



City of
Peterborough

To: Members of the Waste Management Steering Committee

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

Meeting Date: June 20, 2016

Subject: Report WMC16-009
First Draft of the 2017 Budget for the Peterborough
County/City Waste Management Facility

Purpose

A report to present the first draft of the 2017 Budget for the Peterborough County/City Waste Management Facility along with an explanation of the assumptions behind the budget.

Recommendations

That the Waste Management Committee endorse the recommendations as outlined in Report WMC16-009 dated June 20, 2016, of the Director of Utility Services as follows:

- a) That Report WMC16-009 dated June 20, 2016 providing information on the first Draft of the Peterborough County/City Waste Management Facility 2017 Budget and the underlying assumptions made in the preparation of this draft budget be received for information;
- b) That staff be requested to report further at the September meeting of the Waste Management Committee with any proposed changes and/or updates to the Draft Budget;
- c) That the tipping fee for Construction & Demolition Overs be increased from \$20/tonne to \$40/tonne effective January 1, 2017;

- d) That staff continue to investigate/evaluate the matter of recycling shingles and report back to the Waste Management Committee on the results of this investigation; and
- e) That staff be requested to continue planning toward implementation of a Reuse Centre at the Landfill.

BUDGET AND FINANCIAL IMPLICATIONS

The assumptions presented in this report will form the basis for the 2017 Draft Budget submission for the Peterborough County/City Waste Management Facility. The final budget forms part of the City budget and is expected to be adopted in December 2016.

BACKGROUND

The 2017 Budget process has started with the goal to have the final budget for the Peterborough County/City Waste Management Facility (the “Landfill”) adopted in December 2016.

The budget for the Landfill forms part of the overall City of Peterborough budget. The Waste Management Committee provides input to the budget process together with staff from both the County and City.

Appendix A provides a list of assumptions used in the preparation of the first Draft of the 2017 Budget. The assumptions consider the actual performance of various elements of the budget factored by what staff can reasonably foresee occurring in the immediate economic environment (i.e. household growth) and more global reaching environments (i.e. price paid for recyclable material).

These assumptions are being made some 6 to 18 months before actually occurring and, accordingly, there is an element of risk and uncertainty involved. Given this long prediction period, staff suggests that a second budget report be submitted to the September meeting of the Committee to allow further discussion and/or comments.

The conservative approach has been used for all assumptions.

1. Operating Budget

Appendix B provides Budget and Actual information from 2014 to 2016 with an estimated 2017 Budget. Comparing the 2016 and 2017 Budgets, it can be seen that:

- Revenues are down by almost 6%. This is mainly attributable to slower than expected growth in non-municipal garbage coming to the Landfill; and
- Expenditures are down by almost 4% mainly because of reduced costs for the site and weigh scale operator and other contracted work at the Landfill.

2. Capital Budget

The Landfill Capital Budget 2017-2033 is presented in Appendix C.

Six projects are listed for 2017 as shown in Table No. 1.

Items 1-3 are all carryovers from 2016. Less work was done in 2016 than anticipated for Items 1 and 2 resulting in a higher 2017 cost than originally anticipated.

To reduce the overall Capital Budget, the haulage of excess soil off-site was spread over 3 years instead of 2. At this time, the amount of garbage being deposited in the Landfill will allow a 3-year window to remove the excess soil.

The cost estimate to rebuild the lower platform retaining wall will be refined as we move closer to budget approval.

The Reuse Building may be built in 2016 depending on MOECC approval of the required change to the Landfill Environmental Compliance Agreement. As reported in an earlier Waste Management Committee meeting, the funds for the Reuse Building are intended to come solely from the City.

Table No. 1: 2017 Preliminary Capital Budget

| No. | Description | Cost |
|------------|---|--------------------|
| 1 | Final Cover for Cell 2 | \$ 250,000 |
| 2 | Perimeter LFG Collection System in Cell 3 | \$200,000 |
| 3 | Vertical LFG Collection Wells in Cell 2 | \$360,000 |
| 4 | Haul Soil Off-site | \$1,450,000 |
| 5 | Rebuild Lower Platform Retaining Wall | \$100,000 |
| 6 | Reuse Building | \$30,000 |
| 7 | TOTAL | \$2,390,000 |

The proposed 2017 Capital Budget does not include any “miscellaneous item so, accordingly, if something unexpected comes up, staff would have to report to the Waste Management Committee and City Council to obtain any necessary funds. However, the likelihood of this happening is considered minimal.

