
Subject: Expansion of the Walker Environmental Group Composting Facility

Report to: Public Works Committee

Report date: Tuesday, August 10, 2021

Recommendations

1. That Regional Council **APPROVE** a seven (7) year extension of the term of the existing agreement, dated April 30, 2008, with Integrated Municipal Services Inc. (since renamed Walker Environmental Group Inc.) at a processing rate of \$107.98 per tonne beginning in 2029, together with such other amendments to the existing agreement as may be required in order to provide for an expansion of the Source Separated Organic (SSO) Material processing facility at the Walker Organics Recovery Thorold site as described in this report;
2. That Regional Council **APPROVE** entering into a contract with Miller Waste Systems to redirect, from time to time, up to approximately 2,500 tonnes of Source Separated Organics material from the west end Municipalities during the months of December to March to the Miller Systems Digester facility in Grimsby at a rate of \$100 per tonne;
3. That, following the successful negotiations of the final agreement terms and conditions, the Regional Chair and Regional Clerk **BE AUTHORIZED** to execute: (i) an amending agreement with Walker Environmental Group Inc. consistent with Recommendation 1; and, (ii) a new contract with Miller Waste Systems consistent with Recommendation 2; along with any other required documents, all in a form satisfactory to the Director of Legal and Court Services.

Key Facts

- This report is a follow-up of Report PW-20-2021 Processing of Source Separated Organics which authorized staff to negotiate with Walker Environmental Group Inc. (WEG) for additional processing capacity of Niagara Region Source Separated Organic (SSO) material.
- This report summarizes the results of negotiations with WEG for a seven (7) year extension.
- WEG would expand the processing facility by four (4) GORE cells which will provide an additional 8,000 tonnes of SSO processing capacity for a total of 48,000 tonnes of SSO, annually.

- As the Every Other Week (EOW) waste collection program matures, it is anticipated that approximately 44,000 tonnes of SSO will be generated annually by Niagara residents within the next ten (10) years.
- As part of the WEG agreement, Niagara Region will receive \$20 per tonne for any third party materials that are processed at the WEG facility if any extra capacity is available in the GORE system.
- As a contingency, Niagara Region has the option of redirecting a portion of SSO, up to approximately 2,500 tonnes, to the Miller Waste System facility (former Grimsby Digester) during winter months at a rate of \$100 per tonne.
- The amended WEG agreement will contain a clause allowing Niagara Region to renegotiate the agreement in order to explore and/or process SSO using alternate technologies in the future, should an opportunity present itself.

Financial Considerations

Niagara Region currently pays a total of \$96.84 per tonne which includes a capital repayment fee of \$31.95/tonne on 29,700 tonnes and SSO processing fees in the amount of \$64.89/tonne. Niagara Region is paying approximately 19% less than the industry average of \$115/tonne to process SSO. This equates to close to \$755,000 savings each year. If Niagara Region extends the contract with WEG and invests in the capital expansion, Niagara Region would continue to maintain one of the lowest processing rates in Ontario. For comparison, another Southern Ontario Regional municipality extended agreements with three different processors set to end in 2020 for two (2) additional years with the lowest cost being at \$131/tonne

Under the amended agreement with WEG, the GORE system's overall capacity would increase by 8,000 tonnes bringing the total available capacity for Niagara Region's SSO to 48,000 tonnes. The SSO fee rates under this new agreement are included in **Table 1**. The total SSO fee rate in 2022 of \$98.18/tonne is inclusive of capital repayment fees of \$31.95/tonne on 37,700 tonnes and SSO processing fees of \$66.23/tonne. On April 1, 2029, the new capital repayment fee for the additional 8,000 tonnes will be incorporated into the overall fee charged by WEG for an estimated total fee of \$107.98/tonne at that time. Annual inflation increases apply on the SSO processing fees until the end of the contract on March 31, 2036.

