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the Region of Durham and all public
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York.

This Review is subject to the provisions of Ontario Regulation 616/98 which sets out a deadline for the completion of this document. The deadline for the completion of the Review was February 19, 2010. This paragraph and the giving of the Notice of Completion are the notices required by subsection 7(3) of the *Environmental Assessment Act*. The Review documents the ministry's evaluation of the amended EA and takes the comments of the government agencies, the public and Aboriginal communities into consideration.

Cette publication hautement spécialisée n'est disponible qu'en anglais en vertu du règlement 441/97, qui en exempte l'application de la Loi sur les services en français. Pour obtenir de l'aide en français, veuillez communiquer avec le ministère de l'Environnement au 1-800-461-6290.

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Executive Summary

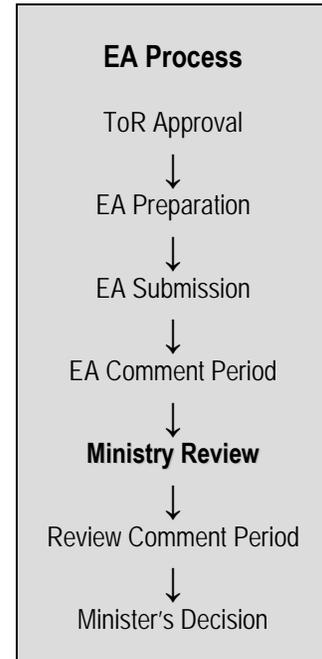
WHO	The Regional Municipalities of Durham and York.
WHAT	Ministry Review of the Amended Environmental Assessment (EA) for the proposed undertaking which includes the construction and operation of a Thermal Treatment Waste Management Facility capable of processing up to 140,000 tonnes of residual municipal solid waste (the waste remaining after diversion) annually. The facility will include an electrical power generating system which will produce electricity for in-house use and delivery to the municipal grid.
WHEN	Original EA Submitted: July 31, 2009. Amended EA submitted: November 27, 2009 Addendum to amended EA submitted: December 21, 2009 Ministry Review comment period: February 26, 2010 – April 2, 2010.
WHERE	The proposed thermal treatment facility is to be located south of Highway 401 on the west side of Osborne Road and north of the CN Rail corridor in the Municipality of Clarington.
WHY	The undertaking is intended to provide the Regions of Durham and York with a long term sustainable solution to manage the solid waste remaining after diversion (reuse, reduction, recycling and composting) and to minimize the amount of waste requiring landfill disposal.
CONCLUSIONS	The ministry Review has concluded that the EA has been prepared in accordance with the approved Terms of Reference and the <i>Environmental Assessment Act</i> . The proposed thermal treatment facility will benefit the communities in the Regional Municipalities of Durham and York. The ministry is satisfied that the proposed mitigation methods and contingencies will ensure that any potential negative impacts will be minimized and managed.

1. Environmental Assessment Process

Environmental Assessment (EA) is a proponent led planning process designed to incorporate the consideration of the environment into decision making by assessing the potential effects of an undertaking on the environment. In Ontario, the *Environmental Assessment Act* (EAA) sets out the general contents for the preparation of an EA, as well as the ministry's evaluation process. For those proponents and undertakings subject to the EAA, approval under the EAA is required before the undertaking can proceed.

Proponents address a wide range of potential effects on the natural, social, cultural and economic environments to ensure the protection, conservation and wise management of the potential environment. An EA determines, on the basis of the environmental effects, if an undertaking should proceed, and if so, how potential environmental effects can be managed.

An EA may identify a problem or opportunity, consider alternative ways of addressing the problem or opportunity, evaluate the potential environmental effects of the alternatives and select a preferred undertaking from the alternatives. The EA must also consider actions to avoid, reduce and mitigate potential environmental effects. In preparing the EA, the proponent will complete various studies and consult with interested stakeholders, including government agencies, the public and potentially affected Aboriginal communities, to evaluate the alternatives and determine the preferred undertaking. Once the undertaking is approved, the proponent is required to carry out monitoring in order to demonstrate compliance with standards, regulations and conditions of EAA approval.



1.1 Terms of Reference

The first step in the application for approval to proceed with an undertaking under the EAA is the submission of a Terms of Reference (ToR) to the Ministry of the Environment (ministry) for approval. An approved ToR becomes the framework for the preparation of an EA.

On December 31, 2005 the Regional Municipalities of Durham and York (Regions) submitted the Durham and York Residual Waste Disposal Planning Study ToR to the ministry for approval. The ToR stated that the EA would be prepared in accordance with Section 6(2)(a) of the EAA. The ToR established the rationale for identifying a long term sustainable solution to manage the Regions' municipal solid waste (MSW) remaining after diversion (reuse, reduction, recycling and composting) and to minimize the amount

of waste requiring landfill disposal. The ToR described how the Regions would assess alternatives, assess potential environmental effects and consult with the interested persons during the preparation of the EA.

The ToR was made available for a thirty day public and government agency comment period which ended on February 6, 2006. During this time all interested persons, government agencies and Aboriginal communities could review and provide comments about the proposed ToR to the ministry for consideration.

The Minister approved the Durham and York Residual Waste Disposal Planning Study ToR on March 31, 2006.

1.2 Environmental Assessment

The application for approval to proceed with an undertaking under the EAA is completed with the submission of an EA to the Minister of the Environment (Minister) for review and a decision. The EA must be prepared in accordance with the approved ToR. The Regions submitted the Durham and York Residual Waste Study EA to the ministry on July 31, 2009. The EA seeks approval to construct and operate a thermal treatment facility in the Municipality of Clarington. The facility, if approved, would receive and process up to 140,000 tonnes of residual MSW annually.

The EA was made available for a seven week public and government agency comment period which ended on September 25, 2009. During this time all interested persons, government agencies and Aboriginal communities could review and provide comments on the EA. The EA was also circulated to a Government Review Team (GRT) made up of federal, provincial and local government agencies. The GRT reviewed the EA to ensure that the information and conclusions in the EA were valid, based on their agencies' mandates.

All comments received by the ministry during the initial comment period on the original EA (July 2009) were forwarded to the Regions for a response. Summaries of the comments received during the initial comment period on the original EA (July 2009), along with the Regions' responses can be found in Tables 1 to 3 of this ministry Review (Review).

On November 27, 2009, the Regions formally submitted an amended EA for a thermal treatment waste management facility to the ministry for review and a decision. Additional information clarifying and addressing the concerns raised during the initial EA comment period was added to the original EA (July 2009) by way of the amendment.

The amended EA (November 2009) was circulated to the GRT for comment and to ensure that the concerns raised were addressed. The amended EA (November 2009) was made available for a three week GRT comment period which ended on December 18, 2009. The Regions also provided written notice to all persons, Aboriginal communities

and government agencies who participated during the EA process to inform all participants about the submission of the amended EA, where the amended EA could be viewed, and the next steps in the EA process.

All comments received by the ministry during the comment period on the amended EA (November 2009) were forwarded to the Regions for a response. Summaries of all comments received during the comment period on the amended EA (November 2009), along with the Regions' responses can be found in Table 1 of this Review. Copies of the submissions are also available in Appendix B of this Review.

