



REPORT FOR INFORMATION

Next Steps for Developing a Third Green Bin Organics Processing Facility

Date: November 27, 2017

To: Public Works and Infrastructure Committee

From: General Manager, Solid Waste Management Services

Wards: All

SUMMARY

On November 16, 2017, the Ontario Ministry of Environment and Climate Change, released the Proposed Food and Organic Waste Framework ("the Proposed Framework") for public comment. The Proposed Framework focuses on Ontario's shift to a circular economy and places high value in reducing food and organic waste and recovering resources, where possible, at the end-of-life stage. Included in the Proposed Framework is a Policy Statement that provides direction to parties to further the provincial interest in waste reduction and resource recovery as it relates to food and organic waste.

This supplementary report provides details regarding the Proposed Framework and the potential impacts to organic waste tonnage and organic processing capacity.

FINANCIAL IMPACT

There are no financial implications from this report.

The Acting Chief Financial Officer has reviewed this report and agrees with the financial impact information.

COMMENTS

The Ontario Ministry of Environment and Climate Change released a draft Food and Organic Waste Framework for public comments, as part of their commitment outlined in their provincial Strategy for a Waste-Free Ontario: Building a Circular Economy. The Proposed Framework was posted on the Environmental Registry on November 16, 2017, and will remain open for comment until January 15, 2018.

The Proposed Framework is comprised of two parts:

- **Part A: Proposed Food and Organic Waste Action Plan** which outlines strategic commitments to be taken by the Province to address food and organic waste;
- **Part B: Proposed Food and Organic Waste Policy Statement** under the *Resource Recovery and Circular Economy Act, 2016*, which provides direction to the Province, municipalities, the industrial, commercial and institutional sectors, owners and operators of resource recovery systems (e.g. anaerobic digestion) and others, to further the provincial interest in waste reduction and resource recovery as it relates to food and organic waste.

Part A: Proposed Food and Organic Waste Action Plan

Part A of the Proposed Framework provides a list of 17 actions that the Province will undertake to support stakeholders in shifting to a circular economy. Included in the proposed actions are commitments to work with partners to develop promotional and educational tools, incorporate waste reduction and resource recovery activities within schools, work with partners to support innovative approaches to rescue surplus food, support academic research, and develop data collection mechanisms for measuring progress in reducing food and organic waste. The list of actions and proposed timelines are listed in Attachment 1.

Of the 17 actions, this report outlines in further detail five actions that are anticipated to have the most significant impact to the City, in terms of organic waste tonnage and organics processing capacity.

3Rs Regulations

The term "3Rs Regulations" refers to a series of regulations promulgated in the 1990s under Ontario's *Environmental Protection Act* that imposed waste diversion requirements on various sectors in Ontario, including the municipal residential sector and the industrial, commercial, and institutional sectors. Currently, the 3Rs Regulations do not require recovery of food and organic waste from these sectors. The Province intends to consult on amendments to the 3Rs Regulations to increase resource recovery across this sector.

Amendments will consider:

- Different thresholds for establishments based on their sector, size, quantity of materials generated, and geographic population levels;
- Efforts by the sector to support resource recovery and waste reduction;
- The breadth of food and organic waste covered by the regulation;
- The appropriateness of source separation requirements and the role of education on how to source separate;

- Efforts to ensure a beneficial use for all recovered food and organic waste;
- The role of other processing technologies to recover organic materials with a beneficial use from disposal streams where source separation is not feasible;
- Measures to promote the quality of recovered materials, such as requirements to remove food waste from packaging;
- Contamination of source separated streams;
- The need for data gathering and reporting to measure progress, and measures to promote accountability and transparency, and;
- Potential reduction of administrative burden and consideration of economic impact of new or expanded requirements.

The majority of the industrial, commercial and institutional sectors in Toronto receive private collection services. The Division services some small businesses through the Commercial Customer Collection Program and approximately 65% of the multi-residential buildings in Toronto. Amendments to the 3Rs Regulations could result in increased food and organic waste tonnes requiring management regardless of the collection service provider. Specifically in the multi-residential sector, source separation requirements may see an increase of non-City serviced multi-residential buildings wanting to receive waste collection services from the City, which includes collection of organic waste through the Green Bin organics program.

Ban from Disposal Sites

The Proposed Framework includes provincial plans to develop and implement a food and organic waste disposal ban regulation under the *Environmental Protection Act*. The regulation could prohibit the disposal of food and organic waste at waste disposal sites (e.g. landfill). The Ministry of Environment and Climate Change is considering how to best implement a disposal ban to ensure that adequate time is provided to build capacity to manage and process food and organic waste.

