



**STAFF REPORT
ACTION REQUIRED**

Proposed Measures to Reduce In-Store Packaging Waste and Litter, Municipal Hazardous and Special Waste and Plastic Water Bottles

Date:	October 29, 2008
To:	Public Works and Infrastructure Committee
From:	General Manager, Solid Waste Management Services
Wards:	All
Reference Number:	p:/2008/swms/Nov. /019PW

SUMMARY

The City of Toronto has adopted the goal of diverting 70% of its waste from landfill and reducing the impact of litter on our local environment. As part of the Target 70 plan the City has taken a 3Rs approach to waste reduction and waste diversion. This report recommends incentives to reduce, reuse and ensure the recyclability of plastic retail shopping bags, hot drink cups and plastic take-out food containers. This report also measures to reduce or eliminate the use of plastic water bottles at City of Toronto facilities and recommends enhanced recovery programs for municipal hazardous and special waste.

RECOMMENDATIONS

The General Manager, Solid Waste Management Services recommends that:

Plastic Bags

1. Commencing June 1, 2009, the City of Toronto:
 - a. require all retailers that offer or provide to customers single-use plastic retail shopping bags (as defined in Appendix A) for the transport of purchased items at the point of sale in a retail store in the City to provide a minimum discount of \$0.10 for each single-use plastic retail shopping bag not used by the customer;

- b. require all retailers who offer or provide single-use plastic retail shopping bags to communicate the discount to customers by:
 - i. prominent signage at the point of sale; and
 - ii. itemizing the discount on the transaction receipt (if one is issued);
- c. require all retailers to accept the use of a reusable bag or container (as defined in Appendix A) for the transport of purchased items in lieu of single-use plastic retail shopping bags; and
- d. ban the sale or distribution of single-use plastic retail shopping bags that are not compatible with the City of Toronto's recycling program (as described in Appendix a), including biodegradable or compostable plastic bags (as defined in Appendix A) and bags with metal grommets or other non-plastic fittings.

Hot Drink Cups

- 2. Commencing June 1, 2009, the City of Toronto:
 - a. require all retailers who sell hot drinks in a single-use disposable Hot Drink Cup (as defined in Appendix B) to offer, and provide, a minimum discount of \$0.20 off of the price of a hot-drink in a single-use disposable Hot Drink Cup, to every customer that purchases a hot-drink in a reusable or refillable cup (as defined in Appendix B);
 - b. require all retailers who sell hot beverages in single-use disposable cups to communicate the discount to consumers by:
 - i. prominent signage at the point of purchase; and/or
 - ii. itemizing the discount on the transaction receipt (if one is issued); and
 - c. require retailers who sell hot drinks in single-use disposable cups to sell the hot drink in an equivalent quantity by filling a reusable mug in lieu of single-use disposable cups.
- 3. The City of Toronto ban the sale or distribution of single-use hot drink cups (as defined in Appendix B) that are not compatible with the City of Toronto blue bin program (as described in Appendix B), by December 31, 2009.

Plastic Take-Out Food Containers:

- 4. The City of Toronto request food service retail representatives, foodservice trade associations and/or other foodservice stakeholders who currently use plastic take-out food containers and operate in the City, to develop, by December 31,

2010, a reusable and/or refillable take-out food container, or take-out food service protocol, which will allow customers to choose a reusable option for take-out food packaging.

5. The General Manager of Solid Waste Management Services be requested to report back to Council, by January 1, 2011, on the progress of Recommendation 4 and on the use of bans and/or financial tools on plastic take-out food containers that may be appropriate at that time.
6. The City of Toronto ban the sale or distribution of plastic take-out food containers (as defined in Appendix C) that are not compatible with the City of Toronto Blue Bin program (as described in Appendix C), by December 31, 2009.

Other Materials:

7. The General Manager of Solid Waste Management Services be authorized to report back with recommendations on additional in-store packaging materials to be considered for similar packaging reduction policies.

Bottled Water:

8. The City of Toronto:
 - a. ban the sale or distribution of bottled water at Civic Centres immediately, with due regard for any current contracts related to the purchase or sale of bottled water;
 - b. authorize and direct appropriate staff from Solid Waste Management Services, Parks, Forestry and Recreation, Facilities and Real Estate, Purchasing and Materials Management, Toronto Public Health and Toronto Water, to work together to develop and implement a program that bans the sale and distribution of bottled water at all remaining City facilities, improve accessibility to tap water at all City facilities and take into account existing contracts related to bottled water at City facilities and unique public health and safety related situations, and that this implementation be completed by December 31, 2011.

Packaging Reduction Working Group:

9. The In-Store Packaging Working Group be reconstituted as a Packaging Reduction Working Group with two primary roles:
 - a. explore the options available to the City to reduce factory packaging (i.e., packaging applied at the point of manufacture or distribution) and report on the options explored to the Public Works and Infrastructure Committee; and

- b. explore the options available for a program where customers could remove factory packaging at the point of purchase and leave the packaging at the retail location, and that the Working Group report back to Council on the feasibility of such a program.
10. Membership of the Packaging Reduction Working Group be modified to include factory packaging and retail representatives.

Batteries, Paint Cans and Light Bulbs:

11. Savings which accrue to the City of Toronto as a result of the Waste Diversion Ontario funding of Municipal Hazardous and Special Waste be reinvested in enhanced recovery programs for those materials such as regular scheduled collection days for apartments and increased Toxic Taxes for single family residences.
12. The City Solicitor be directed to submit the necessary bills to Council to implement the above recommendations.

FINANCIAL IMPACT

The 2009 Recommended Operating Budget of Solid Waste Management Services includes \$0.700 million in funding allocated for developing and implementing a communication and outreach program for this initiative in the Waste Diversion Cost Centre SW0703-Waste Diversion and Planning.

