



# Durham/York Residual Waste Study

## **Background Document 2-5 Relevant Policies and Approvals Requirements**

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### **Development of Environmental Assessment Terms of Reference (EA Terms of Reference)**

December 16, 2005





**Residual Waste Disposal Planning Study  
Background Document 2-5  
Relevant Policies and  
Approvals Requirements**

**Development of Environmental Assessment  
Terms of Reference**

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**TASK 2  
BACKGROUND DOCUMENTATION**

**December 16, 2005**

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## 1. Introduction

This introduction provides an overview of waste management within the two Regions, the Environmental Assessment Act (EAA), the Background Documents supporting the Environmental Assessment (EA) Terms of Reference and the purpose of this particular Background Document.

### 1.1 Background

Durham and York Regions (the Regions) have agreed to undertake a joint Residual Waste Planning Study. Both municipalities are in need of a solution to manage the solid waste remaining after diversion (residual or post-diversion waste). The Regions are working to address the social, economic, and environmental concerns of residents through an Environmental Assessment (EA) Study process to examine potential waste management alternatives.

The Region of Durham (Durham) has programs in place for the source separation and diversion of both “Blue Box” recyclables and household organics. The Blue Box program is being expanded over the next few years to collect a wider range of materials and the source separated organics collection/composting program is being expanded to service all of Durham. In its December 1999 Solid Waste Master Plan, Durham adopted a diversion target for residential waste of at least 50% by 2007 or earlier. On April 14, 2004, Durham Regional Council adopted the position to increase waste diversion beyond 50%. In light of the province’s recently-announced policy initiative of “60% diversion by 2008” Durham will likely refine its diversion target to align with that established by the province.

York Region (York) has programs in place for the source separation and diversion of “Blue Box” recyclables and household organics. In July 2005, York opened a single-stream Blue Box materials recycling facility located in East Gwillimbury. This facility enables residents to put all recyclables into one Blue Box, eliminating the need for separating containers and fibres. The facility also allows residents to recycle approximately 25 items, including #1 to #7 rigid plastic containers, empty paint cans, and milk cartons. Household collection of food waste began, as a pilot project, in September of 2004 and is currently provided to approximately 67,000 households. Full implementation of household organics programs is expected to be completed by 2008.

Even with the expanded source separated diversion efforts, Durham and York continue to face the challenges of managing residual waste. Both Regions face a shortage of available landfill capacity over the long term. In response to the closing of existing landfill sites in the Greater Toronto Area (GTA) and the inability to develop new landfill capacity, Durham and York, along with other GTA municipalities, were forced to enter into contracts for the “export” of their residential waste primarily to Michigan. In response to this situation, the Regions want to implement, as quickly as possible, a Durham/York based solution that is socially and politically acceptable to both communities, that maximizes environmental protection and that fosters the wise management of potential resources, which are currently lost by way of landfill in Michigan.

During the later half of 2005, the United States government initiated the process of passing legislation that, if successful, would prevent or severely inhibit Durham’s and York’s current

disposal arrangements with sites in the State of Michigan. There is a reasonable likelihood that this legislation will be passed in 2006.

In addition, Durham and York, recognize that the Province of Ontario does not have sufficient energy to meet its growing needs. Both Regions recognize that there is significant opportunity associated with the utilization of the waste stream as a source of energy and have identified this opportunity as a key part of the subject EA Study.

## **1.2 Environmental Assessment Act (EAA)**

Since the adoption of the Environmental Assessment Act (EAA) in the 1970s, the EA process has evolved into the completion of a study or decision-making process, in consultation with the public and interested parties, that evaluates alternatives considering potential effects on the environment, the availability of mitigative measures that address, in whole or in part, these effects and the comparison of the advantages and disadvantages of the remaining or “net” effects. The result of this process is to provide the planning rationale and support for a preferred solution.

The EA 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 and heritage “environments”) and potential effects are understood and addressed before development occurs.

All public sector (i.e., provincial or municipal) undertakings that have the potential for significant effects in terms of their scope are generally subject to the EAA and must apply for approval from Ontario’s Minister of the Environment. With respect to waste management, certain types of waste management undertakings require compliance with the EAA. In general, approval under the EAA is required for the establishment or the expansion of a waste disposal facility, such as a landfill or energy from waste facility as well as some waste processing and transfer facilities.

Under the EAA, an Environmental Assessment Terms of Reference (EA Terms of Reference) must be prepared and submitted to the Minister of the Environment for approval before an EA Study can be undertaken.

## **1.3 Overview of Task 2 – Background Documentation**

A series of documents are being prepared to provide the necessary background and rationale in support of the EA Terms of Reference. These documents describe:

- underlying assumptions and commitments on the part of the Regions with respect to completing the EA Study in accordance with the approved EA Terms of Reference;
- public and agency consultation undertaken by the Regions in developing the EA Terms of Reference; and
- the manner in which that consultation influenced the document submitted to the Minister of the Environment for approval.

