

The Regional Municipality of York

Committee of the Whole
Environmental Services
February 6, 2020

Report of the Commissioner of Environmental Services

Source Separated Organic Waste Processing Contract Extensions

1. Recommendations

1. Council authorize the Commissioner of Environmental Services to execute two year renewal options in the existing service agreements with Renewi Canada and GFL Environmental to provide haulage and processing of source separated organic waste (SSO) from June 30, 2020 to June 30, 2022.
2. Council authorize increases to the total value of the Renewi Canada and GFL Environmental contracts as follows:
 - a. Renewi Canada contract shall be increased by \$16,588,000, from \$90,020,250 to \$106,608,250, excluding taxes, for haulage and processing of up to 58,000 tonnes of SSO per year during the two year renewal period.
 - b. GFL Environmental contract shall be increased by \$12,571,000, from \$39,499,583 to \$52,070,583, excluding taxes, for the following:
 - i. \$1,511,000, excluding taxes, for continued haulage and processing of up to 35,000 tonnes per year for the balance of the current contract term ending June 30, 2020; and,
 - ii. \$11,060,000, excluding taxes, for haulage and processing of up to 35,000 tonnes per year during the two year renewal period.
3. Council authorize the Regional Chairman to send a letter to the Minister of the Environment, Conservation and Parks advocating for expedited SSO processing facility approvals.

2. Summary

This report is to obtain authorization for the Commissioner of Environmental Services to execute two year renewal options in the existing agreements with Renewi Canada (formerly Orgaworld) and GFL Environmental (formerly Lafleche Environmental) for haulage and processing of SSO and to obtain approval for associated purchase limit increases. Executing

the renewal options will extend the contract expiration dates from June 30, 2020 to June 30, 2022, and provide interim processing capacity while the Region advances its long term plans for SSO processing, which will be presented to Council for approval in Q2 2020. In addition, this report seeks Council authorization for the Regional Chairman to send a letter to the Minister of the Environment, Conservation and Parks advocating for expedited SSO processing facility approvals to address Ontario's current processing capacity shortfall and prepare for the proposed provincial ban on landfilling of organics.

Key Points:

- Contract extensions with Renewi Canada and GFL Environmental provide interim capacity through June 2022 while long term plans are advanced and implemented
- Staff will report to Council in Q2 2020 for approval of a long term SSO processing plan
- Expedited approvals for new SSO processing facilities can help the province meet its greenhouse gas reduction goals by addressing the current capacity shortfall and preparing the way for a ban on landfilling of organics

3. Background

Provincial landfill ban changes legislative landscape for Ontario SSO Processing

Under the Made in Ontario Environment Plan, the provincial government has proposed to ban landfill disposal of organics to increase waste diversion and help meet its greenhouse gas reduction goals. This action will result in a large and rapid increase in demand for SSO processing capacity as many municipalities and businesses that were not previously required to provide green bin programs seek processing options for their organic waste. This additional demand will exceed current capacity and place severe strain on the marketplace unless new processing capacity is developed.

Renewal options in existing contracts provide full SSO processing through June 2027 with flexibility to set an earlier end date if required

York Region currently processes its SSO at Renewi Canada's composting facility in London, GFL Environmental's composting facility in Moose Creek and Cornerstone Renewables' Bio-En Power anaerobic digestion facility in Elmira, as summarized in Table 1. The Renewi and GFL contracts include three optional term extensions of two years each and one additional one year term extension to provide the Region with diverse processing options until a long term solution is approved and executed. Executing all optional term extensions could provide the Region with sufficient processing capacity to manage its SSO tonnage through June 30, 2027. Under the terms of the contracts, York Region may exercise the renewal options at its sole discretion.

Table 1
Summary of Source Separated Organic Waste Processing Contracts

Facility, Location, Processing Technology & Travel Distance (one-way)	Minimum Annual Tonnage	Maximum Annual Tonnage	2019 Tonnes Managed	Current Term Expiry Dates	Current Price per Tonne ¹
Renewi Canada London, ON Aerobic (211 km)	50,000	80,000	51,162	June 30, 2020	\$136.60
GFL Environmental Moose Creek, ON Aerobic (465 km)	32,500	50,000	39,291	June 30, 2020	\$151.05
Cornerstone Renewables Elmira, ON Anaerobic Digestion (132 km)	8,000	10,000	8,649 ²	June 30, 2022	\$131.86
Total	90,500	140,000	99,102		

1. Includes current base price per tonne plus average per tonne fuel surcharges for 2019.
2. Cornerstone's annual total includes 101.57 tonnes of contingency processing managed at their alternate facility in Leamington, ON.