Any new by-law to be developed from this initiative would involve support from Municipal Licensing and Standards (MLS). In addition, the 2009 Recommended Operating Budget of Solid Waste Management Services includes funding for 15 staff including 12 dedicated enforcement officers that will undertake a wide range of duties associated with Target 70 initiatives including enforcement of this program. The funding for these staff resources is budgeted as follows: Cost Centres SW0619- Bylaw Enforce-Dist 3 & 4-Waste for \$1.021 million and SW0712- Bylaw Enforcement-District 1&2-Recycle for \$1.478 million. The resources required for the continued enforcement of this program will be reviewed again as part of the 2010 Operating Budget process.

The reduction of in-store packaging waste being managed by the City of Toronto will generate a cost savings, since the material will never enter the City's waste management system. Assuming, an annual reduction of 5,000 tonnes of in-store packaging waste would generate an estimated cost savings of at least \$0.500 million per year.

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

DECISION HISTORY

Getting to 70% Solid Waste Diversion by 2010

At its meeting of June 19, 20 and 22, 2007, City Council adopted, as amended, the recommendations in Executive Committee report EX9.1 entitled “Proposed Initiatives and Financing Model to Get to 70% Solid Waste Diversion by 2010” (the “Target 70 Report”).

The staff report and Council’s decision can be viewed at (relevant from pages 2 to 10): <http://www.toronto.ca/legdocs/mmis/2007/cc/decisions/2007-06-19-cc10-dd.pdf>

Amended Report EX9.1 included the motions that an In-store Packaging Waste Diversion Working Group be established and that the General Manager of Solid Waste Management Services report on the specific materials or classes of materials or products, specifically including batteries, light bulbs, paint cans, plastic bags and hot drink cups, that may be suitable for deposit-return or take-it-back programs

City Council, at its meeting of December 11, 12 and 13, 2007, amended Public Works and Infrastructure Committee Report PW11.13, entitled “Response to Council Motions – Getting to 70% Diversion by 2010” by adding motion 7, which states:

“The City Solicitor be requested to report to an upcoming meeting of the Public Works and Infrastructure Committee comprehensively on what powers the City has under the new City of Toronto Act to enact its own advanced disposal fees, levies or similar charges against packaging etc.”

The staff report and Council’s decision can be viewed at (relevant pages 110 and 111): <http://www.toronto.ca/legdocs/mmis/2007/cc/decisions/2007-12-11-cc15-dd.pdf>

Recycling of Hot Drink Cups

At its meeting of October 31, 2007, the Public Works and Infrastructure Committee considered PW10.12, 2007 titled “Recycling of Hot Drink Cups” and requested that staff work with Tim Hortons to develop a pilot program, replicating full-scale operating conditions, to examine the feasibility of adding hot drink cups to the City’s recycling systems, including small commercial Yellow Bag customers, public space and public event recycling containers, Agencies, Boards, Commissions and Divisions, and residential single and multi-family homes; and that the General Manager, Solid Waste Management Services report back to the Public Works and Infrastructure Committee on this program as part of the report of the In-Store Packaging Waste Diversion Working Group in 2008

The staff report and the Public Works and Infrastructure Committee Decision can be viewed at (page 17):

<http://www.toronto.ca/legdocs/mmis/2007/pw/decisions/2007-10-31-pw10-dd.pdf>

Product Stewardship to Facilitate Waste Diversion

At its meeting of September 28, 29, 30, 2005, Council approved the establishment of an Informal Working Group comprised of Councillors Giambrone, Palacio and Balkissoon to discuss the issue of depot return systems. At its meeting of March 7, 2006 the Works Committee adopted recommendations from that Working Group that included:

- (2) the Province of Ontario be requested to enact legislation to implement a comprehensive product stewardship system that requires industry to make payments to municipalities to cover the full cost of diverting the following materials: tires, oil, electronics, household hazardous waste, litter, Green Bin organics, mattresses, carpets and furniture;
- (3) should the Province choose not to implement a full product stewardship system, the City be given the necessary powers under the new City of Toronto Act to require companies selling the aforementioned products in the City to pay an advanced disposal fee into a fund that is then used by the City to fund the full cost of operating programs that effectively divert these products from landfill;

Communication to Works Committee from Councillor Giambrone and Palacio can be viewed at:

<http://www.toronto.ca/legdocs/2006/agendas/committees/wks/wks060503/it027.pdf>

Recycling of Fluorescent Tubes and Other Light Bulbs Containing Hazardous Materials

At its meeting of September 25, 26 and 27, 2006 City Council adopted the following recommendations related to the recycling of fluorescent tubes and other light bulbs containing hazardous materials:

- (1) City staff report back to Works Committee as to the status and effectiveness of the light bulb recycling programs in place at City facilities and facilities operated by Toronto agencies, boards and commissions;
- (2) Solid Waste Management develop a corporate policy for the safe and efficient recycling of fluorescent light bulbs, metal halide light bulbs or other light bulbs that contain mercury or other potentially hazardous materials such as mercury and other gases;

Works Committee Report Number 6, Clause Number 4 can be viewed at:

<http://www.toronto.ca/legdocs/2006/agendas/council/cc060925/wks6rpt/cl004.pdf>

Plastic Water Bottles

At its meeting of December 11, 12 and 13, 2007, Council Referred the following motion to the Executive Committee:

“that the General Manager, Toronto Water, in consultation with the General Manager of Solid Waste Management Services, address the significantly growing impact of PET bottles on our recycling infrastructure and landfill capacities, by examining and reporting back on possible Blue Box alternatives, such as a deposit return system similar to ones already in place in many provinces.”