These documents have been provided to support the development of the EA Terms of Reference, but do not form part of the Terms that will be submitted for approval by the Minister of the

Environment. The subject background documents contain information that may be referenced to obtain a better understanding of how the Regions established the steps, methods and criteria included in the EA Terms of Reference. The following provides a list of the background documents prepared for the Durham/York Residual Waste Study:

- 2-1 – *Purpose and Need for Undertaking;*
- 2-2 – *Consideration of “Alternatives To” the Undertaking;*
- 2-3 – *Consideration of “Alternative Methods” of Implementing the Undertaking;*
- 2-4 – *Description of the Environment Potentially Affected; and*
- 2-5 – *Identification of Approvals Required for the Undertaking and Applicable Policy, Guidelines and Practices of the Approvals Authority.*

## 1.4 Purpose of this Background Document

The purpose of this Background Document is to outline applicable legislation and approvals requirements that will form a fundamental part of the subject Environmental Assessment Study process. This document provides an outline of each level of the regulatory context in the Province of Ontario (federal, provincial and municipal) and describes the approval requirements and related processes that must be followed to ensure successful compliance.

## 2. Applicable Federal Legislation

There are two pieces of Federal Legislation that are potentially relevant to this Study. They are the *Canadian Environmental Assessment Act* (CEAA) and the *Fisheries Act* (FA). In addition, depending on the site specific details of the preferred site(s), additional federal regulations may be triggered under CEAA. The involvement of federal departments and authorities will be determined based on site specific requirements and level of involvement coordinated by way of the Federal Coordination Regulations under CEAA (i.e., potential impact to navigable waters may require authorization under Transport Canada).

### 2.1 The Canadian Environmental Assessment Act

Under the Canadian Environmental Assessment Act, an Environmental Assessment must be completed where federal departments and agencies:

1. carry out the project;
2. provide financial assistance to enable a project to be carried out;
3. sell, lease, or otherwise transfer control or administration of land to enable a project to be undertaken; and/or
4. issue an authorization to enable a project to go forward.

Depending on the nature of the project, and the significance of possible environmental effects, the type of assessment required will vary between a ‘screening’ and a ‘comprehensive study’.

*Screening* – A Screening involves the systematic review of potential environmental effects associated with a project and the identification of required mitigation or modifications to the project to address the potential for these effects. Assuming that there is no potential for remaining significant environmental effects, the process is complete.

*Comprehensive Study* – A Comprehensive Study is required for projects that are defined under the Comprehensive Study Regulations under the EAA. These studies tend to apply to large and complex projects that may have the potential to generate significant adverse environmental effects and public concerns. A Comprehensive Study involves, in addition to the requirements of a screening, a review of alternatives to determine a preference for pursuing the project or one of its alternatives, which may include not proceeding with the project. In addition, a Comprehensive Study must consider the purpose and need for the project as well as mandatory public consultation and follow-up.

### **2.1.1 Approval Requirements**

The CEAA assessment process generally requires that the following activities be undertaken:

- Consideration of the following factors to a level of detail that will be stipulated by the responsible federal agency or designate:
  - purpose of the project
  - environmental effects of the project and the significance of those effects;
  - comments from the public;
  - measures that are technically and economically feasible to mitigate adverse effects and residual impacts;
  - alternative means of carrying out the project;
  - the potential impact of the environment on the project;
  - current use of land for traditional resources;
  - cumulative effects;
  - the need for a follow-up or monitoring program; and
  - impacts on renewable resources with respect to their capacity to meet present and future needs.
- Preparation of a screening report or a comprehensive study report.
- Mediation or assessment by a review panel as provided in the CEAA and the preparation of a report.
- Design and implementation of a follow-up program.

### **2.1.2 Harmonization with the Ontario Environmental Assessment Act**

If the environmental assessment concludes that a project is acceptable, then the responsible federal authority is authorized to proceed with their involvement in that project.

Based on the current Federal and/or Province of Ontario regulatory and policy environment, where waste management undertakings are subject to a federal environmental assessment, two pieces of legislation, the Canadian Environmental Assessment Act and the Provincial Environmental Assessment Act, must be addressed by way of two separate processes.

Recognizing that the potential exists for many projects Canada-wide to require EAs under two separate pieces of legislation and that there is much duplication between the processes, the Canadian Environmental Assessment Agency (CEAA) is working to establish agreements with the various Provinces to harmonize the requirements of both Acts into one process. To date, agreements have been reached in only four Provinces and one Territory – Manitoba, Saskatchewan, Alberta, British Columbia, and the Yukon.

On November 1, 2004 the federal and provincial ministers of the environment reached an “EA cooperation agreement” for projects that require approval under both the Canadian EAA and the provincial EAA. The “Canada-Ontario Agreement on Environmental Assessment Cooperation” has established the basis upon which the EAs for projects, which are subject to both pieces of legislation, can be completed more effectively. Separate approvals would still be required. The means, however, by which these approvals are administered, will be undertaken in a more fully coordinated fashion.

### **2.1.3 Applicability of the Canadian Environmental Assessment Act to the Durham/York Residual Study**

There are a number of scenarios under which the subject Study would require approval under the Canadian Environmental Assessment Act including:

- the provision of funds from a federal program for the project;
- the sale or lease of federal land to the co-proponents or to the private sector for the development of the preferred alternative system(s); and/or,
- the issuance of a federal approval (e.g. approval under the Fisheries Act related to an alteration of a watercourse for construction of the preferred alternative system(s)).

The extent and specific nature of any possible compliance requirements will depend upon the characteristics of prospective alternative site(s) under consideration at the Study’s site-selection phase for the preferred alternative system(s).

