



REPORT FOR ACTION WITH CONFIDENTIAL ATTACHMENT

Green Bin Organic Waste Processing and Capacity in the Province of Ontario

Date: June 25, 2018

To: Public Works and Infrastructure Committee

From: General Manager, Solid Waste Management Services

Wards: All

REASON FOR CONFIDENTIAL INFORMATION

This report includes commercial or financial information that belongs to the City and has potential monetary impacts.

In addition, it involves a position, plan, procedure, criteria or instruction to be applied to any negotiation carried on or to be carried on by or on behalf of the City.

SUMMARY

This report responds to City Council's direction to provide an update on trends over the next ten years for Green Bin Organic Waste Processing Capacity in the Province and related potential cost per tonne. The report also identifies the material amounts and how organic waste is managed by the City; an update on the implementation of the City's Long Term Waste Management Strategy; and the Ministry of the Environment and Climate Change newly approved Food and Organic Waste Framework.

The report also includes two recommendations related to services required to continue processing of source separated organics at the Disco Road Organics Processing Facility. The first recommendation is for delegated authority to the General Manager, Solid Waste Management Services, to negotiate and enter into agreements to operate, maintain, or undertake capital improvements at the Disco Road Organics Processing Facility. This delegated authority will allow for the continuation of operations when the current Operate and Maintain contract ends on June 30, 2019. The second recommendation is to increase the contract financial value and extend the term with the vendor currently providing Solid Waste Management Services engineering and contract administration services, and overseeing the completion of the remaining infrastructure deficiencies at the Disco Road Organics Processing Facility.

RECOMMENDATIONS

The General Manager, Solid Waste Management Services, recommends that:

1. City Council renew and extend the authority of the General Manager, Solid Waste Management Services and/or designate to negotiate and enter into any agreements necessary to operate, maintain, or undertake capital improvements to continue to process source separated organics at the Disco Road Organics Processing Facility, for terms up to June 30, 2024, with an option to renew for up to an additional five years until June 30, 2029, at the sole discretion of the General Manager of Solid Waste Management Services, based in part on the pricing information for operational costs presented in Confidential Attachment 1 of the report, on terms satisfactory to the General Manager, Solid Waste Management Services and the Interim Chief Financial Officer and each in a form satisfactory to the City Solicitor.
2. Public Works and Infrastructure Committee, in accordance with Section 71-11.1.C of the City of Toronto Municipal Code Chapter 71 (Financial Control), grant authority to amend Purchase Order No. 6041872 with GHD Limited awarded through Request for Proposal No. 9117-08-7038 by an additional amount of \$311,587.00 net of taxes and charges (\$317,070.92 net of HST recoveries), increasing the current total contract amount of \$2,495,771.40 net of taxes and charges to \$2,807,358.40 net of taxes and charges (\$2,856,767.84 net of HST recoveries) and authorize an extension of the agreement with GHD Limited from December 31, 2018 to September 30, 2021.
3. City Council adopt the recommendations in Confidential Attachment 1 attached to this report.
4. City Council direct that the recommendations in Confidential Attachment 1 to this report remain confidential as they relate to commercial or financial information that belongs to the City and has potential monetary value, and it involves a position, plan, procedure, criteria or instruction to be applied to any negotiation carried on or to be carried on by or on behalf of the City.

FINANCIAL IMPACT

Amendments to Purchase Order No. 6041872 with GHD Limited, awarded through Request for Proposal No. 9117-08-7038, will result in an additional amount of \$311,587.00 net of taxes and charges (\$317,070.92 net of HST recoveries), increasing the current total contract amount of \$648,588.76 net of taxes and charges to \$960,175.76 net of taxes and charges (\$977,074.83 net of HST recoveries).

The required additional funding in the amount of \$311,587.00 is included in the 2018 Approved Capital Budget and 2019-2027 Approved Capital Plan for Solid Waste Management Services, in Capital account CSW012-01-04, Disco Road Organics Processing Facility, formerly referred to as Disco Road Source Separated Organics (SSO) Facility.

The effect of this Purchase Order Amendment will result in the total value of the Purchase Orders for GHD Limited services, increasing the current contract amount from \$2,495,771.40 to \$2,807,358.40 net of taxes and charges (\$2,856,767.84 net of HST recoveries).