Future projects beyond 2017 that are foreseen at the Landfill include:

- Construction of Cell 4;
- Installation of gas monitoring wells in Cell 3 and 4;
- Installation of a gas collection system in Cell 3 and 4;
- Final Cover on Cells 3 and 4; and
- Hauling excess soil off-site.

3. Considerations for Waste Management Committee

The following four potential changes to the 2017 Estimated Budget are submitted for Waste Management Committee’s consideration:

- Increase Tipping Fee to \$95/Tonne
- Increase Minimal Tipping Fee to \$10.00 Per Visit
- Increase Tipping Fee for Construction & Demolition Overs; and
- Recycling of Shingles

Each item is presented below with information that is available at this time.

3.1 Increase Tipping Fee to \$95/Tonne

The tipping fee of \$90/Tonne has existed since January 1, 2010. Table 3.1 provides general garbage tipping fees for “competitor” landfills.

Table 3.1: Comparison of Tipping Fee for General Garbage for Competitor Landfills

| Price per Tonne of General Garbage | Landfill |
|------------------------------------|-----------------------------------|
| \$90 | City of Peterborough North Bay |
| \$95 | Kawartha Lakes/Lindsay |
| \$100 | Welland Niagara |
| \$106 | Trail Road - Ottawa |
| \$108 | Thorold |
| \$115 | Northumberland |
| \$125 | Kingston |
| \$150 | Orillia |
| | |

Since 2010, inflation has risen slightly more than 10%.

Based on the competitor tipping fees and inflation, there is a case to raise Peterborough’s general garbage tipping fee. An increase in line with inflation would put the tipping fee at \$100/tonne. However, to be in line with the closest competitor, a rate of \$95/tonne might be more appropriate.

The 2017 draft budget estimate does **not** include an increase in the general tipping fee. If a \$5 increase were implemented on January 1, 2017 additional revenue of \$78,000 would be expected assuming the fee increase did not dissuade any customers from coming to the Landfill.

3.2 Increase Minimal Tipping Fee to \$10.00 Per Visit

The tipping fee of \$5.00 per visit for loads less than 100 kg has existed since at least 2010. During that time, inflation has increased slightly more than 10%. Table 3.2 provides examples of “competitor” landfill minimum charges.

Table 3.2: Comparison of Minimum General Garbage Charges

| Minimum Charge for General Garbage | Landfill |
|------------------------------------|--|
| \$5 | Peterborough North Bay* Welland Niagara |
| \$10 | Thorold |
| \$11.50 | Northumberland |
| \$15 | Kingston |
| \$3/bag | Kawartha Lakes/Lindsay |

* \$5 for up to 6 bags of residential garbage

As can be seen, the Peterborough Landfill is in the lower range for minimum fee. The Kawartha Lakes/Lindsay rate of \$3/bag works out to almost \$13 when you consider the minimum charge in Peterborough is \$5/100 kg and a maximum bag weigh is 23 kg meaning about 4.3 bags can be dropped at the Peterborough Landfill for \$5.

The 2017 draft budget estimate does **not** include an increase in the minimum general garbage fee. If this fee were increased to \$10/100 kg, on January 1, 2017, additional revenue of \$140,000 would be expected assuming the fee increase did not dissuade any customers from coming to the Landfill. However, for budgeting purposes it would be prudent to assume the number of trips incurring minimum tipping fees would be reduced by 25%. Increasing the minimum tipping fee may encourage greater consolidation of trips resulting in less overall trips incurred and less activity at the Landfill both of which are environmentally beneficial.

