

THE REGIONAL MUNICIPALITY OF YORK

**REPORT NO. 2 OF THE
COMMISSIONER OF ENVIRONMENTAL SERVICES**

**For Consideration by
The Council of The Regional Municipality of York
on March 27, 2008**

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**DURHAM YORK RESIDUAL WASTE ENVIRONMENTAL ASSESSMENT
MEMORANDUM OF UNDERSTANDING**

1. RECOMMENDATIONS

It is recommended that:

1. The Region enter into a revised Memorandum of Understanding with the Regional Municipality of Durham governing the process and costs to complete the Environmental Assessment for Residual Waste and establish an energy from waste facility on the following principles:
 - (a) Based on a projected processing capacity of 140,000 tonnes, Durham shall commit a minimum of 100,000 tonnes per year, and York shall commit a minimum of 20,000 tonnes;
 - (b) The additional 20,000 capacity in the facility shall be allocated equally between York and Durham;
 - (c) York and Durham shall share the capital construction costs and shall have an equity interest in the facility based on their proportionate share of the total tonnage allocation. This represents a 21.4% interest for York and 78.6% for Durham;
 - (d) Each Region may borrow excess capacity not required by the other party;
 - (e) *York and Durham shall pay their proportionate share of net operating costs based on the basic allocation of 20,000 tonnes and 100,000 tonnes respectively;*
 - (f) *York and Durham shall each pay for any use of excess capacity based on the operating rate per tonne as determined through the Request for Proposal;*
 - (g) *Excess capacity may be sold to a third party and any revenues in excess of operating costs shall be split equally between York and Durham;*

- (h) The cost of upgrades to the facility shall be allocated based on each Region's respective equity interest;
 - (i) The cost of any future expansion shall be borne by the Region requiring the additional capacity. Part of the expansion cost may be recovered from the other Region under certain conditions; and
 - (j) Either Region may terminate the MOU at the conclusion of the RFP process prior to entering into a contract with the preferred proponent.
2. The Regional Chair and Clerk be authorized to execute the Memorandum of Understanding, subject to review by Legal Services.

2. PURPOSE

This report is to obtain authorization to enter into a revised agreement with the Regional Municipality of Durham through a Memorandum of Understanding (MOU) to establish the guiding principles to manage and share costs for completion of the Individual Environmental Assessment for Residual Waste that may result in an energy from waste facility. The MOU will also establish a framework for the respective roles and responsibilities in constructing and operating the facility.

3. BACKGROUND

On April 21, 2005, Regional Council adopted Clause 1 of Report No. 3 of the Solid Waste Management Committee to initiate a partnership with Durham to jointly undertake a Residual Waste Environmental Assessment Study.

On June 23, 2005, Regional Council adopted Report No. 4 of the Commissioner of Transportation and Works to enter into an agreement with Durham for the Durham York Residual Waste Environmental Assessment Study.

The preferred technology for the study has been identified as thermal treatment of mixed solid waste and recovery of energy, followed by the recovery of materials from the ash or char. The next steps in the project are to:

- Select the vendor to build and operate the facility.
- Complete the Environmental Assessment and Environmental Protection Act studies to be submitted to the Ministry of the Environment in 2009.
- Put the facility into operation in 2012.

On February 22, 2007, Regional Council adopted Clause 2 of Report No. 2 of the Solid Waste Management Committee, thereby authorizing staff to enter into an agreement with Durham to govern the processes by which the two Regions would undertake the next steps in the energy from waste project.

On April 18, 2007, Durham Regional Council approved recommendations to Report #2007-J-14 "Regional Council Approvals to Proceed with the Durham and York Region Energy from Waste (EFW) Project". The recommendations included proposed amendments to the Durham York Energy from Waste Memorandum of Understanding.

On June 21, 2007 Council adopted Clause 1 of Report No. 1 of the Solid Waste Management Committee requesting the following amendments with Durham:

- York commits to supply a minimum of 20,000 tonnes per year of municipal waste to the energy from waste facility during its 25-year operating term, at a rate established by the Request for Proposal for the project, less any revenues from the sale of material, heat or electricity.
- York and Durham shall share the capital construction costs for the facility based on the tonnage commitment made for the initial operations of the facility. This represents 12% equity in the facility for York Region for 20,000 tonnes per year.
- Durham shall be the primary decision maker with respect to issues concerning the project such as directing consultants, communications, discussions regarding power purchase arrangements, negotiations for a Host Community Agreement, siting of the energy from waste facility, etc.
- Durham will ensure that sufficient capacity exists for York at the energy from waste facility to service the 20,000 tonnes per year committed by York to the facility throughout the 25-year operating term and that the plant is designed to allow for future expansion.
- Should York require additional capacity at the facility, it will have an option which it can exercise at any time during the 25-year operating term to expand the facility at its own cost and thereby acquire an increased ownership interest in the facility.
- Both Regions retain the ability to terminate the Memorandum of Understanding at set milestones in the project, specifically at the selection of a preferred site and at the conclusion of the Request for Proposals for the design/build/operate vendor for the facility.
- Staff ensure that York Region has the first right of referral on any excess capacity at the energy from waste facility.

On January 24, 2008 Council adopted Clauses 1 and 2 of Report No. 1 of the Solid Waste Management Committee for the preferred site for an energy from waste facility as well as a short list of pre-qualified vendors for the project.