The Province will be considering the following items in the ban from disposal sites:

- Time needed to develop sufficient processing infrastructure and capacity to manage additional volumes being diverted before the disposal ban;
- Phased approach to a ban;
- Thresholds for compliance, and;
- Exemptions to the ban, where end products with a beneficial use are created (e.g. biochar).

It is expected that the ban could result in additional amounts of organic material available to the Division, thereby further necessitating an increase to the City's organics processing capacity.

Multi-Residential Buildings

Resource recovery in multi-residential buildings in Ontario continues to remain low. The Province intends to increase resource recovery from multi-residential buildings through a review and subsequent amendment to the Building Code.

The *Building Code Act*, 1992 governs the construction, renovation, demolition and change of use of buildings. The Building Code will be reviewed to assess the requirements for new buildings in order to enable and promote design and construction options that support the resource recovery of food and organic waste.

Any action that may facilitate multi-residential buildings to overcome barriers to the built-form (i.e. space limitations for source separation programs) would increase the recovery of food and organic waste.

Review Existing Approval Processes

The Province intends to streamline the approval process for resource recovery systems, such as organic processing facilities. Potential changes and process enhancements to be considered include, but are not limited to:

- Update the Checklist for Technical Requirements for a complete Environmental Compliance Approval Submission for all medias (e.g. air, noise and waste) to reduce risk of incomplete applications, and;
- Consider changes to regulatory requirements associated with demonstration projects for new and innovative processing organic waste.

The review and potential update of Environmental Compliance Approvals under the *Environmental Protection Act* could possibly shorten the time required to build an organics processing facility, as the current approval process is onerous and difficult to estimate in terms of timing.

Renewable Natural Gas

The Province continues to support markets for biogas through actions to fight climate change. The Climate Change Action Plan provides financial support to encourage the use of cleaner, renewable natural gas and other low-carbon substitutes in the industrial, transportation and building sectors.

The Proposed Framework does not provide details with respect to the amount of financial support for the use of low-carbon fuels, but with an increase in demand in renewable fuels, of which the City can produce renewable natural gas through its organics processing facilities, the business case for the development of a third organics processing facility may be improved with financial incentives for such developments.

There were no details or options provided regarding enforcement responsibilities for any potential legislative or regulatory measures.

Part B: Proposed Food and Organic Waste Policy Statement

The proposed Food and Organic Waste Policy Statement ("Proposed Statement") focuses on waste reduction and resource recovery through prevention and reduction of food waste, effective and efficient collection and processing, and recovering resources.

The Proposed Statement is intended to further the aspects of the provincial interest stated in Section 2 of the *Resource Recovery and Circular Economy Act, 2016*, that relates to waste reduction and resource recovery of food and organic waste. Municipal policies and private sector initiatives under the *Resource Recovery and Circular Economy Act, 2016*, are required to conform to the Proposed Statement, when it is finalized.

When finalized, the Proposed Statement will be a positive and important first step in influencing the industrial, commercial and institutional sectors to divert food and organic waste. However, the Proposed Statement is not enforceable with administrative penalties or fines, which is something that the Province may need to pursue in the future, through amendments to the 3Rs Regulations, to include these as potential options. According to the timeline outlined in the Proposed Framework, amendments to the 3Rs Regulations will occur in 2018 and beyond.

The following is an overview of policies that are included in the Proposed Statement that will impact organic waste tonnage and organics processing capacity.

Targets

The Proposed Statement includes targets to ensure that waste reduction and resource recovery efforts are reflective of an evidence-based policy approach. The Proposed Statement gives direction to prevent and reduce food and organic waste at each stage of the food supply chain, and establishes waste reduction and resource recovery targets.

The Proposed Statement proposes a 70% waste reduction and resource recovery of food and organic waste generated by single-family dwellings by 2023. Multi-residential buildings have a 50% waste reduction goal by 2025. The industrial, commercial and institutional sectors have a minimum goal of 50% by 2025.

The targets referred to in the Proposed Statement may be achieved through activities, including the prevention and rescue of surplus food, and resource recovery from food and organic waste. Processing organic material in an organics processing facility, aligns to the Proposed Statement, as it fosters diversion and is a means of recovering resources from food and organic waste.

Reduce Food Waste - Promotion and Education

Food waste awareness and prevention are important first steps. The Proposed Statement includes promotion and education initiatives to encourage a change in behaviour and reduce the amount of food wasted in Ontario. The Proposed Statement targets the entire food supply chain, including retail shopping establishments, restaurants, hotels and municipalities.

