SOLID WASTE MANAGEMENT COMMITTEE

Wednesday, December 11, 2002
9:00 a.m.
Committee Room "A"

12554

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Ontario
LEGISLATIVE ASSEMBLY

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November 22, 2002

The Regional Municipality of York
P.O. Box 147
17250 Yonge Street
Newmarket, ON L3Y 6Z1

To the Chair and Members of Council:

This summer I introduced a Private Member's Bill, ***The LCBO Deposit and Return Act***, to require the Liquor Control Board of Ontario to implement and administer a deposit and return system for all liquor containers sold in Ontario. Enclosed is a copy of Bill 125 and a backgrounder.

I took this action because municipalities such as yours have been directed under Regulation 101 of the Environmental Protection Act to collect and process in their curbside recycling programs glass containers for which economically viable end markets do not exist. Collecting and processing glass containers is costing municipalities millions of dollars, yet there is no environmental benefit since the bulk of the material is ending up in landfills.

A recent report from the Product and Packaging Stewardship Review, entitled "Wine and Liquor Container Recovery: The 2002 Perspective" highlights the municipal concerns in detail. It also details how a deposit and return system would better protect the environment by increasing recovery and the quality of materials for reuse and recycling. A copy of the Executive Summary is attached and the remainder of the report can be found at www.productstewardship.org.

Municipalities in the past have overwhelmingingly endorsed the concept of a deposit and return system for LCBO containers. The current Minister of the Environment, Chris Stockwell, also supported this concept and said so during the PC leadership campaign earlier this year. I would ask that your Council give further consideration to this matter by:

1) Verifying with your Public Works Department what is currently happening to the colored glass collected in your blue box program;
2) Affirming your Council's support for a deposit and return system for LCBO containers; and
3) Sending a resolution in support of my Private Member's Bill to The Premier, The Minister of the Environment and the LCBO, with a copy to my office.

I firmly believe that this Bill has a reasonable chance of success because it seeks to do the right thing for the right reasons.

Thanks you for your consideration of this request.

Sincerely,

Mike Colle

Mike Colle, MPP
Eglinton-Lawrence

encl: (2)

LCBO Deposit Return Act, 2002 Backgrounder

Mike Colle M.P.P. - Eglinton-Lawrence

June 24, 2002

Purpose of the Bill

To require the Liquor Control Board of Ontario (LCBO) to implement and administer a deposit and return system for all liquor containers sold in Ontario by July 1, 2003.

How?

- The Act amends the ***Liquor Control Act*** which governs the LCBO. The amendment mandates the establishment of programs to ensure that all liquor sold to the public by government stores and stores owned and operated by wineries to charge a deposit on containers, which are refundable upon return.

- Rules and details governing the establishment and operation of the deposit return system are to be established by regulation.

Why a Deposit Return System for the LCBO?

- The LCBO generates 74,000 tonnes of container packages per year;
- 7 other Provinces in Canada have a deposit return system on wine and spirits;
- LCBO Deposit refund system is supported by 268 Municipal Councils representing 84% of Ontario's population;
- Glass is expensive to recycle. It has few markets and generates no scrap revenue when broken and colour mixed;
- Most LCBO glass collected is stockpiled or sent to landfill;
- The cost of disposing/recycling this waste is borne solely by municipalities costing them over $10 million a year[1];
- The LCBO collects an 'environmental levy' of $40 million a year from consumers – 10 cents on every container sold - but only contributes $5 million of this per year to municipalities[2].
- **Where does the other $35 million go?**

Other numbers

- The LCBO made a record profit of $905 million in 2001-2002[3];
- The LCBO has spent over $100 million on upgrading its stores in the last 5 years[4];
- **Estimated capital cost of implementing a deposit refund system - $5 million[5];**
- Estimated net revenue of an LCBO deposit return program $2.9million[6];
- Estimated recovery rate of LCBO container waste – 85%.[7]

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[1] Comments and recommendations regarding Bill 90, Brewers of Ontario, Ontario General Government Committee, May 27, 2002

[2] Ontario Ministry of the Environment.

[3] Booze Binge, Canadian Business Magazine, June 10, 2002

[4] ibid.

[5] Comments and recommendations regarding Bill 90, Brewers of Ontario, Ontario General Government Committee, May 27, 2002.

[6] Ibid.

[7] ibid.

3RD SESSION, 37TH LEGISLATURE, ONTARIO
51 ELIZABETH II, 2002

Bill 125

An Act to amend the Liquor Control Act to require the Liquor Control Board to establish a deposit and return system

Mr. Colle

Private Member's Bill

1st Reading	June 24, 2002
2nd Reading	
3rd Reading	
Royal Assent	

Printed by the Legislative Assembly of Ontario

3e SESSION, 37e LÉGISLATURE, ONTARIO
51 ELIZABETH II, 2002

Projet de loi 125

Loi modifiant la Loi sur les alcools pour exiger que la Régie des alcools crée un système de consigne et de remise

M. Colle

Projet de loi de député

1re lecture	24 juin 2002
2e lecture	
3e lecture	
Sanction royale	

Imprimé par l'Assemblée législative de l'Ontario

Bill 125 2002

An Act to amend the Liquor Control Act to require the Liquor Control Board to establish a deposit and return system

Her Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. Section 3 of the *Liquor Control Act*, as amended by the Statutes of Ontario, 1994, chapter 9, section 2 and 1996, chapter 26, section 2, is amended by adding the following subsection:

Deposit and return program

(3) The Board shall establish programs to ensure that all liquor sold to the public on or after July 1, 2003 by government stores and stores owned and operated by wineries or manufacturers of beer or spirits is in containers for which a deposit is charged at the time of sale and refunded on the return of the container.

