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## **BRIEFING NOTE**

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### **DISTRIBUTION OF BACKYARD COMPOSTERS**

#### **Issue/Background:**

At its meeting of March 10, 2004, the Budget Advisory Committee requested the Commissioner of Works and Emergency Services to prepare a briefing note for the Budget wrap-up meeting on possible cost savings of further subsidized home composting bins. It was also suggested at the meeting that consideration be given to providing free composters to all single-family households.

#### **Key Points(s):**

Since Toronto's Backyard Composting program began in 1989, over 178,000 backyard composters have been distributed to residents at a subsidized rate. Approximately 3,000 composters were purchased by residents in 2003. The 2004 Operating Budget Submission includes the purchase of 3,500 backyard composters by the City at \$28 each and revenue of \$15 per unit from the sale of the composters to residents. It is estimated that each backyard composter used on a regular basis diverts approximately 100 kg. of organic waste per year.

There are two options for increasing the distribution of backyard composters; intensive promotion and free distribution.

#### **Intensive Promotion/Truckload Sales**

Truckload sales, accompanied by intensive promotion of backyard composters, have been used by the City in the past to increase sales of composters. The truckload sales are promoted and operated by the bin manufacturer, on behalf of the City. Promotion by the bin manufacturer includes door hangers to all households in the targeted area, local advertising and other medium. Assuming similar prices quoted in response to a tender issued for intensive promotion/truckload sales approximately three years ago, the City would be charged a premium of \$12 per composter distributed, in addition to the \$28 cost per unit.

Assuming that we would sell an additional 6,000 bins in 2004 through this type of promotion, the increase in our 2004 operating budget for backyard composters would be \$150,000 (6,000 bins @ \$28

+\$12 less \$15 revenue recovery). The 2004 savings including avoided SSO processing, transfer and collection costs in the Green Bin areas (\$110 per tonne) and waste disposal, transfer and collection cost savings in the non-Green Bin areas (\$60 per tonne) would be approximately \$26,000. This assumes that the bins distributed throughout 2004 would be used for six months, on average in 2004. This would result in a net increase to our 2004 Operating Budget of \$124,000 (\$150,000-\$26,000).

The main benefit to the City would be realized in subsequent years, as the expected life of a composter is ten years. Assuming citywide Green Bin implementation, there would be savings to the City of \$66,000 per year after 2004. This assumes a green bin processing savings of \$100 per tonne and a marginal collection and transfer cost saving of \$10 per tonne (6,000 more composters diverting 100 kg/year @ \$110 per tonne). This equates to a payback period of approximately three years.

### Free Distribution

We do not recommend free distribution of backyard composters to all single-family households. The cost would be between \$9 million and \$14 million depending on whether free composters are given to all homes or just those that do not have a backyard composter, and many homes may not want one. Free distribution to households requesting a composter could be considered; however, it is questionable whether composters that are given away would be used on a regular basis and achieve similar diversion rates. Staff believe that by charging a fee for the composter only those individuals that are serious about using the composter on a regular basis will purchase one.

It is estimated that the increase in our 2004 operating budget for backyard composters would be approximately \$795,000 if we offered free composters. This is based on a projection that 30,000 composters would be given away, as opposed to selling 3,500 composters as projected in our 2004 operating budget submission {30,000 composters @ \$28 less 3,500 composters @ \$13 (\$28 less \$15 sale price)}. The 2004 savings including avoided SSO processing, transfer and collection costs in the Green Bin areas and disposal and collection cost savings in the non-Green Bin areas would be approximately \$115,000. This assumes that the bins distributed throughout 2004 would be used for six months, on average in 2004. This would result in a net increase to our 2004 Operating Budget of \$680,000 (\$795,000 -\$115,000).

The main benefit to the City would be realized in subsequent years as the expected life of a composter is ten years. Assuming citywide Green Bin implementation, there would be savings to the City of \$290,000 per year. This assumes a Green Bin processing savings of \$100 per tonne and a marginal collection and transfer cost saving of \$10 per tonne (26,500 more composters diverting 100 kg/year @ \$110 per tonne). This equates to a payback period of approximately three years. Assuming diversion of 50 kg/bin/year on average since composters that are given away may not be used as regularly, the pay back period would be 6 years.

### **Conclusions:**

Initiatives to further increase the distribution of backyard composters would increase Solid Waste Management Services 2004 operating budget, but could result in Green Bin processing, transfer and collection savings in the future that would more than offset this increase. Should

Budget Advisory Committee choose to allocate funds for further backyard composter distribution in 2004, it is recommended that the Intensive Promotion/Truckload Sales option be chosen over the Free Distribution option for the reasons stated in this briefing note.

**Date:** March 16,2004