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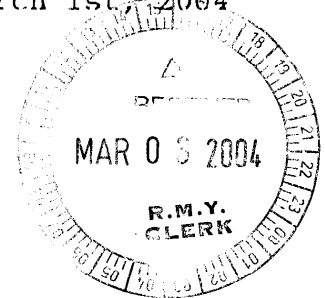
RECYCLING - UP
ORGANICS - IN
THE LAST SIX - OUT

**WASTE
DIVERSION**
TORONTO

A NON-PROFIT - OUR MANDATE IS TO ASSIST IN THE STEPS NECESSARY
TO DIVERT WASTE FROM LANDFILL OR INCINERATION

March 1st, 2004

Chair and Members,
of the Solid Waste Management Committee,
The Region of York,
Administrative Center
17250 Yonge Street,
Mewmarket, Ontario
L3Y 6Z1



Source Separated Organics Implementation

Dear Mesdames & Monsieurs;

The purpose of this letter is, in lieu of a deputation, I'm in Durham on the 10th hoping to help those folks, to repeat my organization's recommendation, that foodscrap collection programs throughout the GTA be studied, so as to become aware of best practises which can then be utilized in the introduction of foodscrap organics collection in York Region.

For your information there are currently three large scale foodscrap diversion programs in place in the area;

Toronto (Etobicoke & Scarborough) - 200,000 homes
(the largest program in N. America)

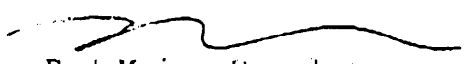
Durham - Courtrice, Bowmanville, Brock, Scugog - 47,000 homes
Niagara Region - Grimsby, Lincoln, Pelham - 20,000 homes

As part of our mandate, which is to assist in the diversion of waste from landfill or incineration, we have closely monitored set-out participation in each of these programs. As a result we have observed **clearly visible differences in weekly participation.**

We cannot stress enough that Regional Staff be encouraged to observe this difference for themselves, so as to become aware of the best practises, which can then be utilized in the introduction of foodscrap organics collection in York Region.

In addition please find enclosed an article I wrote for Resource Recycling Magazine on the various foodscrap collection programs here in the Province.

Respectfully,


Rod Muir, Founder,
Waste Diversion Toronto
and

Waste Diversion Campaigner, Sierra Club of Canada,
GTA Group and Eastern Canada Chapter



Taking the next step

Ontario is on the cusp of a province-wide food scrap recovery system that could point the way for more communities seeking to integrate organics into established collection programs.

by Rodney Muir

"The distance is nothing. It is only the first step which is difficult."

Marquise du Deffand

Building upon the techniques as practiced by residents when source separating recyclables, numerous jurisdictions in Ontario, Canada's largest province, are asking residents to take the next step and separate food scraps for collection as well. With a population of over 11 million, including approximately three million single-family homes and an additional 1.2 million multi-family dwellings, such a program is grand in scope, to say the least.

Green bin program

In September 2002, the City of Toronto introduced the collection of food scraps to 67,000 homes, with another 110,000 homes receiv-

ing this service in June 2003. The balance of the city's single-family residents, slightly more than 300,000 homes, will come on-stream by 2005.

Toronto's waste management program features a three-stream system handling separated organics, recyclables and residuals. Using two-compartment trucks, food scraps are collected weekly at the curbside with either recyclables or residuals, which are picked up on alternating weeks. The food scraps are collected in small, 12-gallon, wheeled containers that were distributed to every household, free of charge, together with a 2-gallon in-home container. The total cost for the two containers and delivery was less than \$20 (Cn). Leaf and yard debris continues to be collected seasonally, separated into kraft bags or open-top containers supplied by the resident.

Using the twin messages "Take the Next Step" to position food scraps as an extension of residents' current recycling habits and

"Simply Separate Organics" to promote the ease of this new service, Toronto's green bin program boasted weekly participation rates in the 90 percent range upon launch. Due to a lack of on-going advertising and promotion though, the participation rate has slowly drifted down to 75 percent. However, the capture rate, at approximately eight pounds per week per household, is 20 percent above the initial forecast. Additionally, Toronto's current test of single-stream recycling collection, which includes both the green bin materials and residuals, has achieved a reputed 61 percent diversion rate.

Not going it alone

By no means is Toronto alone in their efforts, though. About 20 communities, totaling over two million homes, are in step with Toronto's efforts. East of Toronto, Durham Region, which includes seven municipalities and 150,000 homes, introduced food scrap collection to more than 45,000 homes in February 2003. The remainder of the region expects

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to follow suite within 12 to 18 months. Although Durham started slowly with only a 25 percent weekly participation rate, the residents' participation has moved steadily upward to 45 percent.

Unlike Toronto, Durham Region has opted for a smaller bin – 8.5 gallons in size – with no wheels. Additionally, Durham's collection schedule sees organics and residuals co-collected weekly and recyclables collected bi-weekly. However, following Toronto's lead, Durham has delivered these bins and a kitchen container to every household free of charge, at a total cost of about \$14.25 (Cn), including delivery.

Northeast of Toronto, the City of Pembroke and several neighboring communities introduced a food scrap program to service 12,000 homes in early 2002. The program features a bi-weekly food scrap collection program. Food scraps are collected together with leaf and yard debris in a large divided cart that costs the region around \$70 (Cn). Pembroke's program requires that organic materials and recyclable fibers be separated into the container for collection one week, and residuals and co-mingled recyclables be collected in alternating weeks.

Niagara Region, which includes the City of Niagara Falls and surrounding communities, recently began offering food scrap collection to 20,000 of their 130,000 homes in September 2003. Service will extend to the remainder in April of 2004. In this region, organics and residuals are picked up weekly with fibers and co-mingled recyclables alter-

nating each week. Early surveys of weekly participation have been disappointing though at 40 percent.