2. Subsection 8 (1) of the Act, as re-enacted by the Statutes of Ontario, 1994, chapter 9, section 4 and amended by 1996, chapter 26, section 2, is amended by adding the following clause:

(c.1) governing the establishment and operation of programs required under subsection 3 (3);

Commencement

3. This Act comes into force on the day it receives Royal Assent.

Short title

4. The short title of this Act is the *LCBO Deposit and Return Act, 2002*.

EXPLANATORY NOTE

The Bill amends the *Liquor Control Act* to require the Liquor Control Board to establish programs to ensure that all liquor sold to the public on or after July 1, 2003 is in containers for which a deposit is charged at the time of sale and refunded on the return of the container. The Lieutenant Governor in Council is authorized to make regulations governing the establishment and operation of the programs.

Projet de loi 125 2002

Loi modifiant la Loi sur les alcools pour exiger que la Régie des alcools crée un système de consigne et de remise

Sa Majesté, sur l'avis et avec le consentement de l'Assemblée législative de la province de l'Ontario, édicte :

1. L'article 3 de la *Loi sur les alcools*, tel qu'il est modifié par l'article 2 du chapitre 9 des Lois de l'Ontario de 1994 et par l'article 2 du chapitre 26 des Lois de l'Ontario de 1996, est modifié par adjonction du paragraphe suivant :

Programme de consigne et de remise

(3) La Régie crée des programmes pour que toute boisson alcoolique vendue au public le 1er juillet 2003 ou après cette date par des magasins du gouvernement et par des magasins qu'exploitent et dont sont propriétaires des vineries ou des fabricants de bière ou de spiritueux le soit dans des contenants pour lesquels une consigne est exigée au moment de la vente et remboursée à la remise du contenant.

2. Le paragraphe 8 (1) de la Loi, tel qu'il est réédicté par l'article 4 du chapitre 9 des Lois de l'Ontario de 1994 et tel qu'il est modifié par l'article 2 du chapitre 26 des Lois de l'Ontario de 1996, est modifié par adjonction de l'alinéa suivant :

c.1) régir la création et le fonctionnement des programmes exigés en application du paragraphe 3 (3);

Entrée en vigueur

3. La présente loi entre en vigueur le jour où elle reçoit la sanction royale.

Titre abrégé

4. Le titre abrégé de la présente loi est *Loi de 2002 sur les consignes et remises exigées par la RAO*.

NOTE EXPLICATIVE

Le projet de loi modifie la *Loi sur les alcools* pour exiger que la Régie des alcools crée des programmes afin que toute boisson alcoolique vendue au public à compter du 1er juillet 2003 soit dans un contenant pour lequel une consigne est exigée au moment de la vente et remboursée à la remise du contenant. Le lieutenant-gouverneur en conseil peut prendre des règlements régissant la création et le fonctionnement des programmes.

Wine and Liquor Container Recovery in Ontario - The 2002 Perspective

SPECIAL REPORT

Executive Summary

Wine, liquor and cooler bottles make up a significant portion of the Ontario waste stream—a little less than half of all glass and a small part of the plastic containers generated by householders.[1]

From a recycling point of view, the cost to collect and sort containers, except aluminum cans, is considerably higher than the revenue which comes from the sale of the material.

Once regarded as a staple in the blue box, glass containers have become a pariah. As more and more programs commingle their glass with other containers, the problem with contamination of other materials and wear and tear on equipment and belts has been steadily growing. The value of clear glass containers has halved in the past 10 years and most programs now have to pay to move coloured glass to its secondary markets.

Polyethylene terephthalate (PET) plastic containers are very light and thus their collection and processing cost is very high. Prices paid for recovered PET containers are extremely volatile. In the past 12 months, they have halved.

In British Columbia, wine and liquor containers were added to the province's deposit legislation four years ago. They had previously been collected in the blue box. BC's recycling program is now primarily concerned with collecting fibre materials and food containers. Very little coloured glass is now seen in blue boxes in BC.

Removing Liquor Control Board of Ontario (LCBO) containers from the municipal recycling program in Ontario would mean shorter stops at the curb, and thus less time required for collection. While there may be short-term issues with existing contracts, reducing the amount of material collected would provide the opportunity to have fewer trucks or to add other materials to the diversion stream.

By its very nature, glass is a potential hazard and reducing its volume by up to half would mean fewer injuries for sorters and reduced maintenance and replacement of sorting equipment.

The current payments by the LCBO, at $4 million, cover less than half of the estimated $11 million cost[2]. With the proposed Waste Diversion Act funding model based on *sharing* recycling costs, municipalities would still save half the cost of collecting the LCBO containers ($5.5 million) if they were collected via another system.

There would be no inconvenience to residents. Those who chose not to take back their empty containers when buying more product could support community bottle drives, as they used to do with empty soft drink containers.

Once collected via a take-back system, whoever may be operating it, the recovered containers would be already sorted, for the most part, and intact. With a cleaner, deposit-grade material, marketing the glass would be far less of a problem than the low-grade secondary material currently being produced by the blue box system.