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

DECISION HISTORY

At its meeting on December 5, 6, 7, and 8, 2017, City Council adopted Item EX29.19 entitled "2018 Rate Supported Budgets - Solid Waste Management Services and recommended 2018 Solid Waste Rates and Fees", and directed the General Manager, Solid Waste Management Services, to report to the Budget Committee in Spring 2018 to provide a financial update on trends over the next 10 years for the cost of organics processing per tonne for the City of Toronto, giving consideration to the City's reliance on private processors and organics processing contracts reaching their expiration date, as well as the shortage of organics processing capacity across the Province of Ontario and the proposed Ontario Organics Framework.

The City Council Decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.EX29.19>

At its meeting on December 5, 6, 7, and 8, 2017, City Council adopted Item PW25.9 entitled "Next Step for Developing a Third Green Bin Organics Processing Facility", and requested the General Manager, Solid Waste Management Services to write to the Minister of Environment and Climate Change on the Proposed Food and Organic Waste Framework emphasizing the need for review and streamlining of existing provincial approval processes and requirements to ensure the timely review and approval of organics processing facility development applications.

The City Council Decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.PW25.9>

At its meeting on July 4, 5, 6, and 7, 2017, City Council adopted Item PW22.4 entitled "New Provincial Waste Management Framework Legislation - Bill 151: Waste-Free Ontario Act, 2016 - Update". City Council renew and extend until 2022, the authorization for the General Manager, Solid Waste Management Services and/or designate to negotiate and enter into any agreements (including but not limited to agreements to receive external funding) necessary for the City's continued waste diversion operations throughout the transition period under the *Waste Diversion Transition Act, 2016*, based in part on the updated pricing information presented in the Confidential Attachment 1 to the report (May 24, 2017) from the General Manager, Solid Waste Management Services, on terms satisfactory to the General Manager, Solid Waste Management Services and each in a form satisfactory to the City Solicitor.

The City Council Decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.PW22.4>

At its meeting on July 4, 5, 6, and 7, 2017, City Council adopted Item PE19.4 entitled "TransformTO: Climate Action for a Healthy, Equitable and Prosperous Toronto - Report 2 - The Pathway to a Low Carbon Future" and directed the General Manager, Solid Waste Management Services in consultation with the Director, Environment and Energy to review the viability of the proposed Zoo Share biogas organic waste to electricity project at the Toronto Zoo, assess opportunities for organic energy projects at the former Beare Road Landfill, and to report back to the Public Works and Infrastructure Committee in the fourth quarter of 2017, as part of the "Next Steps for Developing a Third Anaerobic Digester" report.

The City Council Decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.PE19.4>

At its meeting on December 13, and 14, 2016, City Council adopted Item EX20.23 entitled "2017 Rate Supported Budgets - Solid Waste Management Services and Recommended 2017 Solid Waste Rates". To inform the 2018 Rate Supported Budget process, City Council directed the General Manager, Solid Waste Management Services, to report back to the Budget Committee in the second quarter of 2017 on the next steps for developing a third anaerobic digester to process organic waste, given the business case for planning and securing additional capacity with an earlier timeline due to potential Provincial/Federal funding programs, maturation of multi-residential Green Bin Program, and long-term contract opportunities to accept organic waste from private entities and other municipalities.

The City Council Decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.EX20.23>

At its meeting on July 12, 13, 14, and 15, 2016, City Council adopted Item PW14.2 entitled "Final Long Term Waste Management Strategy" and approved the Long Term Waste Management Strategy, including recommended options and implementation plan, as presented in Attachment 1 to the report (June 2, 2016) from the General Manager, Solid Waste Management Services.

The City Council Decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.PW14.2>

At its meeting on May 16, 2016, Public Works and Infrastructure Committee considered and adopted, Item PW13.5 entitled "Amendment to Purchase Order No. 6041872 for Contract Administration and Technical Support Services for Completion of the Disco Road Organics Processing Facility".

