



City of
Peterborough

To: Members of the General Committee

From: W.H. Jackson, Director of Utility Services

Date: February 26, 2018

Subject: Report USDIR18-003
Source Separation Organics System Update Report and
Municipal GHG Challenge Fund Application Results

Purpose

A report to update Council on the progress made in the development and implementation of a facility to process the City's Leaf & Yard waste and Source Separated Organic materials including the City's Biosolid material from the Wastewater Treatment Plant and to report on the success of the application for funding to the Municipal GHG Challenge Fund.

Recommendations

That Council approve the recommendations outlined in Report USDIR18-003 dated February 26, 2018, of the Director of Utility Services, as follows:

- a) That the Mayor and Clerk be authorized to execute the Municipal GHG Challenge Fund Transfer Payment Agreement between Her Majesty the Queen in Right of Ontario as represented by the Minister of the environment and Climate Change;
- b) That W. H. Jackson, Director of Utility Services be given delegated authority to verify and attest to the accuracy of claimed costs and all other documents required by the Province and is the Authorized Representative with signing authority on behalf of the City of Peterborough;
- c) That the City of Peterborough commit to review its existing Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and a

Community-wide GHG Emissions Reduction Plan to ensure they meet each of the definitions in Schedule B of the Transfer Payment Agreement within two years of signing the Agreement

- d) That due to the time constraints in having to execute Recommendation (a) a Special Council Meeting be held on February 26, 2018 to consider Report USDIR18-003 "Source Separation Organics System Update Report and Municipal GHG Challenge Fund Application; and
- e) That staff report further to Council with full financial considerations on the agreement secured with Triland Excavation and Hauling for the purposes of implementing a facility to process the City's Leaf & Yard waste and Source Separated Organics initially and potentially to also process the City's Biosolid Material from the Wastewater Treatment Plant

Budget and Financial Implications

It is estimated that full implementation of a Source Separated Organics (SSO) collection and processing system will cost in the order of \$15 million including the supply and distribution of curbside green bins and kitchen catchers for all City single-family households, the design and planning for revamped waste collection routes, a comprehensive public education/communication campaign, purchase of new collection vehicles and the construction of a processing facility.

The success of the Municipal GHG Challenge Fund application means that \$7,461,250 of these costs will come from the GHG Fund which is a program funded by the proceeds from Ontario's carbon market.

The remaining funding will be a combination of private and public investment based on the Principles of Agreement that are described elsewhere in this report. A future report to Council will provide the detailed costing analysis.

Background

Council, at its meeting of November 14, 2017 adopted the following recommendations:

- a) That staff develop a program for the City-wide collection of Source Separated Organics including items such as the provision of green bins, the procurement of collection trucks and the public education and advertisement campaign necessary to the success of such a program;
- b) That the City sole source Triland Excavation and Hauling for the purposes of developing and implementing a facility to process the City's Leaf & Yard waste

and Source Separated Organics initially and potentially to also process the City's Biosolid Material from the Wastewater Treatment Plant in the future;

- c) That staff explore the benefits of a Private/Public Partnership with Triland Excavation with respect to the provision of organic processing capacity;
- d) That staff be requested to submit an application to the Municipal GHG Challenge Fund to support the collection and processing of the City's Leaf & Yard waste and Source Separated Kitchen Organic material; and
- e) That staff report back on the details related to Recommendations a), b), c) and d) with information on any Private/Public Partnership arrangement that is achieved, including financial considerations.

Much has happened since November 14, 2017 as described in below.

1. Municipal GHG Challenge Fund Application

An application to the GHG Challenge Fund was submitted on November 9, 2017. Because of timing restrictions, this application was made before the actual Council approval although the then Committee of the Whole had recommended to Council that the application be submitted. The project that staff submitted included the following:

- Design of new waste collection routes that will involve the collection of Source Separated Organics (SSO) separately;
- The procurement and distribution of residential green bins and kitchen catchers;
- A comprehensive public information and communication campaign;
- Procurement of the necessary vehicles to effect the collection of SSO; and
- Design, approval and implementation of a third party processing facility to process SSO and Leaf & Yard waste material initially. Ultimately, the potential to also process the City's biosolids will be considered.

On February 15, 2018, the City was informed that the submitted application was selected for funding. This was an application for \$7,461,250 and, obviously, is very significant in the City's efforts to move forward with SSO collection and processing.