By having them returned intact, there would be an opportunity to clean and refill the empty bottles. This would be a better use of the embedded energy and would provide the smaller wineries and the U-Vint outlets with the option of buying their containers at reduced prices. A refillable bottle would not be subject to the 10-cent Environmental Levy and this would reduce prices for the consumer.

As mentioned above, the LCBO currently spends $4 million annually to support recycling. A 1998 study suggested a deposit-return system with an 85% return rate, would generate a net *profit* of $2 million for the LCBO. It would be funded by unredeemed deposits. In addition, the LCBO would not be obliged to support curbside recycling.

Environmentally, increasing recovery rates for recyclable containers is a clear benefit and assists the Province in its diversion goals. Secondly, the opportunity to refill some of the empty LCBO containers will save energy and resources, and is more in line with the 3Rs hierarchy.

Publisher's Note

This report is designed to provide some background and analysis on an issue that never seems to go away. As the readers of *Product & Packaging Stewardship Review* will know, recent developments have heightened awareness of, and interest in, the deposit-return system, particularly as it pertains to the Liquor Control Board of Ontario.

With the appointment of Chris Stockwell as environment minister and the recent announcement of Waste Diversion Ontario, there is an opportunity to step back and take a close look at how we manage containers in Ontario.

It is hoped that these pages will assist that discussion.

Copies of this report, as well as back issues of *Product & Packaging Stewardship Review,* are available from our website (www.productstewardship.org).

To be added to the list to receive *PPSReview* electronically, please send us an email (bbc@albedo.net).

Ben Bennett, Publisher, *Product & Packaging Stewardship Review*

THE REGIONAL MUNICIPALITY OF YORK

Solid Waste Management Committee
December 11, 2002
Report of the
Commissioner of Transportation and Works

EVALUATION OF THE MARKHAM'S "BAG-IT!" AND MARKHAM'S "ON A ROLL!" PILOT PROJECTS

1. RECOMMENDATIONS

It is recommended that:

1. This report be received for information by Committee and Council.
2. A subsequent report be prepared, with involvement from local municipal staff, which focuses on collection system options and their financial impacts on the total waste management system.

2. PURPOSE

The purpose of this report is to:

- Provide background information on the Town of Markham's pilot projects for the collection of garbage, blue box materials and household organic waste in carts and bags.
- Provide a summary of the Region's financial contribution to the pilot projects.
- Provide the final results of the pilot projects.
- Discuss the potential impact of the pilot project results upon the Region's new three-stream system.

3. BACKGROUND

The Region's solid waste management diversion strategy calls for a 50 percent diversion rate. In order to achieve this objective, there was a need to investigate new waste management programs and service levels through pilot projects.

Regional Council adopted Clause 2 of Report No. 3 of the Solid Waste Strategy Committee on May 11, 2000. The report recommended that the Region contribute $15,000 towards the Town of Markham's bag-based pilot project for solid waste collection alternatives.

Regional Council adopted Clause 6 of Report No. 4 of the Transportation and Works Committee on April 12, 2001. The report recommended that the Region contribute $55,000 towards the Town of Markham's six-month cart-based pilot project for solid waste collection alternatives, less half of the amount which the Town may obtain through a grant from the Federation of Canadian Municipalities. The Federation of Canadian Municipalities (FCM) approved a $100,000 grant to the Town of Markham for a six-

month extension of the pilot project. York Region provided an additional $16,500 to fund the six-month extension.

4. ANALYSIS AND OPTIONS

4.1 Description of the Pilot Projects

4.1.1 Markham's "Bag-It!" Pilot Project

The Town of Markham launched a "Bag-It!" pilot project that commenced in April, 2000 and concluded in March, 2001. The purpose of the pilot project was to examine an option for residential waste collection i.e. use of plastic bags, that would contribute to increased waste diversion from landfill. The pilot area involved 513 households in Markham's Ward 5 area, located in the Village of Markham (bounded by Church Street to the north, the Ninth Concession to the east, Highway 7 to the south and Wooten Way to the west).

The residents were asked to set out their waste in the following manner:

- Garbage set out in regular garbage bags or cans.
- Recyclable paper fibres set out in one clear blue bag(s) or blue box(es).
- Recyclable containers set out in another clear blue bag(s) or blue box(es).
- Kitchen organics set out in clear green bags.
- Yard waste set out in clear colourless bags, bundles or rigid containers.

The results from the pilot are discussed in Section 4.2.

4.1.2 "Markham's On a Roll!" Pilot Project

The purpose of the pilot project was to determine the residents' acceptance of a cart-based collection program. The cart-based pilot project commenced in April 2001, which included 588 households in Markham's Ward 5 area, just north of the area used for the bag-based pilot project.

The project was originally anticipated to run for six months. During the course of the pilot project, a telephone poll was conducted to determine residents' interest in extending the pilot project for an additional six months. As a result of the poll, in which the residents were in favour of an extension, the Town applied for and received $100,000 in additional funding from the Federation of Canadian Municipalities to extend the project for an additional six months. The pilot project officially ended on June 14, 2002.

The pilot project tested a three-stream, automated cart based collection system. Residents used a two-compartment wheeled 417-litre (110-gallon) cart for the collection of garbage and recyclables, which was collected on a weekly basis. The cart was collected in a two-compartment, automated top-loading truck.

