

APR 27 2015

Utilities & Environmental Protection Report to  
Priorities and Finance Committee  
2015 April 21

ISC: UNRESTRICTED  
ITEM: PFC2015-0322  
*URGENT BUSINESS*  
PFC2015-0322  
CITY CLERK'S DEPARTMENT  
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**ORGANICS AND BIOSOLIDS COMPOSTING PROGRAM CAPITAL BUDGET REQUEST**

**EXECUTIVE SUMMARY**

The diversion of organics from landfill is a critical step in achieving Council's Priority for a Healthy and Green City and the 80/20 by 2020 waste diversion goal. At the same time, there is a need to address the increasing amount of biosolids produced at The City's wastewater treatment plants.

Council has approved the construction of a joint-use composting facility. The compost facility will be used by the Water Utility to compost biosolids and Waste & Recycling Services (WRS) to process materials from a single-family residential food and yard waste program (Green Cart Program).

On 2013 May 27 Council approved the commencement of the procurement process for a design-build-operate contract for the construction of the composting facility (PFC2013-0409). A Request for Proposal (RFP) was issued to prequalified parties on 2014 July 25. Administration has completed an initial review of the submissions. This report discusses the revised capital requirements for the organics and biosolids composting facility, based on information gathered through the RFP process.

**ADMINISTRATION RECOMMENDATION(S)**

That the Priorities and Finance Committee recommends that:

1. Council approve the transfer of \$10.0 million in capital budget appropriation and gas tax funding, \$2.225 million from Program 256 - Landfill/Treatment and \$7.775 million from Program 258 - Facilities & Equipment, to Program 257 - Diversion Infrastructure as detailed in Table 1; and
2. This report be forwarded to the 2015 April 27 Regular Council Meeting as an item of urgent business.

**RECOMMENDATION OF THE PRIORITIES AND FINANCE COMMITTEE, DATED  
2015 APRIL 21**

That the Administration Recommendation contained in Report PFC2015-0322 be approved.

**PREVIOUS COUNCIL DIRECTION / POLICY**

On 2013 April 15, the Organics and Biosolids Composting Program report (C2013-0246) was considered at the Special Strategic Planning Meeting of Council. Administration was directed to proceed with the preparation of Request for Qualifications (RFQ) and Request for Proposal (RFP) documents for a City-owned, private sector Design-Build-Operate (DBO) composting facility, to be located at the Shepard landfill site.

On 2013 May 27 Council approved a capital budget appropriation of \$133.0 million to commence a Public-Private-Partnership Design-Build-Operate (DBO) procurement for the organics and biosolids composting facility (PFC2013-0409).

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On 2014 November 24 Council approved Action Plan 2015-2018: Waste & Recycling Services' operating budget which included the funding proposed to implement a Green Cart Program in 2017 and to award the organics facility contract.

### **BACKGROUND**

Waste & Recycling Services launched a residential food and yard waste diversion pilot program in 2012 March. It provided data with respect to participation and volumes that guided WRS on the size of the processing facility and the composition of the organic material. In 2014 Council approved a city-wide Green Cart Program to commence in 2017.

As part of the Public-Private-Partnership (P3) process, and in accordance with Council Policy (CFO0011), an RFQ was released to the national market on 2013 November 13 and the successful consortia that responded to the RFQ were identified in early June 2014. The RFQ process received seven submissions, of which four were pre-qualified to submit a proposal on the RFP. The RFP was issued to the pre-qualified consortia on 2014 July 25 and the RFP process was completed in early March 2015.

### **INVESTIGATION: ALTERNATIVES AND ANALYSIS**

Based on pre-engineering work completed in 2013, a capital budget requirement of \$133.0 million for the composting facility was approved by Council in 2013 May 27. In order to award the Composting Facility Design-Build-Operate (DBO) contract to the preferred proponent, \$10.0 million in additional capital budget is required in Program 257- Diversion Infrastructure.

Table 1 summarizes the changes proposed to WRS' approved capital budget programs to accommodate the additional budget required for the composting facility.