## **2.2 The Fisheries Act**

Fish habitat can be easily damaged and lost due to human activities that occur in, near or within water. For any project that could potentially alter or even destroy fish habitat (e.g., spawning grounds, nursery and rearing areas, areas of food supply or migration routes), approval by the Minister of Fisheries and Oceans (DFO) is required under the Fisheries Act.

### **2.2.1 Approval Requirements**

Section 35 of the Fisheries Act states that *no person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat*. For project approval, specific information is required under the Fisheries Act, including:

- water body name and location;
- detailed description of the work site;
- creek habitat inventory by qualified fisheries biologists; and

- measures incorporated into the design of a prospective development that would result in no net loss of fisheries habitat (this is often accomplished by way of improvements to down stream habitats).

With regard to the screening of projects for the need for approval under the Fisheries Act, arrangements exist between the local Conservation Authority and DFO. In accordance with this agreement, all projects involving potential impacts on a watercourse or a development permit from the conservation authority are also screened for the need for approval under the Fisheries Act. If Federal approval were required, then the conservation authority would work with the co-proponents to the extent they can (depending on their level of agreement with DFO) prior to the project being referred to DFO for consideration.

### **2.2.2 Applicability of the Fisheries Act to the Durham/York Residual Waste Study**

The need for approvals under the Fisheries Act for a waste processing facility will depend on the location of the preferred site(s) together with the proposed on-site activities. Should the site be located near an existing watercourse, or if there were any potential harmful alternation, disruption or destruction of fish habitat, approval under the Act would be required. An approval under the Fisheries Act would invoke the requirement of the Canadian Environmental Assessment Act as described in Section 2.1.

## **3. Applicable Provincial Legislation**

The most directly applicable pieces of provincial legislation to the subject Study are: the Environmental Assessment Act (EAA); the Environmental Protection Act (EPA); the Ontario Water Resources Act (OWRA); the Environmental Bill of Rights (EBR); the Planning Act; the Green Belt Act; and the Oak Ridges Moraine Conservation Act.

### **3.1 The Environmental Assessment Act (EAA)**

The purpose of the Environmental Assessment Act (EAA), R.S.O. 1990, c.E. 18, as quoted in the Act is the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment.

This has typically been translated into the completion of a study or decision-making process, in consultation with interested parties including the public that evaluates alternatives considering potential effects on the environment, the availability of mitigative measures that address, in whole or in part, these effects and the comparison of the advantages and disadvantages of the remaining or “net” effects. This process provides the planning rationale and support for approval under the EAA for a proposed undertaking. The EAA ensures that environmental problems or opportunities are considered in the context of the broadly defined environment (i.e., natural environment as well as the social, economic and heritage “environments”) and potential effects are understood and addressed before development occurs. The planning process required by the EAA also requires that a reasonable range of alternatives to the proposed undertaking and alternative methods of implementing the undertaking (e.g., alternative sites for the establishment of residual waste management capacity) be evaluated by the proponent.

Most major provincial or municipal undertakings are subject to the EAA and must apply to the Minister for approval in accordance with Section 5(1) of the EAA. Private sector undertakings are not subject to the EAA unless specifically designated by regulation or the Minister. Waste processing facilities for the disposal of residual wastes, such as those being considered by Durham and York, are the types of undertakings, which typically require EAA approval.

### **3.1.1 Approval Requirements**

Approval under the EAA is issued by the Minister of the Environment. There are two levels of approval required:

1. An EA Terms of Reference identifying how the EA is to be conducted (Approved by the Minister of the Environment); and
2. The EA Study completed in accordance with the approved EA Terms of Reference (Approved by the Minister of the Environment by way of an Order-in-Council from Provincial Cabinet).

#### **Environmental Assessment Terms of Reference (EA Terms of Reference)**

EA Terms of Reference are prepared by the proponent in accordance with Section 6. (1) and 6.(2) of the Act and are required to contain the following primary components:

- Identification of the Proponent (i.e., person carrying out the project or the owner having charge, management or control of the project).
- A description of the purpose of the undertaking (i.e., project) and undertaking itself (to the extent that it can be defined at the Terms of Reference step).
- A description of the alternatives to the undertaking and the alternative methods of implementing the undertaking to be evaluated during the EA.
- A description of the environment potentially affected by the proposed undertaking (to the extent it can be defined at the Terms of Reference step).
- The proposed methodology and criteria for assessing and evaluating the alternatives and selecting the preferred alternatives (to the extent it can be defined at the Terms of Reference step).
- A description of the Consultation Plan to be followed over the course of the EA.

Once submitted for approval, the Minister may approve, modify and approve, or reject the proposed EA Terms of Reference. Some issues may also be referred to mediation for consideration in deciding whether or not approval should be granted. In accordance with the ‘deadline’ regulation (Regulation 616/98) under the EAA, the timeframe for Ministerial approval of an EA Terms of Reference is to fall within a range of three to five months.

