



City of  
**Peterborough**

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**TO:** Members of the Waste Management Steering Committee

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

**MEETING DATE:** June 24, 2013

**SUBJECT:** Report WMC13-013  
Full Cost Accounting for the Peterborough County/City Waste Management Facility

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## **PURPOSE**

A report to present Committee with the full cost accounting analysis for the Peterborough County/City Waste Management Facility.

## **RECOMMENDATIONS**

That the Waste Management Committee endorse the recommendations as outlined in Report WMC13-013 dated June 24, 2013, of the Director of Utility Services as follows:

- a) That Report WMC13-013 dated June 24, 2013 providing the full cost accounting analysis of the Peterborough County/City Waste Management Facility be received for information; and
- b) That staff continue to update the cost and other assumptions used in this analysis and report back to the Waste Management Committee on a yearly basis, or sooner if appropriate, regarding the updated analysis when additional information is available.

## BUDGET AND FINANCIAL IMPLICATIONS

There are no budget or financial implications to receiving this report for information.

## BACKGROUND

The Waste Management Committee at its meeting of May 13, 2013 in considering Report WMC13-005 entitled “Full Cost Accounting for the Landfill” requested staff to report further on this matter to the June 24, 2013 Committee meeting.

### 1. Full Cost Accounting Analysis Basic Principles

The basic principles behind full cost accounting are simple. The costs to provide a site to dispose of waste are factored by the capacity of the site to arrive at a cost per tonne or cost per cubic metre of waste.

### 2. Background

An Environmental Assessment Board hearing *“in the matter of the application by the City of Peterborough to the Ontario Ministry of the Environment for a Certificate of Approval for a waste disposal site for landfilling to serve the City of Peterborough and the Township of Otonabee in accordance with Section 38 of the Environmental Protection Act, 1971, as amended”* occurred in late 1977/early 1978. The landfill site began accepting waste in 1981. The site, as now constituted, has a life expectancy to 2026.

In late 2002, the County and City of Peterborough agreed to jointly own the landfill and it is now referred to as the Peterborough County/City Waste Management Facility (the “Facility”).

### 3. Analysis and Assumptions

Three basic pieces of information were needed to undertake the analysis:

- Costs (operating and capital);
- Revenues collected during the life of the site; and
- Capacity of the site (tonnes and cubic meters).

### 3.1 Costs

The costs to operate the Facility can be broken into three broad time periods. From 1975+ to 1981 costs would have been incurred to undertake any studies necessary to determine the viability of the site to operate as a landfill and to receive the appropriate approvals to do so.

From 1981 to 2026± the operating and capital costs relate to the acceptance and placement of garbage brought to the Facility.

From 2013 to 2201± the operating and capital costs relate to post closure costs for either a part (South Fill Area) or the entire Facility.

### 3.2 Revenues

The revenues for the Facility would occur during the 1981 to 2026± period when a tipping fee was charged for garbage (and other items) brought to the Facility.

### 3.3 Capacity

The capacity of the site is based on the most recent (2012 Annual Monitoring Report) document that provides estimates for total tonne and total cubic meter capacity.

## 4. Results

A number of assumptions (Appendix A) were required to proceed with the analysis. Appendix B provides the results of this analysis.

Based on the work done to date, the gross cost per tonne of waste deposited at the landfill is \$76.63 with a net cost of \$13.10. Expressed as a per cubic metre cost, the gross cost is \$33.48 per cubic metre with a net cost of \$5.72 per cubic metre.

## 5. Caution

Much work has been done to arrive at the results shown in Appendix B. However, there are still issues that need further review. For example, the weakest of analysis would be the costs to develop the original Facility, operating revenues and costs between 1981 and 1992 plus the post closure costs.

Recently an updated South Fill Area Closure Plan was developed. The Facility consultant has been asked to provide an estimated cost to implement this closure plan. With this updated post closure cost, the full-cost analysis can also be updated.

The original development costs for the facility and the early cost/revenue amounts are more difficult to verify but staff are still pursuing this by working through old archived files.

A third avenue of exploration is an attempt to verify the results through comparisons with other landfills. The inherent problem in doing this is to ensure the comparison is between apples and apples. Nevertheless, it is a worthwhile exercise but it will take some time to complete.

Staff will continue to seek greater clarity for the above issues and report back to the Waste Management Committee as appropriate.

Submitted by,

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Attachments:

Appendix A – Assumptions Made for Full Cost Accounting Analysis  
Appendix B – Results of Full Cost Accounting Analysis