

May 10, 2001

Councillor Disero & John Piper:

As discussed, I agreed to follow up with a "brief" e-mail summarizing the answers to the questions and some of the discussion during our teleconference between myself and Fred Wendt of HRM and yourself and Councillor Betty Disero and Sean Goetz-Gadon (EA to Mayor Lastman) of Toronto.

In regards the "Overall Question", in order to achieve high rates of diversion from landfill, SSO collection and centralized composting are needed as organics are a significant portion of both the residential and ICI streams.

A. Residents of Halifax Regional Municipality are provided a collection system consisting of organics, refuse and recyclables.

For the curbside collection system, organics is collected every second week alternating with refuse collection. Recyclables are collected weekly in the urban and suburban areas and every second week (biweekly) in the rural areas.

Organics collection is through an aerated cart based system assigned to properties along with a mini-bin for use in the kitchen to collect food waste, etc., the organics collected consists of food waste, boxboard, some non-recyclable paper, leaf and yard waste and during peaks, clear or orange plastic or heavy paper bags are used by residents for yard waste (max. of 20 biweekly) beside the cart. Refuse has a ten bag or container limit every two weeks. The recyclables are collected in a blue bag (bottles, cans, milk cartons, plastic bags, etc.) and the fibre (paper and newspaper) alongside in a plastic grocery bag with any cardboard bundled beside.

Householders are provided a collection schedule for their area to place on the fridge along with the lists of items that go in each stream.

The carts are 64 gallon (240 L) approx. and mini-bins are 11 L.

The key to the system for organics is use of the mini-bin in a proper way, empty often, clean some, wrap wet food waste, etc. Occasionally, clean the cart, wipe the rim, etc. A program brochure was provided at the start and is given to new householders with the system outlined and a hotline was available at the start and an information line integrated with the Transit line is still available. Odour has been predominantly a non-issue, particularly after the initial summer and folks got used to them, fruit flies were common in the warm weather and it was a good summer for them in general regardless of the carts so we had tips to manage that issue and a campaign to improve summer management during hot weather, rodents have been a non-issue, we have had perhaps a couple of dozen complaints and a few times where rodents have chewed through an aeration plate on the side (one incident I recall was a gentleman had thrown out a large amount of peanut butter and it had stuck on the side of this plate in the cart, then he had left the cart

and went away and a very hungry squirrel chewed through). The good news is, there will be less complaints of birds and dogs opening and destroying garbage bags and making a mess because there's no food there, it's in the cart which they don't even try to get into it.

The cost of the cart and mini is on the residential tax rate and the carts are assigned to the property (civic address, etc.) not to the resident so the cart stays with the property. The resident cleans the cart and mini.

B. A community based waste management strategy and landfill siting process was followed that included an inclusive, multi-stakeholder group along with consensus based decision making and a timeline. This occurred about 1995 after quite a number of false starts in landfill siting, usual nuisances with the old site, commitment to close the old and full site, a failed incinerator proposal, many trucking long haul scenario proposals, etc.

The program is quite well supported, in fact a corporate survey rated waste management as one of the few municipal services that citizens said had improved over the last few years (since amalgamation) and this is because of the introduction of this new system that was developed by the community.

The HRM Solid Waste ByLaw sets out the collection system and collectible materials in each stream (organics, refuse and recyclables), education program with education stickers, material rejection, up to fines as last resort. Province has a regulatory regime that includes a ban on the disposal of organics in landfills but the system works because residents are provided the tools and information needed to participate, not because of the regs., which are the back drop policy.

C. Trucks for organics are regular rear load packers with a lifter on the side that is used to lift and tip the carts, one week they are used for organics and the next for refuse (the lifter swings out of the way).

D. For Organics, two in-vessel composting plants of 25,000 tonnes each annual capacity, both have tipping floor and pre-sort line and one is a wide bed system with paddle turner and one is an aerated container system. Both plants are operated by private contractors and are receiving organics and processing, one contracted operator is working through some operational issues.

E. We've done some call surveys with over 90% stating participation. Our staff's set-out neighborhood surveys over a month randomly done show above 80% and upwards. I sent you the numbers, approx. 31,000 tonnes from approx. 114,000 households including single family dwellings, row housing, some multi-unit condos. and small apartments. That's about 10.5 kg per household every two weeks. The standard "design" figure for a single family detached residential dwelling to be captured is 12 kg every two weeks. Capture rates are estimated at 85% or greater for organics based on the overall waste stream estimates.

Contamination (plastics, metals, non-compostables) is not really an issue. About 3.5% off the front pre-sort and maybe 3% screened in back (materials missed in pre-sort and materials breaking down slow).

Sale of compost is not a major thrust of revenue for the Region. We have revenue sharing in our contracts with the operators and bulk sale to landscapers and now garden centres are selling it in year two, three.

F. About \$80 per cart and mini delivered. A lifter is a few thousand, say \$5 to \$8 thousand installed per truck (not much investment). HRM pays per tonne for organics processing (including capitalization by the owners) but book value for each plant is eight to nine million dollars. C&E - invest up front and do it right, say \$3 per resident and after that a \$1 per resident or so with particular targeted special communications projects budgeted separately.

G. BYC levels are always difficult to judge, with the convenience of the carts, we believe some folks who were not as committed to BYC for gardening purposes are probably using the cart more for yard waste but still seasonally during peaks may BYC. We try to encourage BYC, etc., home based management as complementary to the carts.

I believe this reflects some of my comments and thoughts (along with some of Fred's) on the topic, it is by no means definitive or complete but reflects some of our teleconference discussion on the questions.

Regards

Rob Orr, P. Eng.
Waste Resources
Halifax Regional Municipality