Motion M183 can be viewed at:

<http://www.toronto.ca/legdocs/mmis/2008/ex/comm/communicationfile-5125.pdf>

COMMENTS

The City’s waste management activities, programs and initiatives take into account the protection of human health, the environment and the conservation of natural resources. To this end, the City should promote, support and where appropriate, implement initiatives that reduce, reuse and recycle the City’s waste, with the goal of reducing the amount of waste generated to the maximum extent practicable.

The in-store packaging target materials discussed in this report are all single-use disposable packaging materials. These materials (the “Target Materials”) consist of:

- (a) Hot Drink Cups (e.g., coffee cups and lids applied at quick-service coffee shops and chains)
- (b) Plastic Retail Shopping Bags (e.g., grocery bags and other plastic single-use carrier bags which are provided at the point of purchase for customer convenience to carry their purchase)
- (c) Single-use plastic food packaging (e.g., take-out “clamshell” containers)

The Target Materials are unnecessarily contributing to depleting the capacity of the Green Lane landfill and make up a noticeable portion of litter on City streets. As directed by Council through the Target 70 report, staff is recommending ways that can effectively deal with the environmental issues that these Target Materials are creating and contribute to achieving 70% diversion.

Environmental Issues

Landfill Capacity

The Target Materials are primarily being managed in the waste stream through landfill disposal and therefore reducing or diverting these materials will extend the life of the Green Lane landfill.

The Green Lane landfill is permitted by the Ministry of the Environment to accept a total of 14.85 million cubic meters of non-hazardous solid waste and daily cover. At the current rate of diversion (42%) the City would fill Green Lane Landfill at a rate of 928,125 cubic meters per year.

The in-store packaging Target Materials discussed in this report are all single-use disposable packaging materials. Plastic retail shopping bags, hot drink cups and plastic take-out food containers are, currently and primarily being managed through landfill disposal, therefore reducing or diverting these materials will extend the life of the landfill.

Conclusions from Stewardship Ontario audit data (2005), presented to the In-Store Packaging Waste Diversion Working group, estimate an average of 8.8 plastic retail shopping bags generated, per household, per week in Toronto. This represents a total generation in Toronto of 457.6 million plastic retail shopping bags per year and, with each bag weighing 6 grams, 2745.6 tonnes per year, which is approximately 6,900 cubic meters of landfill capacity per year. Plastic bags do not degrade significantly over time and therefore this volume of plastic bags will persist if landfilled.

Hot Drink stakeholder representatives on the In-Store Packaging Working Group were not prepared to provide the working group with data related to the actual number of cups sold in Toronto because this was considered proprietary information. Staff estimates that 1 million hot drink cups are used in Toronto each day. Using the estimate of 365 million hot drink cups per year, we estimate the total generation of hot drink cups to be approximately 15,400 cubic meters of landfill capacity per year. While the paper component of most hot drink cups can degrade in landfill over time, unlike plastic bags and take-out food containers, this degradation does contribute to methane production.

City waste audits show approximately 7.67 kg of polystyrene packaging (including protective packaging, plastic take-out food containers, hot drink lids, cups and pill bottles) per household per year. If we assume 30% of this total is polystyrene take-out food packaging we approximate 2,301 tonnes of plastic take-out food containers disposed per year. The generation of plastic take-out food containers represents approximately 21,500 cubic meters of landfill capacity per year. Polystyrene containers do not degrade over time in landfill.

Based on the above assumptions, the total generation rate of these materials together represents approximately, 12,300 tonnes and 43,800 cubic meters of landfill capacity per year. At our current rate of fill, this could represent up to 5% of Green Lane landfill usage per year. By displacing this volume of material the City could extend the life of the Green Lane landfill by approximately one year.

Furthermore, landfill capacity in Ontario remains scarce and establishing new landfills or waste processing sites is a long (i.e., 7 to 10 years) and expensive endeavour that can carry significant environmental impacts. Building new landfill capacity has potential impacts on ground and surface water, as well as on the host community through increased traffic, noise and particulate matter in the air. To avoid environmental impacts, City should minimize the amount of waste generated and the amount of waste that must be managed.

Litter Reduction

Reduction of the use of the Target Materials will help to reduce litter. In aggregate, all categories of in-store packaging (e.g., cold drink cups, take-out trays, paper take-out food containers, napkins, utensils, etc.) represent approximately 26.5% of litter. Hot drink packaging in particular were also found to be the top contributor to hundreds of litter bins in an audit conducted by Parks and Recreation in 2006. The City spends \$20 million per year on litter management which involves curbside collection of three stream litter bins, street and sidewalk vacuum collection (i.e., “Mad Vac”) and bag-and-broom fly squads. In 2001 the City of Toronto set a goal of reducing litter by 50% over 5 years. Through education, enforcement and outreach the City managed to reduce the amount of on-the-ground litter by 40% over 5 years (2002 – 2007) and has increased the number of public space litter and recycling bins. Further reduction of litter is necessary and can be achieved through a policy which supports the source reduction of single-use disposable items that end up as litter such as hot drink cups, plastic bags and take-out food containers.

Reducing the Target Materials

The environmental benefits of reducing the use and disposal of single-use disposable items are clear. Reducing the use and consumption of the Target Materials simply results in less waste to manage through recycling or disposal. A reduction in waste means less waste to collect, resulting in local environmental benefits such as fewer trucks on the road, less gas consumption and lower emissions. Less waste managed means less waste to process at MRFs, other recycling facilities and the City landfill, resulting in less energy used and less energy consumed in transportation of materials. It is more environmentally sound, and cost effective, to reduce the amount of waste that we produce than it is to recycle or dispose of it. Recycling and disposal both require the use of energy (e.g., to run the processing operations) and transportation (e.g., source collection and transfer to facilities) and carry the environmental and financial costs of energy use, greenhouse gas emissions and the need for more waste processing capacity. By simply reducing the

amount of waste results in the reduction of the City's overall environmental impact and contributes to the environmental well being of the City.

