



City of
Peterborough

To: Members of the Waste Management Committee

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

Meeting Date: January 19, 2015

Subject: Report WMC15-002
Background Information on the County/City Waste
Management Facility on Bensfort Road

Purpose

A report to provide information to the Waste Management Committee as background on the County/City Waste Management Facility on Bensfort Road.

Recommendation

That the Waste Management Committee approve the recommendation outlined in Report WMC15-002 dated January 19, 2015, from the Director of Utility Services, as follows:

That Report WMC15-002 be received for information.

Budget and Financial Implications

There are no budget or financial implications to the receipt of this report.

Background

The January 19, 2015 meeting of the Waste Management Committee will be the first of numerous meetings for this Committee over the next 4 years and the information package provided at this meeting is intended to help Committee members in their considerations of the various issues related to the Landfill.

Under separate cover, the following information related to the Landfill will be provided to Committee:

- Air photo of the Landfill site;
- Map showing all properties owned related to the Landfill Site;
- Environmental Compliance Agreement;
- Agreement between County/City and Township;
- County/City Agreement to develop and operate the Landfill Site;
- 2015 Draft Operating and Capital Budgets
- Tonnage history; and
- Annual Monitoring Report.

The following sections provide more information on some of the significant aspects of the Landfill.

1. Brief History of the Bensfort Road Landfill

The Bensfort Road landfill began operation in 1981 as a City of Peterborough Facility. The landfill was approved in 1979 after an Environmental Assessment Board hearing and on recommendation of the hearing panel.

In 2002, the City of Peterborough and County of Peterborough came to an agreement for joint ownership and operation of the now “Peterborough County/City Waste Management Facility” (the Landfill). At this point there is approximately 18 years of life left in the Landfill.

2. Operation of the Landfill Site

Waste management at the County/City Waste Management Facility on Bensfort Road is directed and focused by the following three main agreements:

- Environmental Compliance Agreement Number A341508 issued November 15, 2011 to the City of Peterborough by the Ministry of the Environment and Climate Change;
- Memorandum of Agreement between the City of Peterborough, the County of Peterborough and the Township of Otonabee-South Monaghan that deals with, among other matters, royalty payments paid by the County/City to the Township.

- July 2, 2002 Agreement between the County of Peterborough and the City of Peterborough to jointly develop and operate a waste disposal Facility to be named the Peterborough County/City Waste Management Facility.

2.1 Environmental Compliance Agreement Number A341508

This Environmental Compliance Agreement (ECA) issued November 15, 2011 was the result of extension negotiation between County/City staff and representatives of the Ministry of the Environment and Climate Control. The ECA was established under the Environmental Protection Act and provides direction to the municipalities on all aspects of the operation of the Landfill site.

The ECA requires the owner to prepare, submit and keep updated various documents such as an Operator's Manual and Closure Plan(s). Operational aspects of the Landfill such as:

- waste inspection and deposit;
- dust, litter, odour, noise and vermin control;
- hours of operation;
- buffer areas and waste limits;
- leachate, surface and ground water collection/monitoring systems;
- inspections to be undertaken by the owner; and
- the competency of people that operate the landfill

are discussed and requirements of the owners are established in detail.

Two significant aspects of the ECA are the requirement to publish by May 15 of each year an annual written report on the development, operation and monitoring of the Landfill to cover the 12 month period preceding December 31 and the establishment of the Peterborough Landfill Public Liaison Committee (the Site Liaison Committee).

The latest Monitoring Report (2013) is included in the information package provided to Committee members at this meeting.

The Site Liaison Committee meets twice yearly (January/February and June/July). The general mandate of the Site Liaison Committee is provided in the ECA.

2.2 Agreement between County/City and Township

The main issue in this agreement is the establishment of the criteria for calculating the annual royalty paid by the County/City to the Township as compensation by the County/City to the Township related to the Landfill. The Agreement is included in the information package provided to Committee members at this meeting.

2.3 County/City Agreement to Develop and Operate the Landfill Site

This is an agreement between the County and City with regard to the joint ownership, operation, maintenance, licensing, development, closure and perpetual care of the Landfill. The Agreement is included in the information package provided to Committee members at this meeting.

It is under this Agreement that the Waste Management Committee responsibilities, composition, and operation are established. The Waste Management Committee is "...responsible for the administration and implementation of the terms of this agreement in an orderly and proper fashion...". Under this agreement, costs and revenues are shared equally between the County and the City.

