



THE REGIONAL MUNICIPALITY OF DURHAM

BACKGROUND

Since 2005, Durham and York Regions have been working together to examine ways to manage residual waste—the waste that remains after composting and recycling. Commonly referred to as the Durham/York Residual Waste Study, this Environmental Assessment (EA) will be submitted to the province, following approval from both Durham and York Regional Councils. Final approval of the EA will rest with the provincial government.

A LONG-TERM WASTE STRATEGY

In an effort to divert recyclable materials from landfill, Durham Region introduced the Blue Box recycling program in 1984. In 1998, the Region then began working on a Long Term Waste Management Strategy Plan, which was completed in 2000.

During this process (in 1999), Durham Regional Council made it clear there would be no new landfill sites in the region. Therefore, a key objective of the plan was to investigate technically feasible waste reduction and waste disposal opportunities in an environmentally and financially responsible manner.

In 2003, the Region complemented the Blue Box recycling program by introducing a Green Bin composting program in the Municipality of Clarington and townships of Brock, Scugog and Uxbridge.

THE DURHAM RESIDUAL WASTE DISPOSAL STUDY

In 2004, Durham Region began researching effective ways to manage the solid (residual) waste that remains after recycling and composting programs, which led to the Durham Residual Waste Disposal Study EA.

In October and November 2004, eight public information centres (PICs) were held in Durham Region. These forums were used to introduce the study, while presenting the requirements of Ontario's EA Act. In order to ensure that residents were fully aware of these sessions, a total of 12 advertisements were placed in the local newspapers, from September to November 2004. A total of 53 people participated.

From February to May 2005, Durham Region hosted 11 PICs to notify the public of alternatives available to manage post-diversion residual waste; the methodology and criteria for evaluating these alternatives; technologies being considered; the types of sites that should be considered for the preferred waste processing facility; the criteria that should be used to identify potential sites; how sites should be evaluated; how criteria should be used in the evaluation of potential sites; and how the public should be consulted during the EA study.

Input received, from the approximately 100 residents who attended, was used to develop the respective parts of the EA Terms of Reference, as well as the supporting background documentation. A total of 26 ads were placed in community newspapers, in addition to notifying college students via the local campus paper.

A PARTNERSHIP BEGINS

In May 2005, York Region began working with Durham Region on a process, which would now be known as the Durham/York Residual Waste Study. Shortly after the partnership formed, the Draft EA Terms of Reference was submitted to the Ontario Ministry of the Environment (MOE).

THE DURHAM/YORK RESIDUAL WASTE STUDY BEGINS

Eleven PICs were held in York Region from May to September 2005. These sessions were designed to discuss and obtain public input on alternatives reasonably available to manage post-diversion residual waste, and the methodologies and criteria for evaluating these alternatives during the EA study. The input received from these workshops was used to develop the respective parts of the Draft EA Terms of Reference and supporting background documentation. There were 38 advertisements placed to notify the public of these sessions.

In October 2005, a series of six PICs related to the Draft EA Terms of Reference were held in both Durham and York Regions. These sessions provided an opportunity for residents to give feedback about how the EA would proceed. Since this was the first, and critical, first phase of the project, it was important residents were aware. Therefore, eight ads ran in community newspapers in Durham, while seven ran in York.

JOINT WASTE MANAGEMENT GROUP

The Joint Waste Management Group (JWVG) met 24 times during the span of this project, beginning with its first meeting in August 2005. The JWVG is comprised of members from the Durham Region Works Committee and the York Region Solid Waste Committee, as well as individuals from the public. This group was created to provide advice, and make recommendations, to the Durham Region Works Committee and York Region Solid Waste Management Committee on all matters relating to the Durham/York Residual Waste Study EA.

HOPING TO FIND A SOLUTION

In March 2006, six PICs were held in Durham and York Regions to discuss possible solutions to the residual waste question. Approximately 215 residents attended these sessions.

THE EA OFFICIALLY BEGINS

The EA Terms of Reference were approved by the Minister of the Environment on March 31, 2006; the EA study “officially” begins.

IDENTIFICATION OF A PREFERRED RESIDUAL PROCESSING SYSTEM

In April 2006, the consultants presented an overview of the EA progress to date, as well as their conclusion on a preferred alternative system (based on the results of previous PICs). The next step in the process was the identification of a preferred residual processing system. The topic was alternative residual waste management technologies, and how to identify a preferred method.

