

TO: Members of the Committee of the Whole

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

**MEETING DATE:** April 22, 2013

SUBJECT: Report USWM13-003

Organics Processing Options - Creation of Budget for

**Consulting Services** 

### **PURPOSE**

To create a budget for consultation services to search and evaluate processing alternatives for the City's three organic waste streams.

# **RECOMMENDATIONS**

That Council approve the recommendations outlined in Report USWM13-003 dated April 22, 2013, of the Director of Utility Services, as follows:

- That a 2013 Capital Budget of \$75,000 be created for consulting services to search and evaluate processing alternatives for the leaf and yard, kitchen, and waste water biosolid organic streams; and
- b) That the necessary funds be transferred from the Waste Management Reserve Fund.

## **BUDGET AND FINANCIAL IMPLICATIONS**

The uncommitted balance in the Waste Management Reserve, after the recommended \$75,000 draw, will be \$2,380,262.

## BACKGROUND

#### 1. General

The identification of suitable processing capacity for a Source Separated Organics (SSO), or "food waste" program has been in the City's plans for many years. Since 2001, Waste Management staff has intended to add SSO to its existing leaf and yard collection ("Green Waste") in order to save valuable landfill space but, for various reasons, this has not happened. Once food waste is added into the Green Waste mix, the regulations and technical requirements for its processing become much more stringent. Plans to establish a low-cost, in-house solution at our landfill site were met with regulatory opposition, and there are few private or municipally-run facilities within a reasonable distance.

## 2. Existing Organic Processing Operations

The City presently collects and processes the following three organic waste streams:

#### 2.1 Leaf and Yard Waste

A "Green Waste" collection which includes grass, leaves, flowers, hedge trimmings, brush and branches, has occurred in the City since 1990.

Unlimited quantities are collected every week, beginning in early April and ending late November. It has been a popular and effective program, diverting between 5000 – 6000 tonnes of waste from landfill each year. This material is now banned from regular garbage. In addition to the diversion benefits, high quality compost is produced from this material by the City at the Harper Road Compost Facility, and sold back to residents and businesses. Peterborough was one of the first municipalities in the province to implement a green waste and composting program.

#### 2.2 Food Waste

A north-end neighbourhood of 625 households has been the site of a food waste, or SSO collection pilot since 2001. The material collected under this program is mixed with leaf and yard waste and composted at the Harper Road Compost Facility.

This pilot proved the success of asking residents to set their SSO out separately for collection so that it may be composted rather than land filled. The intention is to expand to include all households in the City, and eventually, all businesses as well. Although little promotional effort has been spent recently on the pilot program, it has shown that residents are willing and able to comply with such a program. Additionally, requests have been received from residents outside the pilot area asking to participate. The City needs to find the appropriate means of processing the municipality's food waste so that we may proceed with the expansion. Once implemented, it is believed that at least 6000 tonnes of residential SSO alone will be diverted from landfill and converted to a marketable end product.

#### 2.3 Waste Water Biosolids

Presently waste water biosolids are trucked to Iroquois, Ontario for processing under a contract which has two years remaining at an annual cost of almost \$900,000.

### 3 Emerging Situation

To continue operating the existing compost site at Harper Road will require an expensive upgrade in storm water management protocol and operational procedures. Even with these in place, the MOE may not allow the City to continue to operate the site for composting and the expectation is that within 2 ± years, there will be pressure to close the site. Consequently, the future of our long-established Green Waste collection and composting program is in jeopardy until a new option for processing this material is found.

#### 4 Future Organic Processing

Given the need to locate a new facility to process our leaf and yard waste, the time is ripe to expand SSO collection across the City and bundle all organic streams together for processing. The Waste Management Master Plan identified the diversion of SSO as a top priority, with the potential to divert 17% of the City's current waste going to landfill. Recent advancements in technology and regulations now make the co-processing of biosolids with SSO and leaf and yard waste feasible, so it is anticipated that an option for handling all three organics streams may be found and implemented locally.

### 5 Next Steps

To test the viability of integrating all organic streams into a single processing concern, a Request for Information (RFI) was issued asking how firms might handle the organic waste steams expected to be produced by the City. The County waste streams were included with an expectation this would make the financial aspect of the solution(s) more attractive. Seventeen firms replied to the RFI with a variety of technological and partnership alternatives.

The next step will be to Pre-Qualify firms who have the necessary financial and technological qualifications required for a project of this magnitude. It is expected that this RFQ will allow the identification of 3 or 4 firms that will be requested to respond, in significant detail, to a Request for Proposals.

Given the complexities of the process, the varied technologies available, the potential to enter in partnership deals with private organizations and the time pressure the City now faces to move forward, it is prudent to engage the assistance of a consultant skilled in this area of activity to assist staff with this work and to accelerate the process of making the critical evaluations and decisions.

# **SUMMARY**

Bundling all organic waste streams and inviting private firms to offer solutions (processing and financial) to deal with these steams is proposed. In consideration of the short time frame available and the varied and potential complex technologies available, staff is requesting the creation of a new capital budget to hire a consultant to assist with the search and selection of a qualified organics processor. Securing organics processing capacity is a priority, and it is believed significant cost saving could be realized if a technology that can process all organic streams can be found thereby extending our landfill life through the diversion of all organic materials.

Submitted by,

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