#### **Environmental Assessment Study**

The preparation of an Environmental Assessment Study must document how the EA Terms of Reference were followed and generally includes the following:

1. A description of the purpose of the undertaking;

2. A description of and a statement of the rationale for the undertaking, the alternative methods of carrying out the undertaking, and the alternatives to the undertaking;
3. A description of the environment that will be affected or that might reasonably be expected to be affected, directly or indirectly, the effects that will be caused or that might reasonably be expected to be caused to the environment;
4. The actions necessary or that may reasonably be expected to be necessary to prevent, change, mitigate or remedy the effects upon or the effects that might reasonably be expected upon the environment, by the undertaking, the alternative methods of carrying out the undertaking and the alternatives to the undertaking;
5. An evaluation of the advantages and disadvantages to the environment of the undertaking, the alternative methods of carrying out the undertaking and the alternatives to the undertaking; and
6. A description of any consultation about the undertaking by the proponent and the results of the consultation.

The completed Environmental Assessment Study is submitted to the Minister of the Environment for approval and the Minister subsequently refers the EA to the Ministry's Environmental Assessment and Approvals Branch to co-ordinate comments from all Provincial agencies relevant to the project and from stakeholders responding as a result of a public notice issued when the EA is submitted. This review is released for consideration by the Minister when making a decision on whether or not to approve the EA. The Minister may approve the EA in part or in whole, approve the EA with modifications, refer certain matters to mediation or a public hearing, or reject the EA.

In accordance with Regulation 616/98 (Deadlines), the timing of a decision from the Minister on a environmental assessment can range up to 8 months without the need for mediation or a public hearing, up to 1 year if mediation is required and longer if a public hearing is required (the Minister has the discretionary power to set deadlines where public hearings are required).

### **3.1.2 Related Policies and Practices of Approval Authority**

There are several Ministry of the Environment policies, guidelines and practices that are used by MOE staff when determining whether or not the EAA applies and that are also referenced when applying the EAA. In addition, there have been a number of precedent-setting decisions and court cases relative to the original EAA that was promulgated in the 1980's and subsequently modified in 1996 that have a bearing on how the EAA is to be followed today. This section discusses how these policies and practices may come to bear on an undertaking being contemplated by the Durham/York Residual Waste Study.

#### **A "Reasonable" Range of Alternatives for the EAA Approval Process**

The subject of a hearing before the Ontario Superior Court of Justice, Division Court, in 2003 was a judicial review of the then Minister of the Environment's approval of an EA Terms of Reference for a landfill undertaking and in particular, the identification of a "reasonable" range of "alternatives" in accordance with provisions of the modified (1996) Environmental Assessment Act. The subject landfill expansion proposal involved the Canadian Waste Services

(CWS) Richmond Landfill Site. The Superior Court's decision, issued on June 17th, 2003, essentially deemed that the Minister's approval of the Terms of Reference was based on an incorrect interpretation of the EAA in that the Environmental Assessment, as described, would not have entailed the consideration of a sufficiently comprehensive range of alternatives to be in compliance with the EAA.

From 1997 up to the court's decision (the "Sutcliffe Decision") many proponents had utilized Sections 6(2)(c) and 6.1(3) of the EAA, which were interpreted to facilitate a more focused consideration of alternatives to only those that address the specific needs and circumstances of the proponent. In the case of CWS, substantial focusing had been proposed in the Terms of Reference for the Study due to the company's limited ability to influence the diversion of waste from disposal and due to limitations that exist for the private sector with regards to alternative properties or locations.

The "Sutcliffe Decision" was a split decision among the three judges and was appealed. On August 25, 2004 the Court of Appeal for Ontario issued its decision, which allowed the appeal thus reinstating the CWS Terms of Reference. The Court's decision reinforces the Minister's capacity to approve an EA Terms of Reference based, essentially, on its specific merits provided that she/he has performed her/his duties in a reasonable manner and that the decision to approve the respective Terms of Reference addresses the Purpose of the EAA and the protection of the public interest. Possibly the most significant outcome of the Court of Appeal's decision is the affirmation that proponents must apply a standard of "reasonableness" when developing and undertaking an EA study and considering how to address the generic EA components provided in section 6.1 (2) of the EAA.

### **3.1.3 Public Consultation Requirements**

Under the Environmental Assessment Act, the proposed EA Terms of Reference must be prepared in consultation with the public and submitted to the MOE with a record of public consultation in order to be approved. The actual EA Study, when submitted to the MOE, must also have a description and results of any consultation about the project. Once the Environmental Assessment Study is submitted to the MOE, the Minister subsequently refers the EA to the Ministry's Environmental Assessment and Approvals Branch to coordinate comments from all relevant agencies and stakeholders.

#### **Public Hearing Requirements**

Section 9 of the EAA provides for the referral of an application under the EAA to the Province's Environmental Review Tribunal (ERT) for a decision or part of a decision. This stipulation applies to the EA study only and not to the EA Terms of Reference. In arriving at a decision, the ERT may consider the findings of a Mediator's Report, if mediation was sought to address an issue, or may hold a public hearing to consider issues. This referral is discretionary on the part of the Minister as is the setting of deadlines for the ERT report back on a decision. Generally, if a request is received for a public hearing, the matter will be referred to the ERT except where:

1. The Minister considers the request to be frivolous or vexatious;
2. The Minister considers a hearing to be unnecessary; or
3. The Minister considers that a hearing may cause undue delay in determining the application.

Any decision provided back to the Minister by the ERT may be varied, substituted or returned to the ERT for a new hearing by way of an Order-in-Council from Provincial Cabinet.