Table 1: (in \$000s)

|  | <b>2015</b>    | <b>2016</b>    | <b>2017</b>  | <b>2018</b> | <b>Total</b> |
|--|----------------|----------------|--------------|-------------|--------------|
| Program 257 – Diversion Infrastructure | 1,300          | 1,000          | 7,700        | -           | 10,000       |
| Program 256 – Landfill Treatment       |                |                | (2,225)      | -           | (2,225)      |
| Program 258 – Facilities & Equipment   | (4,790)        | (2,367)        | (618)        | -           | (7,775)      |
| <b>TOTAL</b>                           | <b>(3,490)</b> | <b>(1,367)</b> | <b>4,857</b> | <b>-</b>    | <b>0</b>     |

Approval of the requested capital budget adjustments will facilitate the award of the DBO contract, so that work on the project can commence to meet the 2017 program start target.

### **Stakeholder Engagement, Research and Communication Strategic Alignment**

The diversion of organics from the landfill is a critical step in achieving Council's Priority for a Healthy and Green City and WRS' Strategy related to Council Outcome: H1 Implement the green cart program and multi-family recycling strategy, and reduce industrial, commercial and institutional waste in our landfills. It is also a critical element for achieving progress in the 80/20 by 2020 waste diversion goal.

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### **Social, Environmental, Economic (External)**

Diverting organic waste from landfill is a critical component of reducing Calgary's impact on land, air and water. Diverting waste reduces greenhouse gas emissions, redirects natural resources back into the economy and reduces The City's landfill liability. Composting of biosolids will continue The City's program to reuse biosolids in a way that provides environmental benefits and is flexible to respond to future changes in regulations.

### **Financial Capacity**

#### **Current and Future Operating Budget:**

WRS' operating budget approved in Action Plan includes the revenue and expenditure required for the Green Cart Program commencing in 2017. The program will be funded through a program fee and savings that will be realized in residential waste collection. The \$9.00 per household per month program cost, partially offset by savings in residential waste collection, is expected to require a \$6.50 per household per month program fee.

However, elements of the city-wide Green Cart Program are still uncertain. These elements have the potential to impact the program user fee and they include:

- Purchase of carts (commodity price remains uncertain, US\$ exchange rates);
- Green Cart tonnages coming from residents (impacts expenses);
- Inflation of labour and commodities (fluctuation in energy commodities);
- Property tax for the facility;
- Population projections (amount of revenue earned); and
- Collection costs (size of fleet is based on population).

Recent analysis of the program elements result in an indicative rate of \$9.00 to \$9.50 per household per month, with a net cost of \$6.50 to \$7.00 per household per month. WRS continues to look for efficiencies and the cost of the program will be confirmed with Council closer to the roll-out in 2017.

WRS will bring the Green Cart Program fee to Council in 2016 November as part of The City's budget adjustment process.

During this business cycle, Waste & Recycling Services will be conducting a Financial Model Review and Cost of Service Study, which will determine the Green Cart Program fee and the recommended financial model and rates for the 2019-2022 business cycle.

The operating funding identified in Action Plan 2015-2018 for the Water Utility continues to be sufficient.

#### **Current and Future Capital Budget:**

The composting facility will be funded from a combination of self supported debt, revenue/reserve and gas tax funding grant. The self supported debt funding will be used for the construction of infrastructure and facilities and the purchase of equipment with an expected useful life of 25 years.

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There is \$133.0 million in capital budget currently approved within Action Plan 2015-2018. Based on a review of the Waste & Recycling Services' 10 year Infrastructure Investment Plan (WRIP), the \$10.0 million increase requested in this report can be accommodated within the existing capital budget through reprioritization in Program 256 and 258, with minimal long-term impact.

**Risk Assessment**

A strategic assessment was conducted in early 2013 and presented to the Special Strategic Planning Meeting of Council on 2013 April 15. The Strategic Assessment report presented a full spectrum assessment of risk and the different contract models available to deliver a composting facility.

**REASON(S) FOR RECOMMENDATION(S):**

This report outlines the additional capital budget required to allow the award of the Composting Facility Design-Build-Operate RFP contract to a preferred proponent.

**ATTACHMENT(S)**

N/A