Torontonians have asked the City to address waste packaging. In public consultation sessions held in 2006 and 2007 on the City's approach to waste disposal, residents identified packaging waste as one of the key problems facing waste management in Toronto. During City-sponsored focus groups conducted by Ipsos Reid in May and October, many participants identified packaging as the primary problem associated with waste reduction. It is clear that Torontonians are concerned about their impact on the environment and, to the extent that citizens are given a choice affecting that impact, there is greater social and environmental benefit to the City of Toronto.

Key Principles when Developing In-Store Packaging Policy

Staff has identified five key principles for evaluating the various options for managing the Target Materials.

1. 3Rs hierarchy:
 - (a) Policies should first encourage source reduction of waste as well as provide reuse and recycling opportunities. Disposal of the target materials should be avoided.
2. Consistency with the goals of the Target 70 focused service model, which:
 - (a) minimizes the amount of waste generated to the maximum extent practicable;
 - (b) maximizes municipal efficiency of collection and processing of recyclables; and
 - (c) maintains WDO funding.
3. The policies should: not put Toronto businesses at a significant competitive disadvantage with those outside of the city; have a relatively low administrative or financial impact on retailers; and should not increase the baseline price of products.
4. The policies should provide residents with the tools and access to information to make environmentally responsible choices which result in the reduction of their waste when making their purchasing decisions.
5. Consumer health and safety should not be compromised when developing the City's approach because the Target Materials all have the potential to come in contact with food and beverage

Recommended Policy for the Target Materials

After considering the City of Toronto Act and upon review of successful waste reduction programs in other jurisdictions, the availability of reusable alternatives to single-use disposables (e.g., reusable shopping bags and travel mugs), and existing waste reduction incentives already in use by some retailers (e.g., a charge-per-bag, discounts for reusable mugs) staff are recommending a policy that:

1. Contains a financial incentive that encourages consumers to make a choice having a positive environmental impact by reducing the use of single-use disposable packaging;
2. Provides the tools and information necessary for customers to make an educated choice with respect to the selection of reusable alternatives to single-use disposable packaging; and
3. Acknowledges that when single-use disposables must be used, they should be compatible with the City's waste diversion systems and not be managed through the residual waste stream.

Staff is proposing the following policy be applied to each of the Target Materials, as indicated below.

Plastic Retail Shopping Bags

(a) Reduction Strategy

The City of Toronto should require all retailers that offer or provide to customers single-use plastic retail shopping bags (as defined in Appendix A) for the transport of purchased items at the point of sale in a retail store in the City to provide a minimum discount of \$0.10 for each single-use plastic retail shopping bag not used by the customer;

Retailers who offer or provide single-use plastic retail shopping bags should also be required to communicate this available discount by prominent signage at the point of sale and/or itemized on the transaction receipt to inform customers of the choice they have (i.e., a single-use disposable bags vs. a reusable bag or “no bag”).

In March 2002 the Irish government introduced a levy that resulted in a significant reduction in the demand for plastic bags. The levy charged 15 Euro cents (\$0.24CAN) starting in 2002 and was raised to 22 Euro cents (\$0.35CAN) in 2007. Irish authorities chose 15 Euro cents because it was considered sufficiently high to give most consumers “pause for thought”.

Their statistics show a 94% reduction in the use of plastic bags (from 328 bags per capita to 21 bags per capita) in three years. The use of bags increased to 33 bags per capita in early 2007, prompting officials to raise the levy. By November 2007, the plastic bag consumption had dropped to 26 bags per capita.

The successful reduction in the demand for plastic retail shopping bags in Ireland can be attributed to a levy on each plastic retail shopping bag. The Irish levy is a tax on each plastic bag with revenues going to the Irish government. A similar system is not possible under the current City of Toronto Act, which only permits a sales tax to be applied to alcohol, tobacco and admission on places of amusement. It is clear that source reduction is effected by a per-bag charge in Ireland and that some sort of financial tool should be utilized in Toronto to encourage source reduction of plastic bags.

Research suggests that a per-bag fee of \$0.10 to \$0.35 would significantly reduce the consumer use of retail plastic shopping bags. Public research in Australia concluded that people would be more likely to reduce the use of plastic retail shopping bags if there were a charge or fee implemented. For four weeks in the summer of 2008, some cities in the Australian state of Victoria, piloted the imposition of a 10 cent (Australian) levy on each plastic retail shopping bag. Preliminary results released by the State Environment and Climate Change Minister showed a 79% reduction in the use of plastic bags.

A tax or fee on plastic retail shopping bags is not feasible under the City of Toronto Act, but the waste reduction benefit of a financial incentive is apparent. Staff recommends a per-bag discount of \$0.10 to effectively drive source reduction behaviour by providing a reasonable financial incentive to reduce plastic retail shopping bag use.

(b) Reuse Strategy

The City of Toronto should require all retailers to accept the use of a reusable bag or container (as defined in Appendix A) for the transport of purchased items in lieu of single-use plastic retail shopping bags.

Consumers can take advantage of the plastic retail shopping bag discount by bringing their own reusable bag to retail stores. In order to provide customers with the option of owning a reusable bag, many retailers are already offering reusable bags for sale. All retailers should be willing to accept the use of reusable bags and should ask customers if they want a plastic retail shopping bag or not.

Current City policies encourage the reuse of plastic retail shopping bags for lining Green Bin kitchen catchers and Solid Waste Management Services continues to support the reuse of plastic retail shopping bags. However, while the City encourages the reuse of plastic retail shopping bags, the City does not consider plastic retail shopping bags to be equivalent to a reusable shopping container.

