs and past research as part of the scope of this work.

4.1.2 Town of Markham Proposed 2007 Pilot Projects

At its June 26 meeting, the Town of Markham staff presented a report entitled "2006 Mission Green Program Update and Proposed 2007 Pilot Projects" (see Attachment 1). The Town has requested the development of a pilot to test the use of clear plastic bags for residual waste and blue bags for overflow recycling. This pilot would require that the Region receive and debag this material at the Region's Waste Management Centre or an alternative facility. Before the Region can commit to supporting this pilot, additional information is required so that staff can gain a better understanding of the costs associated with processing this material. Regional staff will be working with Markham staff and the contracted operator of the Regional MRF (Miller Waste) to determine the extent and feasibility of the pilot and will report back to Committee.

4.2 The Role of Parks, Recreation Facilities and Multi-Residential Dwellings in Achieving 65% Diversion

The Province of Ontario's *Places to Grow Act (2005)* mandates intensification in York Region. Achieving Council's diversion goals will necessitate additional efforts to ensure residents of multi-residential dwellings have access to comparable waste diversion services currently available to curbside residents. Similarly, increased efforts to divert waste from parks and recreation facilities will also be required.

4.2.1 Housing York Inc., Waste Management Pilots

Through its non-profit Housing Corporation, Housing York Inc., the Region of York owns 1927 social housing units across 30 properties in all nine local municipalities. This portfolio currently has a high level of participation in blue box programs, and staff work closely with local municipalities to improve participation. It is proposed that this portfolio be utilized to explore and test waste management programs and systems to enhance opportunities to increase recycling in multi-residential facilities.

Staff intends to initiate this project with preliminary research scheduled for the fall of 2008. Audits will be conducted to determine the types, quality and quantity of materials the system would be required to manage. Surveys and focus groups will also be conducted to gain an understanding of the type of communication program required to achieve effective participation. A subsequent report outlining the plan in detail will be provided to the Housing York Inc. Board later this fall.

4.2.2 Three-Stream Management Pilot in Town of Newmarket Parks

The Town of Newmarket has expressed interest in working with the Region on a trial project of a three-stream waste management system along the Tom Taylor Trail and in neighbouring parks in the summer of 2008. Historically, the recyclables collected from public place recycling bins have tended to be highly contaminated. The purpose of this pilot would be to determine levels of contamination, quantity, types of materials collected and type of communication program required to achieve effective participation.

4.3 The Addition of New Materials to the Blue Box Program

Staff periodically receives requests to consider the addition of new materials such as shredded paper, styrofoam and plastic film to the Region's blue box program. The addition of new materials is also identified as a possible option for optimizing the blue box program under the Joint Waste Diversion Strategy.

In 2006, a pilot was conducted with the Township of King to determine the extent to which residents would recycle styrofoam, plastic film and blister pack (theft proof packaging) through the blue box program. The pilot demonstrated that the addition of these materials had no significant impact on diversion (i.e., less than 1%).

Since that time, the Region has been actively involved in working with the Province to encourage product and packaging manufacturers to establish "take-back" programs for these materials. To date, voluntary programs have been established for the Liquor Control Board of Ontario (LCBO) glass and plastic grocery bags.

Staff recommends that consideration of the addition of new materials be prioritized appropriately and addressed after the other initiatives proposed in this report have been implemented.

5. FINANCIAL IMPLICATIONS

The estimated cost of the pilot programs is listed in Table 1. It is proposed that these projects be funded from the “New Waste Management initiatives” in the 2008 Solid Waste Management Capital Budget. The draft budget includes sufficient funds for these initiatives.

Table 1
Proposed Budget Requirements

Task	When	\$
Richmond Hill and King Alternative Containers Pilot	February – April 2008	200,000
Town of Newmarket Parks Pilot	July – August 2008	50,000
Housing York Inc. Research Project	2008 – 2009	<u>100,000</u>
Total		\$350,000

6. LOCAL MUNICIPAL IMPACT

Collection of waste is a local municipal responsibility and the choice of containers used and sources of materials collected can have significant impacts on both levels of government. Staff, therefore, intend to work closely with local municipal staff to investigate opportunities to optimize the blue box program and pursue non-traditional diversion activities. Conversations with the Towns of Richmond Hill, Newmarket and King have occurred, and staff are in agreement with the implementation of these pilot initiatives.

7. CONCLUSION

In October 2006, Regional Council adopted the Joint Waste Diversion Strategy. One of the options to achieve the diversion goal adopted by Council focuses on optimizing the blue box program. Investigating alternative containers and the addition of new materials are among several ways identified to achieve this. Non-traditional diversion opportunities including multi-residential dwellings and parks also need to be explored in order to achieve Council’s diversion goal.

To investigate these opportunities, staff proposes to conduct a number of pilots in conjunction with municipal and Regional staff.

For more information on this report contact Corena Cane, Project Coordinator of the Solid Waste and Administration Branch at extension 5781 in the Transportation and Works Department.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)