The Public Works and Infrastructure Committee Decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.PW13.5>

At its meeting on February 22 and 23, 2010, City Council adopted Item PW30.4 entitled "Authority to Negotiate and Enter into an Agreement with AECOM Canada Ltd. to Design, Build, Commission and Operate a New Source Separated Organics Processing Facility at Disco Transfer Station" and authorize the General Manager, Solid Waste Management Services, to finalize negotiations and execute an agreement with AECOM

Canada Ltd. to Design, Build and Commission a new facility to process up to 90,000 tonnes per year of the City's Source Separated Organics at the Disco Transfer Station site generally in accordance with the terms and conditions set out in Request for Proposals 3907-09-7053, the addenda issued for Request for Proposals 3907-09-7053, the base proposal submitted by AECOM Canada Ltd. dated August 19, 2009 in response to Request for Proposals 3907-09-7053, agreed upon changes to the scope of work set out in Appendix 1 to the report (January 18, 2010) from the General Manager, Solid Waste Management Services and the Director, Purchasing and Materials Management, and otherwise on terms and conditions satisfactory to the General Manager, Solid Waste Management Services, and in a form satisfactory to the City Solicitor.

The City Council Decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2010.PW30.4>

At its meeting on November 30, December 1, 2, 4, and 7, 2009, City Council adopted Item PW28.13 entitled "Design, Build and Operate a New Source Separated Organic Material Processing Facility at the Disco Road Transfer Station on a Sole Source Basis" and authorized and directed the General Manager, Solid Waste Management Services, to enter into sole source negotiations with AECOM Canada Ltd. for a contract to Design, Build and Operate a new facility to process the City's source separated organic material at the Disco Transfer Station site.

The City Council Decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2009.PW28.13>

COMMENTS

ISSUE BACKGROUND

Organic Waste Data

In 2016, Solid Waste Management Services collected 144,381 tonnes of organic waste and in 2017, 158,604 tonnes was collected representing a 10% increase.

Approximately 170,600 tonnes is projected to be collected in 2018. The increase in organic waste tonnes can be attributed to the continued maturation of the Green Bin Organics Program, improved participation at multi-residential locations, and the recent rollout of the new larger Green Bins to single family households. Another contributing factor is Solid Waste Management Services' ongoing campaign to address increasing levels of contamination in the Blue Bin recycling stream. Ongoing efforts to educate residents on the impacts of contamination in the City's Blue Bin Recycling Program, paired with recent media coverage on blue bin contamination and the impacts of China's decision to restrict incoming recyclable materials, may have increased public awareness and efforts to place organic waste in the Green Bin, rather than the Blue Bin.

The implementation of the Long Term Waste Management Strategy will also impact the amount of organic waste required to be managed. For example, new technologies such as Mixed Waste Processing with Organics Recovery could recover organic waste that

currently goes to landfill. This technology recovers recyclables from a mixed waste stream, typically contaminated streams (e.g. waste generated at multi-residential locations or waste from public space and parks bins), leaving behind a potential mix of materials that could be processed in an organics processing facility. Solid Waste Management Services will begin this year a Mixed Waste Processing with Organics Recovery study, along with pilot testing of various technologies, to be completed in 2020. The results and recommendation for next steps will be presented to City Council. Implementation of the food waste reduction strategy, another component of the Long Term Waste Management Strategy, is also expected to decrease the amount of organic waste requiring management.

Introduction of the Ontario Food and Organic Waste Framework

On April 30, 2018, the Ministry of Environment and Climate Change announced the approval of the Food and Organic Waste Framework (the "Framework") that includes both a Food and Organic Waste Action Plan (the "Action Plan"), which outlines strategic commitments to be taken by the Province to address food and organic waste and a Food and Organic Waste Policy Statement (the "Policy Statement"), which provides direction to provincial ministries, municipalities, industrial, commercial and institutional establishments, and the waste management sector to increase waste reduction and resource recovery of food and organic waste.