Residents were also given a 242-litre (64-gallon) cart for the collection of kitchen organics (i.e. food) and non-woody yard waste, which was also collected on a weekly basis. The cart was collected in a single compartment, automated side-loading truck.

The woody yard waste was set out in clear bags, bundles or rigid containers for separate collection. This material was collected in a single one-compartment side loading truck.

Markham staff monitored set out rates of the carts during the course of the pilot project and collected information in the pilot area. This involved driving through the pilot area prior to the commencement of collection and recording the number of carts set out for collection.

4.2 Communication Strategy

4.2.1 "Bag-It!" Pilot Project

The introduction of the "Bag-It" pilot project was communicated to residents by way of brochures and newsletters to introduce the program and educate residents on the new waste collection system, with special emphasis placed on the separation of kitchen organic waste.

The following list represents the components of the communication plan:

- An introduction letter to the residents.
- A public meeting was held on April 19, 2000 to introduce the pilot project concept to the residents.
- An outline of the requirements to participate in the pilot, including a streaming guide, accompanying the kitchen container and first allotment of blue and green bags.
- A letter to confirm that the initial shipment of bags had been made.
- A newsletter to update residents on the mid-term results.
- A letter of confirmation of the telephone poll results.
- A 'decommissioning' letter to confirm the end of the pilot and to instruct residents on how to return to the town's regular waste collection program.

4.2.2 "Markham's On a Roll!" Pilot Project

Communication tools were also developed for the cart-based pilot project, and used to introduce the program and to educate residents on the new system, especially with regard to proper use of the carts and the separation of kitchen organics. Specific examples of communication tools distributed to pilot area residents include streaming guides, door-hangers and newsletters.

The Town of Markham conducted background research for the pilot project. The purpose of the research was to ensure that residents' issues, concerns and questions were addressed and mitigated up front. The initial stage of the research involved contacting municipal users and suppliers of similar carts in Canada and the United States. The purpose of this exercise was to identify potential, real and perceived barriers and opportunities among residents in the pilot area.

The qualitative research included the following steps:

Pre-launch:

- Secondary research to learn from other municipalities and suppliers that had launched cart-based programs.
- Primary research-mail back survey, focus groups and telephone survey-to establish benchmark data and to identify perceived and real barriers to co-operation and effective in-home operation.
- Development and delivery of a wide range of communication materials designed to address and mitigate concerns, encourage full participation and educate all in the household concerning the operation of the pilot project.

Six-month Extension:

- Primary research through a telephone survey to assess the willingness of the participants to continue for an additional six months so the Town could gain information about cart operation during the winter months.
- A newsletter to encourage appropriate behaviour and to answer common questions.

Post-pilot:

- Primary research, a mail-back survey to assess participants' opinions and attitudes toward the system.

4.3 Final Results of the Pilot Projects

4.3.1 Household Participation

Household participation for the bag-based pilot project was lower than for the cart-based pilot project. Thirty-three percent of households set out at least one green organics bag per month. The average monthly household participation rate for blue recycling bags or blue boxes was 82 percent.

It was determined from waste audits in June, 2001 and February, 2002 that 87 and 57 percent of the pilot area homes respectively set out the organics cart. The participation was lower in the winter months because there is much less generation of yard waste at this time. For the split cart, the average monthly household participation rate was 97 percent.

4.3.2 Set Out Rates

Set out rates for the pilot projects were defined as the number of households that set out material on a given collection day. The average weekly set out rates were 68 percent for the blue bag, 22 percent for the green bag and 13 percent for blue boxes in the bag-based pilot area.

The average weekly set out rates were 78 percent for split carts and 44 percent for organic carts in the cart-based pilot area. Set out rates for both carts gradually declined during the pilot project, which has been attributed to a decline in organic waste

generation during the winter months, additional storage capacity in the carts thereby requiring fewer pickups, and fewer odour problems in the winter months.

4.3.3 Impact on Backyard Composting Rates

The Town conducted a telephone survey with the bag-based pilot area residents to determine if they are still utilizing their backyard composter while also participating in the pilot project. The survey indicated that those using backyard composters during the pilot project were unlikely to also use the curbside organics collection for their remaining organic materials such as meat and fish scraps. Residents not participating in the pilot project indicated that using a backyard composter would preclude them from participating in curbside organics collection.

As a result of the implementation of the cart-based pilot project, the number of pilot area residents who continued to use their backyard composters year-round dropped from 43 percent to 30 percent. The number of people who composted only in the warmer months dropped from 40 percent to 21 percent. Further, the number of pilot area residents who now have no routine to use their backyard composter increased from 11 percent to 42 percent.

4.3.4 Potential Impact of Pilot Results on York Region's Three-Stream System

York Region Council approved Clause 5 of Report No. 4 of the Transportation and Works Committee at its meeting on April 12, 2001. The report endorsed the adoption of a three-stream waste collection system. The system involves the separation by the householder of garbage, kitchen organic waste and dry recyclable material for collection.

Based upon the results of the pilot projects, the Town of Markham must decide which type(s) of container(s) (i.e. bags, carts, open containers, blue boxes) best meets the needs of its residents for use in the new system. The Town must also decide which items may be collected in the same truck (i.e. co-collection) and the appropriate frequency of collection (i.e. weekly or bi-weekly).