(c) Recycle Strategy

The City of Toronto should ban the sale or distribution of single-use plastic retail shopping bags that are not compatible with the City of Toronto's recycling program (as described in Appendix A), including biodegradable or compostable plastic bags (as defined in Appendix A) and bags with metal grommets or other non-plastic fittings. Starting December 8, 2008, the City will begin accepting plastic retail shopping bags into the Blue Bin program. With the introduction of plastic retail shopping bags in the Blue

Bin, it is recommended that the City should also ban the sale or distribution of any plastic bag that is not compatible with the City's recycling program including biodegradable or compostable plastic bags and bags with metal grommets or non plastic fittings. These types of plastic bags interfere with the recycling of plastic bags and contaminate the end-products for recycled plastic bags. Because biodegradable plastic bags are visually indistinguishable from traditional plastic bags they should be banned from sale or distribution in Toronto to prevent the contamination of recyclable plastic bags. The contamination created by biodegradable and compostable plastic bags in the recycling process renders potentially recyclable plastic unusable and subsequently must be disposed of in landfill.

Our overall approach to plastic retail shopping bags follows the 3Rs hierarchy by providing residents with three environmentally beneficial choices: to reduce their plastic bags, reuse any bags they have (i.e., for Green Bin liners, pet waste, etc) or bring reusable bags when they shop, and to recycle any remaining plastic bags in the Blue Bin system. This approach expands on discount programs that many Toronto retailers are offering which provides a discount when reusable shopping bags are used. This approach maintains customer and resident convenience and will not compromise food safety.

Hot Drink Cups

(a) Reduce Strategy

City of Toronto should require all retailers who sell hot drinks in a single-use disposable Hot Drink Cup (as defined in Appendix B) to offer, and provide, a minimum discount of \$0.20 off of the price of a hot-drink in a single-use disposable Hot Drink Cup, to every customer that purchases a hot-drink in a reusable or refillable cup (as defined in Appendix B).

Retailers who sell hot beverages and single-use disposable cups should also be required to communicate this available discount by prominent signage at the point of sale and/or itemized on the transaction receipt to inform customers of the choice they have.

The current practice at some major hot drink chains provides customers with a financial incentive (i.e., a discount) to use a refillable mug. For example, Tim Hortons and Starbucks both offer a 10 cent discount on the price of a cup of coffee when a reusable mug is used. Some hot-drink retailers have no stated policy or indication that a discount is offered for reusable mugs. Staff research suggests that the current discount amount may be too small to motivate customers to use reusable mugs regularly and that the discount is often not well communicated. Based on staff research the wholesale cost of a hot drink cup, lid and insulating cardboard sleeve, can range from \$0.13 to \$0.27 depending on the size and composition of the cup. Staff recommends a discount of \$0.20 to effectively drive the source reduction of single-use hot drink cups by providing a financial incentive for the consumer to make the environmental choice to reduce waste and choose reusable options. This amount is also representative of the cost of the packaging to the retailer.

(b) Reuse Strategy

The City of Toronto should require retailers who sell hot drinks in single-use disposable cups to sell the hot drink in an equivalent quantity by filling a reusable mug in lieu of single-use disposal cups.

All retailers selling hot drinks in single-use disposable cups should be required to provide the choice to the consumer of using a reusable mug (e.g., a reusable travel mug, a ceramic mug for use on the premises). Therefore all retailers that offer hot drinks in single-use hot drinks cups should be required to fill a customer's order in a reusable mug.

(c) Recycling Strategy

The City of Toronto should ban the sale or distribution of single-use hot drink cups (as defined in Appendix B) that are not compatible with the City of Toronto Blue Bin program by December 31, 2009.

Recycling of hot drink cups (specifically paper-based polycoat cups and the associated polystyrene lids) in Toronto's Blue Bin program is not currently possible. There are several key reasons, discussed in Appendix D of this report, as to why it is not feasible, at this time, to add these materials to the single stream recycling program.

In order to ensure that any single-use disposable hot drink cups used in Toronto are recyclable, it is recommended that Toronto ban the sale or distribution of single-use hot drink cups and lids that are not compatible with the City of Toronto Blue Bin program by December 31, 2009.

Our overall approach to single-use hot drink cups follows the 3Rs hierarchy by providing residents with environmentally beneficial choices: an incentive to reduce disposables and to use reusable or refillable cups. This approach expands on discount programs that many Toronto retailers are offering which provides a discount when reusable mugs are used and is not too onerous of an amount for retailers to bear. Our approach acknowledges the current problem with recycling single-use hot drink cups and sets a goal and timeline for solving the problem.

Plastic Take-out Food Containers

(a) Reduce and Reuse Strategy

The City of Toronto should request food service retail representatives, foodservice trade associations and/or other foodservice stakeholders who currently use plastic take-out food containers and operate in the City, to develop, by December 31, 2010, a reusable and/or refillable take-out food container, or take-out food service protocol, which will allow customers to choose a reusable packaging option for take-out food packaging.

Unlike plastic bags and hot drink cups, there are currently no viable reusable alternatives to plastic take-out food containers that retailers are willing to fill at the point of purchase in lieu of disposable packaging. During consultation with food service retailers and brand owners, all cited health and safety concerns with respect to packaging food in

reusable containers, especially those brought in by customers, because the food service retailer would not be able to guarantee that the container is safe and sanitized. Food service retailers feel they would be liable for contamination as it would be impossible to determine whether the source of contamination existed prior to filling the customer-brought reusable container.

Acknowledging this, Toronto should seek the development of a reusable take-out food container or foodservice protocol for reusable take-out food containers that will satisfy health and safety requirements and provide customers with a reusable option when ordering take-out food. The General Manager of Solid Waste Management Services will monitor the progress towards the development of a reusable take-out food container and will report back to Council by January 1, 2011.