3.3 Increase Tipping Fee for Construction & Demolition Overs

On January 1, 2016 the tipping fee for daily cover contaminated soil was increased from \$20/tonne to \$40/tonne. Daily cover contaminated soil is that soil which can be used as a daily cover versus contaminated soil (or contaminated solid waste) that must be immediately buried and which has a higher tipping fee of \$90/tonne.

There is another category of waste that is used as daily cover but is still only charged \$20/tonne. This is what is referred to as “overs” from the processing of construction & demolition recycled material. These overs are used at the Landfill

in exactly the same manner as the daily cover contaminated soil and, accordingly, it would appear reasonable to charge the same tipping fee.

Of the estimated 21,500 tonnes of daily cover material used at the Landfill, approximately 6,500 tonnes are the construction & demolition overs. Accordingly, by not charging the same tipping fee as for the daily cover contaminated soil, about \$130,000 in revenue is lost each year.

It is proposed to increase the tipping fee for these overs to \$40/tonne as of January 1, 2017. The 2017 draft budget **does include** this increased revenue.

3.4 Recycling of Shingles

Staff has been approached with a proposal to recycle the shingles received at the Landfill at a cost of \$80/tonne. In 2015, the Landfill received 1,535 tonnes of shingles. From January to April in 2016, the amount of shingles received is down significantly (by almost 32%) which would prorate to an annual amount in 2016 of about 1,000 tonnes. Based on these yearly figures, the estimated annual cost to recycle the shingles would be in the range of \$80,000 to \$120,000. Of course, revenues of \$90/tonne would still be received as the shingles came into the Landfill.

The 2017 draft budget makes **no** allowances for the cost to recycle shingles.

Submitted by,



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Attachments:

- Appendix A: Peterborough County/City Waste Management Facility 2016 Draft Budget Assumptions
- Appendix B: Summary of Peterborough County/City Waste Management Facility Activity 2014-2017
- Appendix C: Peterborough County/City Waste Management Facility Estimated Capital Budget (as of June 2016)

Appendix A to Report WMC16-009

Peterborough County/City Waste Management Facility

2017 Draft Budget Assumptions

Tonnages

| ITEM | 2016 TONNES | | 2017 DRAFT BUDGET |
|--|-------------|-----------------|----------------------|
| | BUDGET | ACTUAL ESTIMATE | |
| Garbage subject to full tipping fee (1) | 17,000 | 15,600 | 15,600 |
| Garbage exempt from tipping fee (2) | 29,500 | 29,000 | 29,300 |
| Daily Cover (Contaminated Soil) (3) | 21,500 | 21,500 | 21,500 |
| Asbestos (4) | 200 | 270 | 270 |
| Recyclables subject to regular tipping fee (5) | 5,800 | 4,000 | 4,000 |
| Recyclables subject to other tipping fee(6) | 700 | 600 | 600 |
| Recyclables exempt from tipping fee (7) | 700 | 600 | 600 |
| Tire Units (8) | 2,500 | 2,500 | 2,500 |
| Freon Units (9) | 560 | 1,200 | 1,200 |
| Mattresses (10) | 8,500 | 11,300 | 11,300 |

Notes

- (1) Lower than predicted. No significant trend or obvious reason. Maintain 2017 at estimated 2016 value.
- (2) No significant change anticipated.
- (3) No significant change anticipated. This category includes "overs" from the processing of construction & demolition recycled material.
- (4) Slight increase in 2016 actual level. Maintain 2017 at estimated 2016 value.
- (5) This is mainly Construction & Demolition materials. 2016 Budget estimate was high. Maintain 2017 estimate at 2016 Actual Estimate.
- (6) These are typically scrap metal, green waste, drywall and blue box materials, and bulky plastics.
- (7) These are WEEE & loads under 100 kg.
- (8) No significant change anticipated.
- (9) 2017 value increased to match 2016 actuals.
- (10) 2016 Budget was low. Have matched 2017 budget to 2016 estimated actual.

