

Residential Multi-Unit Waste Diversion Strategy

PRESENTED BY

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The City of
BARRIE

Objectives

Barrie's 2012 Sustainable Waste Management Strategy includes '**Modifying Services to the Multi-Residential Sector**' to assist with waste diversion in that sector and includes:

- Implement a Multi-Family Green Bin Program (**SSO, Source Separated Organics**);
- Reduce garbage collection (bag) limits in Multi-Residential Sector;
- Elimination of the "Tipping Fee Exemption Program"; and
- Eliminate Leaf and Yard Collection from Multi-Residential Units.

Inputs (Costs):

- Contracted collection costs, Branch Resources, some additional waste volume
- resulting "tax rate" impact

Outputs (Benefits) (contingent on a mandatory SSO (Green Bin) program)

- Increased diversion; and
- Extended Landfill Life on balance.



Currently...

- Known number of multi-unit residential properties = 291, comprised of approximately 11,000 units (Multi-Res are: 6 or more Units and townhouse on private roads).
- The City currently provides 2 service options for Multi-Unit Residential developments:
 - Curbside collection; or
 - Private hauler collection; with or without optional Tipping Fee Exemption Program.
- A private Front End Bin Service is provided to 184 known multi-unit residential properties.
- Garbage disposal limits are *equivalent* to two (2) bags/unit/week for waste being disposed of at the City of Barrie Landfill Site (Why two bags?, because no Organics program is currently provided).
- Currently there is no Multi-Unit Residential Organics Collection (Green Bin) Program (Pilot to start Q4 2015 as per Business Plan).
- Eligibility for the Tipping Fee Exemption Program currently includes **mandatory** participation in municipal recycling (Blue and Grey Box, not currently SSO/Green Bin).

Multi-Res Front End Waste Collection Program, Proposed Criteria – to promote Diversion

- ***Mandatory*** participation in the Multi-Unit Residential Recycling Program (Blue/Grey) **and** Source Separated Organics (Green Bin) Program;
- Compliance with a new two (2) bag garbage limit per multi-unit residential unit every **other** week as specified through an approved bin size;
- For mixed-use multi-residential properties, mandatory physical separation of residential waste from commercial waste;
- The use of the curbside collection service in addition to the front end bin collection service be prohibited (either/or, **not** both); and
- Divertible materials (ex. Hazardous waste, leaf and yard waste etc.) are not permitted in front end bins.

Implementation: Strategy to be Phased in

Initial Step – Source Separate Organics Pilot (commencing Q4, 2015)

Currently in the 2015 Business Plan (evaluation results expected Q1, 2017)

Integral step in the Residential Multi-Unit Waste Diversion Strategy

Current Collection Method	Objectives	Dependencies	Units
Now None, Pilot will use Barrie's Collection Contractor	<ul style="list-style-type: none"> ➤ Will assist in reducing the bag limit, promotes diversion – extended Landfill Life ➤ Develop communication channels and methods links with target groups ➤ Establish a critical path to assist with full implementation ➤ Establish monitoring and evaluation methods ➤ Develop data management systems ➤ Establish standardized policies, procedures and By-Law for a Residential Multi-Unit Waste Diversion Strategy 	<ul style="list-style-type: none"> ➤ Co-operation/participation from property managers, owners and tenants ➤ Compliant enclosures 	11 properties = 1409 units

Organics Pilot and results to precede Front End Bin implementation

Initial Step being: the SSO (Green Bin) Program Pilot will assist with:

- Establishing communication channels and methods; setting up linkages with target groups.
- Prevents challenges and confusion among the multi-res parties as we intend ultimately to implement both programs.
- More efficient proactive approach to determining waste bin(s) space allocation as a whole instead of guessing.
- Assist with a concerted approach to policy and procedure development.
- Set up data management, monitoring and evaluation systems and contingency planning unique to multi unit residential systems.
- Allows time to address multiple unique scenarios individually to ensure accurate and consistent application of the program and property owner's full understanding of requirements.
- Creates a standardized service and associated better determined funding requirements for program maintenance.

Front End Bin - Phased Implementation

First Group – Tipping Fee Exempt Properties (76% of Multi-Res Units)

Current Collection Method	Objectives	Dependencies	Units
Current Hauler = <i>Progressive</i> (Barrie's Collection Contractor)	<ul style="list-style-type: none"> ➤ Enhance waste diversion – extended Landfill Life ➤ Enhance data management systems (track tonnages for future sector profiling) ➤ Minimal interruption ➤ Terminate existing Tipping Fee Exemption Contracts 	<ul style="list-style-type: none"> ➤ Participation in Organics Program and continued Recycling (Blue/Grey) ➤ Compliant enclosures ➤ Separated wastes in mixed use properties ➤ Terminate existing collection contracts (advance contractor agreement) 	125 properties = 6581 units
Current Hauler = Others	<ul style="list-style-type: none"> ➤ Enhance waste diversion – extended Landfill Life ➤ Implement Organics Program during life of existing contracts. ➤ Assist with preparations for conversion to Front End Bin Program. ➤ Assist with compliance with enclosure requirements ➤ Terminate existing Tipping Fee Exemption Contracts 	<ul style="list-style-type: none"> ➤ Participation in Organics Program and continued Recycling (Blue/Grey) ➤ Compliant enclosures ➤ Separated wastes in mixed use properties ➤ Willingness to terminate existing collection contracts – time dependent 	Approximately 25 properties = 1824 units

Front End Bin - Phased Implementation

Second Group – Non Tipping Fee Exempt Properties (11% of Multi-Res Units)