(b) Recycling Strategy

In order to ensure that any plastic take-out food containers used in Toronto are recyclable, the City of Toronto should ban the sale or distribution of plastic take-out food containers (as defined in Appendix C) that are not compatible with the City of Toronto Blue Bin program by December 31, 2009.

Currently, many plastic take-out food containers are foam polystyrene “clamshells”. As of December 8, 2008 all foam polystyrene will be acceptable in the Blue Bin program. Some paper take-out food containers are also compatible with the City of Toronto Blue Bin program, however, non-foam, clear or coloured polystyrene or other plastic take-out food containers are not currently compatible with the Blue Bin program. Staff will continue to work with affected stakeholder representatives as well as MRF operators and material market representatives to find ways of including other types of plastic take-out food packaging in Toronto’s Blue Bin program in the future.

By-law and enforcement of policy on Target Materials

A by-law will be drafted following Council adoption of recommendations related to this report. Solid Waste Management staff will work with appropriate staff from Municipal Licensing and Standards, Legal Services, Toronto Public Health and any other appropriate departments, to develop the text of the by-law which will include an enforcement protocol and recommended set fines for violation, in the range of \$100.00 to \$400.00 per offence.

Other Policy Option explored

In order to develop this recommended approach, staff examined a number of policies such as taxes, bans, and deposit return and take-it-back programs to deal with plastic retail shopping bags, hot drink cups and plastic take-out food containers. An overview of these policies can be found in Appendix D of this report.

Factory Packaging – Leave at Retail

The In-Store Packaging Waste Diversion Working Group should be reconstituted as a Packaging Reduction Working Group with two primary roles:

- (a) explore the options available to the City to reduce factory packaging (i.e., packaging applied at the point of manufacture or distribution) and report on the options explored to the Public Works and Infrastructure Committee; and
- (b) explore the options available for a program where customers could remove factory packaging at the point of purchase and leave the packaging at the retail location, and that the Working Group report back to Council on the feasibility of such a program.

The In-Store Packaging Waste Diversion Working Group was initially formed to examine the range of mechanisms that would result in achieving the waste reduction targets of in-store packaging outlined in the Target 70 report. Over the course of the discussions there was a suggestion to implement a program where customers could remove factory packaging (i.e., packaging applied at the point of manufacture or production, as opposed to in-store packaging applied at the point of purchase) and leave the packaging at the retail location. At the time it was determined that the suggestion fell outside of the group's mandate (which focused on packaging applied at the point of purchase) and was not explored further.

The industry, retail and manufacturing stakeholders on the Packaging Reduction Working Group will work with the City of Toronto to develop a plan that will reduce factory packaging as well as additional options to provide consumers with the choice to remove factory packaging at the point of purchase and leave the packaging at the retail location.

Plastic Water Bottles

The City of Toronto should:

- (a) Ban the sale or distribution of bottled water at Civic Centres immediately, with due regard for any current contracts related to the purchase or sale of bottled water; and
- (b) authorize and direct appropriate staff from Solid Waste Management Services, Parks, Forestry and Recreation, Facilities and Real Estate, Purchasing and Materials Management, Toronto Public Health and Toronto Water, to work together to develop and implement a program that bans the sale and distribution of bottled water at all remaining City facilities, improves accessibility to tap water at all City facilities and takes into account existing contracts related to bottled water at City facilities and unique public health and safety related situations, and that this implementation be completed by December 31, 2011.

During the past several years, the quantity of plastic water bottles generated has increased significantly. The City of Toronto's drinking water is excellent quality and drinking water from fountains or taps is environmentally preferable to single-use bottles of water. Plastic water bottles require energy resources to produce and they end up in our recycling program, as litter, or in landfill. A policy with respect to water bottles should be consistent with the 3Rs approach and first focus on the reduction of plastic water bottle use. For the City locations that have adequate access to tap water, there should be no need to sell bottled water and it is recommended that the City ban the distribution and sale of bottled water at City facilities.

The City has various contracts related to the sale of bottled water at City facilities that would need to be considered before a ban on the sale of bottled water at City facilities could be instituted. The City is under contract with Pepsi until October 31, 2010 to supply beverage vending machines and beverages to concession operators at City facilities (e.g., arenas, community centres). The contract with Pepsi also requires that a minimum of 50% of product selection availability for sale through vending equipment in each outlet be in the form of healthy beverages including water, 100% juice and low fat milk products. This City requirement was based on a recommendation by Public Health related to healthier choices. The City also has contracts with different concession operators with various expiry dates (e.g., 2012, 2013, 2016 etc.). These contracts would likely have to be renegotiated as the initial bids by the concession operators would have been based on sales projections that included bottled water.

Drinking fountains are available at City's recreation facilities (arenas, community centres etc.) and in various parks across the City. Should there be a need to install additional drinking fountains, the cost is approximately \$2,500.00 for an indoor fountain and \$10,000.00 to \$15,000.00 for an outdoor fountain. Annual maintenance costs are approximately \$50.00 and \$400.00 for an indoor fountain and outdoor fountain respectively.

The target date for a ban of December 31, 2011 has been set to provide the necessary time to ensure adequate access to tap water at all City facilities. A policy banning bottled water distribution by the City would also have to take into account unique situations where bottled water may be necessary, such as emergencies in the community (e.g., evacuation situations) and distribution by Toronto Public Health during Heat Health Alert System response protocols.