All comments received by the ministry will be considered by the Minister before a decision is made about the proposed undertaking. Summaries of the comments received during the original EA (July 2009) public and government agency comment period and amended EA (November 2009) GRT review period, along with the Regions' responses, are included in Tables 1 to 3 of this Review.

The Regions' letters seeking approval to postpone the Review and amend the original EA (July 2009), including the ministry's responses, are included in Appendix C.

1.3 Ministry Review

Section 7 of the EAA requires that the ministry prepare a review of the EA currently before the Minister for a decision, known simply as the Review. The Review is the ministry's evaluation of the EA. The purpose of the Review is to determine if the EA has been prepared in accordance with the approved ToR and the requirements of the EAA. The ministry Review determines whether the EA provides sufficient information to allow the Minister to make a decision about a proposed undertaking.

This Review has been prepared for the Durham and York Residual Waste Study Amended EA submitted to the ministry for review and a decision on November 27, 2009 and the Addendum to Section 9.2 of the Amended EA submitted to the ministry on December 21, 2009. The Review outlines whether the information contained in the amended EA, which includes the addendum to section 9.2, supports the recommendations and conclusions for the selection of the proposed undertaking. Ministry staff, with input from the GRT, evaluate the technical merits of the proposed undertaking, including the anticipated environmental effects and the proposed mitigation measures. The Review also provides an overview and analysis of the public, government agency and Aboriginal community comments on the original EA (July 2009), the amended EA (November 2009), the addendum to section 9.2 of the amended EA (December 2009) and the proposed undertaking.

A Notice of Completion of this Review will be published in a number of locally and regionally distributed newspapers. The Notice will identify that the Review has been completed and will be available for a five-week comment period, from February 26, 2010 to April 2, 2010. Copies of this Review will also be placed in the same public record

locations where the original EA (July 2009) was available, and copies will be distributed to the GRT members and potentially affected or interested Aboriginal communities. Those members of the public who participated during the EA process will be notified of the comment period on the Review and have been provided direction on how and where to obtain a copy of this Review.

The comment period for this Review allows the GRT, the public and Aboriginal communities to see how their concerns with the original EA (July 2009), the amended EA (November 2009), the addendum to section 9.2 of the amended EA (December 2009) and the proposed undertaking have been considered. During the Review comment period, anyone can submit comments on the amended EA (November 2009), section 9.2 of the amended EA (December 2009), the undertaking and the Review. In addition, anyone can request that the Minister refer the amended EA (November 2009), which includes the addendum to section 9.2, or any particular matter relating to the amended EA (November 2009), to the Environmental Review Tribunal for a hearing if they believe that there are significant outstanding environmental effects that the amended EA (November 2009) has not addressed. A request for a hearing can only be made during the Review comment period. The Minister will consider all requests and determine if a hearing is necessary.

The Minister considers the conclusion of the Review when making a decision. The Review itself is not the EA decision-making mechanism. The Minister's decision will be made following the end of the five-week Review comment period and is subject to the approval of the Lieutenant Governor in Council.

2. The Proposed Undertaking

The Regions are seeking approval to construct and operate a thermal treatment waste management facility as described in the Durham and York Residual Waste Study Amended EA submitted to the ministry on November 27, 2009 for review and a decision. The facility is intended to provide the Regions with a long term sustainable solution to manage the MSW remaining after diversion (reuse, reduction, recycling and composting) and to minimize the amount of waste requiring landfill disposal.

Prior to the commencement of the Durham and York Residual Waste Study EA process, the Regions' waste management strategy involved the export of residual MSW to the State of Michigan, United States of America (USA), for disposal. Due to the inability of the Regions to develop long term local disposal capacity to manage their waste, they entered into contracts with the private sector to secure disposal capacity outside their respective jurisdictions. During this time the USA government initiated a process of passing legislation that, if successful, would see the Michigan border closed to MSW from Canada. As a result, the Regions would no longer have sufficient waste disposal capacity. The Regions therefore initiated the EA process to establish a new long term sustainable and local waste disposal solution to jointly manage the post diversion residual MSW each jurisdiction generates for the next 35 years.

The proposed facility will process up to 140,000 tonnes of post diversion residual MSW annually; however, over the 35 year planning period the maximum capacity of the facility could be increased up to 400,000 tonnes per year. Any expansion of the facility beyond the proposed 140,000 tonnes per year capacity will be considered to be a new undertaking. Any future expansion of the facility will be subject to the applicable approval requirements under the EAA and any associated regulations.

The proposed facility is to be located south of Highway 401 on the west side of Osborne Road and north of the CN Rail corridor in the Municipality of Clarington (Figure 1). The recommended site is approximately 12.1 hectares, owned by the Regional Municipality of Durham and designated as an employment area by the Durham Official Plan. The recommended site is surrounded to the north by commercial properties, to the east and west by undeveloped land and lands used for agricultural purposes, and to the south by the Courtice Water Pollution Control Plant. The Darlington Nuclear Generating Station is located 1.8 kilometres (km) to the east. There are two residences within one km of the site, with the closest 650 metres away.

The proposed facility includes two independent waste processing lines, capable of managing up to 218 tonnes of residual MSW per day and up to 70,000 tonnes of residual MSW per year. Each line will consist of a feed chute, stoker, boiler combustion furnace, acid gas scrubber, fabric baghouse and an associated ash and residual collection system (Figure 2). Steam produced by the boilers will drive an electrical generating system to produce up to 20 megawatts (MW) electricity for use within the facility and the local electricity grid.

Residual MSW will be delivered to the facility in trucks, with capacities of up to 92 cubic metres. It is anticipated that truck traffic will utilize Highway 401 and either South Service Road or Osborne Road to access the facility. Although the facility is expected to operate 24 hours a day, seven days a week, trucks will be expected to enter and leave the facility during regular working hours, Monday through Saturday.

Upon entering the site, each truck will pass through a scale house where it will be weighed to maintain an accurate record of all waste delivered to the facility and all residues and recovered materials. In addition, the scale house will have sensors for medical and other unacceptable volatile wastes. If unacceptable or hazardous wastes are detected, the truck will not be permitted to discharge its load and will be directed to leave the site.

After being weighed, incoming trucks will proceed directly to the tipping building entrance. Once inside the tipping building, trucks will discharge their loads directly into the refuse pit where waste will be mixed and transferred to the hoppers which feed each of the waste processing lines.

Each processing line will begin with waste being fed from the hoppers to the stoker grates. Combustion will be initiated with a small fire that will quickly spread across the grate. Air will be drawn from the tipping floor and refuse pit area and directed to the waste layer through specially designed air slots in the grate. This will ensure that consistent air distribution and proper combustion. The resulting negative pressure inside the tipping area will also create a constant air change and prevent the escape of odours.

Bottom ash will be cooled in a quench bath and the wet bottom ash fed into a draining and drying chute. The chute will ensure that any excess water from the bottom ash will drain back into the quench bath. The bottom ash will then be screened to remove any large materials, ferrous metals and non-ferrous metals. Following appropriate testing to determine if the material is hazardous or not, as defined and regulated by the Province of Ontario, the bottom ash will then be transported off site to a landfill facility licensed to receive the material. Fly ash is to be collected and managed separately from bottom ash.