Another round of PICs was organized to allow the public to provide feedback about their preferred technology. Input received at the six sessions in May 2006 determined that residents felt thermal treatment was the preferred option. About 300 residents attended these six sessions. In order to ensure residents were aware of these upcoming sessions, approximately 60 advertisements ran from Feb. 22 to May 8 in community newspapers, theatres, radio, major Toronto dailies, and buses in both regions.

In April 2006, following the evaluation of alternative technologies, the EA project consultants recommended to Durham Regional Council that—based on public feedback—thermal treatment was the preferred method to deal with Durham and York’s residual waste. Thermal treatment is a high-temperature technology used to treat waste. Through this process, the waste or synthetic gas is burned to create energy in the form of steam, electricity and heat. However, the primary purpose of the Durham/York facility is to process the household waste (garbage) left over after diversion efforts, such as recycling and composting.

Both Durham and York Regional Councils accepted the consultants’ recommendation of thermal treatment, or an energy-from-waste (EFW) facility, in June 2006.

INCREASING DIVERSION

In an effort to complement the Blue Box recycling program, the Region of Durham fully implemented the Green Bin composting program in July 2006. While the program began in four local area municipalities in 2003, the full rollout now incorporated the cities of Oshawa and Pickering and towns of Ajax and Whitby. As part of this new program, Blue Box and Green Bin materials, within the lakeshore municipalities, were now collected each week and garbage collection moved to every two weeks.

PROPOSED FACILITY SITING METHODOLOGY AND CRITERIA

Now that the preferred approach had been identified, the next step in the EA process was to determine a site for this facility. From here, residents were asked to provide feedback on which criteria should be a top priority when siting a thermal treatment facility.

Through a series of six PICs in both Durham and York during September 2006, hundreds of residents provided feedback about what criteria should be considered first and foremost when choosing a site. To notify the public about these sessions, a total of 77 advertisements were placed via print, broadcast, theatres, local buses and Toronto dailies between August and September 2006.

RECOMMENDED SHORT-LIST OF FIVE POTENTIAL SITES

Following public consultation and feedback, a short-list of potential sites is released based on the most important criteria noted by residents: public health and safety and the natural environment; social/cultural considerations; economic/financial considerations; technical considerations; and legal considerations. In March 2007, both Durham and York Regional Councils endorsed the consultants' recommended short-list of five potential sites. Four of the potential sites were in Durham Region, with one located in York Region.

It was now time to ask the public what they thought of this list. Four PICs were held (three in Durham and one in York) during April 2007, with about 380 people registering at these events. The sessions notified the public of the short-list of preferred sites that had been identified at this stage of the project.

During these four PICs, residents asked about: air emissions and their effects on public health and the environment; competition with diversion programs (recycling and composting); traffic issues (number of trucks and types); site locations; site selection process; and technology issues.

To inform residents about the upcoming PICs, 10 advertisements were placed in the local newspapers, radio and television during the weeks of March 20, April 2 and April 10. In an effort to further inform residents, and answer their questions, Regional Chair Roger Anderson appeared on local television on April 12 and 19, 2007.

THE GENERIC HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT

During this phase, a Generic Human Health and Ecological Risk Assessment (GHHERA) was undertaken to help determine any potential risks to human and ecological life, including those associated with truck traffic.

Following the release of the GHHERA results in June 2007, six PICs were held (four in the Municipality of Clarington and two in York Region). After seven advertisements were placed in local newspapers, and ongoing ads ran on local radio, about 380 residents attended these five sessions.

These PICs included an open house, a presentation by the project consultants, and a question-and-answer period. Questions focused on: air emissions and effects on public health; competition with diversion programs; potential tax impacts; final site selection; landfill possibilities; various technologies; and timelines for commenting on this process.

REQUESTING QUALIFICATIONS

In July 2007, Durham Region put out a Request for Qualifications (RFQ) to identify qualified thermal treatment vendors. The list of pre-qualified vendors was released in August 2008.

THE CONSULTANTS' RECOMMENDED PREFERRED SITE

In September 2007, the consultants' recommended preferred site was brought to Durham Regional Council. Clarington 01 is a 12-hectare site located between Courtice Road and Osbourne Road in the Municipality of Clarington. This site, which is owned by The Regional Municipality of Durham, is located in the Clarington Energy Park (south of Highway 401).