Batteries, Light Bulbs and Paint Cans

Effective July 1, 2008, brand owners and importers of municipal hazardous or special waste (MHSW) including paints and single-use, dry cell batteries are obligated to cover municipal costs for the recycling and/or proper disposal of these materials. Municipalities are responsible for the collection costs. In fall 2009, other MHSW materials including compact fluorescent light bulbs (CFL's) and other batteries will be included. As well, in fall 2009, industry will be required to cover 100% of the cost of the entire program, including municipal collection costs.

With 100% funding, the City will have the necessary funds to significantly enhance its recovery program, making it much more convenient for the public. We expect that this will include regular scheduled collection days for apartments and increased Toxic Taxes for single-family residences. With the new funding in place, we also expect to see some stores set up return-to-retail options, similar to the Home Depot CFL recovery program.

The recovery of municipal hazardous or special waste materials through enhanced City recovery programs funded by Waste Diversion Ontario is the preferred recovery method for these materials. It is not practical to ban batteries, CFL's, or empty paint cans which are currently accepted in our Blue Bin program. Implementing a City deposit return program would disqualify the City from WDO funding.

Staff are currently planning a MHSW pilot to commence in late 2008 or early 2009 involving approximately 20 multi-unit buildings. A range of buildings will be selected to ensure a cross-section of different socio-economic categories. Each building will receive 3 MHSW collection days throughout the 8 month pilot where our staff will set up in their lobby or near the waste management collection area for a specified time period. Promotional material will be provided to the residents and building management in advance of their scheduled collection days.

Communications Plan

To effectively implement this report's recommendations a substantial investment in public education will be required. To effect necessary change, the public must be informed, embrace the change and actively engage in the required behaviour.

A proposed public education/promotion budget of approximately \$700,000 has been identified as part of the 2009 recommended operating budget of Solid Waste Management Services. This plan will take into consideration the receptivity of the audience(s), the barriers to reaching these audiences, the specifics of what they are being asked to do, the tools they are provided, their underlying socio-economic characteristics, the consequences of non-compliance, etc. The communication tactics will potentially include research, advertising, website, media relations, displays and print materials, including translation of key materials.

Once Council makes its decision regarding staff's recommendation and provides direction, a targeted communications plan will be created.

Stakeholder Relations

In preparing this report, staff conducted numerous stakeholder consultations including:

- (a) The In-Store Packaging Waste Diversion Working Group.
- (b) The Packaging Waste Reduction Forum, held on September 10, 2008.
- (c) Individual meetings with stakeholders.

- (d) Site visits to other municipalities.

Staff consulted and commissioned research on policy options (including bans, taxes, and deposit return programs) currently utilized, and proposed, for managing in-store packaging in the following jurisdictions:

- Ireland
- Australia
- The City of Seattle
- The City of Los Angeles
- The City of Ann Arbor Michigan
- The City of Oakland
- The City of San Francisco
- The City of Portland
- Alberta
- British Columbia

In-Store Packaging Working Group

The In-Store Packaging Waste Diversion Working Group was formed to explore a range of options available to the City to achieve the source reduction of “in-store packaging” as described in the Target 70 report. Solid Waste Management Staff identified the Target Materials to the In-Store Packaging Waste Diversion Working Group, as the initial materials for source reduction planning.

These Target Materials were identified because there are currently a variety of viable, reusable alternatives to single-use hot drink cups and plastic retail shopping bags, suggesting that these two items in particular can be targeted for source reduction. Additionally, all of these materials are applied at the point of purchase within Toronto’s boundaries (as opposed to the point of manufacture or distribution, potentially outside of the boundaries of the City of Toronto) and therefore may be within our jurisdiction to regulate.

The In-store Packaging Waste Diversion Working Group met three times to explore a range of options available to achieve source reduction of the Target Materials. At the last meeting, in January 2008 the industry, brand owner, and retail stakeholders identified the following:

- (a) Plastic bags were already the subject of voluntary reduction measures per a target set with the Province of Ontario and therefore no additional programs or measures were necessary in the City of Toronto.
- (b) Some hot-drink retailers were piloting in-store recycling programs and suggested that Toronto should integrate hot-drink cups into existing waste diversion programs.

- (c) No reduction of plastic take-out food packaging was possible because it may compromise consumer health and safety.
- (d) All brand owners pay into municipal Blue Box funding through Stewardship Ontario and therefore already financially support waste diversion initiatives.

Notably, no plan to promote or monitor the waste reduction of the Target Materials was presented, and staff therefore resolved to review the issue of source reduction of the Target Materials and bring a policy forward that will encourage the source reduction of the Target Materials.

Packaging Waste Reduction Forum

Toronto hosted a Packaging Waste Reduction Forum on September 10, 2008 and invited industry, retail and packaging manufacturing stakeholders, peer municipalities and ENGOs to hear presentations and discussion on packaging waste reduction. Speakers and presenters at the event included representatives from the Packaging Association of Canada, EPIC, the Canadian Council of Grocery Distributors, the Guelph Food Technology Centre, the Association of Municipalities of Ontario, the Cities of Seattle, Ottawa, London, Ann Arbor Michigan, among others. Full details and presentations from the forum can be found on the Solid Waste Management website.

Toronto hosted this event to engage stakeholders in a discussion on packaging waste reduction and to hear the various positions and viewpoints on the subject. The forum panels and presenters discussed voluntary vs. regulatory approaches to packaging reduction, the powers and strategies available to municipalities to reduce packaging, and case studies of voluntary reduction programs and examples of financial tools and bans from various jurisdictions.

Individual meetings with stakeholders

Staff met with various stakeholders to discuss options the City was considering and to solicit feedback. The following table below provides a summary of the stated positions and staff response.