The boiler will be designed and operated to minimize pollutants such as Carbon Monoxide (CO) and hydrocarbons. The products of combustion (flue gases) will be treated by an air pollution control system. The air pollution control system will consist of the following series of equipment and processes:

- A Nitrogen Oxides (NO_x) Control System
- An Activated Carbon Injection System (mercury, dioxin and furan control)
- An Acid Gas Scrubber (acid gas control)
- A High Efficiency Fabric Filter Baghouse (particulate control)

One air pollution control system will be installed for each line in the facility. In addition to the above mentioned air pollution control system, the facility will be also designed and operated to include the following initiatives:

- *Air Emission Standards* – the air emissions standards that will govern the facility are to be the lower of Ontario Guideline A-7 “Combustion and Air Pollution Control Requirements for New Municipal Waste Incinerators” (February 2007) limits and the European Union Standards for the Incineration Exhaust.
- *Air Emission Monitoring* – the facility will be equipped with a continuous dioxin sampling system to assess the dioxin emissions from the facility monthly.
- *Stormwater Discharge* – the facility and stormwater management works will be designed to ensure water being discharged from the site will meet the highest water quality standard for storm water.
- *Process Water Discharge* – the facility will be designed for zero process water discharge to allow for recirculation of water within the system and limit the potential impact to water resources.
- *Environmental Management* – the facility will be consistent with the International Standards Organization 14001:2004 Environmental Management Standards.

A fly ash handling system will collect the fly ash from the air pollution control system. Fly ash will be collected mixed with Portland cement, cement extender and water to bind the ash together. In Ontario, fly ash is designated as hazardous and after the fly ash has been bound together it will be loaded into trucks and shipped off site to a licensed landfill facility, as defined and regulated by the Province of Ontario.

If EAA approval is granted, the thermal treatment waste management facility will be constructed and operated in accordance with the terms and provisions outlined in the amended EA; any conditions of approval; and, will include the details outlined above. In addition, the Regions must still obtain all other legislative approvals it may require for the undertaking.

Figure 1:
Thermal Treatment Waste Management Facility Location
Clarington 01

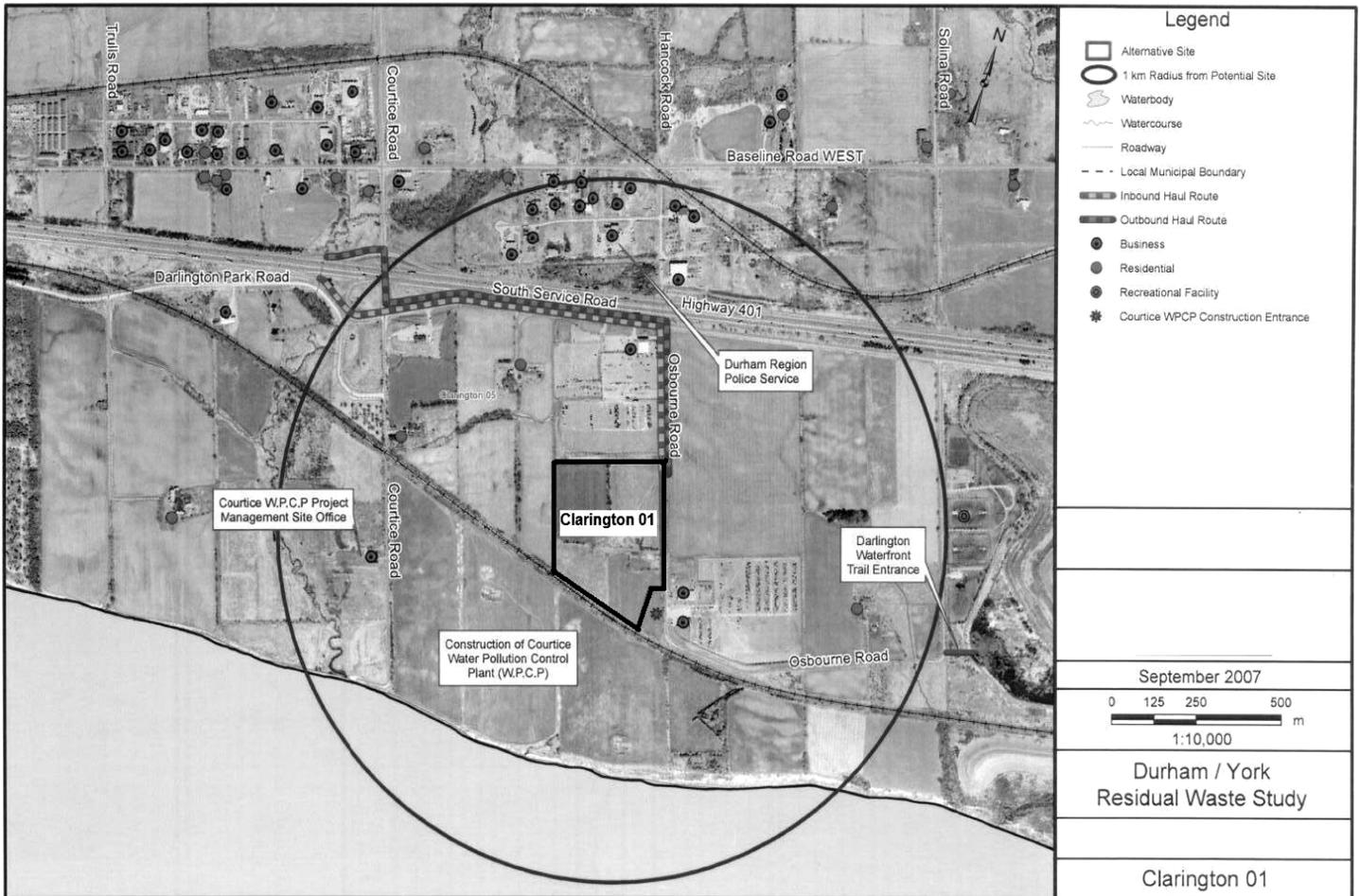
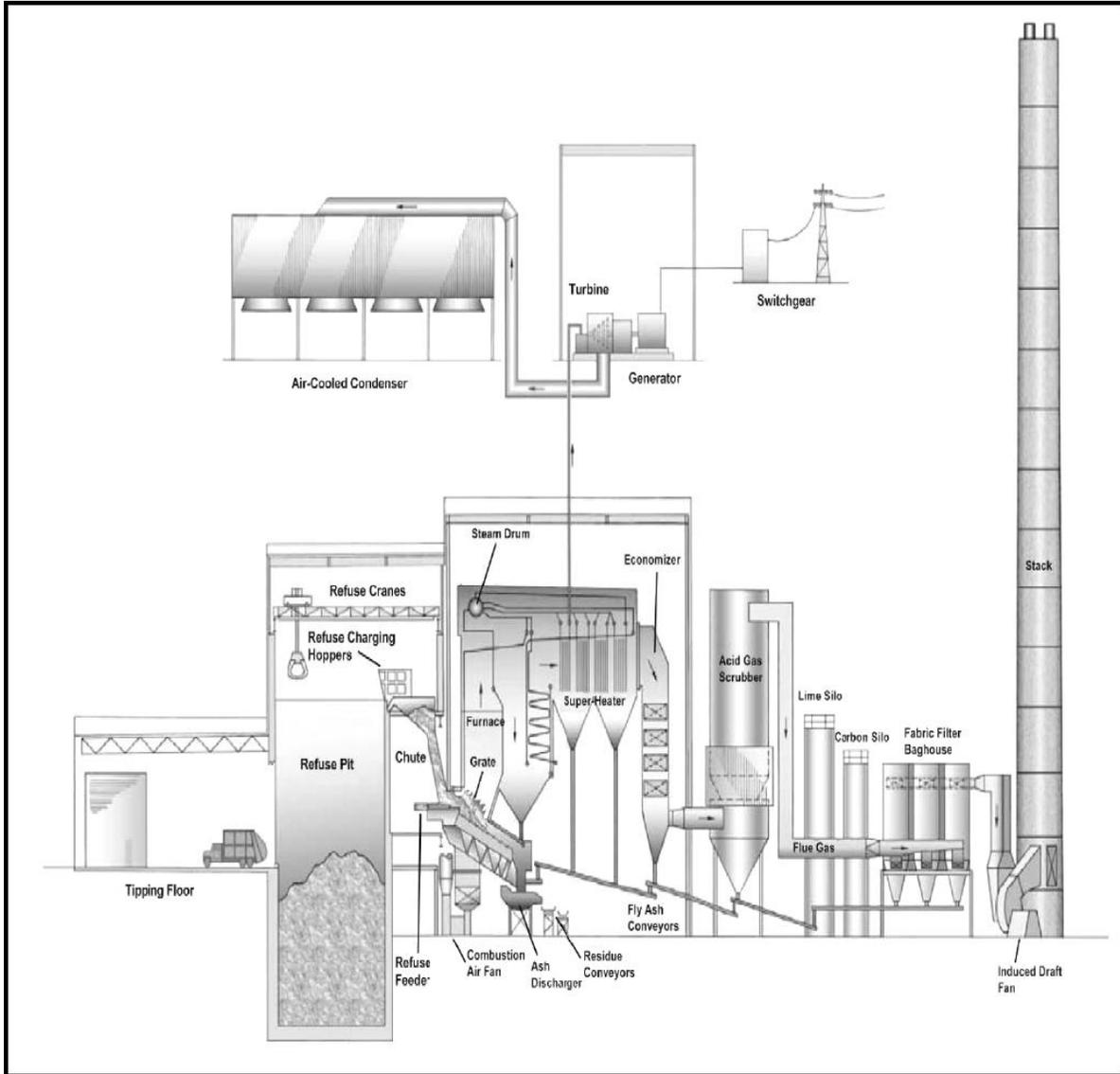


