

3

DURHAM/YORK RESIDUAL WASTE STUDY UPDATE

The Solid Waste Management Committee recommends the following:

- 1. The presentation by Andy Campbell, Director, Solid Waste Management Branch, be received; and**
- 2. The recommendation contained in the following report, December 21, 2006, from the Commissioner of Transportation and Works, be adopted:**

1. RECOMMENDATION

It is recommended that this report be received for information by Committee and Council.

2. PURPOSE

The purpose of this report is to reaffirm appointments of the Joint Waste Management Group and provide an update to the Durham/York Residual Waste Environmental Assessment.

3. BACKGROUND

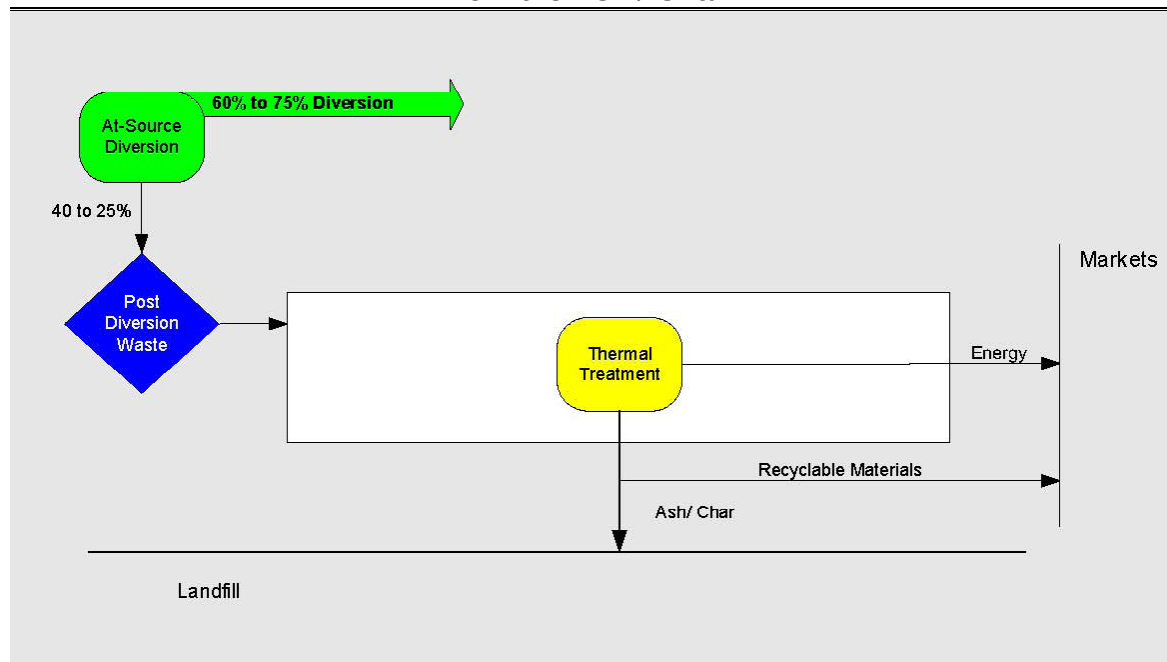
On June 23, 2005, Council adopted Clause 1 of Report No. 4 of the Solid Waste Management Committee recommending a partnership with Durham Region to undertake an individual Environmental Assessment to study residual waste management for the two Regions. A Joint Waste Management Group was established with representation from both York and Durham Region Councils and citizens to serve as a Steering Committee for the initiative. On March 31, 2006, the Ministry of the Environment approved the Terms of Reference for the Environmental Assessment Study.

On May 25, 2006, Council received Clause 1 of Report No. 3 of the Solid Waste Management Committee describing the technology review and draft recommendation of the Consultants for the selection of a long-term waste processing system to minimize our landfill needs as part of the Durham/York Residual Waste Environmental Assessment. The draft recommendation was to use a thermal process (i.e. energy from waste, incineration or gasification). This draft recommendation was circulated for public comment to over 400 government and non-government organizations, was discussed at public information sessions on May 9, 10 and 11 and was the subject of deputations to the Solid Waste Management Committee and Joint Waste Management Group on May 17, 2006.

