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RESIDUAL WASTE ENVIRONMENTAL ASSESSMENT

The Solid Waste Management Committee recommends the following:

- 1. The presentation by Andrew Campbell, Director of Solid Waste Management, be received; and**
- 2. The recommendations contained in the following report, March 22, 2005, from the Commissioner of Transportation and Works, be adopted:**

1. RECOMMENDATIONS

It is recommended that:

1. A partnership with The Regional Municipality of Durham, as a co-proponent to Durham's Residual Waste Management Environmental Assessment Study, be supported in principle.
2. The Commissioner of Transportation and Works and the Regional Solicitor be authorized to work with Durham staff to prepare a partnership agreement for the Environmental Assessment and report back to Committee and Council.
3. Staff prepare an initial public consultation plan and partnership agreement with the assistance of MacViro Consultants Inc. and Jacques Whitford Limited who have been retained by Durham Region for their Environmental Assessment process, at a cost of \$25,000.

2. PURPOSE

The purpose of this report is to outline the Environmental Assessment (EA) process that the Region of Durham is undertaking for the management of its residual waste and to discuss if York Region should partner with them on this initiative.

3. BACKGROUND

On December 16, 2004, Council received a communication from Durham Region concerning its Environmental Assessment for residual waste management. Council referred the issue to staff and requested a report (*see Attachment 1*).

On January 26, 2005, the Durham Community Waste Disposal Task Committee recommended:

- “a) That the Regional Municipality of York and the County/City of Peterborough be requested to participate in Durham Region’s Residual Waste Management Environmental Assessment (EA) Study be approved; and*
- b) That the Regional Chair and Clerk be authorized to execute any necessary agreements with respect to the cost sharing and partnership responsibilities which will reduce the overall cost to the Region of Durham.”*

4. ANALYSIS AND OPTIONS

The Regions of York and Durham began landfilling residual waste in Michigan in January 2003. Staff of both Regions believe that landfilling our waste in Michigan is not a sustainable, long-term solution.

Durham has started an Environmental Assessment (EA) to find a long-term solution for its residual waste management with a particular focus on constructing an energy-from-waste facility. Durham has asked if York is interested in partnering with them on their EA as the partnership will potentially provide a more cost effective facility. The County and City of Peterborough have also asked to participate with Durham as they are neighbouring communities in need of a long-term waste management solution. The following sections of this report outline the options and merits of a partnership between York and Durham.

4.1 Need for an EA

York Region is increasing its waste diversion from landfill by adding more items to the blue box program and implementing the source separated organic waste program. These initiatives will divert at least 50% of our waste, and future programs will be developed to increase this rate further. Realistically, a rate of 60% is achievable leaving 40% that needs to be landfilled or processed in another manner. Currently, York is working with Dongara on a refuse derived fuel product that will divert 70,000 tonnes annually from landfill. This project is still in its conceptual stage and has not received any approvals from the Ministry of the Environment (MOE). If this project and the source separated organics program proceed, there will still be approximately 100,000 tonnes per year of residual waste still to be landfilled. This quantity of material will increase in proportion to the expected growth in York’s population over the coming years of an expected 160,000 tonnes per year by 2030. York will be landfilling 230,000 tonnes per year in 2030 if the Dongara project does not proceed.

York Region's growing population will continue to generate a significant quantity of residual waste. York has stated that it does not want a landfill within its jurisdiction. Therefore, York will need to continue to rely on other "willing host" communities for our disposal needs unless a long-term plan is undertaken to find an alternative.

Landfill alternatives for residual waste management are typically energy-from-waste (incineration/gasification), biological stabilization, or chemical or mechanical processing in order to produce alternative fuels and recyclable products. The current direction from the MOE is that an individual environmental assessment under the Environmental Assessment Act (the Act) would need to be completed to properly involve the public and analyse these options before a facility could be sited and constructed. Therefore, if York Region intends to implement an alternative to landfilling waste in another jurisdiction, it needs to start an EA process. A unique opportunity exists today to partner with Durham as an alternative to York proceeding on its own.

4.2 Durham Region's Environmental Assessment

Durham Region has started the EA process to find an alternative to shipping residual waste to Michigan. They have retained the firms of MacViro Consultants Inc. and Jacques Whitford Limited to complete the EA at an estimated cost of \$4.7 million. It is expected that the EA would be completed in 2008. The facility, if approved, would then take another three to five years to be constructed.