PICs were held with residents of both Durham and York Regions in October 2007, in an effort to notify the public of the consultants' recommended preferred site. Durham and York Regions welcomed about 380 residents at three PICs to discuss the results of the evaluation process and the consultants' recommended preferred site.

These eight-hour sessions, which were facilitated by an independent professional facilitator, included an informal drop-in period, a presentation by the project consultants, and a question-and-answer period. In order to ensure that residents were made aware of these public meetings, 12 advertisements were placed in the local newspapers and ongoing ads ran on the local radio station. A session was also held in York Region. The major concerns raised by residents during these sessions included: air emissions and effects on public health; competition with diversion programs (recycling and composting); landfill possibilities; and various EFW technologies.

In January 2008, Durham and York Regional Councils accepted the recommended preferred site.

DURHAM REGION WASTE FAIR

Residents were invited to attend the Durham Region Waste Fair in November 2007—an event held to educate residents about Regional waste initiatives through children's activities and public education displays.

STATE-OF-THE-ART RECYCLING CAPABILITIES

In December 2007, The Regional Municipality of Durham hosted the official opening of its new 68,600-square-foot Material Recovery Facility (MRF). This state-of-the-art facility, which offers the capacity to process up to 115,000 tonnes of recyclable materials each year, was designed to keep up with the expected tonnage increases from the residential sector during the next 10 to 15 years. Made possible as a result of \$16.6 million in funding through the federal Gas Tax Fund, the MRF replaced the old Recycling Centre, which had reached its capacity, thanks to the outstanding efforts of Durham's residents. The MRF has been recognized internationally through the receipt of several prestigious awards.

PUBLIC OPINION

In December 2007, approximately 400 residents of both Durham and York Regions participated in an Ipsos Reid telephone survey about the proposed EFW facility. The survey was conducted to gauge awareness and opinions regarding the building of a thermal treatment facility to manage waste from the two regions.

The survey found that seven in 10 residents knew their residual waste was shipped to a landfill in the State of Michigan. However, eight out of 10 agreed that this was not a sustainable option. About three-quarters of those surveyed agreed (strongly or somewhat) with building a thermal facility.

As for the proposed alternative, about 34 per cent of residents (from both regions) were aware that Durham and York Regions were undertaking an EA to find a solution for residual waste. However, Durham residents (43 per cent) were significantly more familiar with the study than their counterparts in York (24 per cent).

THE BUSINESS CASE

Durham Regional Council accepted the EFW business case in May 2008, which was prepared by Deloitte & Touche LLP. The business case included conservative and comprehensive risk and cost evaluations, and a final recommendation on waste management options available to Durham. The document suggested using money from the federal Gas Tax Fund towards upfront capital costs, in order to take the burden off property taxes.

SPECIAL REPORT: INTERNATIONAL BEST PRACTICES

In May 2008, Durham Regional Council requested that staff review best practices of environmental monitoring to develop a program that will provide baseline information during the life cycle of the Durham/York EFW facility. A document was released in February 2009 (see "Site-specific studies" header below).

REQUEST FOR PROPOSALS

In August 2008, the Regions of Durham and York issued a request for proposals (RFP)—incorporating technical requirements for the design, construction, operation and maintenance of an EFW facility—to the five pre-qualified vendors who had passed the RFQ process in mid-2007. Four vendors submitted proposals in February 2009.

SITE LIAISON COMMITTEE

The Site Liaison Committee (SLC) hosted its first meeting in November 2008, after a call for volunteers (residents) in July 2008. This committee—made up of four Durham Region residents and five residents from the Municipality of Clarington—was formed to provide a forum for local residents and stakeholders to review and provide input on site-specific studies related to the EA. Several subsequent meetings were held as an opportunity for the public to provide feedback into the process.

SITE-SPECIFIC STUDIES

In February, The Regional Municipality of Durham released four site-specific studies. These documents will be included with the EA when it is submitted to the province. These four reports characterized environmental conditions in the area; provided an analysis of the potential presence of significant archaeological issues; presented preliminary information on site soil conditions; and also outlined aspects of the natural environment. No issues were reported.

Based on a May 2008 request from Durham Regional Council, the consultants prepared a document in response to a previous council resolution. However, it is not required under the EA Terms of Reference.