On October 19, 2006, Council also adopted Clause 1 of Report No. 6 of the Solid Waste Management Committee on a Waste Diversion Strategy for the Region and local municipalities setting out a target of 65% waste diversion by the end of 2010. The strategy also contemplates a higher diversion rate of 75% in the longer term.

On June 22, 2006, Council adopted Clause 1 of Report No. 4 of the Solid Waste Management Committee approving the selection of the preferred system to manage post diversion residual waste be study Option 2(a) - Thermal Treatment of Municipal Solid Waste and Recovery of Energy Followed by the Recovery of Materials from the Ash/Char (Figure 1).

Figure 1
Option 2(a) – Thermal Treatment of Mixed Waste with Recovery of Materials from the Ash / Char



Council also approved study Option 2(b) – Thermal Treatment of Solid Recovered Fuel as an alternative for further consideration in the upcoming competitive procurement process as new technologies may offer additional benefits, also endorsed by the Joint Waste Management Group and Durham Council.

To date, the majority of residents attending the public consultation meetings for this project are in support of diversion efforts prior to disposing the remaining waste in a thermal treatment facility.

4. ANALYSIS AND OPTIONS

The Durham/York Residual Waste Study is subject to Ontario's Environmental Assessment Act relating to municipal waste disposal undertakings. The first phase of the Study was the development of a Terms of Reference which was approved by the Minister of the Environment in March 2006. Table 1 summarizes the study schedule to date highlighting the timing for each key study component and tasks completed to date. Under the current schedule, and projected timing, this facility will be operational late 2010 or early 2011.

Table 1
Study Schedule

Task	Scheduling	Status
Development of Terms of Reference	2005	Approved March 2006
Initiation of Full Environmental Assessment Study	2005 - 2008	In Progress
Selection of Preferred Processing System	2006	Complete
Consideration of 'Alternative Methods' and Site Selection	2006 - 2007	In Progress, to be completed Fall 2007
Selection of Specific Technology and Vendor	2007 - 2008	In Progress
Site Specific Studies	2007 - 2009	
Submission and Approval of Environmental Assessment	2007 - 2009	
Facility Construction	2009 - 2011	
Facility Operation	2011 - 2012	

A detailed schedule milestone listing is in Attachment 1.

4.1 Study Related Events for 2007

As the study progresses through 2007, a number of key issues will require Committee and Council direction. These issues include site selection, RFP processes for vendor selection, and facility ownership options.

4.1.1 February Committee Meeting Issues

The Solid Waste Management Committee will receive a report during the month of February regarding the Durham/York Residual Waste Study relating to:

- The Durham/York Facility Memorandum of Understanding.

4.1.2 March Committee Meeting Issues

Committee will receive reports during the month of March relating to:

- The Ownership/Business Model of the Proposed Facility.
- A Host Community Agreement.
- The Request for Qualification Process for a Vendor and Specific Technology.

4.1.3 April Committee Meeting Issues

Committee will receive a report during the month of April relating to:

- The Short List of Sites and Communications Plan.

4.1.4 September Committee Meeting Issues

Committee will receive a report during the month of September relating to:

- The Consultants Recommendation on the Preferred Site.

4.1.5 November Committee Meeting Issues

Committee will receive a report during the month of November relating to:

- The Identification of a Short List of Technology Vendors.

4.1.6 December Committee Meeting Issues

Committee will receive reports during the month of December relating to:

- The Identification of a Preferred Site.
- The Issuance of Request for Proposals from the Short List Vendors.

4.2 Joint Waste Management Group

The Joint Waste Management Group is an advisory committee to Durham's Works Committee and York's Waste Management Committee. The Joint Waste Management Group is comprised of eight voting members (four current members of Durham's Works Committee and York's Solid Waste Management Committee), six non-voting members (three interested residents from each Region), and the Chair of the City & County of Peterborough's Waste Management Steering Committee as an observer. Two of the four voting members from York and Durham are the Chair and Vice Chair of each Committee, or their designates. The remaining two members are from their respective Committees. Joint Waste Management Group members for 2005/2006 are listed in Attachment 2.