Figure 2:
Conceptual Facility Process Flow



3. Results of the Ministry Review

The Review provides the analysis of the EA. The Review is not intended to summarize the EA, nor present the information found in the EA. For information on the decision making process, refer to the EA itself. The EA and supporting documentation outlines the EA planning process and demonstrates how the proponent selected the preferred undertaking and made the final decision.

The purpose of the Ministry Review is to determine whether:

- The EA has met the requirements of the ToR and the EAA.
- There are any outstanding issues with the EA.
- The proposed undertaking has technical merit.

This Review was prepared for the Durham and York Residual Waste Study Amended EA submitted to the ministry on November 27, 2009 and the Addendum to Section 9.2 of the Amended EA submitted to the ministry on December 21, 2009. The amended EA (November 2009) is comprised of the original EA (July 2009) and all additional information clarifying and addressing the concerns raised during the initial comment period on the original EA (July 2009) made by way of the amendment and addendum.

3.1 Compliance with ToR and EAA

3.1.1 Ministry Analysis

The ministry has concluded that the amended EA (November 2009) followed the framework set out in the approved ToR and addresses each of the commitments set forth in the ToR. The ministry has also concluded the required components of the EAA have been met.

Must Haves in the EA:

- The EA must be prepared in accordance with the approved ToR.
- EA must include all the basic EAA information requirements.
- EA demonstrates where all the additional commitments in the ToR were met, including studies and the consultation process.

Appendix A of this Review summarizes the ministry's analysis of the amended EA (November 2009) and how the requirements of the approved ToR and EAA have been addressed.

3.1.2 Consultation

One of the key requirements of the EA process is consultation with interested persons. Consultation is a legal requirement of the EAA and is completed during the preparation of the EA. Consultation is the responsibility of the proponent and must be undertaken prior to the submission of the EA and completed in accordance with the consultation plan outlined in the approved ToR. Proponents are required to involve all interested persons as early as possible in the EA planning process to ensure that their concerns can be identified and considered before irreversible decisions and commitments are made during the planning process. The results of the consultation must be documented at the end of the planning process.

Section 5.1 of the EAA states:

"When preparing proposed terms of reference and an environmental assessment, the proponent shall consult with such persons as may be interested."

As part of the consultation plan developed by the Regions, consultation was undertaken with all government agencies, Aboriginal communities, and members of the public who may be affected or have an interest in the EA process.

Notification and dissemination of information was undertaken through newspaper, radio and TV advertising, a mailing list, and an EA website (www.durhamyorkwaste.ca) maintained throughout the EA process. Consultation included public polling, consultation events such as public information centres, and opportunities for delegations at Regional Committee and Council meetings. Consultation was also undertaken through the development of public liaison committees, such as the Joint Waste Management Group and the Site Liaison Committee. Although opportunities for public input were available throughout the EA process, consultation events typically took place at major EA milestones.

The ministry is satisfied with the level of consultation that occurred during the EA process. The ministry is also satisfied that the level of consultation was appropriate for the proposed undertaking for which EA approval is being sought. The amended EA (November 2009) clearly documents the consultation methods utilized by the Region to engage the GRT, the general public, stakeholders and Aboriginal communities during the EA process.

Upon the submission of the original EA (July 2009) to the ministry for review and a decision, the ministry undertook additional consultation with interested persons during the initial comment period on the original EA (July 2009). The GRT, Aboriginal communities and interested members of the public were provided with an opportunity to review the original EA (July 2009) and to submit comments to the ministry on whether the requirements of the ToR had been met, on the original EA (July 2009) itself and on the proposed undertaking. All comments received by the ministry during the initial comment period on the original EA (July 2009) were forwarded to the Regions for a response. Summaries of the all comments received during the initial comment period on the original EA (July 2009), along with the Regions' responses are included in Tables 1 to 3 of this Review.

Government Review Team

Various government agencies were consulted by the Regions during the EA process. The GRT was established early in the EA process and consisted of different levels of government (i.e., federal, provincial, regional, and municipal), and other municipal agencies. A list of GRT members, their affiliation, and departments can be found in the EA Record of Consultation.

The Regions' consultation plan ensured that opportunities for the GRT were provided to seek input and identify issues at each specific milestone of the EA process. The GRT

was also consulted throughout the EA planning process to gather expert opinions on the reports and studies prepared during the EA process.

In addition, the Regions coordinated a series of EA process workshops with members of the GRT during the preparation of the EA. The first workshop was held in September 2006 to review the evaluation methodology and evaluation criteria for the assessment of EA alternatives. The purpose of the first workshop was to present a draft of the “front-end” of the original EA (July 2009) document, up to and including the identification of the preferred waste management system and recommended preferred site. The second workshop, comprised of two sessions, was held in April and May 2009. During the workshop a draft of the entire original EA (July 2009) document was presented to members of the GRT for review and comment.