A component of the Action Plan is to develop, consult on, and implement a ban on the disposal of food and organic waste at waste disposal sites. It is anticipated the Action Plan may increase the amount of organic waste tonnes requiring management. The Policy Statement includes recovery targets for both residential and non-residential sectors. Organic waste tonnes generated by the non-residential sector is not well quantified, however it is expected that the implementation of the Action Plan will increase the amount of non-residential organic waste requiring processing, which may result in increased interest in the City's Commercial Collection Program that offers eligible commercial customers premium Green Bin organic waste collection services. Implementing the Framework could also see an increased demand for organic waste processing capacity across Ontario, which would place pressure on industry to build additional processing infrastructure.

Although the Framework is non-enforceable, the Ministry of Environment and Climate Change intends to consult on potentially new diversion Provincial Regulations or amendments to existing Provincial Regulations, namely O. Reg. 101/94 (Recycling and Composting of Municipal Waste) and O. Reg. 103/94 (Industrial, Commercial and Institutional Source Separation Programs), as part of implementing the Food and Organic Waste Action Plan. The current aforementioned Provincial Regulations do not require recovery of food and organic waste from the affected sectors and amendments could result in increased food and organic waste tonnes requiring management regardless of the collection service provider. Additionally, as part of the Action Plan, the Ministry of Environment and Climate Change plans to consult in amending the *Environmental Protection Act* to include a ban of food and organic waste from disposal sites. Pending any new Regulations, the Ministry of Environment and Climate Change expects persons and entities to act in a manner consistent with the policy statement as per the *Resource Recovery and Circular Economy Act*.

Green Bin Organic Waste Processing Capacity

City-owned Facilities

The City owns and operates two anaerobic digestion organic processing facilities; the Disco Road Organics Processing Facility and the Dufferin Organics Processing Facility. The Disco Road Organics Processing Facility processes 75,000 tonnes per year, and the Dufferin Organics Processing Facility will process 55,000 tonnes of organic waste per year beginning January 1, 2019. The combined City-owned processing capacity will be 130,000 tonnes per year.

Private Organic Waste Processing Contracts

The City currently has processing contracts with three private sector operators:

- 30,000 tonnes at Green For Life Environmental (formally Lafleche Environmental) until June 1, 2021;
- 10,000 tonnes at Courtice Auto Wreckers Limited until December 31, 2018; and,
- 10,000 tonnes at Cornerstone Renewables Incorporated until September 30, 2018.

The Green For Life Environmental contract was recently awarded to replace contracts that expired in May 2018. The General Manager of Solid Waste Management Services, using the authority directed by City Council, may negotiate and enter into subsequent short term agreements as a contingency should it be required. Solid Waste Management Services also plans to procure additional larger contracts in 2019 for additional longer term contracts.

Construction and Operation at the Disco Road Organics Processing Facility

The development of the Disco Road Organics Processing Facility was awarded as two contracts to AECOM Canada Ltd. ("AECOM"), a Design, Build and Commission contract, followed by an Operate and Maintain contract. The facility was commissioned at the end of June 31, 2014, triggering the commencement of a five year Operate and Maintain contract set to expire on June 30, 2019. Although there remained two infrastructure deficiencies under the Design, Build and Commission contract, efforts have continued with AECOM to resolve the infrastructure deficiencies, while the facility continued to operate and process organic waste at a rate of 75,000 tonnes per year.

As a result of this delay in correcting the deficiencies, Solid Waste Management Services has been unable to release a Request for Proposal to retain a vendor to Operate and Maintain the facility and to allow sufficient time for a possible transition from AECOM to the next operator. Consequently, this report is seeking to extend the authority for the General Manager, Solid Waste Management Services to negotiate and enter into a new or amended Operate and Maintain contract for the Disco Road Organics Processing Facility for terms up to June 30, 2024, with an option to renew for up to an additional five years until June 30, 2029, subject to securing an acceptable proposed approach from AECOM to achieve total completion of the partially completed

Design, Build and Commission contract deficiencies in a form that is acceptable to the General Manager of Solid Waste Management Services.

GHD Limited ("GHD") was retained to provide engineering, contract administration and technical support services on behalf of the Division during the construction phase of the Disco Road Organics Processing Facility. The continuation of AECOM's work to resolve the deficiencies has required an extension of the contract with GHD beyond its planned conclusion in 2014 that was scheduled to align with AECOM's scheduled date to achieve completion of the Design, Build and Commission contract. Details on the AECOM Design, Build and Commission contract deficiency progress and GHD contract extension authorities were provided in a report (refer to Item PW13.5) to Public Works and Infrastructure Committee at its meeting on May 16, 2016.