### 3.1.4 Applicability of EAA to the Durham/York Waste Study

The Durham/York Study could qualify as an undertaking that is considered significant in terms of scope and potential to impact the environment and subject to the Environmental Assessment Act. The Study, therefore, is being planned in accordance with the requirements of the EAA. A substantial proportion of the technologies/processes being considered in the subject Study of alternative residuals management systems will require approval under the Environmental Assessment Act.

Approval is typically required under the EAA when a proposed undertaking exceeds certain values, as identified in Ministry guidelines, for a waste disposal facility. The guidelines for municipal waste processing and incineration facilities, as contained in the Ministry of Environment document titled “Guide for Applying for Approval of Waste Disposal Sites” and dated November 1999, are as follows:

Incineration	Processing
>100 tonnes per day (tpd) (refers to quantity of waste being fed into a facility for processing).	>200 tpd (refers to total quantity of residuals resulting from processing that will require disposal as residual waste).

The projected quantities of residual waste available for processing through incineration will exceed the above-noted guideline for incineration provided it is determined that only one facility is to be implemented. The quantity of process residuals may exceed the guideline for other means of waste processing depending on the nature of the respective process. Accordingly, the need for an EEA approval is considered likely.

## 3.2 The Environmental Protection Act (EPA)

Unlike the EAA which considers a very broadly defined environment and which requires a planning/decision-making process which takes into account potential impacts on all aspects of the environment, the Environmental Protection Act (EPA), R.S.O. 1990, c. E.19 is more focused on the natural environment (i.e. air, land, water and biota) and the technical/scientific analysis of projects on a case by case basis with regards to environmental suitability.

There are two parts of the EPA with particular relevance to the establishment of a facility utilizing an alternative waste disposal technology currently being considered by Durham and York. These are:

- Part II that regulates emissions to the natural environment and, in particular, the air.
- Part V that regulates the establishment and operation of all waste management facilities in the Province.

To address the requirements of the EPA and to obtain the required approval instruments, supporting technical studies and design plans must be completed to a level of detail

demonstrating no “adverse effects” on the environment and to show that the applicable environmental standards and criteria will be met.

### 3.2.1 Approvals Requirements

#### Part II – Air & Noise Approvals

Section 9 of the EPA underlies the Province of Ontario’s Air & Noise approvals program and requires that a Certificate of Approval (Air and Noise) be obtained for the establishment of any operation that may emit a contaminant into the natural environment. To obtain a C of A (Air and Noise) detailed supporting documentation is required (similar to waste C of As) to be completed and provided as part of the application for a Certificate of Approval. Air approvals will be particularly important in the subject Study should a thermal processing alternative be identified as the preferred “Alternative To” the undertaking. There are two key requirements related to the receipt of a Certificate of Approval (Air) for a thermal processing facility:

- Compliance with limits based on dispersion modeling under Regulation 419/05 General Air Pollution (which comes into effect November 30, 2005, replacing Reg. 346); and
- Compliance with the requirements of MOE Guideline A-7 entitled, “Combustion and Air Pollution Control Requirements for New Municipal Waste Incinerators”, February 2004.

This latter of the two is the most recent set of air emission criteria set under the Environmental Protection Act for thermal processes.

Under Guideline A-7, limits are set on the concentrations of critical parameters in the source emissions (i.e., at the point of emission to the atmosphere or ‘end of the stack’) and are based on a combination of “Maximum Achievable Control Technology (MACT)” and “Lowest Achievable Emission Rate (LAER)” principles depending on the parameter.

Any new municipal residual waste thermal processing facility constructed and operated in Ontario must meet the A-7 requirements regarding minimum design and operating parameters, emission control systems, air emissions limits for particulate matter, acid gases, metals and dioxins/furans, and for the control, monitoring and performance testing of incineration systems.

The requirements of Guideline A-7 are in addition to those of the General Air Pollution Regulation 419/05 which sets limits on certain parameters at the point of impingement (i.e., normally the property line and any sensitive receptors) and that were developed solely to achieve the protection of the environment and human health (as opposed to MACT or LAER levels which in all cases are lower and more stringent).

In order to obtain a noise approval the facility must demonstrate compliance with the noise requirements, which are included in the MOE Noise Pollution Control (NPC) documents as follows:

- Publication NPC-205, “Sound Level limits for Stationary Sources in Class 1 & 2 Areas (Urban)”, October, 1995, as amended;
- Publication NPC-232, “Sound Level limits for Stationary Sources in Class 3 Areas (Rural)”, October, 1995, as amended.

Air approvals under Section 9 of the EPA will also be important in this study in regards to odours should a composting component (whether aerobic or anaerobic) be included in the preferred “Alternative to”. Regulation 419/05 sets standards for acceptable levels of airborne emissions (stack or fugitive), noise and odour. For composting facilities that would be filtering air through biofilters or other similar equipment or processes, from the compost facility prior to discharge to the environment, approval under Section 9 of the EPA is required.

### Application of Ontario Guideline A-7 – Combustion and Air Pollution Control Requirements for New Municipal Waste Incinerators

Guideline A-7 (updated February 2004) addresses the concentration of pollutants in emissions from thermal processing facilities. In brief, MOE staff currently apply the requirements of Guideline A-7, as applicable, to any combustion device that burns gases, liquids or solids generated by any thermal process used for the management of solid municipal waste. As such, the thermal process would be classified as an incineration process with regard to Ministry policy.