Consultation with the GRT allowed the Regions to seek input and identify issues covering a wide spectrum of expertise for input into the EA planning process. The comments that were received in response to consultation with the GRT and in regard to the draft EA were considered by the Regions and incorporated into the final version of the original EA (July 2009) as necessary.

Upon the submission of the original EA (July 2009) to the ministry for review and a decision, the GRT was provided with an opportunity to review the original EA (July 2009) and to submit comments to the ministry. All comments received by the ministry from the GRT during the initial comment period on the original EA (July 2009) were forwarded to the Regions for a response. Summaries of the comments received, along with the Regions’ responses are included in Table 1 of this Review. Copies of the submissions can also be found in Appendix B of this Review.

The GRT consultation process has been documented in the amended EA Record of Consultation, which provides a summary of the issues and concerns raised during the consultation process.

Public Consultation

Consultation with interested members of the public was a key component of the Regions’ consultation plan. The public, which includes the general public, communities, interest groups and property owners, were provided with several opportunities to participate in the EA process and to provide input. Public participation in the EA process was achieved in a variety of ways.

The majority of public consultation took place through public information sessions held in various municipalities within the EA study area. The public information sessions included both formal and informal presentations by the Regions that focused on aspects of the EA background, scope of the EA and activities associated with each milestone in the EA process. Representatives from the Region’s Waste Management Services Department together with members of the Regions’ consultant team attended each of the

sessions to answer questions and provide attendees an opportunity to obtain additional information.

To effectively provide information to the public on the EA process and opportunities for consultation, the Regions developed a communications strategy. Each municipality within the EA study area was provided with information on public information sessions, workshops and drop-in centres through the following activities:

- Public advisories;
- Notices;
- News releases;
- Advertisements in major and local newspapers (including non-English publications);
- Advertisements on local radio stations prior to each community event;
- Public service announcements;
- Notifications via bus ads and ads in local movie theatres; and,
- Updates on the EA project website.

Public consultation was also undertaken through the establishment of a Joint Waste Management Group and a Site Liaison Committee that were made up of officials from both Regions and members of the public. The Joint Waste Management Group was formed very early in the EA process to provide advice and recommendations to the Regions. Once a recommended preferred site for the undertaking had been identified, a Site Liaison Committee was created to provide information to the public and feedback to Regions. Meetings of both committees were open to all residents and were advertised in newspapers well in advance of the meetings. The Joint Waste Management Group and a Site Liaison Committee allowed the Regions to gather feedback from a broad range of public interests across the communities within the EA study area in the preparation of the EA. Agendas, minutes and relevant presentations have been posted on the EA project website.

Interested members of the public were also provided with an opportunity to make delegations outside of the formal public consultation process at any time during the EA process. A number of delegations were received at Regional Councils and Committees. Copies of all delegations and presentations were made public, with copies circulated to Council and committee members, and posted on the respective Regional websites with minutes and agendas.

Over the course of the EA process, a contact list of those individuals and groups expressing interest in the EA was compiled and updated as the EA process proceeded. Interested members of the public were added to the list throughout the EA process. The list provided an ongoing means for the Regions to update the public on the EA process and to request comments. The current contact list is included as part of the Consultation Record and forms part of the EA.

Consultation with interested members of the public allowed the Regions to gather information covering a wide spectrum of interests for input into the EA planning process. The comments that were received in response to consultation with the public were considered by the Regions during the preparation of the original EA (July 2009) and the amended EA (November 2009).

Upon the submission of the original EA (July 2009) to the ministry for review and a decision, interested members of the public were provided with an opportunity to review the original EA (July 2009) and to submit comments to the ministry on whether the requirements of the ToR had been met, on the original EA (July 2009) itself and on the proposed undertaking. All comments received by the ministry from interested members of the public during the initial comment period on the original EA (July 2009) were forwarded to the Regions for a response. Summaries of the comments received, along with the Regions' responses are included in Table 2 of this Review.

Aboriginal Community Consultation

In addition to the EAA requirements that interested persons be consulted, the Crown and proponents must turn their minds to consultation with Aboriginal communities who may have aboriginal or treaty rights that could be affected by the proposed undertaking. This is because it is well established in law that the Crown has a duty to consult Aboriginal communities where it is contemplating action that may adversely affect established or asserted aboriginal or treaty rights.

During the preparation of the EA, the Regions contacted both the Ministry of Aboriginal Affairs (MAA) and Indian and Northern Affairs Canada (INAC). The Regions continued the consultation process with those Aboriginal communities consulted on the TOR during the development of the EA, including:

- Chippewas of Georgina Island First Nation
- Chippewas of Mnjikaning First Nation
- Mississaugas of Scugog Island First Nation
- Batchewana First Nation
- Chippewas of Beausoleil First Nation
- Caldwell First Nation
- Curve Lake First Nation
- Delaware First Nation (Moravian of the Thames)
- Mississauga of the New Credit First Nation
- Alderville First Nation
- Mohawks of the Bay of Quinte
- Hiawatha First Nation

Aboriginal rights stem from practices, customs or traditions which are integral to the distinctive culture of the Aboriginal community claiming the right.

Treaty rights stem from the signing of treaties by Aboriginal peoples with the Crown.

Aboriginal rights and treaty rights are protected by section 35 of the Constitution Act, 1982.

- Huron-Wendat Nation
- Oneida Nation of the Thames
- Six Nations of the Grand River
- Wahta Mohawks

The Regions also contacted:

- Anishinabek Nation/Union of Ontario Indians
- Association of Iroquois and Allied Indians
- Métis Nation of Ontario (MNO)

Each of the above identified Aboriginal communities and organizations, were invited to participate at each consultation point in the EA process. The Regions provided the Aboriginal communities and organizations with all relevant EA materials, including draft reports, invitations to workshops, and invitations to participate in the review of the various draft EA reports. In addition, those Aboriginal communities and organizations with a potential interest in the undertaking were invited to participate in an information session specifically for the Aboriginal communities and organizations. The information session was held prior to the public information centres on May 12 and 19, 2009. A summary of the Regions' consultation process with Aboriginal communities and organizations can be found in the EA Record of Consultation. To date, no concerns were raised by the Aboriginal communities and organizations that were contacted by the Regions.

In addition, the above noted Aboriginal communities and organizations were provided with a copy of the EA documentation by this ministry. Please see Table 3 of this Review for a summary of the comments received from Aboriginal communities and organizations, and the Regions' responses to those comments.

3.1.3 Conclusion

The EAA requires that a proponent consult with interested persons during the preparation of an EA and report on the results of those consultations. Overall, the Regions have followed the consultation plan as set forth in the requirements of the approved ToR. The Regions have also provided sufficient opportunities for the public, the GRT and Aboriginal communities to participate and provide input during the preparation of the EA. The EA clearly documents the consultation methods utilized by the Regions to engage these groups during the EA process, and the EA clearly sets out the issues and concerns raised and how they were addressed.

The ministry is satisfied that the amended EA (November 2009) clearly documents the consultation methods used by the Regions to engage the public, the GRT and Aboriginal communities during the preparation of the original EA (July 2009). The ministry is also satisfied that the amendments to the original EA (July 2009) demonstrate how input from

the public and the GRT assisted in the generation, evaluation and refinement of the amended EA (November 2009).

