

Section 1 Table of Contents

1. Introduction and Background..... 1-3

List of Tables

Section 1 has no tables

List of Figures

Section 1 has no figures

Section 1 Summary

The Durham/York Residual Waste Study was initiated jointly by the Regions of Durham and York in 2005 to identify a long-term sustainable solution to manage the solid waste remaining after reuse, reduction and recycling (including composting) initiatives otherwise referred to in this EA Study document as “post-diversion residual waste”. Both Durham and York recognized the advantages of partnering in the process as they faced similar waste management challenges and had partnered successfully on other projects in the past. The Regions officially reached an agreement to proceed as co-proponents in the completion of an EA Study on June 30, 2005.

The EA Study entailed the evaluation of: residual waste management alternatives considering the potential effects on the environment; the availability of mitigation measures that address, in whole or in part, these effects; and, the comparison of the advantages and disadvantages of the remaining “net” effects. The result of this process provided the planning rationale and support for the preferred solution, the thermal treatment of post-diversion residual waste at the Clarington 01 Site.

1. Introduction and Background

Over the past few decades, the Regional Municipality of Durham (Durham Region) and the Regional Municipality of York (York Region) have spent considerable time and resources in attempting to establish and site new long-term waste disposal capacity to manage their post-diversion residual waste within their respective Regional boundaries. The most recent effort was the Greater Toronto Area (GTA) Interim Waste Authority (IWA) EA process that identified potential landfill sites in Durham and York Regions. In total, this EA process was reported to have cost in excess of \$100 million, caused significant social disruption and failed to yield any new landfill disposal capacity.

As a result of continued failed attempts to establish new landfill disposal capacity, Durham and York, (the Regions) along with other GTA municipalities, entered into contracts with the private sector to export residual waste primarily to Michigan. However, through negotiations completed at the provincial and federal levels, at the end of December 2010, the Michigan border will be closed to municipal waste from Canada, which includes residential residual waste from Durham and York Regions. As a result, the Regions do not currently have sufficient long-term waste disposal capacity within their Regional boundaries or the direct control required to support their current waste management responsibilities.

Although they have become reliant on exporting their residential residual waste outside their regional boundaries, both Regions desire a Durham/York based solution that is socially and environmentally acceptable to both communities, that maximizes environmental protection and that fosters the wise management of potential resources.

Both Regions remain committed to investigating technically feasible waste reduction, reuse, recycling and disposal opportunities. Durham is dedicated to reaching its goal of diverting 70% of its residential waste from disposal by December 2013 and will look for opportunities to increase diversion even more in the future. Similarly, York is committed to designing a waste management system that will divert approximately 65% of its residential waste from disposal in the short-term and hopes to increase this rate to over 70% in the 10-year planning horizon (2016). Moreover, both Regions are committed to developing strategies that will promote reducing and reusing waste so that managing the material may one day be avoided all-together.

However, even with significant decreases in waste production (i.e., via near zero waste initiatives) and increases in waste diversion, there still remains a residual waste that is required to be managed by the Regions in the foreseeable future.

Given the above similarities and a long history of Regional partnerships on municipal infrastructure and services, the Regions of Durham and York agreed undertake a joint Residual Waste Planning Study in accordance with Ontario's *Environmental Assessment Act*. Through this process, the Regions worked together to address the social, economic, and environmental concerns of residents to develop a sustainable, long term waste residual management solution.

Durham and York also recognize the problem that the Province of Ontario does not have sufficient energy to meet its growing needs. Both Regions recognize that there is opportunity

Section 1: Introduction and Background

associated with the utilization of the waste stream as a fuel source to produce energy and have identified this opportunity as a key part of the EA Study.

The Durham/York Residual Waste Study was initiated jointly by the Regions in 2005 to identify a long-term sustainable solution to manage the solid waste remaining after reuse, reduction and recycling (including composting) initiatives otherwise referred to in this Environmental Assessment (EA) as “post-diversion residual waste”. Both Regions’ are in need of a solution to manage the waste remaining after diversion (residual or post-diversion waste). The Regions are working to address the social, economic, and environmental concerns of residents through the EA Study, which examines potential waste management alternatives. Each Region also recognizes the advantages of partnering in the process as they faced similar waste management challenges and had partnered successfully on other projects in the past. The Regions officially reached an agreement to proceed as co-proponents in the completion of an EA Study on June 30, 2005.

The EA Study was undertaken in accordance with the Approved EA Terms of Reference which defined the framework and methodology for the EA including the scope, study areas, study periods and consultation to be included in the Project. The EA Terms of Reference included those activities required to fulfill the requirements of Ontario’s *Environmental Assessment Act* (EAA). The EA Terms of Reference, developed in 2005 were approved by the Ontario Minister of the Environment on March 31, 2006 (See **Appendix A-1**).

In order to achieve the desired purpose of the EA and resolve the problems and challenges appropriately, the EA Study evaluated residual waste management alternatives considering the potential effects on the environment, the availability of mitigation measures that address, in whole or in part, these effects and the comparison of the advantages and disadvantages of the remaining “net” effects.

Although it was recognized from the outset that all waste management systems, no matter how progressive, require a landfill component, the Regions intent was to minimize this component as originally described in the approved EA Terms of Reference. A landfill only system, whereby a new landfill site capable of managing all waste that remains after at-source diversion does not meet the purpose of the undertaking, and thus was not considered. The decision to focus the statement of purpose and need, is based upon the factors noted above, in particular the historic experience within Durham and York regarding attempts to site new landfill capacity within their jurisdictions. It has not proven feasible to site new landfills in either jurisdiction, resulting in the current situation where all or a portion of waste is exported outside of the municipalities for disposal. The only reasonable options for a ‘local’ solution, which would provide capacity to manage the majority of the waste that remains after at-source diversion, are processing/treatment options such as mechanical, biological and thermal treatment.

The result of this EA Study process provided the recommended solution to the problem and the planning rationale and support for the preferred solution: the thermal treatment of post-diversion residual waste at the Clarington 01 Site in the Municipality of Clarington, Durham Region. This EA study has resulted in a long-term, local and sustainable solution for the management of post-diversion residual waste.