This would apply to virtually all thermal processes including new and emerging technologies such as plasma gasification. Once in operation, an incineration or non-incineration facility would be monitored for recyclable and hazardous waste quantities and continually assessed based on a 12 month-period running average. This monitoring would be part of the performance testing program to ensure compliance with applicable laws and provisions in the respective Certificate of Approval.

### Part V – Waste Management Approvals

Section 27 under Part V of the EPA requires that a Provisional Certificate of Approval be issued for the use, operation, establishment, alternation, or enlargement or extension of a waste management system or waste disposal site. This requirement applies to all waste management projects no matter its size or type. There are, however, differences in the form of required supporting documentation and the need for a public hearing under the EPA depending on the complexity of the project. The receipt of a Provisional C of A and approval under the Environmental Protection Act requires the submission of an application for a Certificate of Approval which may be required to be supported by studies, which in the case of an alternative residual waste management facility may include:

- a Noise Impact Assessment;
- an Air Quality Impact Assessment;
- a Natural Environment Impact Assessment;
- a Health Risk Assessment
- a Land Use Study; and



Environmental Protection Act	
	Air Quality Impact Assessment
	Health Risk Assessment
	Land Use Study
	Natural Environment Impact Assessment
	Noise Impact Assessment
	Hydrological/Hydrogeological Impact Assessment
	Visual Impact Assessment

- a Visual Impact Assessment.

Most of the studies and assessments completed in Ontario to address the EPA Part V approval requirements have related to landfill sites, transfer facilities and processing sites, all of which have generally well established requirements regarding level of detail and scope of work. However, there is currently limited precedent for the establishment of thermal processing facilities.

Supporting studies should address all of these information requirements and the results of these studies must be incorporated into the development of a design and operations report and maintenance plan that addresses potential adverse effects and provides monitoring programs, contingency plans, closure plans, etc.

If the above referenced application is approved by MOE, then a Provisional Certificate of Approval will be issued under the relevant sections of the EPA, and will contain conditions of approval that must be followed to operate the subject facility.

### 3.2.2 Public Consultation Requirements

Section 30 of the Environmental Protection Act requires that a public hearing be held where a project involves “final disposal” of waste equivalent to or greater than the quantity generated by a population of 1,500. The incineration and landfilling of waste is identified as “final disposal” under MOE Guideline C-1 entitled “Mandatory or Discretionary Hearings on Waste Disposal Sites”, April 1994. In all other cases, the need for a hearing is at the discretion of the Director in accordance with Section 32 of the EPA.

If a project does proceed in accordance with the discretionary hearing requirements of the EPA, the triggers for a hearing as per the Director’s discretionary power are typically<sup>1</sup>:

- The site is for the processing, storage or transfer of either liquid industrial wastes or hazardous wastes;
- The site is for the storage of waste over an extended period of time;
- A request, including reasons, is received from the council of the municipality in which the site is proposed to be located;
- A significant number of public requests are received;
- The proposed use of land is inconsistent with official plans or zoning by-laws;
- There is likely to be a significant off-site environmental impact;
- The site design or operation may require special evaluation; or
- Other unanticipated factors suggest a hearing may be necessary.

Ontario Regulation 206/97 under the Environmental Protection Act states that *A waste disposal site is exempt from Sections 30 and 32 of the Environmental Protection Act if it is or forms part*

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<sup>1</sup>MOE Guideline C-1, “Mandatory or Discretionary Hearings on Waste Disposal Sites, Environmental Protection Act, RSO 1990, Sections 30 to 32 and Ontario Regulation 347 as amended by Ontario Regulation 457/93”, April 1994

*of an undertaking that is subject to section 5 of the Environmental Assessment Act (i.e., project is proceeding in accordance with an Individual Environmental Assessment).*

### **3.3 The Ontario Water Resources Act (OWRA)**

The OWRA provides for the protection of Ontario's water resources considering impacts on the supply and flow of the surface and groundwater, and impacts resulting in the impairment of the resource. Once a preferred site(s) has been identified for implementation of the long-term waste disposal facility, a site-specific determination will be required to assess the need for obtaining OWRA approvals. If the facility is to discharge wastewater/leachate to a sewer, the quality and quantity of the discharge is controlled by applicable municipal sewer use by-laws, and the limitations/requirements of the receiving wastewater treatment facility.

#### **3.3.1 Approval Requirements**

Typically, approvals for waste management facilities under the OWRA involve the diversion of natural flows and drainage over a subject property and the management of storm water and sewage generated on the facility site either as a result of precipitation or activities resulting in the generation of sewage (e.g., grey water, sanitary sewage, etc.).

With regards to the diversion of overland flows, approval from the MOE Director is required under Section 52 of the OWRA and will require supporting studies and designs that demonstrate the protection of the water resource with regards to downstream users.

With regards to the management of storm water and sewage, approval from the MOE Director is required under Section 53 of the OWRA and will require supporting studies and designs that demonstrate no impairment on the receiving water resource.

#### **3.3.2 Applicability of the OWRA to the Durham/York Residual Waste Study**

The need for approvals under the OWRA for an alternative residual waste management system will depend on the location of the site and proposed on-site activities that may result in the discharge of wastewater/leachate to surface or groundwater sources.