3.2 EA Process

An EA is a planning process that requires a proponent to identify an existing problem or opportunity, consider alternative ways of addressing the problem or opportunity and evaluate the potential environmental effects of these alternatives. The conclusion of the planning process is the identification of a preferred alternative that will best address the existing problem or opportunity and therefore become the undertaking for which EA approval is sought.

The Durham and York Residual Waste Study EA process commenced following the approval of the ToR on March 31, 2006. The EA was undertaken in accordance with the approved ToR, which defined the framework for the EA. The purpose of the EA was to establish a long term sustainable and local waste disposal solution to manage the post diversion residual MSW generated by the Regions for the next 35 years.

The following is a brief summary of the EA process for the Durham and York Residual Waste Study Amended EA submitted to the ministry on November 27, 2009.

Alternatives To

At the start of the EA process, the Regions initiated an evaluation and assessment of ‘alternatives to’ the problem identified in the EA. These ‘alternatives to’ were developed within the context of identifying a specific waste management system rather than individual waste management components or technologies. A competitive municipal procurement process would be undertaken during the evaluation and comparison of ‘alternative methods’ and used to identify and engage technology vendors to determine the preferred waste management system technology.

Waste management system alternatives were developed based on a combination of at-source diversion assumptions, reasonable alternatives for the treatment of the residual MSW, and landfill disposal of materials that remain after treatment. A landfill-only option was not considered as set forth in the approved ToR, although it was recognized that each of the proposed alternatives would require landfill disposal capacity for process residues. Only those systems capable of managing the residual MSW remaining after at-source diversion were developed and evaluated. The waste management systems carried forward for evaluation and assessment included:

- Mechanical Treatment Systems (physical processes);
- Biological Treatment Systems (the use of microorganisms); and,
- Thermal Treatment Systems (combustion, gasification, pyrolysis)

Each 'alternative to' under consideration was subjected to an evaluation process to determine its applicability and suitability to the purpose of the undertaking as outlined in section 7 of the amended EA (November 2009). A seven step waste management system evaluation process was applied to formulate and then comparatively evaluate the 'alternatives to'. The preferred 'alternative to' would exhibit the preferred balance of advantages and disadvantages based on the priorities of the waste management system evaluation methodology.

The three waste management systems were evaluated to assess their potential to address the purpose of the undertaking and to identify their potential environmental effects. Each of the potential environmental effects identified was considered with respect to the availability of mitigation measures. The result was the identification of each waste management system's 'net effects'.

The 'net effects' associated with each waste management system were then compared and a list of relative advantages and disadvantages associated with each waste management system was developed. The preferred waste management system was the system that offered the preferred balance of advantages and disadvantages.

The seven step evaluation process of 'alternatives to' found that the preferred waste management system was thermal treatment. More specifically, the preferred 'alternatives to' included:

- The establishment of a thermal treatment waste management facility with capacity to process the Regions' residual waste stream and to recover energy;
- The removal of materials that may be sold to market from the ash/char residue; and,
- The landfilling of any remaining process residues (bottom and fly ash).

The ministry is satisfied that the Regions have followed a logical and transparent decision-making process which has been clearly outlined in the EA. A study area for the EA was established to provide geographical and temporal context for the evaluation of 'alternatives to'. A reasonable range of alternative solutions that would address the problem of providing for future waste management needs were evaluated. An evaluation methodology process was established to formulate and then comparatively evaluate the advantages and disadvantages of each 'alternative to'. The conclusion of the evaluation process has identified a preferred alternative that will best address the existing problem or opportunity and therefore become the undertaking for which EA approval is sought.

Alternative Methods

Having selected thermal treatment as the preferred 'alternative to', the Regions initiated an evaluation and assessment of 'alternative methods' to locate a preferred site upon which to locate a thermal treatment waste management facility. A seven step site evaluation process was applied to formulate and then comparatively evaluate the

alternative sites. The preferred site would exhibit the preferred balance of advantages and disadvantages based on the priorities of the site evaluation process.

In order to undertake the comparative evaluation of sites without having first identified the technology that would eventually be used in the preferred thermal treatment waste management system, a number of assumptions were made with respect to the final aspects of the design and operation of the facility. The municipal procurement process to identify the thermal treatment technology would then be used to carry forward these assumptions as requirements for the design and operation of the facility, and in turn validate the assumptions used in the evaluation of 'alternative methods'. Accordingly, the Regions would not have to go back, following the identification of the thermal treatment technology, to reassess the accuracy of the original site evaluation process.

Each alternative site was evaluated using a set of criteria that was developed by the Regions to be relevant, clear and logical. The alternative sites were evaluated based on the advantages and disadvantages of potential environmental effects and were presented in a traceable manner. The evaluation was built upon baseline data and existing conditions in the EA study area. The Regions' evaluation was completed using criteria in the following categories:

- Public Health and Safety and the Natural Environment;
- Social/Cultural Considerations;
- Economic/Financial Considerations;
- Technical Considerations; and
- Legal Considerations.

The starting point for the site evaluation methodology process was to identify lands within the EA study area that consisted of features and land uses considered suitable for the establishment of a thermal treatment facility. The result was the identification of suitable areas, such as designated industrial lands, and the exclusion of lands in unsuitable areas, such as significant natural features, agricultural lands and existing residential areas. Site specific constraints were then applied to these suitable areas to identify potential siting opportunities that would meet the minimum site size requirements, ancillary uses, and configuration requirements.

The list of sites was further evaluated to compare the relative advantages and disadvantages of each site. Sites were deemed unsuitable if they exhibited significant technical, social and/or environmental disadvantages relative to other sites on the list. Sites that passed through this evaluation were made part of a list of five sites that were carried forward for a more extensive and comparative evaluation.

A qualitative methodology was then applied to the list of five sites to identify a preferred site that exhibited the best balance of advantages and disadvantages based on the priorities of the Regions' site evaluation process as outlined in section 8 of the amended EA (November 2009). The seven step evaluation methodology process found that the

preferred site on which to locate the proposed thermal treatment waste management system was Clarington 01, located in the municipality of Clarington south of Highway 401 on the west side of Osborne Road and north of the CN Rail corridor.

The ministry is satisfied that the Regions followed a logical and transparent decision making process that was clearly outlined in the EA. A site evaluation process was established to comparatively evaluate the advantages and disadvantages of each alternative site. The conclusion of the evaluation process has identified a recommended preferred site upon which to locate a thermal treatment waste management facility.

Municipal Procurement Process

During the comparative evaluation of ‘alternative methods’ to identify a recommended preferred site, the Regions initiated a municipal procurement process to identify a vendor that would ultimately provide the specific thermal treatment technology to be used in the preferred waste management system. To engage qualified vendors capable of designing, constructing and operating a thermal treatment waste management facility, a two stage competitive process was carried out involving a Request for Qualification (RFQ) followed by a Request for Proposal (RFP).

During the first stage of the procurement process, the Regions solicited qualifications from technology vendors through the issuance of a RFQ. The qualifications submitted were used to identify those vendors qualified to participate in the second stage of the process. The RFQ was issued in July 2007 and closed in October 2007.

Following the completion of the RFQ stage, technology vendors qualified to participate in the RFQ process were invited to submit detailed proposals for the design, construction and operation of a thermal treatment waste management facility. The objective of the RFP process was to identify a preferred vendor technology based on the qualitative assessment and comparison of the advantages of each vendor proposal relative to the EA procurement process evaluation criteria. The evaluation criteria were developed to ensure that the preferred vendor technology selected could be considered “best in class” and included:

- Technical Considerations (including environmental considerations);
- Cost and Commercial Considerations; and
- Project Delivery Considerations (including impact management commitments).