APPENDIX B to Report WMC16-009

Summary of Landfill Activity 2014 - 2016 and 2017 Budget

| | 2014 | 2014 | 2015 | 2016 | 2016 | 2017 |
|---|------------------|------------------|------------------|------------------|------------------|------------------|
| | Budget | Actual | Budget | Budget | Estimate | Budget |
| Gross Revenues | | | | | | |
| Tipping Fees | 2,830,425 | 2,744,374 | 2,565,401 | 3,076,900 | 2,600,000 | 2,896,600 |
| Rental Properties | 100,000 | 88,490 | 90,000 | 80,000 | 87,000 | 87,000 |
| Stewardship fees - tires | 10,000 | 3,642 | 3,000 | 1,500 | 10,000 | 10,000 |
| Scrap Metal | 25,000 | 58,542 | 30,000 | 44,830 | 40,000 | 35,000 |
| LFG Agreement | 20,000 | 79,640 | 100,000 | 75,000 | 75,000 | 75,000 |
| Certified Emissions Reduction Credits | 65,000 | 63,703 | 65,000 | 65,500 | 65,500 | 38,000 |
| | <u>3,050,425</u> | <u>3,038,391</u> | <u>2,853,401</u> | <u>3,328,900</u> | <u>2,877,500</u> | <u>3,141,600</u> |
| Gross Expenditures | | | | | | |
| Salaries, Wages, Benefits, Training & Corporate Admin | 264,237 | 295,737 | 266,648 | 267,120 | 267,120 | 261,839 |
| Materials, Property Taxes and Insurance | 166,855 | 158,882 | 246,923 | 143,392 | 131,478 | 163,031 |
| Site and Weighscale Operator | 1,320,012 | 1,320,641 | 1,359,630 | 1,542,430 | 1,400,964 | 1,442,435 |
| Monitoring Consultants | 450,000 | 323,541 | 410,000 | 385,000 | 360,000 | 470,000 |
| Leachate Disposal | 300,000 | 243,311 | 300,000 | 197,997 | 560,000 | 560,000 |
| Landfill Recyclables | 350,000 | 470,200 | 630,000 | 600,000 | 600,000 | 600,000 |
| Shame Agreement and WM Steering Committee | 65,000 | 57,386 | 60,000 | 60,000 | 60,000 | 60,000 |
| Rental Property Expenses | 20,000 | 23,909 | 30,000 | 25,000 | 5,000 | 10,000 |
| Township Royalty Fees | 312,000 | 340,003 | 331,000 | 342,364 | 340,000 | 340,716 |
| Other Contractual Services | 75,000 | 62,132 | 180,000 | 180,000 | 100,000 | 100,000 |
| | <u>3,323,104</u> | <u>3,295,542</u> | <u>3,814,201</u> | <u>4,105,306</u> | <u>3,824,562</u> | <u>4,008,021</u> |
| Net Revenues/(Expenses) to Share | <u>(272,679)</u> | <u>(257,151)</u> | <u>(960,800)</u> | <u>(776,406)</u> | <u>(947,062)</u> | <u>(866,421)</u> |
| County Share @ 50% | <u>(136,340)</u> | <u>(128,576)</u> | <u>(480,400)</u> | <u>(388,203)</u> | <u>(473,531)</u> | <u>(433,211)</u> |

Operational Revenues

Tipping Fees

- Budget estimate based on maintaining existing tipping fees except for an increase in tipping fee from \$20/tonne to \$40/tonne for Construction and Demolition Overs.

Rental Properties

- Slight increase to match cost of living index.

Stewardship Revenues

- 2016 Budget was low. Maintain 2017 Budget at 2016 Actual Estimate.

Scrap Metal

- Assumed increased volume based on estimated 2016 Actual.

LFG Agreement

- Royalty maintained at 2016 level.

Certified Emissions Reduction Credits

- Slight unit rate increase based on Cost of Living Index but program ends July, 2017 so total revenue is reduced from 2016.

Operational Expenses

Salaries, Wages, Benefits, Training and Corporate Administration

- City salaries up by almost 1.5%. No change in allocation of staff to Landfill site;
- County Staff resources allocated to Landfill site assumed same as 2016; and
- Training increased because the Co-ordinator, Waste Operations needs to be recertified.

Materials, Property Taxes and Insurance

- The major adjustment in this area is an increase in the cost of daily data processing to allow for an upgraded system to be installed at the weigh scale.