AECOM has made progress in correcting the deficiencies, however, there still remains outstanding issues to be resolved in order to meet the requirements of the original Design, Build and Commission contract. This report seeks authority to pursue additional contract remedies with AECOM for the remaining work on the deficiencies to achieve total completion of the contract. This includes securing an operating contract term extension agreement, if AECOM's proposed approach for achieving total completion on the Design, Build and Commission contract is acceptable to GHD and the General Manager of Solid Waste Management Services.

As a result of AECOM's continued work to complete the Design, Build and Commission contract, a further extension of the fees and term of the GHD contract to provide contract administration services is requested in this report. Continuation of the agreement with GHD provides the best value for the City, as GHD has been involved in the project since 2008. GHD has accumulated special knowledge, skill, expertise, and experience, and is uniquely positioned to continue to provide services to the City, while AECOM completes its work. As described in the Financial Impact section of this report, the purchase order amendments will allow for GHD to provide engineering, contract administration and technical support services.

Review of Organic Waste Processing in Ontario

Current Organic Waste Processing Infrastructure

Solid Waste Management Services retained a third party consultant to complete a scan of the available organic waste processing capacity and costs in the Province. Unlike other Ontario municipalities, the City's Green Bin Organics Program accepts items such as pet waste, diapers and sanitary products. It also allows residents and customers to line kitchen catchers with a plastic bag and place bagged organic waste into the Green Bin. As such, consideration was given to identifying facilities that can accommodate and process the organic waste that is collected through the City's Green Bin Organics Program. The scope of work was limited to viable facilities within a 500 km distance from the City. A distance of 500 km was selected because the furthest distance of one of the City's contracted facilities is approximately 460 km away.

Facilities that process organic waste by windrows (i.e. aerobic composting whereby compost is produced by mixing organic wastes in long and narrow rows typically

outdoors) would not be a viable option as these facilities have a limited range of materials that can be processed. On-farm facilities (i.e. located on agricultural operations and process organic materials generated from farming operations) are also considered to be out of scope as a viable option as they cannot accept source separated organic waste.

Each facility is approved, through their Ministry of the Environment and Climate Change Environmental Compliance Approval, for a theoretical capacity based on facility design parameters. However, it is important to note that a facility's actual operational capabilities could be less than the design capacity and therefore not able to process to the same amount of waste as the facility is approved to process. As a result, it is important to consider not only the approved capacity of a facility, but also its actual current operational capability.

The organics processing capacity scan found that there are 91 operational facilities in the Province, as identified through a review of the Environmental Compliance Approvals. Out of these facilities, only 18 facilities are considered to be possible options to accept source separated organics. It is important to note that although capacity is identified, it is not readily available as the majority of the capacity at these 18 facilities would currently necessitate further operational and licensing modifications such as pre-processing of the materials and/or amendments to their Environmental Compliance Approvals in order to accept Toronto's Green Bin organic waste (e.g. diapers, sanitary products, and source separated organics). A number of these facilities also expressed concerns specifically about managing diapers and sanitary products due to the cost and potential impact to the end product (e.g. non-organic material in the compost). After considering these limitations only three facilities would be in a position to immediately accept 85,000 tonnes of materials from the City of Toronto. Table 1 below details organic waste processing capacity within the 500 km range.

Table 1: Organic Waste Processing Capacity Tonnes (2018)¹

Distance	Approved/ Theoretical Capacity (Tonnes)	Current Operational Capacity (Tonnes)	Available Capacity with Material Limitations (Tonnes)	Available Capacity without Material Limitations / Immediately Available (Tonnes)²
< 50 km	109,900	79,900	0	0
50-100 km	217,000	141,000	40,000 ³	30,000

1 Material restrictions would exclude City of Toronto's Source Separated Organics Program materials.

2 Includes facilities that can currently accept the City's Source Separated Organics without any additional Environmental Compliance Approvals amendments or new equipment.