At the conclusion of the RFP qualitative assessment and comparison process, the preferred vendor technology was determined based on the vendor proposal exhibiting the preferred balance of advantages. The RFP was issued on August 22, 2008 and closed February 18, 2009.

Based on the conclusions of the RFP process Covanta Energy Corporation was selected by the Regions as the technology vendor to design, construct and operate the proposed thermal treatment waste management facility on the Clarington 01 site.

Site Specific Studies

Having identified a recommended preferred site and technology vendor, several studies and investigations were carried out to determine the potential effects, impact management measures and net effects of implementing the proposed undertaking, and to identify potential mitigation measures. The following site specific studies and investigations were carried out:

- Air Quality Assessment
- Site Specific Human Health and Ecological Risk Assessment
- Natural Environment Impact Assessment
- Acoustic Assessment
- Traffic Assessment
- Visual Assessment
- Economic Assessment
- Social/Cultural Assessment
- Geotechnical Investigation
- Surface Water and Groundwater Assessment
- Stage 2 Archaeological Assessment and Built Heritage
- Facility Energy and Life Cycle Assessment

The site specific studies and investigations have been summarized in the EA and identify the potential effects and proposed impact management measures associated with the construction and operation of the proposed undertaking on the recommended preferred site.

3.2.1 Key Issues

Key issues regarding the EA process undertaken by the Regions were identified during the review and comment period on the original EA (July 2009), the amended EA (November 2009) and the addendum to section 9.2 of the amended EA (December 2009). The issues identified during the review of the original EA (November 2009) were considered by the Regions during the preparation of the amended EA (July 2009) and addendum to section 9.2 of the amended EA (December 2009). The EA amendments include the addition of information and clarification to address the concerns raised.

The following is an overview of the key comments and concerns that were identified regarding the Regions' EA process.

Information on the Municipal Procurement Process

During the EA process interested members of the public and the GRT expressed concerns with the lack of information being provided by the Regions on the municipal procurement process. The Regions acknowledge that during the preparation of the EA every effort was made to include as much information as possible about the municipal procurement process. There are, however, certain factors which have limited the Regions ability to disclose all information related to the procurement process. Disclosure of detailed information that was not used during the comparison and evaluation of vendor submissions but included in the vendor submissions could place the finalization of the procurement process in jeopardy.

The ministry has asked the Regions whether or not the detailed information compiled during the procurement process will be made available for review upon the finalization of the procurement process. The ministry's expectation is that the Regions should provide direction on whether or not this information will be made available, and if so, when and how the information can be obtained.

The Regions have provided a written response to the ministry in which they have committed to making available information on the procurement process following the completion of the procurement process. The Regions will make the information available upon request and in accordance with the provisions of the *Municipal Freedom of Information and Protection of Privacy Act*.

The ministry is satisfied that the commitment to provide the above mentioned additional information addresses the question as to whether or not the detailed information compiled during the procurement process will be made available for review upon the finalization of the procurement process. The ministry's formal comments submitted on the amended EA (November 2009) about the release of information on the municipal procurement process are included in Appendix B of this Review. The responses by the Regions to the concerns raised by the ministry are included in Table 1 of this Review. Copies of the submissions can also be found in Appendix B of this Review.

Compliance with the EA Terms of Reference

During the review of the original EA (July 2009), interested members of the public raised concerns that the original EA (July 2009) was not being prepared in accordance with the provisions of the approved ToR. In particular, it was suggested that the municipal procurement process was not completed prior to the conclusion of the evaluation of 'alternative methods'.

It was originally envisioned in the ToR that the municipal procurement process used to select the preferred waste management system would be completed prior to the completion of the evaluation of 'alternative methods'. The competitive process would have potential technology vendors of thermal treatment technologies submit proposals to

build and operate the preferred waste management system as determined by the evaluation and comparison of ‘alternatives to’. The potential technology vendors would also be provided an opportunity to submit a site along with their proposal for consideration.

The Regions determined that the submission of a site and the submission of a technology should be completed as two entirely separate processes. Consideration of both potential vendor sites and technologies as part of the same competitive process was considered to represent an unfair advantage to those vendors offering both a site and technology versus only those vendors offering a technology. By separating the competitive process from the siting process the Regions would be able to ensure a more “fair” process for those involved. In doing so, however, the Regions would be required to complete the siting activities in advance of the competitive process.

This modification was reviewed by the ministry in January 2008 at the request of the Regions. Upon careful review of the approved ToR and provisions of the EAA, the ministry concluded that the modification did not deviate from the requirements of the approved ToR to such an extent that the EA could not be prepared in accordance with it. The Regions’ formal submission requesting consultation on the modification to the ToR and the ministry’s response are included in Appendix C of this Review.

3.2.2 Conclusion

The ministry is satisfied with the Regions’ decision making process. The amended EA (November 2009) contains an explanation of the problem and opportunities that prompted the EA study and the amended EA (November 2009) demonstrates, in a logical and transparent process, why and how the preferred undertaking was selected.

The Regions have evaluated a sufficient range of alternatives using criteria that considered the EAA’s broad definition of the environment (e.g. including natural, socio-economic, cultural and agricultural environments). The amended EA (November 2009) provides a description of the potentially affected environment in the EA study area and identifies the elements of the environment that may be affected, either directly or indirectly, by the alternatives.

The Regions have compared and evaluated the advantages and disadvantages of the proposed undertaking based on the potential environmental effects for the ‘alternatives to’ the undertaking, the ‘alternative methods’ of carrying out the undertaking and the proposed undertaking. The amended EA (November 2009) also provides a description of the mitigation and monitoring measures to address the potential negative environmental effects.

A summary of the key issues identified with the Regions’ EA process that were during the comment period on the original EA (July 2009) and the amended EA (November 2009), including Regions’ responses, can be found in Tables 1 to 3 of this Review.

3.3 Proposed Undertaking

The proposed undertaking is clearly described in section 10 of the amended EA (November 2009) documentation (see also section 2 of this Review), and was evaluated based on the advantages and disadvantages to the environment. The ministry is satisfied that a broad definition of the environment was used in order to evaluate all potential impacts. This definition included the natural environment, the socio-economic environment, and the cultural environment, as well as public health and safety.

3.3.1 Key Issues

Key issues about the proposed undertaking were identified during the review and comment period on the original EA (July 2009) and the amended EA (November 2009). The issues identified during the review of the original EA (November 2009) were considered by the Regions during the preparation of the amended EA (July 2009). The EA amendments include the addition of information and clarification to address the concerns raised during the comment period on the original EA (July 2009).

The following is an overview of the comments and concerns raised by interested members of the public and the GRT during the comment period on the original EA (July 2009), and comments raised by the GRT during the comment period on the amended EA (July 2009).

A complete summary of all comments received during the original EA (July 2009) comment period, including the Region's responses, can be found in Tables 1, 2 and 3. The GRT submissions received during the initial comment period of the original EA (July 2009) can be found in Appendix B.

Potential Impacts to Human Health

Interested members of the public raised concerns about the potential impacts to human health the proposed facility may have on area residents. The Regions carried out a site specific Air Quality Assessment and a site specific Human Health and Ecological Risk Assessment (HHERA) and submitted these assessments as part of the original EA (July 2009).