Table 1: WEG SSO Processing Fee Rates

Total SSO Fee Rate	2022	Starting on April 1, 2029
Total SSO Fee Rate – per tonne	\$ 98.18	\$107.98

Note: 2022 rate of \$98.18 subject to annual escalation of per tonne rate as required. This results in an estimated rate of \$107.98 on April 1, 2029 which will be subject to further annual escalation to the end of the contract term.

Should Niagara Region choose not to complete the contract to the proposed end date of March 31, 2036, terminating the contract would subsequently result in a buyout payable to WEG. If Niagara Region provides notice that it will be terminating the contract on March 31, 2029 (corresponds with the end date of the current contract) or March 31, 2033 the buyouts would be \$7,731,654 and \$3,445,182 respectively.

Niagara Region could also enter into a contract with Miller Waste to redirect SSO material from the west end Niagara Municipalities as needed during the months of December to March. This would result in material being diverted to the Miller Digester facility in Grimsby at a rate of \$100 per tonne. The redirection of material to Miller Waste would reduce tonnages processed at WEG therefore reducing processing fees paid. The budget impact of reduced processing fees at WEG would be offset by processing fees paid to Miller Waste. The budget impacts will be considered in preparation of the 2022 Waste Management operating budget.

Based on forecasted tonnages of SSO, and leaf and yard material, the estimated gross impact of the amended, restated and modernized WEG contract is approximately \$665,000 (or 1.64% of the Waste Management 2021 Requisition).

The gross cost impact of the contract will be partially offset by funds for any third party materials that are processed at the WEG facility if any extra capacity is available in the GORE system financed by Niagara Region. At this time, Niagara Region will receive \$20 per tonne for the processing of any third party materials that are processed at the WEG facility.

The 2021 budget for processing SSO, and leaf and yard material, is approximately \$3.9 million. It is anticipated that there will be an unfavourable variance for this budget item in the amount of approximately \$114,000 for 2021. This unfavourable variance will be

offset by the overall budget surplus in the Waste Management division for 2021, due to favourable revenue from the sale of recyclables.

It should be noted that tonnage rates referred to in this section of the report exclude 13% HST. In addition, annual escalation will be applied per tonne rate as required.

Analysis

Based on the recommendation in report PW 20-2021, staff began negotiations with WEG in late April on the expansion of their SSO processing (GORE system) facility. Discussions focused on both processing capacity and the capital cost of expanding the current GORE system.

Annual Tonnages

Niagara Region introduced a SSO collection program in 2003 / 2004. SSO is organic material that is comprised of food waste and leaf and yard material which is collected through the Region's Green Bin program. Since 2009, WEG has processed the Region's SSO at their Thorold composting facility which utilizes a GORE system to process SSO material. Under the terms of the current contract which expires on March 31, 2029, Niagara Region is obligated to compensate WEG for a minimum of 29,700 tonnes of SSO. WEG is required to process up to 39,700 tonnes of SSO which is comprised of no less than 5,700 tonnes of leaf and yard bulking material and up to 34,000 tonnes of SSO.

From 2017 – 2019, Niagara Region annually generated an average of 29,050 tonnes of SSO. In 2020, a total of 34,650 tonnes of SSO was generated by Niagara residents. The two main contributors for the 2020 tonnage increase were the COVID-19 pandemic and transitioning to EOW waste collection in mid-October. Projecting to the end of 2021, it is anticipated that 40,700 tonnes of SSO will be generated. Current estimates project that Niagara residents will annually generate 44,000 tonnes of SSO by 2031.

Contract Requirements

Under the current agreement with WEG, Niagara Region is responsible for any capital expansion of the GORE system once incoming tonnages exceed 39,700 tonnes. During negotiations WEG confirmed that they will be able process all of Niagara Region's SSO in 2021 and prior to the construction of an expanded GORE system.