### **3.4 The Environmental Bill of Rights (EBR)**

The Environmental Bill of Rights (EBR) gives the public the right to participate in environmentally significant decisions. For those activities subject to the EBR, the public must be given notice (through the Environmental Registry) of proposals for new policies, Acts, regulations and instruments (e.g. Provisional Certificate of Approval).

The EBR provides a mechanism to ensure the public has the opportunity to formally ask the government to review an existing policy, regulation or instrument, or to consider the need for a new policy, Act, regulation or instrument to protect the environment. This is accomplished by providing:

- The means by which residents may participate in the decision making process on environmentally significant issues;

- A means to increase the accountability of the Government of Ontario when making environmental related issues;
- A means to access the court system by residents; and
- Protection to any employees who take action in cases of environmental harm.

### 3.4.1 Approval Requirements

Any application for approval under the EPA or OWRA for an alternative disposal facility will need to demonstrate that the consultation requirements of the EBR have been addressed and will be posted on the Province's Environmental Registry for review by the public. The EBR does not apply to EAA applications as the EAA has its own legislated consultation requirements (i.e., S.5.1 Obligation to Consult – *When preparing proposed terms of reference and an environmental assessment, the proponent shall consult with such persons as may be interested.*

### 3.4.2 Application of the EBR

The EBR gives the public the right to participate in environmentally significant decisions. For those activities subject to the EBR, the public must be given notice (through the Environmental Registry) of proposals for new policies, Acts, regulations and instruments. For applications subject to the Environmental Bill of Rights requirement for public participation in the approval process, the Application Processor would place the EBR Proposal for the application on the Environmental Registry (ER) for a minimum 30-day public comment period. This ER notice to the public provides a summary of the proposal (application for approval), and identifies the locations where the complete application can be viewed and the end date of the public comment period. During this public comment period, the public is given the opportunity to review the application and submit comments on the proposal to the Environmental Assessment and Approvals Branch of the Ministry.

For applications subject to the public participation requirement under the EBR, the Waste Evaluator will consider, as part of the detailed technical review, any public comments received during the public comment period identified in the ER notice for the EBR Proposal.

## 3.5 The Planning Act

The Planning Act establishes the regulatory basis upon which land use planning in Ontario is undertaken. The province has delegated land use planning authority to the Regions and municipalities. The key mechanisms by which this authority is exercised include official plans, zoning by-laws, site plan control and the subdivision of land.

The Ontario Planning Act governs land use and development throughout the Province and requires that municipalities establish planning instruments such as official plans, zoning by-laws, site plan control by-laws, etc. to manage land use within their jurisdictions.

To control land use Province-wide, a set of Provincial Policy Statements have been developed and must be addressed when developing a municipal official plan, or any amendment thereof. The Minister of Municipal Affairs and Housing may declare a provincial interest and request an amendment to an Official Plan despite the delegation of authority to municipalities.

Additional discussion, concerning these municipal approval responsibilities and their applicability to the subject Study is provided in Section 4.0 of this report.

### **3.6 The Provincial Policy Statement 2005**

The Provincial Policy Statement (PPS) was issued under Section 3 of the Planning Act and came into effect on March 1, 2005. It replaced the PPS that was issued on May 22, 1996 and amended on February 1, 1997. The PPS provides policy direction on matters of provincial interest related to land use planning and development in Ontario. The Policy Statement, therefore, sets the policy foundation for the regulation of development and the use of land in the province. The PPS focuses on directing growth to settlement areas and away from significant and sensitive resources and areas which may pose a risk to public health and safety.

### **3.7 The Greenbelt Protection Act**

The Greenbelt Protection Act, 2003, provides the legislative context for the Greenbelt Plan, which was released in February 2005. The Plan defines the limits of and articulates policies for a “greenbelt area” within the Greater Golden Horseshoe of southern Ontario. The Plan identifies where urbanization should occur so as to protect agricultural lands and ecological features within the defined area. The Plan, in part, establishes a “Protected Countryside” designation that is intended to enhance the spatial extent of protected agricultural and ecological lands currently defined within the Oak Ridges Moraine Conservation Plan (ORMCP) and the Niagara Escarpment Plan (NEP) while establishing improved linkages between these two policy areas and the surrounding major lake systems and watersheds.

The provisions of this Plan will have to be taken into consideration in the evaluation of alternative sites for the preferred residual waste processing system(s) established by the subject EA Study.

### **3.8 The Oak Ridges Moraine Conservation Act**

The Oak Ridges Moraine (ORM) Conservation Act, 2001 establishes the regulatory basis for the Oak Ridges Moraine Conservation Plan. The purpose of this Plan is to provide direction to agencies, municipalities and other stakeholders regarding land use planning and resource management initiatives within the defined ORM area. The Plan divides the ORM area into four land use designations: “Natural Core Areas”, “Natural Linkage Areas”, “Countryside Areas” and “Settlement Areas”.

Municipal planning decisions are required to conform to the Plan, which takes precedence over municipal official plans. As a result, all affected municipal official plans are to be brought into conformity with the policies contained in the Plan.