Upon examination of the bag and cart-based collection systems, it is apparent that the implementation of a bag-based system would increase processing costs by approximately $1.6 million per year at the Region's new facilities. In addition, if bag removal equipment were not required, this would save the Region approximately $1 million per year. This is because the incoming material would not have to pass through a bag breaking machine prior to being processed, whereas material placed loosely in carts and transferred directly into a collection vehicle can pass directly onto a processing line at the facility. Regional staff will be using the results of both pilot projects as it develops its new three-stream system, which will also assist the other local municipalities to decide on the types of containers and frequency of collection.

4.4 Pilot Area Residents' Opinions vis-a-vis the Pilot Project

4.4.1 "Bag-It!" Pilot Project Feedback

The environmental benefits of diverting kitchen organics were not well understood by the public, as residents need to be further educated on the impact of diverting the material from waste disposal.

Residents were concerned about the added waste generated by using plastic bags for waste collection. However, the increase in the amount of plastic containers being recycled far outweighed the added waste generated by using plastic bags.

Some residents were hesitant in participating in the pilot project due to odours and the "yuk" factor produced by organic waste. This barrier can be overcome through the use of a suitable kitchen container, which should be emptied frequently to minimize odours.

Pilot area residents were also concerned with setting out small quantities of organic waste each week. This gave the perception that their diversion efforts were minimal. There were also concerns about animals and birds breaking open the bags prior to collection.

Residents preferred using a large rigid container for organic waste rather than plastic bags.

4.4.2 "Markham's On A Roll!" Pilot Project Feedback

The Town conducted a mail-back survey with cart-based pilot area residents, and the following represents a tabulation of the responses from 310 of the 588 households:

- 92% wanted the system extended; 84% of those wanted it extended indefinitely.
- 89% preferred the cart system compared to 7% who preferred their blue boxes.
- 63% said the carts functioned better as a reminder to recycle while 32% said there was no difference between the carts and their blue boxes.
- 42% found carts easy to store compared to 41% who found blue boxes easy to store.
- 88% preferred the carts for providing sufficient capacity for recyclables compared to 6% who said their blue box capacity was sufficient.
- 87% found the carts easier to take to the curb compared to 8% who said it was easier to take out blue boxes.
- 77% thought the carts reduced the amount of materials going to landfill and encouraged more recycling compared to 21% who thought the carts and blue boxes rated the same in these two categories.

It can be concluded that overall, the pilot area residents preferred using the cart rather than the blue box based on a variety of parameters.

4.5 Diversion Rates Achieved

The Town of Markham did not undertake a baseline waste audit prior to commencement of the "Bag-It!" pilot project. However, the Town did conduct a residential waste audit over a two-week period in September and October, 2000 during the pilot project. Some of the key results are summarized as follows.

- The recovery rates for recyclable materials were high, as 85 percent of the recyclable fibre and 80 percent of the recyclable container material were recovered.
- The recovery rates for organic material were low, as 51 percent of the food and yard waste was recovered.
- Of the total waste generated during the pilot project (1,661 kg), 32 percent was recyclable fibre, nine percent was recyclable container material, 34 percent was compostable food and yard waste, and 25 percent was residual garbage.

Table 1 summarizes the average recovery rates achieved from the two pilot areas during the course of the pilot projects.

Table 1
Average Recovery Rates

Material	"Markham's on a Roll!" Average Recovery Rates kg/hhld/yr	"Bag-It!" Average Recovery Rates kg/hhld/yr
Kitchen Organics	104.0	71.90
Yard Waste in Carts	242.2	81.57
Recycling	408.60	400.40
Garbage	514.10	418.11
Total	**1,268.90**	**971.98**
Pilot Area Diversion Rate	59.50 percent	57.00 percent
Current Diversion Rate	34.00 percent	34.00 percent
Increase in Diversion Rate	25.50 percent	23.00 percent

The cart-based pilot project resulted in a slight increase in diversion when compared to the bag-based pilot project.

5. FINANCIAL IMPLICATIONS

5.1 York Region's Financial Contributions

York Region contributed $15,000 towards the Town of Markham's bag-based pilot project.

The Region has provided financial contributions to the cart-based pilot project both from the onset and the six-month extension. The Region contributed $71,500 towards the project. This funding amount was matched by the Town of Markham.

All cost information provided in the report refers only to Markham's waste management system costs. This information will be considered when the Region prepares the report on collection system options and their impacts on the total waste management system as indicated in Recommendation No. 2.

5.2 Impact of Pilot Projects on Markham's Collection Costs

The Town has concluded that while the amount of waste diverted from landfill increased substantially as a result of the implementation of the cart-based pilot project, it has also resulted in a 30 percent increase in the Town's collection costs (from $4.9 million to $6.35 million). By comparison, the implementation of the bag-based pilot project would cost about the same as Markham's existing waste collection system. It is noted that a financial analysis should be conducted on a total system cost basis i.e. collection, processing and disposal.

6. LOCAL MUNICIPAL IMPACT

The Town of Markham will be sharing the final results from the pilot projects with other local municipalities. The information will be useful in helping them to modify their collection systems to suit the Region's proposed three-stream system.

It is recognized that the results of the studies, while encouraging for the pilot areas, cannot necessarily be replicated in all municipalities of the Region due to different circumstances e.g. varying lot sizes, differing amounts of room to store the bins depending on size of house, and local on-street parking by-laws. These differences must be accounted for by the local municipalities when designing their three-stream collection systems.