Current Collection Method	Objectives	Dependencies	Units
Current Hauler = <i>Progressive</i> (Barrie's Collection Contractor)	<ul style="list-style-type: none"> ➤ Enhance waste diversion – extended Landfill Life ➤ Straight forward conversion based on lessons learned ➤ Tipping Fee Exempt conversion phase ➤ Increase waste diversion with Organics Program, Recycling Program implementation 	<ul style="list-style-type: none"> ➤ Participate in Recycling Program (Blue/Grey) ➤ Participation in SSO Program ➤ Compliant enclosures ➤ Separated wastes in mixed use properties ➤ Terminate existing contracts (advance contractor agreement) 	15 properties = 645 units
Current Hauler = Others	<ul style="list-style-type: none"> ➤ Enhance waste diversion – extended Landfill Life ➤ Increase waste diversion with SSO Program, Recycling Program implementation ➤ Implement waste diversion programs during life of existing contracts. ➤ Assist with prep for conversion to Front End Bin Program. ➤ Assist with compliance with enclosure requirements 	<ul style="list-style-type: none"> ➤ Participate in Recycling Program (Blue/Grey) ➤ Participation in SSO Program ➤ Compliant enclosures ➤ Separated wastes in mixed use properties ➤ Willingness to terminate existing contracts 	38 properties = 614 units

Front End Bin - Phased Implementation

Third Group – Municipal Curbside/Handpicked Serviced Properties (13% of Units)

Current Collection Method	Objectives	Dependencies	Units
<ul style="list-style-type: none"> ➤ Municipal Curbside ➤ Handpicked service ➤ unknown 	<ul style="list-style-type: none"> ➤ to assist with implementing diversion processes given existing collection methods and abilities 	<ul style="list-style-type: none"> ➤ Unable to implement SSO and Front End Bin Program due to physical limitations. 	107 properties = 1400 units

- All multi-unit residential developments are optionally permitted to participate in the City of Barrie Recycling Program through an on-site depot system utilizing 95 gallon recycling carts provided by the municipality at no charge. This is also extended to properties that are not on a current Front End Bin Program.
- Service would not be offered to ICI sector - otherwise, potentially creating another perceived inequity of service provision.

Requirements to Implement: Residential Multi-Unit Front End Bin Service

- Implementation steps to start following results of Multi-Res Organics Pilot
- Pricing (for garbage collection only) obtained through FIN 2013-055P based on current bin inventory.
- Estimated annualized collection cost in 2015 dollars of \$255,000 (approximately \$23/multi-res unit) when fully implemented.
- Necessary oversight, transition and management of the Residential Multi-Unit Front End Bin program would require additional Environmental Operations Branch resources.
- Upcoming Staff Report recommended Motion includes the addition of a permanent Waste Reduction Coordinator, effective Q2, 2017 for the implementation and maintenance of Multi-Unit Residential Collection and Diversion Programs.

Potential Rebate Considerations

- Considered to address the perceived issue of an imbalance in waste services.
- In accordance with the Municipal Act, 2001, property taxes are assessed based on property assessment rather than by services provided or used.
- Potential Rebate Program would:
 - Not advance the Objectives of the Sustainable Waste Management Strategy
 - Cost the City ~\$385K per year totaling \$3.85M over the next ten (10) years (in 2015 dollars). Costs includes estimate for administration costs and issuance of rebates as well as handling associated customer inquiries.
 - Create a disincentive to divert waste; would not promote Organics participation.
 - Would have a net significant negative impact on Landfill Life.

A Rebate Program is **not** recommended.

ICI Sector Front End Bin Service Considerations

- Estimating actual ICI waste quantities is fraught with risk – processes change with time and would not be tempered by removal expense.
- Would negatively impact Landfill space and result in a much earlier closure date than anticipated – many years earlier.
- Would represent some modest loss of Landfill revenue currently derived from small local businesses as the majority of ICI waste is not currently disposed of at Barrie's Landfill.
- Would amount to an unequal business waste *subsidy*.
- Potential for hazardous waste to be disposed of at the Landfill.
- The City's Sustainable Waste Management Strategy (12-G-315) was developed based on the current and common practice in which only a small portion of ICI wastes are actually disposed of at the municipal landfill with associated tipping fee revenue.

**Providing Front End Bin Service to ICI
Sector is not recommended.**

In Summary...for Program Success

- Phased in approach, as recommended, is required.
- Organics Pilot results required prior to Multi-Res Front End Bin start-up
- Mandatory compliance with program criteria or excluded from program (curbside still an option).
- Phase out of current Tipping Fee Exemption Program.
- No rebates.
- Program will exclude ICI Sector.
- Necessary revision of Zoning Bylaw (waste enclosures).
- Additional resources required to manage a new program.

Questions?



Council Directions

- Council Motion 12-G-315 adopted the Sustainable Waste Management Strategy in principle and specifically included implementation of the First Priorities (2012-2016).
- Council Motion 13-G-233 – that staff in the Environmental Services Department be directed:
 - To investigate the feasibility of expanding the Source Separated Organics (SSO) Collection Program. (subsequently, SSO Pilot Program for Multi-Res approved through 2015 Business Plan with results available by Q1, 2017).
 - Assess contract and service level differences (including pricing) in front-end waste collection and initial steps for introduction of SSO (Green Bin) service.
- On March 9th, 2015 through Motion 15-G-049, 2015 Business Plan, Council directed staff to: “develop a Multi-Residential Front End Garbage bin service or a rebate for the same and report back to General Committee with respect to the preferred plan for implementation, the annualized costs of the plan and the implications associated with implementing such a program as it relates to potential future requests from the Industrial-Commercial-Institutional Sector to be added to the service/rebate”.