### **3.9 Conservation Authorities Act**

The Conservation Authorities Act, 1990 establishes the regulatory basis for the administration of Conservation Authorities within the Province of Ontario. In accordance with Section 21 (1) of the Act, for the purposes of accomplishing its objectives, an authority has power, to study and investigate the watershed and to determine a program whereby the natural resources of the

watershed may be conserved, restored, developed and managed. To this end, Toronto and Region Conservation Authority (TRCA), for example, adopted the Valley and Stream, Corridor Management Program (1994)

In addition, in accordance with Section 28(1) of the Conservation Authorities Act, subject to the approval of the Minister of Natural Resources a Conservation Authority may make regulations applicable in the area under its jurisdiction restricting and regulating the use of water in or from rivers, streams, inland lakes, ponds, wetlands and natural or artificially constructed depressions in rivers or streams, prohibiting, regulating or requiring the permission of the Authority for straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering with a wetland; and prohibiting, regulation or requiring the permission of the authority for development if, in the opinion of the Authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development. To this end, conservation authorities have been given the ability to regulate development by way of Fill, Construction & Alteration to Waterways regulations under the Conservation Authorities Act.

### **3.10 Additional Land Use Planning Considerations**

In addition to the relevant legislation outlined in this document, the subject EA Study will be required to consider a variety of land use planning initiatives that have been undertaken by all three levels of government within the area of Durham and York.

Federal government planning initiatives include the proposed regional “reliever” airport in Pickering, roughly bounded by Highway 7 to the south, Durham Regional Road 5 to the north, the York/Durham municipal boundary to the west and Brock Road to the east. This initiative is being planned by the Greater Toronto Airports Authority and Transport Canada. Transport Canada and Public Works & Government Services Canada are also developing a Green Space Management Plan for an area abutting the north and west of the proposed airport (federal lands comprised of the Oak Ridges Moraine and Rouge Park Corridor).

The provincial government has assembled land in Durham since the early 1970’s for the purposes of the planned community of Seaton and for the preservation of agricultural land uses. This area is located immediately south of the proposed Pickering airport. Recently, some of these lands, controlled by the Ontario Realty Corporation, have been subject to planning review in consideration of transferring private interests in lands located in the Town of Richmond Hill with land in Seaton to develop residential land use in exchange for the preservation of portions of the Oak Ridges Moraine in York. This controversial land exchange has been under review for years and has not yet been settled.

Municipalities in Durham and York have been developing several planning studies relating to competing interests in the Regions. Recently, the Pickering Growth Management Study, which impacts both the provincial agricultural preserve and Seaton has come under considerable scrutiny by the community. These studies, and similar secondary and Master Planning exercises will be considered by the Project team in the completion of the subject EA Study.

### **3.11 Places to Grow Act**

The Places to Grow Act came into effect on June 13, 2005. The Places to Grow Act provides the legislative basis for a long-term plan (i.e., the “Growth Plan”) for urban growth in Ontario. This Growth Plan will facilitate decisions on urban planning to accommodate the projected growth of populations, while promoting economic sustainability. The efficient use of infrastructure and the development of compact sustainable communities are other long-term goals for the Growth Plan. The Growth Plan will be implemented in coordination with municipalities further to their responsibilities under the Planning Act and the Condominium Act. The Growth Plan also complements the Greenbelt Plan that was approved in February 2005 to protect the lands surrounding the Greater Golden Horseshoe.

## **4. Applicable Municipal Approvals Requirements**

The following sub-sections provide a summary description of how the land use planning tools available to the Regions and area municipalities will be applicable to the subject EA Study.

### **4.1 Durham and York Regions**

Both Durham and York have provincially approved Official Plans. Generally, both plans provide policy direction regarding issues of region-wide (inter-municipal) significance and of direct Regional responsibility. Amendments to the documents are required to accommodate certain types of land use development. More specifically, an amendment to Durham’s Official Plan would be required to establish new “waste disposal sites” in many land use designations. Of particular significance to the subject EA Study, an amendment to York’s Official Plan is required to establish a new processing facility that would receive waste from outside of the Region. York’s Official Plan also prohibits the development of waste facilities in the designated Greenlands System as well as Environmental and Agricultural Policy Areas. The policies and directives contained in both of the Regional Official Plans will be given close consideration in the completion of the subject EA Study.

### **4.2 The Area Municipalities within the Regional Jurisdictions**

Each of the municipalities within both Regions has an approved official plan that has been established to conform to the respective Regional Plan and provincial policy. The area municipalities are also directly responsible for the development, maintenance and application of Secondary Planning designations and policies, Zoning By Laws (zones and zoning provisions) Site Plan and Development planning approvals and construction permitting. The policies, provisions and development standards contained in each of these planning instruments will have to be taken into consideration, as required, in the “Alternative Methods” or facility siting component of the subject EA Study.

## **5. In Closing**

The Durham/York Residual Waste EA Study will be affected by federal, provincial and municipal policies and regulations related to both environmental compliance and land use planning and permitting. The legislation that is most directly applicable to and, in fact, has driven

the structure of the subject EA Study is the Ontario Environmental Assessment Act. This legislation, together with the more detailed, site development specific Environmental Protection Act establish, for the most part, the environmental approvals requirements and overall structure of the subject EA approvals process. In addition to these pieces of legislation, the subject EA Study will be required to closely consider and/or comply with federal environmental policies and provisions, provincial land use and resource management policies, Regional planning policies and area municipal land use planning policies, provisions and construction permitting requirements