The Review of International Best Practices of Environmental Surveillance for Energy-From-Waste Facilities was released in March; containing recommendations from the project consultants, who feel the two Regions should: comply with the Ontario Ministry of Environment (MOE) Guideline A-7; establish more stringent stack chemical emissions standards than those provided in the MOE Guideline A-7; and include a new stack sampling technology for dioxins and furans. They also believe that the Site Liaison Committee should review any environmental surveillance program being undertaken for this facility.

RECOMMENDED PREFERRED VENDOR ANNOUNCED

A staff report recommending the selection of a preferred vendor for the proposed EFW facility, which also determines the technology, was accepted by Durham Regional Council on April 22. This report recommended Covanta Energy Corporation as the preferred vendor, based on a formal evaluation of submissions received from four pre-qualified vendors. This allowed Covanta to execute an 'Early Works' agreement with the Regions in order to complete the EA, develop architectural renderings for consideration, and negotiate with the Regions to finalize the draft design, construct and operate agreement. Contractual arrangements with Covanta for the construction and operation of the facility were still subject to the satisfactory completion of the EA and acceptance of the preferred undertaking by the Ontario MOE.

www.durham.ca

DRAFT INTERIM DOCUMENTATION

On April 27, the Region of Durham released a draft Interim EA document, which outlined, in its entirety, the steps completed to date in the Durham/York Residual Waste Study. Comments/feedback on the information were accepted until June 5.

FURTHER SITE-SPECIFIC STUDIES

Further site-specific studies—focusing on impact assessments for noise and vibration, traffic, visual elements, socioeconomic, energy and surface/storm water—were released on May 8. These documents—which build upon the four site-specific studies released in February—will also be included with the EA when it is submitted to the province.

SITE-SPECIFIC HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT

Results of the Site-specific Human Health and Ecological Risk Assessment (SHHERA) were also released on May 15. This 310-page report took into consideration possible risks to human health and ecological life at the preferred site in the Municipality of Clarington. Although not a requirement of the EA process (it was drafted after a request from Durham and York Regions), it will be included with the EA documents when they are submitted to the province.

About 370 residents learned more about the further site-specific studies (including the SHERRA), and the Region's current waste diversion programs, during two PICs held on May 12 and 19. Advertisements ran in every newspaper across Durham Region to notify the public about these upcoming events.

FIRST DRAFT OF THE FULL EA

Residents and stakeholders were notified that the Region of Durham released the first draft of the full EA study document on May 26. This document outlines, in its entirety, the steps completed to date through the Durham/York Residual Waste Study. Comments/feedback on the study were accepted until June 5.

COMMITTEE OF THE WHOLE MEETING

On June 16, Durham Region held a Committee of the Whole meeting to discuss the EA documentation. This meeting also addressed a number of additional matters, including a report on the host community discussions; an updated business case; a report on the status of negotiations with Covanta Energy Corporation and the Ontario Power Authority; and details on the Request for Proposals process. It was also determined that, if required, triggers could prompt additional ambient air monitoring, as outlined in the Community Host Agreement and a report from the Durham Region Medical Officer of Health.

NEXT STEPS

Although the Environmental Assessment documentation has been approved by Durham Regional Council, it still requires approval from York Regional Council. Once both councils have approved the EA, it will be submitted to the provincial MOE. For more information about the Durham/York Residual Waste Study, visit www.durhamyorkwaste.ca, call 905-307-8628 (toll-free: 1-866-398-4423), or email info@durhamyorkwaste.ca.

ADDITIONAL INFORMATION

NUMBER ONE IN ONTARIO FOR WASTE DIVERSION

The Regional Municipality of Durham was ranked number one in Ontario (for cities/regions with more than 50,000 residents) for its 2007 waste diversion rate of 47.7 per cent, based on a Waste Diversion Ontario report released in early 2009. This outstanding achievement is the result of dedication from our residents, in addition to the strong focus Durham Regional Council has placed on waste diversion programs.

A CONTINUED FOCUS ON WASTE DIVERSION

In mid-2006, when residents embraced a new collection schedule in the four lakeshore municipalities—weekly Blue Box and Green Bin collection and biweekly garbage collection—diversion rates increased significantly. Waste Management is taken one step further when this same service level is introduced to the four remaining municipalities (Municipality of Clarington and townships of Brock, Scugog and Uxbridge), in March 2009. For more information on the current waste diversion programs offered by The Regional Municipality of Durham, Works Department, please visit www.durhamregionwaste.ca.