The first step in the EA process requires the development of a Terms of Reference with considerable public input. Durham is proposing that the scope of the EA be only residual waste management, not recycling or source separated food waste programs. It will not include an option for a local landfill. Eight public information sessions have been held in Durham to outline the problem and opportunities that the study will deal with, as well as inform the public of the EA process. In addition, Durham will hold the following public sessions in 2005 to discuss the following:

- Public workshop sessions on the identification of "Alternatives To" as defined by the Act, together with consideration of the methodology and preliminary criteria for their evaluation.
- Public workshop sessions on the identification of "Alternative Methods" as defined by the Act together with consideration of the methodology and preliminary criteria for their evaluation.
- Public workshop sessions on the development of the consultation plan to be implemented as part of the EA study.
- Public information sessions on the draft EA Terms of Reference.

The Terms of Reference would then be submitted to the MOE for comment and approval before the study of the residual waste management alternatives begins.

The extensive public consultation process will need to be modified if York Region and/or Peterborough City and County, partner with Durham on a joint EA. Therefore, it is necessary that Durham knows before it starts this process, if York is interested in becoming a partner.

4.3 Proposed York Durham Partnership

A partnership on long-term residual waste management infrastructure could result in a success equal to that of the York Durham Sanitary Sewer System. Long-term residual waste disposal costs will be in the hundreds of millions of dollars over the next 30 years. Therefore, constructing efficient, cost effective facilities will benefit both of our communities. The outcome of the EA process cannot be known at this time but both York and Durham know that our current landfill situation is not sustainable. Each community can undertake an EA study individually or partner to reduce the individual study costs. The estimated costs for a joint EA have been provided by MacViro as outlined in Table 1.

Table 1
Estimate of Residual Waste Disposal Environmental Assessment Costs

Item	Timing	Individual Costs for either Durham or York	Costs for Partnership of Durham and York	Costs for Either Party in Partnership
Formulation of Partnership	2005		\$50,000	\$25,000
Preparation of EA Terms of Reference	2005	\$450,000	560,000	280,000
Establishment of Need and Purpose of the Undertaking	2005	40,000	80,000	40,000
Selection of Preferred Technology ("Alternatives To")	2006	1,200,000	1,350,000	675,000
Selection of Site for Facility ("Alternative Methods")	2007	1,250,000	2,300,000	1,150,000
Completion of EA and EPA Studies	2008	1,250,000	1,400,000	700,000
Negotiations with Facility Developer and Obtaining Other Approvals	2009	500,000	600,000	300,000
Estimated Total Planning and Approvals Cost		\$4,690,000	\$6,340,000	\$3,170,000
Construction of Facility	2010 and 2011			
Start of Facility Operations	Late 2011 or early 2012			

It is estimated that York Region would save \$1.52 million on the EA study by partnering with Durham. In addition, the total quantity of residual waste from York and Durham will provide the opportunity to construct larger facilities that will have lower operating costs due to operational economies of scale. Operational savings of 25% to 30% could be realized.

It is therefore proposed that Committee and Council support the concept of a joint EA with Durham Region. Further it is proposed that the scope of the joint EA, not include a municipal solid waste landfill site within York Region. The formulation of the partnership requires a legal agreement be entered into by both municipalities. It is recommended that the Commissioner of Transportation and Works and the Region's Solicitor be authorized to negotiate an agreement with Durham and report back to Committee and Council. MacViro has identified that the costs to prepare a partnership agreement is \$50,000 of which York would fund 50% (\$25,000).

5. FINANCIAL IMPLICATIONS

The estimated costs for a residual waste EA are identified in Table 1. It is recommended that Council authorize an expenditure of \$25,000 to prepare a partnership agreement and initial communication plan. A provision of \$200,000 to start the EA process has been provided for in the 2005 Solid Waste Management Capital Budget. Staff will report and seek approval for the overall EA project costs, if a partnership agreement can be successfully negotiated with Durham.

6. LOCAL MUNICIPAL IMPACT

An Environmental Assessment for residual waste management will involve all residents in the Region. A communication and public participation plan will be developed as part of the partnership agreement with Durham and will include the elements described in Section 4.2 of this report. The MOE will require that there is adequate public interaction in the preparation of the Terms of Reference for the EA.

7. CONCLUSION

The Region of Durham has begun an individual Environmental Assessment for the management of residual waste. A unique opportunity exists today for a partnership between York and Durham to develop a solution that will meet the needs of our residents and lower our long-term costs. It is recommended that Council endorse such a partnership and direct staff to negotiate an agreement with Durham. Staff will report back to Council once the negotiations are completed.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)