3 Material restrictions would exclude City of Toronto's Source Separated Organics Program materials.

Distance	Approved/ Theoretical Capacity (Tonnes)	Current Operational Capacity (Tonnes)	Available Capacity with Material Limitations (Tonnes)	Available Capacity without Material Limitations / Immediately Available (Tonnes)²
100-200 km	781,000	528,500 ⁴	138,000 ⁵	55,000
200-300 km	40,000	40,000	0	0
300-400 km	110,000	80,000 ⁶	40,000 ⁷	0
400-500 km	270,000	232,500	0	0
Total	1,532,900	1,101,900	218,000	85,000

Proposed New Organic Processing Capacity

There are a number of other organics processing facilities that have Renewable Energy Approval or an Environmental Compliance Approval but are not yet operational. There are two facilities⁸ within 100 km of Toronto, with a combined approved capacity of approximately 65,000 tonnes. However, despite having received approvals, these projects are not guaranteed to move forward. Although they cannot be considered as potential options in the short term, they may offer some opportunities for the City to seek partnerships or long-term arrangements to process Green Bin organic waste.

Projected Organic Waste Tonnes

Figure 1 below shows projected tonnes of City-generated organic waste requiring management, potential available organic waste processing capacity in the Province, and the City's processing capacity, which includes the City's own facilities as well as external processing contracts, over a ten-year period.

At a minimum, the City is expected to have a deficit processing capacity of over 50,000 tonnes per year by 2028, if the food waste reduction targets planned as part of the Long Term Waste Management Strategy are successfully realized. If the City does not meet its reduction targets, the City's organic processing deficit could climb to as high as

⁴ Includes 40,000 tonnes of capacity expected to be added to one of the facilities by Spring 2019.

⁵ Material restrictions and abilities on-site would require that 83,000 tonnes of this would need to be pre-processed Source Separated Organics (e.g. to remove plastics and some issues with diapers).

⁶ Includes 30,000 tonnes of capacity expected to be added to the facility by Spring 2019.

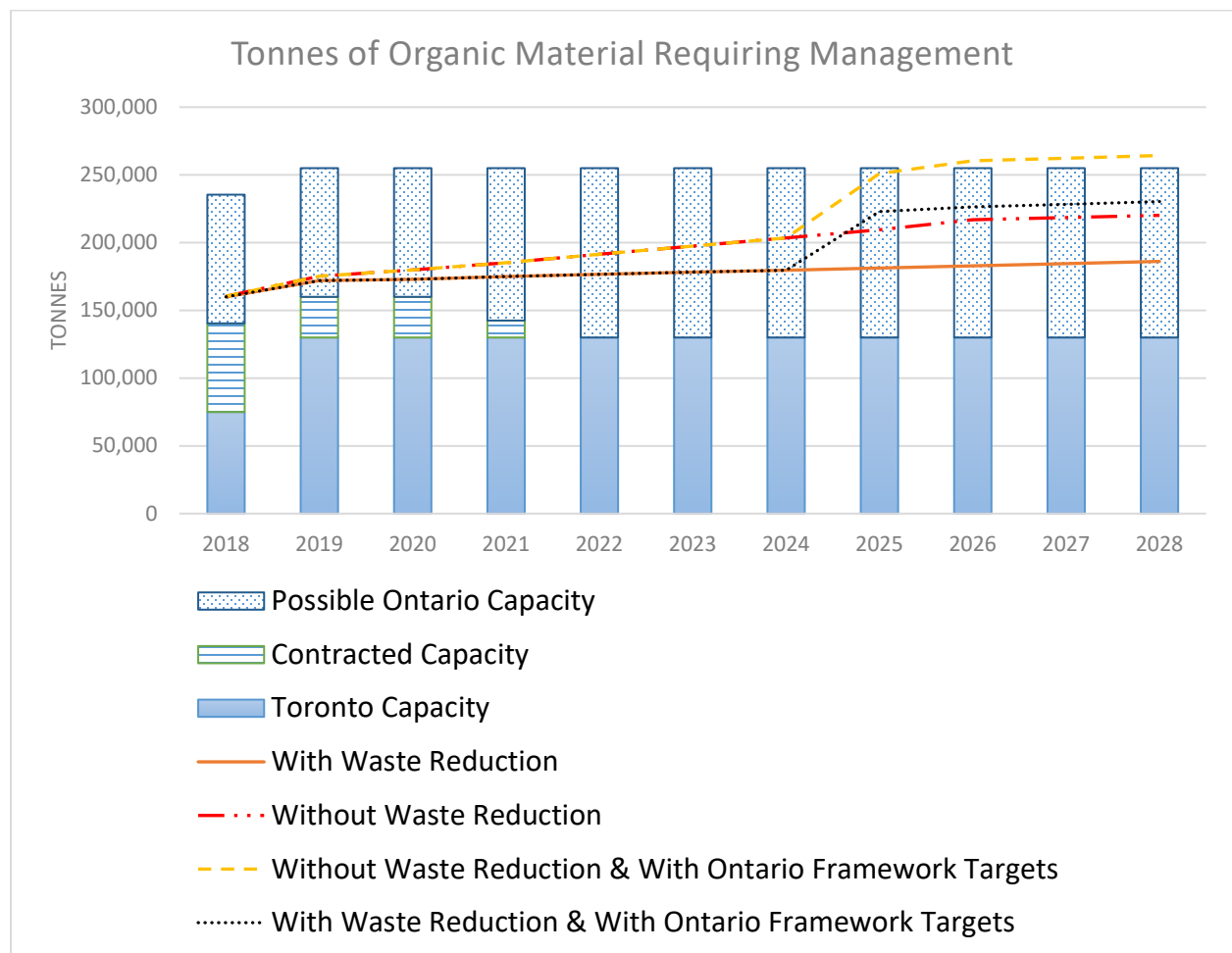
⁷ Expected amendments to the Environmental Compliance Approvals should deal with issues related to diapers and pre-processing.

