

Committee of the Whole (Working Session) Report

DATE: Wednesday, November 04, 2020

WARD(S): ALL

TITLE: INTRODUCTION OF MULTI-RESIDENTIAL ORGANICS COLLECTION

FROM:

Zoran Postic, Deputy City Manager, Public Works

ACTION: DECISION

Purpose

To request Council approval to provide green bin organics collection service in the multi-residential condominium sector.

Report Highlights

- To request Council approval to provide green bin organics collection service in the multi-residential condominium sector, to build on the City's commitment to environmental sustainability and waste reduction achievements, harmonize service levels for all citizens, and fulfill the new provincial policy directive on organics management.

Recommendations

1. That the City provide organics collection service for multi-residential buildings, to build on the City's commitment to environmental sustainability and waste reduction achievements, harmonize service levels for all citizens, and fulfill the new provincial policy directive on organics management.
2. That participation in the program be mandatory for multi-residential buildings receiving municipal waste collection.

3. That the program be initiated in phases, over a period of two years as generally outlined in this report, and that staff be given authority to initiate a change order to the waste collection contract to add this service.
4. That garbage collection frequency be offered weekly within two years of the organics program launch in each building.
5. That the City provide the initial complement of bins and carts necessary for waste collection and the in-home units for organics storage, to reduce barriers to participation.

Background

Provincial *Food and Organic Waste Policy Statement* aims to reduce food waste and recover food and organic waste as a resource through a circular economy model

Under the *Resource Recovery and Circular Economy Act, 2016*, the *Food and Organic Waste Policy Statement*, issued April 30, 2018, addresses food waste and resource recovery in the municipal, industrial and commercial sectors. A coordinated, Province-wide plan for organic waste materials intends to make diversion easier and more accessible for residents of Ontario, avoiding disposal of this valuable resource. Currently, the *Policy Statement* is open for public comment on the Environmental Registry until November 14, 2020, with proposed amendments focused on clarifying the categories of food and organic waste and providing new direction on the management of compostable products and packaging.

The complimentary *Food and Organic Waste Action Plan*, specifically calls out organics resource recovery in multi-unit residential buildings and commits to consult specifically on the barriers for this type of housing, referencing the single waste chutes typical of older buildings.

The Province has set a target of 50% organic waste diversion in the multi-residential sector by 2025

The Province's *Policy Statement* places the onus and direction for achieving this target on the owners of the multi-residential buildings and applies to buildings with more than six (6) units. The *Action Plan* reports that greenhouse gas emissions from the waste sector accounted for 8.6 megatonnes of carbon dioxide, or approximately 5% of Ontario's total greenhouse gas emissions from all sources. Efforts to address the issue of food and organic waste will impact this source of emissions and further the Province's Climate Change Action Plan targets, with a visionary goal of zero emissions from the waste sector.

Development and launch of an organics program will continue to support Council's commitment to the environment, and responsible waste management

Nearly 90 per cent of the City's citizens benefit from an organic waste diversion program implemented for all single-family homes, with the balance residing in multi-residential housing. Since the introduction of the green bin program in 2006, we have seen our waste diversion steadily improve, and citizens in Vaughan continue to divert two-thirds of their waste from landfill through recycling and organics collection.

With multi-residential housing forming a significant portion of growth, it is important to capture these users, form habits early and build on our waste diversion achievements

Organic waste collection in multi-residential buildings will bring solid waste service levels in line with single-family households and other York Region communities. Multi-residential housing represents a growing percentage of the City's housing mix and this sector will continue to impact our waste diversion and reduction achievements without the provision of a comprehensive waste diversion program. Environmental Services staff have heard from citizens that reside in these buildings, who are eager to responsibly divert organic material to composting, as they are coming from other communities or housing types that received this service.

Organic materials make up approximately 35% of the solid waste tonnage generated by the City's citizens

The City's Solid Waste services for garbage, organics, and recycling collected approximately 80,000 tonnes in 2019, excluding leaf and yard waste. Of that total, approximately 28,000 tonnes was food waste collected in the organics program. Based on results in our neighbouring communities of Richmond Hill and Markham and other large Canadian municipalities, multi-residential buildings can divert 25-30 per cent of waste to recycling and organics. Currently, the multi-residential sector in Vaughan is diverting approximately 10% of total waste through recycling alone. By introducing organics collection, we can expect to see similar diversion achievements over time as the program matures, and cascading benefits in recycling and textile waste diversion as residents learn about the importance and positive environmental impact of their participation.

Previous Reports/Authority

[NEW BUSINESS – POTENTIAL RETROFIT OF EXISTING MULTIRESIDENTIAL BUILDINGS WITH RESPECT TO SOLID WASTE STREAMS, DECEMBER 3, 2019](#)

[MULTI-RESIDENTIAL CONDOMINIUM WASTE COLLECTION SERVICE EXPANSION, MARCH 7, 2017](#)

Analysis and Options

An organics collection program is required to meet the waste diversion target in the provincial Policy Statement on Food and Organic Waste

Although the Policy Statement places the responsibility for addressing organic waste with the building owner, as the service provider to 89 multi-residential buildings in Vaughan, the onus will be on the City to provide organic collection service. The City's waste collection services are provided through a long-term service contract awarded through a competitive bidding process to Miller Waste Systems Inc. (Miller). At the time the contract was developed in 2016, organic waste collection in multi-residential buildings was not contemplated, and it was not included in the initial contract terms.