Also under this agreement, the City:

- provides administrative services and staff including ... financial services as may be required by the Committee;
- has responsibility for day to day operations of the Landfill;
- shall provide adequate treatment capacity at its Waste Water Treatment Plan in order to accept the leachate from the Landfill; and
- administer any contracts entered into by the County and City with consultants or contractors for the operation or maintenance of the Landfill.

3. Day to Day Operation of the Landfill

Staff is assisted in the administration of the Landfill by the Landfill consultant Urban & Environmental Management Inc. (UEM). 2015 will be the second year of a five year contract for UEM. Under the direction of staff, the consultant undertakes the following activities:

- Gas Odour control monitoring;
- Annual topographic survey
- Install grade stakes and undertake other surveys as necessary;
- Ensure structural integrity of ground water monitoring wells;
- Annual monitoring report;
- Other annual reporting as necessary;
- Design, construct and commission new cells, gas wells, leachate collection system and miscellaneous structures as necessary;
- Other studies as required.

In addition, Tomlinson Ltd. is the Landfill contractor who, under the direction of the Waste Operations Coordinator (a City staff position), is responsible for handling and disposing of all solid non-hazardous waste that is brought to the Landfill by the City, the County and by any other person or company that are lawfully transporting and handling acceptable waste materials originating in the City and County. Included in these responsibilities are the maintenance of all facets of the Landfill including lawn maintenance, litter control, tipping face operations, leachate, odour and stormwater control, on-site road maintenance and scalehouse operations. Tomlinson Ltd. is in the third year of a seven year contract.

4. Issues Remaining from the Last Waste Management Committee

A number of issues will carry over from the last Waste Management Committee. A listing and brief description is given below.

4.1 Re-use Centre at the Landfill

During discussions around the Landfill draft 2015 budget, consideration was given to the construction of a re-use centre at the Landfill. It is expected that such a facility would be located on the landfill entrance driveway before the weigh scale. The Committee requested that staff report back with a business case to justify the expenditure for building a re-use centre at the Landfill.

4.2 Full Cost Accounting Analysis

In 2013 initial work on the cost to deposit waste at the Landfill was reported to the Waste Management Committee (\$76.63 gross/\$13.10 net per tonne; \$33.48 gross/\$5.72 net per cubic metre). A number of changes in the operation of the Landfill have occurred since that time that would impact the analysis and, accordingly, the Committee asked that staff report back as early as possible in 2015 on an updated Full Cost Accounting Analysis for the Landfill.

4.3 Ground Mounted Solar Projects

The Committee received a presentation by a representative of Peterborough Utilities Inc. (PUI) on two possible submissions to the FIT 4.0 program on Landfill buffer lands owned by the County/City. One location is proposed east of Bensfort Road while the second location is proposed northwest of the existing North Fill Area. Although the Committee did not request further reports on this matter, once the planning is further advanced, it is anticipated that PUI will again attend the Committee meeting to advise on the status of these projects.

4.4 Increasing Fee for Contaminated Soil

During discussions around the Landfill draft 2015 budget, Committee requested that staff report back on the matter of increasing the fee for contaminated soil in 2015. The fee is presently \$20/tonne and the soil is used as daily cover material.

4.5 Leaf and Yard Waste Compost Facility at Landfill

The City owned leaf and yard waste composting facility at Harper Road is nearing the end of its useful life. The Waste Management Committee at its meeting of June 23, 2014 received a report on the City of Peterborough's Organics Strategy and it was explained that the preferred site to relocate the Harper Road composting operation is the Landfill. Committee should expect further reports as this project proceeds.

5. Energy from Gas Project

PUI completed the construction and commissioning of its 1.6 MW LFG Generation Plant at the Landfill on May 11, 2013. The LFG generation facility has operated consistently since utilizing landfill gas that would otherwise have been flared. The Landfill budget acknowledges revenue from this project in the order of \$100,000 per year.

6. Sale of Carbon Credits

"Certified Emission Reductions" (CER) are carbon credits generated by the Landfill in 2008, 2009 and 2010 because of the flaring of methane gas at the Landfill Flare. These CER's were identified, certified and offered for sale. Subsequently a contract was signed with Active Energy Inc. on May 3, 2012 for the purchase of the CER's commencing July 2012 and ending June 2017 in equal monthly amounts. The Landfill budget acknowledges revenue from this project in the order of \$65,000 per year.

Submitted by,

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