The Proposed Statement indicates that municipalities shall develop and implement their own promotional and educational programs aimed at preventing food waste. As part of the Long Term Waste Management Strategy, the Division is already developing a comprehensive food waste reduction strategy, which will include public outreach and engagement on the value of food, and strategies for reducing food waste generation.

Multi-Residential Buildings

Given the pace and extent of growth in dense urban dwellings, there is an increasing demand for innovative methods to divert food and organic waste from multi-residential buildings.

The Proposed Statement indicates that multi-residential buildings in Southern Ontario will provide collection of food and organic waste to their residents. Collection of source separated food and organic waste is the preferred method of servicing multi-residential buildings, but alternatives are permissible as long as it can be demonstrated that the provincial waste reduction and resource recovery targets can be achieved.

With the lack of information regarding specific requirements for multi-residential buildings to collect food and organic waste, it is difficult at this time to estimate the extent of the impact of this action. The Division could experience an increase in demand for City services by multi-residential buildings that are currently not serviced by the City. However, the level of service uptake and the associated tonnes of recovered organic waste is difficult to estimate accurately at this time.

Industrial, Commercial and Institutional Sectors

The Proposed Statement indicates that entities in the industrial, commercial and institutional sector that produce more than 300 kilograms of food and organic waste per week shall source separate food and organic waste. Those entities that generate less than 300 kilograms of food and organic waste could source separate food and organic waste, however are not specifically required to do so.

This requirement could potentially see an increased uptake for City services through the Yellow Tag Program, which includes provision of Green Bin organics collection and processing services.

Management of Food and Organic Waste

Municipalities, multi-residential buildings, and industrial, commercial and institutional sector entities that are required to collect food and organic waste through this Proposed

Statement, are also required to ensure that all collected waste is sent to resource recovery. This is expected to greatly impact the amount of organic waste tonnage requiring management and significantly increase the demand for organics processing capacity within Ontario. This further supports a business case for developing a third Green Bin Organics processing facility, as there is currently insufficient processing capacity in the province to manage the potential influx of additional tonnes into the system.

Compostable Products and Packaging

As new forms of compostable products and packaging emerge, it is imperative that producers are cognizant of waste reduction and resource recovery of these products. To this end, the Proposed Statement indicates that brand holders of marketed compostable products and packaging should ensure they are certified according to international, national or industry standards and meet environmental standards in Ontario. The Proposed Statement also suggests that product and packaging producers should take responsibility in regard to the waste reduction and resource recovery of the compostable products and packaging that they sell in Ontario.

Furthermore, the Proposed Statement indicates that municipalities and owners and operators of resource recovery systems (e.g. anaerobic digestion facilities) are encouraged to support new technology and innovation to recover compostable products and packaging. The Division, as part of the Long Term Waste Management Strategy, has initiated the creation of the Unit for Research, Innovation and the Circular Economy that is intended to support such innovation in resource recovery measures.

Resource Recovery Infrastructure

The vision for a zero waste and zero greenhouse gas emissions from the waste sector is dependent on infrastructure that can recover resources and process organic material effectively and in an environmentally sustainable manner.

As the Province, municipalities and the private sector take action to increase resource recovery of food and organic waste, Ontario will face significant demand for new and expanded resource recovery systems (i.e. organics processing facilities).

The Ministry, through the Proposed Statement, intends to support the development of such infrastructure through the following actions:

- Municipalities and other planning authorities should protect existing and planned resource recovery systems and plan for new systems, and;
- Municipalities and other planning authorities are encouraged to pursue regional approaches to address food and organic waste resource recovery capacity needs.

In the "Next Steps for Developing a Third Green Bin Organics Processing Facility" staff report, the Division is implementing the actions outlined in the Proposed Statement.

Through work with municipal colleagues, the Division intends to discuss opportunities to expand regional food and organic material processing capacity.

Furthermore, the Proposed Statement indicates that the co-ordination of approaches to provincial and municipal approvals will be supported to facilitate timely decisions for resource recovery systems. It also indicates that applications for expanded resource recovery systems will consider the need to support regional approaches for increasing processing capacity.

Next Steps

Solid Waste Management Services will provide comments on the Proposed Food and Organic Waste Framework to the Ministry of Environment and Climate Change by January 15, 2018. Solid Waste Management Services will inform the Public Works and Infrastructure Committee of any key developments with regards to policies or legislation that stem from the Proposed Framework.

CONTACT

Vincent Sferrazza, Director, Policy, Planning and Support. Solid Waste Management Services, Telephone: 416-392-9095, Fax: 416-392-4754, Email: Vincent.Sferrazza@toronto.ca

SIGNATURE

Jim McKay
General Manager
Solid Waste Management Services

ATTACHMENTS

Attachment 1 - Timelines for Proposed Action Plan