The City currently provides garbage and recycling collection to nearly ninety multi-residential buildings

The waste collection contract did include provisional pricing for service expansion of recycling and garbage collection to all multi-residential condominium buildings throughout Vaughan (approximately 6,500 additional dwelling units), and these buildings were added over the first two years of the contract, 2018 and 2019. All eligible multi-residential condominiums now receive front-end garbage collection, and a mix of front-end recycling or cart-based recycling collection, depending on space constraints and waste infrastructure. Table 2 outlines the proposed service levels and estimated waste collection costs for single-family homes and multi-residential buildings.

Table 1 – 2021 Budgeted Costs

	Solid Waste	Blue Box Recycling	Organics	Leaf and Yard Waste
Single Family Homes	\$2,230,000	\$3,370,000	\$3,330,000	\$1,160,000
Multi-residential Buildings	\$260,000	\$140,000	\$60,000	--
TOTAL	\$2,490,000	\$3,510,000	\$3,390,000	\$1,160,000

Multi-residential developments approved prior to 2016 have various dual- or single-stream infrastructure that can be adapted to accommodate organics collection through resident access to organics drop-off on-site

Building infrastructure varies across the multi-residential sector in Vaughan and will be served using two (2) separate collection methods. Among the current 89 multi-residential buildings receiving recycling and garbage collection in Vaughan, one third of units served either have an existing private organics program, or have new, three-stream waste infrastructure in the building, and will compose the first group to receive service. Older buildings without purpose-built organics infrastructure will be assessed on a case by case basis to determine the best approach to introduce this service. At this time, we anticipate approximately half of the total buildings served will be added to an organic cart program, and the remaining 19 per cent have been assessed as future front-end collection.

Table 2 – Multi-Residential Organics Infrastructure in Vaughan

Waste Infrastructure	Percentage of Units Served	Dwelling Units	Buildings
Service-ready infrastructure (Front-end bins or carts in place)	33%	4425	20
Proposed Cart service	48%	6571	54
Proposed Front-end service	19%	2503	15

Environmental Services staff will be focused on supporting the multi-residential sector to meet the organic waste diversion targets and employ best practices well-known throughout municipal waste collection service providers

Based on consultation with other communities that have launched similar programs, we anticipate challenges with behavior change, with some buildings participating more readily than others. Program implementation will involve personalized outreach based on building type and demographics to ensure program success, as well as on-going monitoring, targeted waste audits in collaboration with York Region, and annual touchpoints for all residents.

Garbage collection will be rationalized as the organics program is rolled out

Currently, garbage collection is provided twice per week for multi-residential buildings, and there have been no restrictions on the number of bins collected. With this

frequency, there is less incentive to divert waste to recycling and organics. As the organics program is adopted and buildings participate fully, the second weekly garbage collection will be suspended within two years of the program launch in a building. Based on the development planning review process since 2007, storage capacity for weekly garbage collection has been assessed as a general rule, so that any single missed collection would not impact citizens. Any new buildings brought onto our service will receive weekly garbage collection. This change brings the service level in line with other municipalities (Markham, Richmond Hill), and will result in negotiated cost savings over time, and in the next collection contract.

Financial Impact

Currently, all multi-residential buildings are responsible for the provision and upkeep of all waste containers. Staff recommend that all multi-residential buildings are provided with the initial required bins and carts necessary for waste collection, and that the City provide in-home units for organics storage to support program adoption.

The recommendations of this staff report have been included in the 2021 budget year and are projected to cost \$160K, including contracted collection costs, in-house bins and collection carts and front-end bins for 50% of buildings served. Bin costs in Year 1 are higher, as the majority of the bins will be metal, front-end bins, while Year 2 will be lower, as the majority will be plastic carts, which are less costly. Once the program has been normalized, the administration and oversight will be handled within the existing permanent staff compliment in Environmental Services.

Table 3 – 2021 and 2022 Organics Program Costs

Year 1	
In-house organic containers (50% of total units)	\$20,000
Front end bins and carts	\$80,000
Collection service (hourly)	\$60,000
TOTAL	\$160,000

Year 2	
In-house organic containers (50% of total units)	\$20,000
Front end bins and carts	\$40,000
Collection service (hourly)	\$70,000
TOTAL	\$130,000

Broader Regional Impacts/Considerations

Due to our shared commitment to achieve the waste minimization goals set out in York Region’s Integrated Waste Management Master Plan, all nine (9) local municipalities

have the responsibility of offering comparable waste diversion programming. By expanding organics collection, the City will meet the service levels offered by the most populous cities of Richmond Hill and Markham and will positively impact the overall system performance across the region. There are incremental costs related to organics processing, which would be supported by York Region. On a per tonne basis, it is estimated that these increased processing costs would be \$20-\$30K in 2021.

Conclusion

If approved, Environmental Services staff will collaborate with Miller Waste, York Region, condominium boards and property management firms to ensure that the separation, storage, collection and processing of organic waste from the multi-residential sector is successful and improves our integrated waste collection system for all citizens. To achieve this service level improvement, staff recommend that the program be initiated in phases over two years, starting with buildings that are already collecting organics under separate commercial contracts and those buildings with service-ready three-stream waste infrastructure. This will allow time for the City to provide individualized service to buildings that require more support, including presentations (on-line or in person), materials in specific languages, and repeat site visits to monitor participation.

For more information, please contact: James Steele, Director, Environmental Services, ext. 6116.

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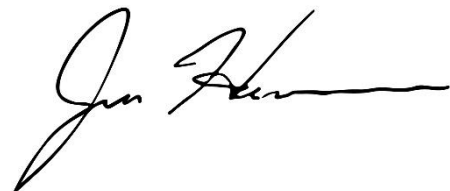
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