Niagara chose a small bin but, rather than distribute the containers freely to residents as was done in Toronto and Durham Region, the bins were sold "truck-load style" prior to the program being introduced. An estimated one-half of the homeowners took advantage of the subsidized bins, which cost residents \$6 versus \$12 for the region. For residents who decided not to purchase the bins, organics are set out either in plastic bags or in hardwalled containers of their own purchase.

Coming soon to a region near you...

York Region is set to launch a food scrap collection program for a number of its 200,000 homes this year. Markham, York's largest community, is an extremely forward thinking community and will be the bellwether for the rest of the region. Markham has already tested bags versus hardwalled containers for food scraps and found that hardwalled containers generate higher participation rates.

The City of Peterborough and its 40,000 homes is another 2004 start. And much like Toronto, Durham Region and Niagara Region, pilot projects here have shown that residents prefer a smaller bin to a large cart. Meanwhile, Peel Region has been pilot testing a food scrap collection program for its 300,000 homes for quite some time (since 1996). Recently, however, the Regional Council elected to launch a three-stream collection program, similar to Toronto's program, in

Wet-dry evaporating

Two-stream wet-dry systems appear to be fading. One of the oldest food scrap programs is in Guelph, where 44,000 homes recently switched from a wet-dry program initiated in 1996 to a three-stream system called wet-dry+. The plus indicates residual streams, while the dry means recyclables only and the wet, of course, stands for organics. The goal is a cleaner stream of recyclables.

May 2005. Interestingly, after having tested large containers in the early stages, the region now is testing smaller bins.

May 2005 is the timeline for the City of Ottawa, whose staff and City Council have also endorsed a three-stream system. They are currently testing the new program using various containers in 5,200 of the city's 350,000 homes. Principal among the findings are that organics should be collected weekly and that collecting residuals bi-weekly encourages food scrap collection participation, as residents seek to have this odorous material removed weekly. (For more information, see "Comparing containers, cart bags and pails" in the August 2002 issue of *Resource Recycling*).

Hamilton was also looking at a 2005 start date, but the recent closure of their incinerator may speed up the process. The city is currently testing a three-stream program with two curbside containers, a 37-gallon cart and an 11-gallon bin at 2,500 of the city's 200,000 homes. Early indications are that residents prefer the smaller bin; however, city collection workers remarked upon the weight of the bins when they are three-quarter or more full, which they are 71 percent of the time.

The City of Kingston's 50,000 homes will start receiving food scrap collection this year while Belleville and Trenton, which together have another 50,000 homes, should be close behind. Meanwhile, in the northern region of the province, the City of Sault Ste. Marie is in the midst of testing 600 homes using a six-gallon curbside container. The results of this test are pending.

In the southwest, the Kitchener and Waterloo areas (150,000 homes), the City of London (180,000 homes), and the Windsor and Sarnia areas (190,000 homes) currently have no plans for food scrap collection. However, in October 2003, the province elected a new Liberal Party government so those plans may change soon. Central to the party's election platform was the promise to achieve a 60 percent diversion by 2008, principally via a ban on organics in the landfills.

Once its collected, process it

One major difference between the programs can be found at the processing end. To handle all of the organics being collected in t

Table 1 Material handling procedures by city or region

City or Region	Organics	Recyclables	Residuals
Toronto	Co-collected weekly	Co-collected bi-weekly with organics	Co-collected bi-weekly with organics
Durham Region	Co-collected weekly with residuals	Collected bi-weekly	Co-collected weekly with organics
Pembroke	Collected bi-weekly with leaf and yard debris	Collected weekly with fiber and containers	Collected weekly
Niagara Region	Co-collected weekly with residuals	Fibers and containers collected on alternating weeks	Co-collected weekly with organics
York Region	TBA	TBA	Co-collected weekly with organics
Peterborough	Co-collected with residuals	Collected weekly with fiber and containers	Co-collected weekly with organics
Peel	Collected weekly with recycling	Single-stream weekly collection with food scraps	Collected weekly
Ottawa	Collected weekly	Fibers and containers collected on alternating weeks	Collected bi-weekly
Hamilton	Collected weekly with recyclables	Collected weekly with organics	TBA
Kingston	Collected weekly with residuals	Collected weekly with fiber and containers	Collected weekly with organics
Sault Ste. Marie	Collected weekly	Collected weekly	Collected weekly
Guelph	Collected weekly with recyclables	Single-stream weekly collection with organics	Collected bi-weekly

Source: Waste Diversion Canada, 2004.

province, several million tons of capacity is required. Currently, the full spectrum of composting techniques is in practice, from open windrows to anaerobic digestion. Whereas Toronto, for example, is utilizing anaerobic digestion to process 25,000 tons their organic waste, Durham's processing technology of choice lies at the opposite end of the spectrum – open windrows. Several other communities, such as Niagara and the City of Peterborough, are also utilizing this low-tech alternative.

In Peel, all materials will be processed via a containerized system, a middle ground of sorts. Meanwhile, Pembroke, together with several other neighboring communities, have combined to construct an aerated container composting facility for their food scrap collection program. Eleven containers, each 42 cubic yards, are projected to compost 4,500 tons annually. Once at the facility, the material spends 14 days in the containers before being cured for an additional 50 to 60 days (longer in the winter months).

Such cooperation is not uncommon, either. Currently, Toronto and the regions of Durham and York have issued a joint RFP for 260,000 tons of processing. Bids are due in early March but already 16 vendors representing 10 different technologies and over six forms of processing attended a recent briefing meeting. With more than half of the plants operating in North America, it is easy to project that, given the interest in Ontario, these companies will be seeking processing revenue throughout the balance of Canada and into the United States. **RR**