7. CONCLUSION

The bag-based pilot project was successful in terms of diversion and financial impact, as 57 percent of the waste generated from the pilot area was diverted from landfill, a 23 percent increase over the Town's average of 34 percent. The total cost to implement the system to the entire Town would be about the same as the Town's existing waste collection system. While the pilot area residents supported the project, it was felt by Markham staff that residents must be educated further to eliminate negative attitudes toward the handling of kitchen organics and the significance of diverting it from landfill.

The cart-based pilot project has been deemed a success from the perspective of waste diversion and public acceptance, as 60 percent of the waste generated from the pilot area was diverted from landfill, a 25.50 percent increase over the Town's average of 34 percent. Also, the pilot area residents were very satisfied with the carts and were very interested in seeing the pilot extended. The Town has also concluded that while the amount of waste diverted from landfill increased substantially as a result of the implementation of the pilot project, it would result in a 30 percent increase in collection costs if it were to be implemented Town-wide. The program would also introduce

significant new cart storage and on-street parking by-law issues. The system costs provided in the report are from the Town of Markham only. This information will be considered when the Region prepares a report on collection system options and their impacts on the total waste management system.

The Senior Management Group has reviewed this report.

Prepared by:

Jay Silverstein
Waste Diversion Coordinator

Reviewed by:

Andrew Campbell, P.Eng.
Director, Solid Waste Management

Recommended by:

Kees Schipper, P.Eng.
Commissioner of Transportation and Works

Approved for Submission:

Michael R. Garrett
Chief Administrative Officer

November 22, 2002

JS/tp

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Version 3-2002-9-26

THE REGIONAL MUNICIPALITY OF YORK

Solid Waste Management Committee
December 11, 2002
Report of the
Commissioner of Transportation and Works

WASTE TRANSFER STATION IN GEORGINA USER FEES

1. RECOMMENDATIONS

It is recommended that:

1. The Commissioner of Transportation and Works be authorized to increase the user fees at the Region's waste transfer station in the Town of Georgina effective January 1, 2003 as outlined in this report.

2. The Regional Solicitor be authorized to prepare the necessary by-law with respect to the above user fees.

2. PURPOSE

This report requests authorization to increase the various user fees at the Region's waste transfer station in the Town of Georgina effective January 1, 2003.

3. BACKGROUND

The Region's waste transfer station in the Town of Georgina commenced operation on January 2, 1998. The current schedule of user fees was approved by Regional Council through the adoption of Clause No. 15 of Report No. 15 of the Transportation and Works Committee on December 6, 2001.

Roger LaRue Enterprises Limited has been the Region's contractor to operate the facility since it opened. That contract will expire on December 31, 2002 and the new contractor will be Miller Waste Systems for a term of three years.

4. ANALYSIS

4.1 Existing and Proposed User Fees

Table 1 presents the user fees that have been charged at the waste transfer station in 2002 as well as those recommended for 2003. The rationale for the recommended user fees is explained in the following sections of this report.

Table 1
Waste Transfer Station in Georgina User Fees
Existing in 2002 and Recommended for 2003

Material	Sources					
	Works Operations of York Region and Local Municipalities		Delivered By Residents		Industrial, Commercial and Institutional	
	2002	2003	2002	2003	2002	2003
Solid Waste	$58.30 per tonne	$85.00 per tonne	$70.00 per tonne	$70.00 per tonne	$82.00 per tonne	$85.00 per tonne
Compostable Yard Waste	$87.00 per tonne	$90.00 per tonne	$70.00 per tonne	$70.00 per tonne	$87.00 per tonne	$90.00 per tonne
Tires:						
- car and light truck	$3.50 each	$3.50 each	$3.50 each	$3.50 each	$3.50 each	$3.50 each
- heavy truck (off rim)	$15.00 each	$20.00 each	$15.00 each	$20.00 each	$15.00 each	$20.00 each
- heavy truck (on rim)	$20.00 each	$25.00 each	$20.00 each	$25.00 each	$20.00 each	$25.00 each
Recyclable "Blue Box" Materials	not applicable	not applicable	no charge	no charge	no charge	no charge
Recyclable Electronic Equipment	not applicable	not applicable	no charge	no charge	not applicable	not applicable
Scrap Metal and Large Metal Appliances	no charge	no charge	no charge	no charge	no charge	no charge
Minimum Charge for Solid Waste and Compostable Yard Waste	$7.00 per load	$7.00 per load	$7.00 per load	$7.00 per load	$7.00 per load	$7.00 per load

A summary of the 2003 projected quantities for solid waste and compostable yard waste is presented in Table 2.

Table 2
Projected Waste Quantities for 2003
Waste Transfer Station in Georgina

Sources	Materials (tonnes)	
	Solid Waste	Compostable Yard Waste
Delivered by Residents	5,100	275
Town of East Gwillimbury	5,150	0
Town of Georgina	7,140	70
York Region Works Operations	10	1
Industrial, Commercial and Institutional	1,900	40
Total	**19,300**	**386**

4.2 Rationale for the Proposed User Fees

4.2.1 Elimination of Charges for Municipally-Collected Waste Region-wide

On November 21, 2002, Regional Council adopted a motion whereby the Region, rather than the local municipalities, will be responsible for the cost of disposing and/or processing municipally-collected solid waste, compostable yard waste, and recyclable materials from residential sources across the Region effective January 1, 2003. The background information for this motion was contained in Report No.1 of the Commissioner of Transportation and Works and Commissioner of Finance, which was also adopted by Regional Council on that same date.