4. ANALYSIS AND OPTIONS

The residual waste study has progressed over the last two and a half years and has become more focussed through the Environmental Assessment process. The short listing of preferred vendors for an energy from waste facility has also allowed Durham and York to better evaluate potential costs and technologies.

As a result, staff from Durham and York have reached agreement on the principles of a revised Memorandum of Understanding.

Determining the Facility Size is Based on Waste Diversion Targets and Optimum Unit Size

A challenge for both Regions in developing the potential financial impact of the Environmental Assessment and energy from waste facility is the size of the facility. Both Regions are increasing their waste diversion efforts and plan to reach at least 65% diversion. York also has its Dongara energy pelletization project that will process 100,000 tonnes per year of residual waste. As a result Durham and York are planning to need 100,000 and 20,000 tonnes per year (respectively) of residual waste capacity when the plant opens in 2012. Staff believe that an initial plant size of 140,000 tonnes per year is appropriate and will provide initially 20,000 of surplus capacity to manage growth and optimize the facility.

Establishing an Ongoing Management Committee provides a Mechanism to Deal with Future Design and Operational Issues

The current Memorandum of Understanding does not deal with management issues beyond the Environmental Assessment process. Staff now has to deal with some design and operational issues to develop a Request for Proposals for the energy from waste facility.

It is proposed that a Management Committee be established, similar to the one used by both Regions for the Duffin Creek Water Pollution Control Plant. This committee would have representation from senior staff from both Regions and operate on a consensus decision-making model. If consensus cannot be reached there will be provisions for a mediator and binding arbitration.

Surplus Capacity will be Shared Equally by Both Regions

Each Region has previously agreed to pay the cost of its required needs. Given a plant size of 140,000 tonnes per year there is surplus capacity of 20,000 tonnes per year. It is proposed that the cost to construct the surplus capacity be shared equally between the Regions. As a shared asset both Regions have access to the capacity and if it is not needed, can sell the capacity to commercial or other municipal users. It is proposed that allocation of the surplus capacity to either Region or to another customer be determined by the Management Committee on an annual basis.

Sharing Ongoing Operational Costs

Each Region has committed to pay the cost of managing its base tonnage of 100,000 and 20,000 tonnes per year. *The cost of extra capacity will be shared between the Regions based on actual utilization. Excess capacity may be sold to a third party and any revenues in excess of operating costs shall be split equally.*

Both Regions will share equally in any revenue generated from the facility, including the sale of electricity, recovered materials and sale of steam or hot water.

To minimize the Net Cost per Tonne it is in both Regions interests to ensure the utilization of the surplus capacity and to maximize the sale of electricity, steam, hot water and recyclable goods.

It is also proposed that the Region's establish a capital replacement reserve fund. Contributions to this fund would be made annually by each Region according to their utilization of the facility.

Sharing of Costs for Future Plant Expansions/Upgrades also Addressed

a) Upgrades to the existing Facility

There may be a requirement, due to a change of law or availability of new technology, to upgrade the facility with new air pollution control or other equipment. It is proposed that the costs for any upgrades to the equipment or processes of the existing operations and any additional costs necessary to maintain the ongoing capability of the facility be shared by the Regions on the basis of their then existing respective ownership and operational interest in the facility.

b) Expansions to add more capacity to the Facility

A fundamental element of the Memorandum of Understanding is that York and Durham have the option to expand the facility if required. It is proposed that the costs for the capital and operations of the expansion be paid for by the municipality requiring the capacity.

If the existing facility is required to be upgraded as part of the expansion, it is proposed that the capital costs for this be paid by the party undertaking the plant expansion with a portion of the costs being recovered from the other Region if the upgrade becomes a legal requirement, if the other party subsequently undertakes an expansion which would have necessitated the upgrade, or if the other party derives a measurable benefit from the upgrade.

5. FINANCIAL IMPLICATIONS

A revised budget of \$7.9 million for the Environmental Assessment was adopted by Regional Council on February 21, 2008 of which York is responsible for 50%. This

budget does not include any costs that may be incurred after the submission to the Ministry of the Environment for project approval in 2009. In addition there will be preliminary facility design costs that will be identified by the design / build / operate vendor in 2009 that are proposed to be shared equally with Durham as the Ministry of the Environment is requiring detailed Environmental Protection Act level information as part of its Environmental Assessment approval process.

Durham is planning to issue the Request for Proposal for the facility this spring with a closing at year end at which time the real costs of the project will be known. The estimate of the capital cost for a 140,000 tonnes per year facility is approximately \$150 million. Based on the principles outlined above York Region's share would be \$33 million.

6. LOCAL MUNICIPAL IMPACT

Completion of this Individual Environmental Assessment and building the resulting infrastructure will ensure that the residents and communities in York Region have a long-term environmentally sound solution for managing its residual waste.

7. CONCLUSION

This report has outlined changes to the Memorandum of Understanding with Durham Region for the continuation of the Individual Environmental Assessment for the management of residual waste. The proposed changes also establish the principles for York and Durham to plan for the construction, financing and operations of an energy from waste facility.

Respectfully submitted,

**March 19, 2008
Newmarket, Ontario**

**Erin Mahoney
Commissioner of Environmental Services**

(Report No. 2 of the Commissioner of Environmental Services was adopted, without amendment by Regional Council at its meeting on March 27, 2008.)