Stakeholder Group	Position	Staff Response
Canadian Council of Grocery Distributors and representative from major grocery chains	<p>Opposed to government mandated reduction programs that include bans on packaging.</p> <p>Prefer to promote municipal recycling programs of the Target Materials and would support voluntary individual waste reduction measures by retail members.</p>	<p>Staff believe that sufficient source reduction has not occurred through voluntary-based programs.</p> <p>Staff believes a financial incentive on the consumer is the best way of achieving source reduction and reuse.</p> <p>Staff is willing to work with CCGD to promote and encourage recycling of the Target Materials at the municipal level.</p>
Canadian Foodservice and Restaurant Association	<p>Opposed to municipal banning of take-out foodservice packaging.</p> <p>Prefer to promote municipal recycling programs of hot drink cups and plastic take-out food containers.</p> <p>Indicated that their members are already funding municipal recycling programs through Stewardship Ontario.</p>	<p>Staff believe that banning take-out food packaging that is not compatible with the City of Toronto Blue Bin program is a necessary policy option to implement.</p> <p>Staff is willing to work with CFRA to promote and encourage recycling of the Target Materials at the municipal level.</p>
Environment and Plastic Industry Council	<p>Opposed to municipal banning and/or taxing of plastic based packaging.</p> <p>Promotes recycling of all plastic based packaging in municipal Blue Bin programs.</p> <p>Believes that viable recycling markets exist and that the City chooses not to utilize these markets.</p>	<p>Staff believe that banning Target Materials that are not compatible with the City of Toronto Blue Bin program is a necessary policy option to implement.</p> <p>While recycling markets may exist, certain plastic packaging is not currently compatible with the City of Toronto Blue Bin program.</p>
Refreshments Canada	<p>Opposed to municipal banning of bottled water.</p> <p>Supports the management of plastic water bottles through municipal Blue Bin programs.</p>	<p>The City is actively promoting municipal tap water as a viable alternative to bottled water. Making tap water more accessible at City facilities while banning the sale of bottled water is consistent with this policy and waste reduction initiatives.</p>

<p>Tim Hortons</p>	<p>Opposed to banning of hot drink cups and lids.</p> <p>Support the management of this packaging through municipal Blue Bin programs.</p> <p>Tim Hortons has launched a well designed and well promoted program to encourage recycling of most of their packaging, including paper coffee cups in their private retail outlets. Tim Hortons piloted this recycling program in 11 Toronto locations starting in April 2008 which includes three-stream waste and recycling bins in stores and at some drive through locations and is planning to make the program available permanently in their private retail outlets city-wide. Recycling and garbage collection services are provided by private waste management companies under contract to Tim Hortons and the City of Toronto does not provide waste management services to any Tim Hortons location.</p> <p>Tim Hortons recycling program includes polycoat hot drink cups and their promotional posters clearly indicate that cups should go into the paper stream, while the lids must be removed and disposed in the waste.</p> <p>The company has contracted the recycling collection and processing to Turtle Island Recycling which is further separating the fibre stream (at their MRF) into paper and coffee cups. The cup fibre is processed, marketed and recycled.</p>	<p>Staff assert that the existing paper and plastic hot drink cups are not recyclable in the City of Toronto Blue Bin program.</p> <p>Staff is willing to work with hot drink retailers to promote and encourage recycling of the hot drink cups at the municipal level.</p> <p>Staff recognize and commend Tim Hortons for showing environmental leadership by implementing a recycling program at their retail locations.</p>
<p>Starbucks</p>	<p>Supportive of 3Rs approach to managing hot drink cups.</p> <p>Currently working with suppliers to develop a hot drink cup that would be compatible with municipal Blue Bin programs.</p>	<p>Staff are supportive of Starbucks' 3Rs approach to managing hot drink cups.</p> <p>Staff are willing to work with Starbucks to input and advice into the design of a hot drink cup that is compatible with the City of Toronto Blue Bin program.</p>

Nestle Canada	<p>Opposed to municipal banning of bottled water.</p> <p>Assert that bans will not result in reduction of waste because customers will likely choose other bottled beverages in lieu of bottled water.</p>	<p>The City is actively promoting municipal tap water as a viable alternative to bottled water. Making tap water more accessible at City facilities while banning the sale of bottled water is consistent with this policy and waste reduction initiatives.</p>
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Site visits to other municipalities

On the advice of the retail stakeholders and retail representatives, staff organized site visits to the City of Owen Sound (April 25) and the City of Windsor (July 10) to better understand how these jurisdictions are managing hot drink cups in their recycling programs and to compare and contrast these programs with the City of Toronto Blue Bin system.

The City of Owen Sound operates a five stream residential recycling program and allows residents to put polycoat hot drink cups (without the polystyrene lids) in their residential fibre recycling. The City collects recycling from 7 Tim Hortons locations in carts supplied by the City of Owen Sound. Tim Hortons, the only coffee chain operating in Owen Sound, operates a four stream waste program in all of their retail stores and drive through (i.e., paper, plastic and container recycling and garbage). Owen Sound receives polystyrene at resident and business drop off locations only and does not process polystyrene (including hot drink cup lids) in the recycling streams. Polystyrene from Tim Hortons locations is self-hauled to a City contracted depot. Owen Sound does not offer public space recycling collection as part of litter management.

The City of Windsor operates a two stream recycling program and promotes the inclusion of hot drink cups in the fibre recycling stream. Staff in Windsor indicates that during the processing, some cup bodies are being captured in the OCC and boxboard stream but cups do get through into the newspaper stream. Staff indicates that even with optical sorting and hand picking, polystyrene lids are still flowing through into both fibre streams. The level of polystyrene lid contamination was not available. Owen Sound does not offer public space recycling as part of their litter program and do not collect recycling from commercial establishments.

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SIGNATURE

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ATTACHMENTS

Appendix A – Plastic Bags
Appendix B – Hot Drink Cups
Appendix C – Plastic Take-out Food Containers
Appendix D – Other Policy Options Explored