Most of the material delivered to the transfer station by the Town of East Gwillimbury and Town of Georgina is municipally-collected solid waste from residential sources. Accordingly, effective January 1, 2003 the Region will no longer be charging those two or any of the other local municipalities a user fee for that material.

4.2.2 Solid Waste from Municipal Works Operations

The local municipalities (particularly East Gwillimbury and Georgina) deliver a small quantity of solid waste from their municipal works operations such as the cleaning of roadside ditches, the maintenance of lawns and gardens, and the disposal of waste from municipal facilities. This type of solid waste will still be subject to a user fee as explained in the report that was adopted by Regional Council on November 21, 2002. As shown in Table 1, a rate of $58.30 per tonne was charged in 2002 for solid waste delivered by the local municipalities and the Region's own works operations. This rate was based on the Region having a net disposal cost at the Keele Valley Landfill Site of $45.00 per tonne. In 2003, the Region will be transporting this waste to Michigan and the cost for haulage and disposal will be approximately $55.00 per tonne. In addition, it will cost approximately $30.00 per tonne to operate the transfer station. Accordingly, the total cost to operate the transfer station and dispose of solid waste in 2003 will be approximately $85.00 per tonne.

Therefore, it is recommended that the charge for solid waste from the public works operations of the Region and the local municipalities be increased from $58.30 per tonne to $85.00 per tonne, effective January 1, 2003.

4.2.3 Compostable Yard Waste from Municipal Works Operations

Most of the municipally-collected compostable yard waste from East Gwillimbury and Georgina is hauled directly by their collection contractors to the Organic Yard Waste Composting Facility in Richmond Hill. In 2002, the waste transfer station received only a very small quantity of compostable yard waste from municipal works operations, which was charged at $87.00 per tonne.

The Region's cost for processing yard waste at the Composting Facility in 2003 will be approximately $60.00 per tonne. In addition, it will cost about $26.00 per tonne to haul it there from the waste transfer station. Therefore, it is recommended that the charge for compostable yard waste from the public works operations of the Region and the local municipalities be increased from $87.00 per tonne to $90.00 per tonne, effective January 1, 2003.

4.2.4 Residential Solid Waste and Compostable Yard Waste

As shown in Table 1, solid waste and compostable yard waste delivered by residents is currently charged at a rate of $70.00 per tonne, with a minimum charge of $7.00 for any load less than 100 kilograms. It is recommended that these rates not be changed.

It is recognized that the Region's actual cost for the haulage and processing of compostable yard waste is higher than the actual cost for the haulage and disposal of solid waste. However, the same fee is recommended for both material types from residential sources in order to streamline operations at the waste transfer station and to encourage residents to separate their compostable yard waste from their solid waste.

4.2.5 Industrial, Commercial and Institutional (ICI) Wastes

On August 1, 1999, Roger LaRue Enterprises Limited (LaRue) merged with Capital Environmental Resource Inc. which is a large waste management company. LaRue collects most of the solid waste generated by ICI sources throughout the Town of East Gwillimbury and the Town of Georgina, which could be in the order of 5,000 to 10,000 tonnes per year. However, LaRue has only delivered a negligible quantity of solid waste to the Region's transfer station since the facility commenced operation in 1998.

Capital Environmental also operated the Bales Transfer Station that is located at 21 Bales Drive in the Town of East Gwillimbury. The company closed that facility permanently on October 18, 2002.

On October 22, 2002, LaRue opened a new transfer station which is located at 23082 McCowan Road in the Town of Georgina. The Certificate of Approval issued by the Ministry of the Environment will allow the facility to receive up to 75 tonnes per day of solid waste from ICI sources.

The rates currently advertised by LaRue for its new transfer station in Georgina are presented in Table 3.

Table 3
Current User Fees Charged by LaRue
New Transfer Station in Georgina

Materials	Rate
Solid Waste	$80.00 per tonne
Minimum Charge for Solid Waste	$20.00 per load (to 200 kg)

As shown in Table 1, all solid waste and compostable yard waste delivered to the Region's waste transfer station by ICI customers is currently charged at a rate of $82.00 per tonne and $87.00 per tonne, respectively. The Region's transfer station does not have the capacity to handle large volumes of ICI waste. To ensure that the Region's facility does not receive a lot of ICI waste, its tipping fees should be higher than LaRue's. Therefore, it is proposed that the tipping fees be $85.00 per tonne and $90.00 per tonne for solid waste and compostable yard waste, respectively.

4.2.6 Tires

It is estimated that the Region's waste transfer station will receive approximately 110 tonnes of tires in 2003, which is a significant quantity. Approximately 20 percent of this total quantity is comprised of large tires from heavy trucks.

The cost of recycling and/or disposing of heavy truck tires will increase significantly in 2003 because the main contractor for such tires in the Greater Toronto Area recently went out of business. Therefore, it is recommended that the rates for heavy truck tires be increased by $5.00 per tire, effective January 1, 2003. This increase will bring the waste transfer station in line with the rates being charged by the retail tire industry and will allow the Region to continue covering its cost for tires.