Source separated organic waste processing options are currently limited in Ontario. Toronto and York Region are the only municipalities in the Greater Toronto and Hamilton Area (GTHA) that accept diapers, personal hygiene products, and pet waste in their green bin programs, resulting in high participation and leading diversion results. A summary of materials accepted by GTHA green bin programs is provided in Table 2.

Table 2
Summary of Accepted Green Bin Materials in GTHA Municipalities

Material Type	Accepted Materials	
	York Region & Toronto	Other GTHA Municipalities
Food Waste	Yes	Yes
Soiled Paper Products	Yes	Yes
Diapers, Personal Hygiene Products and Pet Waste	Yes	No

Only a limited number of processors in Ontario are approved and licensed to receive our specific green bin material at the tonnages that York Region produces. Renewi, GFL and Cornerstone are approved to manage York Region's green bin material and have processing capacity that meets the Region's needs.

Source Separated Organics Processing Feasibility Study identifies anaerobic digestion as the preferred technology for managing York Region's SSO

As reported to Council on [February 15, 2018](#), CH2M Hill Canada Limited completed a Source Separated Organics Processing Feasibility Study (the Feasibility Study) on behalf of the Region. The Feasibility Study identified numerous SSO processing technologies and recommended anaerobic digestion as the best overall value for managing the Region's green bin material.

A long term plan for transition to anaerobic digestion will be presented to Council in Q2 2020 through the SM4RT Living Plan Review and Update. Exercising the renewal options recommended in this report provides interim capacity while these long term plans are advanced and implemented.

4. Analysis

Anaerobic digestion provides greenhouse gas emissions reductions and improved odour control at comparable costs to existing contracts

As presented in the Feasibility Study, anaerobic digestion provides improved environmental performance at costs comparable to the Region's existing processing contracts. Anaerobic digesters produce a product called "digestate", which is beneficial as a soil conditioner and fertilizer. Unlike composting, anaerobic digestion also produces biogas which can be captured and used for generating heat or electricity. Biogas is a renewable energy source that can be upgraded and injected into the utility grid displacing fossil fuel energy and associated greenhouse gas emissions. Additionally, when suitably designed and operated, anaerobic digestion technology reduces nuisance odour risks by confining the biodegradation process to enclosed vessels, making it possible to process SSO closer to the source.

Transition to 100% anaerobic digestion expected to occur within the 2022 to 2024 timeframe

The SM4RT Living Plan Review and Update considers Region-owned and contracted options for transitioning to anaerobic digestion as well as alternate methods for utilizing energy and digestate. Based on the required timeframes to implement these options staff anticipate that transition to 100% anaerobic digestion processing capacity can occur within the 2022 to 2024 timeframe.

Upon receiving direction from Council, staff will develop a Request for Proposal (RFP) to procure the required services for the preferred option. This RFP is scheduled to be released in Q4 2020. The implementation schedule is summarized in Table 3.

Table 3
Proposed Transition Timeline to 100% Anaerobic Digestion

Milestone	Projected Date
Council approval of interim extensions of Renewi and GFL contracts through June 2022	Q1 2020
Council approval of SM4RT Living Plan Review and Update	Q2 2020
Issue RFP for preferred long term processing option	Q4 2020
RFP closes	Q1 2021
Bid review, Council approval and award	Q2 2021
Provincial approvals	Q1 2022
Construction (if required)	2022 to 2024
Service Commencement of 100% AD processing	2022 to 2024

The extensions to the Renewi and GFL contracts requested through this report will provide interim processing capacity through June 2022. It is currently expected that additional time may be required to implement new anaerobic digestion capacity if the vendors do not already have available anaerobic digestion capacity and need to construct new facilities. Staff will report back to Council for approval to exercise the next optional contract extension based on continued contractor performance.

Expedited provincial approvals for SSO processing facilities helps address Ontario’s capacity shortfall and keep York Region’s long term plans on schedule

Obtaining provincial approvals is a key step in development of new SSO processing facilities and can require a year or more to complete. Expediting these approvals can shorten timeframes required to bring new capacity on line and help to address the shortfall that will occur when the proposed landfill ban takes effect. It will also help York Region to reach its goal of transitioning to anaerobic digestion by 2024 as outlined in Table 3, especially if the preferred option requires new construction. This report seeks the authority to send a letter from the Regional Chairman to the Minister of the Environment, Conservation and Parks advocating for expedited approvals for organics processing facilities.