⁸ Includes Zoo Share but not Dufferin Organics Processing Facility.

90,000 tonnes per year. Other scenarios considered in this table demonstrate the potential processing capacity, or lack thereof, such as meeting the organic waste diversion targets as outlined by the Framework, as well as the inclusion of the immediately available 95,000 tonnes of annual capacity identified throughout the Province. As a worst-case scenario, the deficit could be over 130,000 tonnes per year should the City fail to reach the food waste reduction targets yet increase the multi-residential organic waste diversion from the current 21% to the provincial target of 50% by 2025.

Although it appears that there is sufficient available capacity to manage the current amount of organic waste, if most or all of the capacity available throughout the Province is taken into consideration, the City will be faced with increased competition to acquire additional external contracts given the limited supply and the recent approval of the Framework if additional processing capacity does not become available.

Figure 1: Organic Waste Projections and Capacity



Organic Waste Processing Costs

The current available facility cost to process source separated organic waste in Ontario, based on industry pricing, is in the range of \$90.00 - \$120.00 per tonne plus transfer costs, which are dependent on distance and range from \$20.00 - \$45.00 per tonne.

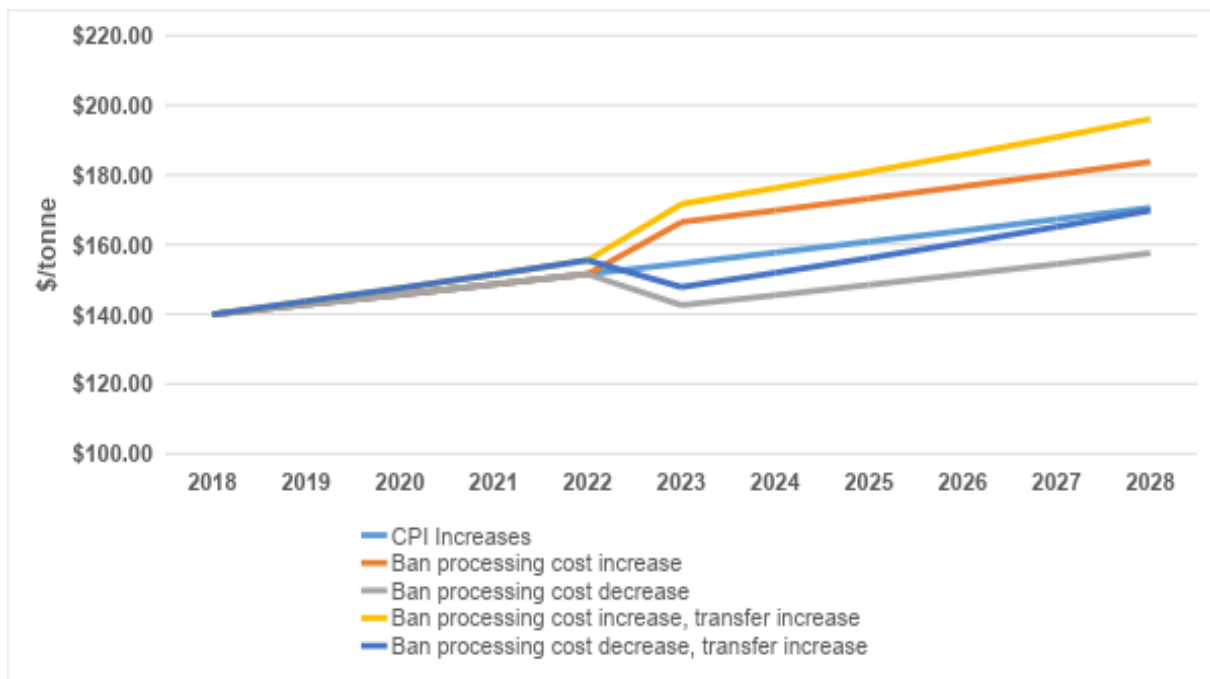
Current typical costs are \$110.00 per tonne for the tipping fee and \$30.00 per tonne for the transfer and haulage. Future source separated organic waste management costs will be impacted by the availability of processing capacity as well as the price of fuel.

The key factor impacting organic waste processing costs will be the implementation of a ban on the disposal of organic waste. A ban could stimulate the development of new processing infrastructure to accommodate increased capture of organic waste and could potentially accommodate some of the City's Green Bin organic waste. The timing of the ban will be critical to ensure that processing supply meets demand. If there is sufficient supply, there is potential for the tipping fees to remain stable and depending on how much processing capacity is available, opportunities for increased competition amongst processors and a potential for tipping fees decreases. If supply does not meet demand, there is potential for tipping fees to increase.

