

1

DURHAM-YORK RESIDUAL WASTE ENVIRONMENTAL ASSESSMENT STUDY – PRESENTATION OF CONSULTANT TEAM’S REPORT ENTITLED “THERMAL FACILITY SITE SELECTION PROCESS RESULTS OF STEP 7: EVALUATION OF SHORT-LIST OF SITES AND IDENTIFICATION OF PREFERRED SITE”

The Solid Waste Management Committee recommends the following:

- 1. The presentation by J. McKay, Jacques Whitford, Consultants, regarding the consultant team’s recommendation on Durham-York Energy-from-Waste Siting, be received; and**
- 2. The recommendation contained in the following report, September 20, 2007, from the Director, Solid Waste and Administration, be adopted:**

1. RECOMMENDATION

It is recommended that:

1. Subsequent to the public and government agency consultation period for the consultant’s report entitled, “*Thermal Facility Site Selection Process Results of Step 7: Evaluation of Short-List of Sites and Identification of Preferred Site*”, Regional staff submit a report to the Solid Waste Management Committee in December, 2007 outlining the results of the consultation and identifying a preferred site for the location of the Durham-York energy-from-waste facility.

2. PURPOSE

This report presents the consultant team’s report on the recommendation for the preferred site location of the Durham-York energy-from-waste facility and establishes a timeframe for Regional Council to consider and approve the preferred site for the facility, subsequent to public and agency consultation.

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.

On March 29, 2007, Council adopted Clause 1 of Report No. 4 of the Solid Waste Management Committee which identified a short list of potential sites for an energy-from-waste plant as part of the Durham-York Residual Waste Environmental Assessment Study.

On September 25, 2007, the consultant team's report entitled "*Thermal Facility Site Selection Process Results of Step 7: Evaluation of Short-List of Sites and Identification of Preferred Site*", was presented to the Joint Waste Management Group, thus beginning the public and government agencies consultation process on the selection of the preferred site for the Durham-York energy-from-waste facility.

4. ANALYSIS AND OPTIONS

4.1 Overview of the Durham-York Residual Waste Environmental Assessment Study

Durham and York Regions have partnered to undertake a joint Residual Waste Planning Study. Both municipalities are in need of a solution to manage the solid waste that remains for disposal after maximizing diversion efforts. The Regions are working together to address the social, economic, and environmental concerns of residents through an Environmental Assessment Study process to examine potential long-term residual waste management alternatives.

Facing common waste disposal issues, the Regions are acting to implement, as quickly as possible, a Durham-York based solution that: is socially and politically acceptable to both communities; maximizes environmental protection; and, fosters the wise management of potential resources which are currently lost by way of landfill in Michigan. In addition to solving long-term, residual waste management issues, Durham and York, recognize the growing need for additional sources of energy generation in Ontario. Both Regions recognize an opportunity associated with the utilization of the waste stream as a fuel source to produce energy and have identified this opportunity as a key benefit associated with the subject waste disposal Environmental Assessment Study.

4.2 The Environmental Assessment Act

An Environmental Assessment Study provides a planning approach where environmental constraints or opportunities are considered in the context of the broadly defined environment (i.e. the natural environment as well as the social, economic, heritage and other "environments" relevant to the undertaking) and potential effects are understood and addressed before development occurs. The environmental assessment process has evolved into the completion of a decision-making process that is carried out in consultation with the public and other interested parties.

This process can be considered as consisting of three parts:

PART A – The Environmental Assessment Terms of Reference

PART B – The evaluation of "Alternatives To" the undertaking (i.e. technology)

PART C – The evaluation of “Alternative Methods” of implementing the undertaking (i.e. facility siting)

PART A

Durham and York are undertaking this project following the Individual Environmental Assessment process required for waste management projects. This is the most rigorous Environmental Assessment process a waste management project of this type can be subjected to. The Terms of Reference for the study were approved by the Minister of the Environment in March 2006.

PART B

Various alternatives were considered and 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.

PART C

Following the identification of the preferred technology, a seven-step facility site selection process was initiated to identify a preferred site for development of the preferred Durham-York residual waste processing system. Completion of the first five steps in the siting process resulted in the identification of five short-list sites to undergo a further detailed evaluation process. Following issuance of the draft report identifying the short-list of sites, one site, and part of another site were removed from consideration. Site Clarington 02 was removed from the short-list as the land use designation for the property changed in late March 2007, such that the site no longer met all the criteria with the site identification process. Site Clarington 03 was removed from the short-list since the site was withdrawn from consideration by the private owner of the property, such that this site could no longer be considered a ‘willing seller’ property.

Following consultation on the short-list of potential sites, a detailed comparative evaluation of the remaining four sites was initiated. This assessment considered the sites as well as the haul routes, transfer requirements and requirements for additional infrastructure to develop the sites.

The consultant team’s report has been prepared to present the results of the evaluation of “Alternative Methods”, which is the third part in the completion of the Individual Environmental Assessment for the Durham-York Residual Waste Study. The evaluation of “Alternative Methods” is undertaken, primarily, in this Environmental Assessment, to identify a preferred location or site for the preferred “Alternatives To” (i.e. technology).