Site and Weigh Scale Operator

- 2017 cost based on agreement. Reduced from 2016 because in 2016, mattress recycling costs were included in the Site and Weigh Scale Operator's account. Now mattress costs are included in landfill recyclables.

Monitoring Consultants

- Standard costs for yearly reporting based on established work program and estimate of additional work that may be required. Have included additional funds to design/tender/inspect reconstruction of lower platform retaining wall and to advise on Cap & Trade matters if required.

Leachate Disposal

- Leachate unit disposal costs have remained at 2016 levels. This cost will be reduced when Cell 2 is completed and fully capped.

Landfill Recyclables

- No change assumed for 2017.

Shame Agreement and WM Steering Committee

- No change assumed for 2017 other than Cost of Living Index.

Rental Property Expenses

- Expense estimates reduced to reflect anticipated reduced work necessary on rental properties in 2017.

Township Royalty Fees

- No change for 2017 other than Cost of Living Index.

Other Contractual Services

- 2017 budget has been reduced based on 2016 actual costs.

APPENDIX C TO REPORT WMC16-009

| PETERBOROUGH COUNTY/CITY WASTE MANAGEMENT FACILITY ESTIMATED CAPITAL BUDGET -- AS OF JUNE 2016 | | | | | | | | | | | | | | | | | | | |
|--|---|--------------------------|--------------------------|-------------|-------------|-----------|------|-----------------------|------------------------|-----------------------|------|------|------|------------------------|------------------------|-----------|-----------|-----------|--------------|
| NO. | ITEM | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | TOTAL |
| 1 | Landfill Vehicle* | | | | | | | | | | | | | | | | | | \$0 |
| 2 | Final Cover for Cell 2 | \$250,000 | | | | | | | | | | | | | | | | | \$250,000 |
| 3 | Perimeter LFG Collection System in Cell 3 | \$200,000 | | | | | | | | | | | | | | | | | \$200,000 |
| 4 | Vertical LFG Collection Wells in Cell 2 | \$360,000 | | | | | | | | | | | | | | | | | \$360,000 |
| 5 | Haul Soil Off-site | \$1,450,000 ¹ | \$1,450,000 ¹ | | \$4,100,000 | | | | | | | | | | | | | | \$4,350,003 |
| 6 | Construct Cell 4 | | | | | \$130,000 | | | | | | | | | | | | | \$4,100,000 |
| 7 | Perimeter LFG Collection System in Cell 4 | | | | | | | \$80,000 ¹ | \$80,000 ¹ | \$80,000 ¹ | | | | | | | | \$130,000 | |
| 8 | Final Cover Cell 3 | | | | | | | \$80,000 ¹ | \$330,000 ² | | | | | | | | | \$240,003 | |
| 9 | Vertical LFG Collection Wells in Cell 3 | | | | | | | | | | | | | \$130,000 ⁴ | | | | \$460,007 | |
| 10 | Final Cover Cell 4 | | | | | | | | | | | | | \$110,000 ¹ | | | | \$330,003 | |
| 11 | Vertical LFG Collection Wells in Cell 4 | | | | | | | | | | | | | \$130,000 ⁵ | \$110,000 ¹ | | | \$555,011 | |
| 12 | Rebuild Lower Platform Retaining Wall | \$100,000 | | | | | | | | | | | | | | | | | |
| 13 | Reuse Building | \$30,000 ⁷ | | | | | | | | | | | | | | | | | \$30,007 |
| | TOTAL | \$2,390,000 | \$1,450,000 | \$1,450,000 | \$4,100,000 | \$130,000 | \$0 | \$80,000 ¹ | \$410,000 | \$80,000 | \$0 | \$0 | \$0 | \$0 | \$370,000 | \$110,000 | \$535,000 | \$0 | \$11,005,034 |

1. Approximately 33% each year
2. Not Used
3. On East Side of Cell 3
4. On West Side of Cell 3
5. On East Side of Cell 4
6. On West Side of Cell 4
7. City Cost Only
- * Eliminated from Capital Budget since depreciating over 10 years under Operating Budget