Proposed Composting Facility Expansion

The proposed expansion of the composting facility would be comprised of constructing an additional four (4) cells to the existing sixteen (16) cell GORE system at WEG. Due to the current site layout, the WEG organic processing facility only has the physical space to accommodate an additional four (4) GORE cells and anything larger would require significant alterations to the entire site. The added GORE cells would increase the overall capacity by 8,000 tonnes bringing the total available capacity for Niagara Region's SSO to 47,700 (rounded to 48,000 by WEG) tonnes. Based on future tonnage projections, it is estimated that the expanded GORE system will be able to process Niagara Region's SSO tonnages over the next ten (10) years and potentially beyond based on current SSO composition and regulations. WEG is estimating that construction will take approximately six (6) months once approved resulting in the expansion being online by Q2 of 2022.

If required, Niagara Region will have the ability to redirect a portion of SSO to the Miller Waste Digester in Grimsby at a rate of \$100 per tonne. This flexibility to send a portion of the material (up to approximately 2,500 tonnes) to the Miller digester is only available during the winter time when there is no yard waste material in the SSO material.

As a further contingency, if required, WEG will be able to divert a portion of the incoming SSO in order to deal with any operational issues such as seasonal peaks, by redirecting the SSO material to one of their other processing facilities with rates to be confirmed with WEG upon finalization of the amended, restated and modernized agreement.

It should be noted that the Province is planning to introduce a Food and Organic Waste regulation. Building in processing contingency will help Niagara manage potential future tonnage increases as a result of a new regulation.

Negotiation Summary

A total of five (5) negotiation meetings were held between Niagara Region and WEG staff between the end of April and end of June. There were several focal areas during the discussions: processing capacity, capital and operating costs, amending, restating and modernizing the agreement.

WEG has indicated that a four (4) cell expansion of the GORE system will allow them to process up to 48,000 tonnes of SSO assuming the current mix of food waste and leaf

and yard materials remains unchanged. The expanded capacity will be solely for SSO materials and exclusive of any leaf and yard or bulking materials.

The capital cost of the GORE system expansion is \$3.5 million. Niagara Region staff have consulted with other municipalities and industry experts to validate that the capital price submitted by WEG is in line with current industry capital cost estimates for similar facilities. Construction of the added GORE cells will include the GORE technology itself, site works, construction, electrical and mechanical infrastructure, and auxiliary works.

A number of areas of the existing contract require clarification and / or updating as a result of the contract extension and new capacity created by GORE system expansion. These include, for example, the inclusion of a minimum amount of bulking material, total processing capacity, and operating to appropriate standards. Subject to Council approval of this report, Waste Management will finalize terms with WEG, and subsequently work with Legal Services Staff to amend the agreement accordingly.

Alternatives Reviewed

Two alternatives were described in report PW 20 – 2021, which included Niagara Region constructing their own SSO processing facility or Niagara Region procuring additional processing capacity through a formal procurement process. Based on the initial price per tonne processing rate from WEG earlier this year, Council authorized staff to negotiate with WEG for an expansion of the facility and report back. Based on subsequent negotiations, and comparing the new per tonne processing rate to the market, no additional alternatives were reviewed, and as such, staff are seeking approval to amend the current SSO processing agreement with WEG, and enter into an agreement with Miller for contingency SSO processing capacity.

Relationship to Council Strategic Priorities

This report supports Council's Strategic Priority of Responsible Growth and Infrastructure Planning.

Other Pertinent Reports

- PW 20-2021 - Processing of Source Separated Organics
- PW 21-2020 - Extension to Residential Waste and Recycling Drop-off Depot

Prepared by:

Emil Prpic
Associate Director, Waste Disposal
Operations & Engineering
Waste Management Services

Recommended by:

Bruce Zvaniga, P.Eng.
Commissioner of Public Works (Interim)
Public Works Department

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was prepared in consultation with Blair Hutchings, Program Financial Analyst, Dan Ane, Manager of Program Financial Support, and Catherine Habermebl, Director of Waste Management Services.

Appendices

None