Another factor for consideration is the cost of fuel. Fuel costs have been reasonably stable over the last five years, however it is trending upwards. An increased cost of fuel would result in increased transfer costs and possible increased processing costs.

Figure 2 provides a forecast potential of organic waste processing costs for private processing facilities in the Province in the future.

Figure 2: Organic Waste Processing Costs Forecast Estimates



Next Steps

Solid Waste Management Services will continue to track and update collected organic waste tonnes projections, and monitor for potential impacts from the Long Term Waste Management Strategy and Ontario's newly approved Food and Organic Waste Framework. Solid Waste Management Services has engaged neighbouring municipalities in discussions for potential opportunities for regional optimization of

securing long-term organic waste processing capacity. Considerations will also be given to Provincial and Federal funding opportunities (e.g. Ontario's Municipal Greenhouse Gas Challenge Fund or the Federal Green Infrastructure Fund) if the City were to build a new organics processing facility, either independently or as part of a partnership.

The City's Green Bin Organics Program determines which processors are viable opportunities outside of the City's facilities. Solid Waste Management Services will consider the option of expanding the pre-processing technology of source separated organics at the City's current organics processing facilities or implementing such technologies at the City's transfer station facilities. Staff would investigate if the product that has passed through the pre-processing technology meets a standard of quality that is acceptable at private organic processing facilities. If the City were to pre-process the material and remove items such as light and heavy plastics, it may be left with a more marketable organic waste stream and increase opportunities for securing private processing capacity and not be required to invest in building a third Green Bin Organics Processing Facility.

In 2019, staff will initiate the planning to secure additional long term organics processing capacity.

CONTACT

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SIGNATURE

Jim McKay
General Manager
Solid Waste Management Services

ATTACHMENTS

Confidential Attachment 1 - This attachment provides confidential pricing information related to Recommendation 1 of this Report.