The Joint Waste Management Group typically holds meetings on a monthly basis, with the location alternating between the two Regions. It is expected that this groups first meeting in 2007 will be held January 30, 2007.

4.3 Other Residual Waste Management Studies

Other municipalities are working towards finding local long-term solutions to managing their residual waste. The Niagara/Hamilton partnership and Halton Region are at different stages in developing their alternatives to landfill.

4.3.1 Niagara/Hamilton Waste Plan

The Niagara/Hamilton Waste Plan, a similar study to Durham and York's, was initiated in 2004. The Terms of Reference for this study was approved in early 2005. Niagara and Hamilton have yet to identify a preferred technology, or identify a list of possible sites. This study differs from the Durham/York Study in that it considered landfill as a possible technology option.

4.3.2 Halton Region Site Approval

Halton Region has site Environmental Assessment approval, dating back to 1989, to construct an Energy from Waste plant on its landfill property located near Milton, Ontario. Currently, Halton is in the process of developing a business case to support the construction of an Energy from Waste facility.

The Region of Halton owns its landfill, which has an estimated capacity to adequately service its population for the next 20 years. The urgency to develop a residual waste processing facility is not as prevalent in Halton because of the landfill, and as a result, scheduling and budgeting for the development of an Energy from Waste facility has not occurred at this time. The size of facility being discussed in Halton, could result in it being a disposal option for York Region. In the absence of budgets and schedules, at the time of this report, it remains out of the realm of control of York Region officials. Staff will report separately on this option to Committee as opportunities arise.

5. FINANCIAL IMPLICATIONS

The estimated costs for the Study have been provided by MacViro as outlined in Table 2. Adequate funds have been included in the 2006 Capital Budget and draft 2007 Capital Budget.

Table 2
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 Environmental Assessment 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")	2007 - 2008	\$1,200,000	\$1,350,000	\$675,000

Report No. 1 of the Solid Waste Management Committee
Regional Council Meeting of January 25, 2007

Selection of Site for Facility ("Alternative Methods")	2006 - 2007	\$1,300,000	\$2,600,000	\$1,300,000
Completion of Environmental Assessment 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		\$4,740,000	\$6,640,000	\$3,320,000
Construction of Facility	2009 - 2011			
Start of Facility Operations	Late 2011 or early 2012			

The Region's average cost per tonne for waste management processing and disposal are listed in Table 3.

Table 3
Waste Management Processing Fees

Item	Total Tonnes		Cost/tonne (\$2007)
	2007	2021 (est.)	
Landfill	171,000	30,000	\$80
Source Separated Organics	53,000	69,000	\$167
Blue Box (Net)	75,000	112,000	\$15
Dongara Pellet Fuel	0	100,000	\$84
Yard Waste	25,000	44,000	\$69
Thermal Processing	0	135,000	\$120-\$140

Note: Costs are for processing only (i.e. paid to a contractor) and do not include collection costs.

On a weighted average basis in 2007 dollars, the system costs would increase from \$74/tonne to \$114/tonne from 2007 to 2021 based on the values in Table 3.

6. LOCAL MUNICIPAL IMPACT

The local municipalities are critical partners in finding a site for a long-term waste management solution in York Region. Involvement with the municipalities has been ongoing throughout the Environmental Assessment process to date.

The siting of a waste facility will impact one local municipality in either York or Durham Regions. The siting identification and review process is the second part of the Environmental Assessment process which began in the Fall of 2006. A short list of sites will be available in February 2007 at which time there will be considerable involvement with the municipalities and public where the potential site has been identified.

7. CONCLUSION

The Regions of York and Durham have undertaken an Environmental Assessment to find a long-term solution to manage their residual waste. This Study represents a significant commitment to develop a Durham/York based solution to manage the waste remaining after our diversion efforts. The potential to develop an Energy from Waste facility through the Environmental Assessment process will require Committee and Council to make significant decisions impacting the course of this project over this term of office.

For more information on this report contact Kelly Spitzig, Policy & Planning Coordinator of the Solid Waste Management Branch at extension 5785 in the Transportation and Works Department.

The Senior Management Group has reviewed this report.

(The attachments referred to in this clause are attached to this report.)