5. FINANCIAL IMPLICATIONS

The Region's Operating Budget for 2003 will be prepared generally in accordance with the recommended user fees as presented in Table 1. The proposed net budget for 2003 for the operation of the Georgina Transfer Station is $850,000. The net cost to the Region has significantly increased over 2002 due to the loss of the revenue from local municipalities and the rebate from the City of Toronto.

6. LOCAL MUNICIPAL IMPACT

As explained previously in this report, the residential waste delivered by the local municipalities to the facility in 2003 will be accepted at no charge. It is recommended that the Region continue to charge local municipalities for the solid waste and compostable yard waste that is generated from municipal works operations such as the cleaning of roadside ditches, the maintenance of lawns and gardens, and the disposal of waste from municipal facilities. However, the quantity of materials that are generated from such sources is very small, therefore the impact to the local municipalities from the proposed user fee increases is minimal.

7. CONCLUSION

This report provides an update regarding the financial situation of the Region's waste transfer station in Georgina. The adoption of the recommended user fee increases will help to fund the operation of the facility.

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Recommended by:

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Approved for Submission:

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Chief Administrative Officer

November 27, 2002

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THE REGIONAL MUNICIPALITY OF YORK

Solid Waste Management Committee
December 11, 2002
Report of the
Commissioner of Transportation and Works

AGREEMENT FOR INTERIM SOLID WASTE TRANSFER STATION SERVICES

1. RECOMMENDATION

It is recommended that:

1. Regional Council ratify the agreement with Miller Waste Systems, a division of Miller Paving Limited for the provision of interim solid waste transfer station services at the company's existing transfer station which is located on Miller Avenue in the Town of Markham.

2. PURPOSE

The purpose of this report is to have Regional Council ratify the agreement that the Region has executed with Miller Waste Systems, a division of Miller Paving Limited (Miller) for the provision of interim solid waste transfer station services.

3. BACKGROUND

On February 28, 2002, Regional Council, through the adoption of Clause No. 1 of Report No. 3 of the Commissioner of Transportation and Works, provided authorization for the conclusion of respective agreements with Miller for:

- The design and construction of a Northern transfer station, material recovery facility, weigh scales and associated works at the Bales Drive property in East Gwillimbury.
- The operation of the proposed waste management facilities on Bales Drive in East Gwillimbury.
- A Southern transfer station.

The report also indicated that:

- There would be a need for interim transfer station capacity upon the closure of the Keele Valley Landfill Site at the end of 2002 since neither the Northern or Southern transfer stations could be constructed by that date.
- The Region could obtain interim transfer station capacity at Miller's existing transfer station on Miller Avenue in the Town of Markham at a cost of $10.50 per tonne, which includes the seven percent Goods and Services Tax (GST).

The proposal to obtain interim transfer station capacity from Miller was further considered by Regional Council on October 17, 2002. At that time, Regional staff were directed to finalize an agreement with Miller for the provision of an interim waste transfer station prior to October 23, 2002, in accordance with the February 2002 report. Regional staff were also directed to report back to Regional Council to ratify the agreement.

4. ANALYSIS

In accordance with the direction provided by Regional Council on October 17, 2002, an agreement was executed with Miller on October 22, 2002. The agreement had been reviewed and approved by the Region's external legal counsel, McCarthy Tètrault. The pertinent details of the agreement are summarized as follows:

- Miller shall provide the services of its existing transfer station which is located on Miller Avenue in the Town of Markham.
- The transfer station shall receive, inspect, handle, compact and re-load solid waste and source-separated organics which are collected by the local municipalities and the Region.
- The commencement date shall be January 2, 2003 and the agreement shall terminate on the earlier of the date that the Southern transfer station begins providing transfer station services to the Region or four years from the commencement date of the Interim Transfer Station.
- Miller shall provide, throughout the term of the agreement, performance securities equivalent to 100% of the estimated amount of the services fees for the year 2003.
- The cost to the Region will be $10.50 per tonne (includes seven percent GST) in 2003, which will be adjusted in each subsequent year in accordance with the Consumer Price Index.

Table 1 provides an estimate of the quantities that would be directed to the Interim Transfer Station under the agreement with Miller.

Table 1
Miller's Interim Transfer Station
Anticipated Quantities
(tonnes)

Year	Solid Waste	Source-Separated Organics
2003	160,000	0
2004	180,000	0
2005	185,000	15,000
2006	180,000	18,000

5. FINANCIAL IMPLICATIONS

Based on the figures mentioned previously in this report, the Interim Transfer Station services will cost the Region approximately $1,680,000 (includes seven percent GST) in 2003. This amount will be provided in the proposed 2003 Business Plan and Operating Budget.

6. LOCAL MUNICIPAL IMPACT

It is intended that East Gwillimbury and Georgina will continue to use the Region's transfer station in Georgina while the other seven local municipalities will use Miller's Interim Transfer Station.

The Interim Transfer Station is conveniently located about two kilometres south of Highway 7 and one kilometre east of Highway 404. This location, compared to that of the Keele Valley Landfill Site, will mean a slightly longer haulage distance for the City of Vaughan's municipal collection trucks. The Town of Markham will have cost reductions as Miller's facility is centrally located and closer than Keele Valley. The haulage distances will be similar to or less than the existing situation for the other five local municipalities.

7. CONCLUSION

An agreement has been executed with Miller for the provision of interim transfer station services. By adopting the recommendation of this report, Regional Council will have ratified the agreement.

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December 3, 2002

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