The funding acceptance comes with very tight timelines to have the Transfer Payment Agreement signed. The Province wants to announce this project the week of March 12, 2018 and they need the Transfer Payment Agreement signed by March 8, 2018 or sooner. That is why staff has initiated a Special Committee meeting and are requesting a Special Council meeting both on February 26, 2018.

One of the requirements of the Province is the commitment to develop a Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and a Community-wide GHG Emissions Reduction Plan or review its existing Community-wide GHG Emissions Inventory, Community-wide GHG Reduction Targets, and a

Community-wide GHG Emissions Reduction Plan to ensure they meet each of the definitions in Schedule B of the Transfer Payment Agreement within two years of signing the Agreement. The City met all of these requirements prior to submitting the grant.

2. Development of a City-wide Program for the Collection of Source Separated Organics

On January 23, 2018 under his delegated authority as set out in the City's Purchasing By-law, the CAO awarded P-33-17 to exp Services Inc. for the Integrated Waste Collection Modelling Study.

The Waste Collection Modelling Study is the first step toward implementation of a program for the collection of SSO in the City. This study will examine how the various waste streams in the City will be collected such that the total collection costs will be minimized with consideration given to the simplicity of the system for the City's residents and businesses. From this study will come the requirements for routing including the number, type and compositions of the necessary collection truck fleet.

3. Private/Public Partnership with Triland Excavation and Hauling

At its meeting of November 14, 2017, Council authorized staff to sole source Triland Excavation and Hauling (Triland) for the purposes of developing and implementing a facility to process the City's Leaf & Yard waste and SSO initially and potentially to also process the City's Biosolid Material from the Wastewater Treatment Plant in the future. Since then, staff has been working with Triland to explore, in detail, the benefits of a Private/Public Partnership with respect to the provision of organic processing capacity.

The City now has substantial grant funding and the raw material (SSO, Leaf & Yard waste, and Biosolids). Triland has the land, private capital and expertise to provide a facility that will process the City's organic material. This is an excellent combination to craft an agreement around.

To date, most of the work the City and Triland have done together revolved around the submission of the GHG Fund Grant application and developing fully sustainable cost models. Now, with the GHG Fund Grant secured, it is time to develop and finalize an agreement between the City and Triland to move forward with this project.

The Principles of this agreement must acknowledge both sides equally. An agreement that is biased to one side or the other is bound, in the long term, to fail. Accordingly, the following principles of an agreement are set out below.

- The GHG Fund grant will be used as seed money to help ensure the viability and sustainability of the proposed organics processing facility and SSO collection, with this funding to be acknowledged in the financial modeling of the project;

- Triland and the City are required to adhere to the principles of the GHG Fund Transfer Payment Agreement and the Program Guidelines, including a fair, open, transparent procurement process and timely reporting;
- The City needs cost certainty and cost containment over the long term with regard to its organics collection program for SSO, Leaf & Yard waste and Biosolids from the Wastewater Treatment Plant;
- Triland needs to achieve a return on investment that will ensure the sustainability of the proposed organics processing facility;
- The risk associated with this endeavour needs to be minimized but must be borne by Triland; and
- A long-term commitment is in the best interests of the City and Triland.

The Agreement with Triland is very significant and will include long-term commitments (financial and performance) on both sides. Council should expect a further report on the details of this agreement in the not too distance future.

4. Next Steps

There are very many steps to complete before this project comes to fruition. Listed below are the major actions that are required but not necessarily in the order they will be done. Certain actions will be concurrent and others are sequential using information from one action to inform the subsequent action.

- Develop and report on an Agreement with Triland;
- Complete the Integrated Waste Collection Modelling Study and develop the appropriate fleet composition;
- Secure all necessary approvals for the construction of an organics processing facility;
- Construct the organics processing facility;
- Secure the necessary bins and trucks for the collection of SSO;
- Develop and implement a public education and advertisement campaign necessary to the success of the SSO collection system;
- Ensure all reporting requirements related to the GHG Fund Grant are completed on a timely basis;
- Implement the SSO collection system.

The timing for all of the next steps is geared toward the implementation of SSO in September of 2019. This is a very aggressive time table that will require input and approvals from a number of sources, award of tenders/RFP's and reports to Council.

Summary

The success of the Municipal GHG Challenge Fund application has made the collection and processing of Source Separated Organics a reality for the near future. This is a

very exciting because of the environmental and financial “wins” for the City especially with the proposed Public/Private Partnership for processing organics in close proximity to the City.

Much work still needs to be done but huge steps have already been taken and staff believe that this project will now move confidentially to a successful conclusion.

Submitted by,

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