4.3 The Consultant Team's Report

The report is presented as a recommendation based on the consultant team's consideration of each site's relative advantages and disadvantages and environmental priorities established by the communities of Durham and York (*see Attachment 1*). The report has been issued for further public and agency consultation prior to both Regional Councils making a decision with respect to the recommended preferred site.

The final step of the facility site selection process entails a comparative evaluation of the identified sites utilizing criteria and indicators to measure potential effects within the following five categories:

1. Public Health and Safety and Natural Environment (High Priority).
2. Social and Cultural (Medium Priority).
3. Economic /Financial (Medium Priority).
4. Technical Suitability (Medium Priority).
5. Legal (Low Priority).

The priorities for each category were determined based on the results of consultation in the first step of the facility siting process.

This net effects analysis consisted of the following steps:

1. Undertaking data collection and application of the comparative evaluation criteria to each of the "short list" sites. Potential effects to the environment were identified based on the application of the comparative evaluation criteria. The net effects analysis was initially carried out based on secondary data sources such as Official Plans, aerial photographs, existing base maps and limited field reconnaissance.
2. Consideration of measures that could be reasonably applied to mitigate potential effects identified in the previous step for each site.
3. Comparison of the net effects associated with each site and the establishment of the relative advantages and disadvantages of each site. Under each criterion, sites received a ranking based on the comparative analysis against the other sites, ranging as follows:
 - Major Advantage
 - Advantage
 - Neutral
 - Disadvantage
 - Major Disadvantage

The site that best met the objective of the criterion would be identified as having a major advantage and the site that least met the objective of the criterion, a major disadvantage. It was not intended that specific ranges would be predetermined for the ranking; instead they were developed based on a comparison between the potential sites. For this study, a

qualitative evaluation methodology was applied which considered tradeoffs between sites using professional judgment in the context of priorities set by the community.

4. The rankings were recorded in a summary table and overall rankings for each of the five categories of criteria were established based on the advantages and disadvantages of the sites (see Tables 4.1 through 4.7 beginning on page 4-2 of Attachment 1). The preferred site was the one with the preferred balance of advantages and disadvantages relative to the established category priorities and rankings. This decision was based on the priorities of both Regions and in consideration of the technical database, professional judgment and advice from technical experts and input received from stakeholders (i.e., public, neighbours, agencies, etc.).

The conclusion of the consultants was that site Clarington 01 has the highest ranking and is therefore recommended as the site for further consultation. This site is undeveloped land owned by the Region of Durham, south of Highway 401 on Osbourne Road in Clarington (see Figure 5-1 on page 5-1 of Attachment 1). Ultimately, the selection of the preferred site will be subject to approval by both Regional Councils in December, 2007.

4.4 The Public and Agency Consultation

As mentioned earlier in this staff report, on September 25, 2007, the Joint Waste Management Group received the consultant team's recommendation on the preferred site and consequently the public and agency consultation period began and will be completed as follows:

- The consultant team's report was released to the public and government review agencies for a period of 30 days starting on September 26, 2007 and ending on October 28, 2007.
- Notification was issued of the availability of the draft report by way of direct contact with the established public and government review agency list and by way of the website and local media for the general public.
- Copies of the draft documentation were forwarded to the public and government agencies in the established contact lists and copies were placed in the local libraries, municipal offices and on the study website for public review.
- Public Information Sessions will be held in both Durham and York during October, 2007. These sessions will be held to allow the public an opportunity to ask questions of the consultants and Regional staff.
- A telephone poll will be conducted during late October or early November, 2007, reaching individuals in Durham and York Regions to determine their support for the recommended preferred site.
- Comments received during the draft report review period will be documented and included in the final report on the preferred site to be submitted to both Regional

Councils for approval. Comments received will be considered and addressed, as appropriate, during finalization of this report.

5. FINANCIAL IMPLICATIONS

There are no direct financial implications associated with this report.

6. LOCAL MUNICIPAL IMPACT

By continuing with the current individual environmental assessment process, the local municipality that will host the preferred site on which to develop the proposed facility will continue to have an important and clearly defined role in the review of documents and active participation in the public process.

7. CONCLUSION

The consultant team has prepared a report to present the results of the evaluation of “Alternative Methods”, which is the third part in the completion of the Individual Environmental Assessment for the Durham-York Residual Waste Study. The primary purpose of the consultant team’s report is to recommend a preferred long-term site for the development and operation of the preferred “Alternatives To” (i.e. a thermal treatment facility). Once public and agency consultation is completed on the consultant team’s report, staff will be reporting back later in 2007 with the identification of the preferred site for council’s consideration and approval.

For more information on this report contact Angelos Bacopoulos, Senior Project Manager of the Solid Waste Management Branch at 905-260-9457 in the Transportation and Works Department.

The Senior Management Group has reviewed this report.

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