Diverted tonnage from Renewi to GFL in 2017 results in additional funds needed for the balance of the current GFL contract term

When the contract with GFL was established in 2014, GFL was expected to process 38% of the Region’s annual SSO tonnage. However, due to processing disruptions experienced by

Renewi in 2017, tonnage from Renewi was diverted to GFL resulting in GFL processing in excess of the projected 38% tonnage allocation. This change in scope exhausted the approved purchase order funds resulting in the need for a \$1,511,000 one-time adjustment for the balance of the current GFL contract term ending June 30, 2020. Staff request that this additional amount be appended to the total value of the GFL contract at this time to maintain uninterrupted SSO processing.

Execution of optional term extension supports SM4RT Living Plan and Vision 2051

York Region is committed to meeting its waste diversion targets as outlined in the SM4RT Living Plan and Vision 2051. Transition to anaerobic digestion processing will reduce the Region’s greenhouse gas emissions and reduce potential for odour impacts from SSO processing. The requested term extensions are a necessary interim step to provide the required time to implement this long term SSO processing plan.

5. Financial

Renewi contract to be increased by \$16,588,000 to allow for continued processing during two-year extension on same terms and conditions

As summarized in Table 4, it is estimated that an additional \$8,294,000 per year will be required to allow for haulage and processing of up to 58,000 tonnes per year at Renewi during the two-year contract extension, resulting in a total contract increase of \$16,588,000.

The average price of \$143 per tonne includes an allowance for inflation adjustments and fuel surcharges, which are calculated based on future changes in the Consumer Price Index and diesel price indices. The contract extension is on the same terms and conditions as the existing contract and can be accommodated within the current annual operating budget.

**Table 4
Summary of Requested Renewi Canada Contract Value Increase**

Description	Tonnage	Average Price (\$/tonne)	Total
Existing Approved Contract Value			\$90,020,250
Contract Extension Year 1	58,000	\$143	\$8,294,000
Contract Extension Year 2	58,000	\$143	\$8,294,000
New Maximum Contract Value			\$106,608,250

GFL contract to be increased by \$12,571,000 to allow for continued processing during two-year contract extension and one-time increase for extra processing during 2017

As summarized in Table 5, it is estimated that an additional \$5,530,000 per year will be required to allow for haulage and processing of up to 35,000 tonnes per year at GFL during the two year contract extension. An additional one-time increase of \$1,511,000 is also required to account for contingency processing during the 2017 processing disruptions at Renewi, resulting in a total contract increase of \$12,571,000.

The average price of \$158 per tonne includes an allowance for inflation adjustments and fuel surcharges, which are calculated based on future changes in the Consumer Price Index and diesel price indices. The contract extension is on the same terms and conditions as the existing contract and will not have a significant impact on the current annual operating budget.

Table 5
Summary of Requested GFL Environmental Contract Value Increase

Description	Tonnage	Average Price (\$/tonne)	Total
Existing Approved Contract Value			\$39,499,583
Contract Extension Year 1	35,000	\$158	\$5,530,000
Contract Extension Year 2	35,000	\$158	\$5,530,000
One-time Increase for Excess 2017 Tonnage			\$1,511,000
New Maximum Contract Value			\$52,070,583

6. Local Impact

York Region collaborates with its local municipal partners to provide sustainable, long term waste management programs and maximize diversion from landfill in a cost effective manner. The recommendations in this report allow the Region to continue providing sustainable organics haulage and processing service to local municipalities in an evolving business environment. They also provide for a seamless transition to 100% anaerobic digestion as the Region's preferred processing option for SSO.

7. Conclusion

Staff will present its preferred option for long term SSO processing to Council in Q2 2020 through the SM4RT Living Plan Review and Update. The requested extensions to the Region's existing contracts with Renewi Canada and GFL Environmental provide sustainable SSO haulage and processing capacity in the interim period while the long term plan is being implemented. Council endorsement of a letter advocating for expedited provincial approvals for SSO processing facilities will help address Ontario's current capacity shortfall and keep York Region's long term processing plans on schedule.

For more information on this report, please contact Laura McDowell, P.Eng. Director, Environmental Promotion and Protection at 1-877-464-9675 ext. 75077. Accessible formats or communication supports are available upon request.

Recommended by: **Erin Mahoney, M. Eng.**
Commissioner of Environmental Services

Approved for Submission: **Bruce Macgregor**
Chief Administrative Officer

January 24, 2020

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