The Air Quality Assessment and the HHERA considered air quality issues and the potential human health effects during the construction and operation of the facility. The results of the Air Quality Assessment and HHERA indicated that the air emissions produced by the facility are predicted to meet applicable ministry air quality criteria and would meet or be below the current air contaminant limits placed on municipal waste incinerators by the ministry.

Ministry technical reviewers have reviewed the Air Quality Assessment and HHERA and are satisfied with the conclusions of the Air Quality Assessment and the HHERA assessments.

The ministry is also satisfied that additional studies and site specific analysis, deemed necessary by the ministry in support of issuing any future approvals under Section 9 of the EPA should the undertaking be approved, will further support the conclusions of the Air Quality Assessment and HHERA and ensure consistency with ministry regulatory requirements.

Waste Diversion

During the review of the original EA (July 2009), interested members of the public raised concerns about the impacts the proposed facility may have on waste diversion and the Regions' commitments to increase diversion rates.

Initiatives including recycling, composting and diversion of household hazardous waste were investigated during the EA process. Although these initiatives do not form part of the undertaking for which approval is being sought, they are directly related to the design of the facility. Based on the Regions' diversion initiatives the proposed thermal treatment facility is being designed to handle the Regions' residual waste only after 65% diversion has already been achieved. The Regions have also acknowledged that the diversion rate will have to increase to even higher rates to offset the effects of population growth over the 35 year planning period.

In order to improve current diversion rates, the Regions have committed to focus on increasing the capture rates of divertible materials and increasing the public participation in diversion programs. The Regions have also committed to continue to invest in, encourage and promote diversion programs so that improved diversion targets can be met and to reduce the amount of waste requiring disposal at the proposed facility.

The ministry is supportive of the Regions diversions efforts and commitments. Through efforts to reduce and divert waste from final disposal the Regions have illustrated the foresight necessary to ensure that the proposed long term waste management plan is successful.

Potential Traffic Impacts

During the review of original EA (July 2009) interested members of the public raised concerns about the potential impacts of increased truck traffic on local traffic and roads. The amended EA (November 2009) includes a traffic assessment study that has concluded that the operations at the facility will result in minimal disruption to the local traffic network.

The traffic assessment study identified that during operation, the facility is expected to generate up to 34 daily truck trips. It is anticipated that operations at the facility will generate 18 trucks (inbound and outbound) and 22 cars during peak hours of operation. The traffic assessment study has identified that road and pavement improvements to the South Service Road and Osborne Road may be required to accommodate construction and operational vehicles. The Regions have therefore committed to pavement testing along the haul route to confirm if road reconstruction and pavement improvements are required prior to construction if the undertaking is approved. No other mitigation will be required to address facility related traffic during construction or operations.

The ministry is satisfied that the conclusions of the truck traffic assessment and commitments based on its conclusions will address the concerns related to truck traffic resulting from the operation of the proposed thermal treatment facility.

Odour

In response to concerns raised by the public and the GRT on the original EA (July 2009) with respect to the site specific Air Quality Assessment, the Regions have committed to carrying out additional site specific analysis. This commitment will be achieved by providing additional information to support seeking future approvals under Section 9 of the *Environmental Protection Act* (EPA), if the undertaking is approved. However, it has been noted in the review of the amended EA (November 2009) that the proposed commitments do not address some of the concerns raised with respect to odour.

The site specific studies in the amended EA (November 2009) do not adequately address the potential impacts related to odour emission resulting from the operation of the proposed thermal treatment facility. In order to ensure that points of odour emissions are identified and mitigated, the ministry will require that an odour impact assessment be undertaken. This should include, but not be limited to, the preparation of an odour emissions inventory prepared in accordance with Ontario Regulation 419/05, *Air Pollution – Local Air Quality* and an Odour Management Plan. The odour impact assessment should identify any adverse odour impacts that are likely to occur during operation and commitments for the implementation of monitoring and mitigation measures.

The Regions have provided a written response to the ministry in which they have committed to undertake an odour impact assessment. The assessment will be carried out as part of the supporting information provided for approvals under Section 9 of EPA if the undertaking is approved.

The ministry is satisfied that the commitment to provide the above mentioned additional information will address the concerns related to odour emission resulting from the operation of the proposed thermal treatment facility.

Noise

An Acoustic Assessment Technical Study was carried out as part of the evaluation of the preferred undertaking and included in the amended EA (November 2009). The purpose of the study was to identify any potential noise impacts associated with the proposed undertaking and recommend mitigation measures. The study applied conservative assumptions to ensure that the worst case scenarios were evaluated in the assessment of the facility's noise impact. This was done because at the time of the study there were no details available on the specific design of the facility which could be used to identify sources of noise generation. The study therefore included a qualitative assessment of potential noise impacts and the recommended mitigation measures were based on the modelling of the noise impact assumptions.

Ministry technical reviewers have raised concerns that the assumptions used in the Acoustic Assessment Technical Study may not accurately reflect the potential noise impacts of the facility. In order to ensure that that potential noise impacts are accurately identified, the ministry will require that an Acoustic Audit be carried out, should the undertaking be approved, once the facility is operational. The acoustic audit will include, but not be limited to, the completion of a Noise Abatement Action Plan to ensure that the applicable noise criteria are met or mitigated at the offsite receptors.

The Regions have provided a written response to ministry in which they have committed to undertake an Acoustic Audit during the EPA approvals process, should the undertaking be approved. The ministry is satisfied that the above mentioned commitment address the concerns raised.

Landfill Capacity for Process Residuals

The amended EA (November 2009) identifies that existing landfill capacity or the siting of new landfill capacity, to manage the process residual materials resulting from the thermal treatment of waste, is outside the scope of the EA study. However, the amended EA (November 2009) acknowledges that each of the processing system alternatives carried forward for comparison and evaluation will require landfill disposal capacity for process residuals. Members of the public and the GRT have raised concerns with respect to how process residuals will ultimately be disposed.

In order to ensure that process residuals are disposed of properly, the ministry requested that the Regions identify the approved landfill or site where the process residuals will ultimately be disposed. This is to ensure that process residuals are disposed of at a licensed facility that is designed and designated to receive the process residuals generated by the facility. It will also ensure that should approval be given to the undertaking, the implementation and operation of the undertaking will not be delayed or impeded by the process to identify or site an approved landfill to receive the process residuals.

The Regions have provided a written response to ministry in which they have acknowledged the requirement for the disposal of process residuals. The response describes the Regions' approach to the management of process residuals. The Regions intend to utilize the Republic's Pine Avenue Landfill in Niagara Falls, New York, USA as the primary site for ash management and the Modern Landfill in Model City, New York, USA as a backup should it be required. The Regions have also committed to continuing their ongoing investigation of more local landfill alternatives and alternative non-landfill uses for the process residues should the undertaking be approved. The ministry is satisfied that the proposed residual disposal approach addresses the concerns raised.

Future Expansion of Facility Capacity

The amended EA (November 2009) outlines that at some point in the 35 year planning period there may be a need to expand the facility in order to accommodate additional post diversion MSW. The EA identifies that the need to undertake an expansion of the facility will be considered through a review of the Regions' integrated waste management system and a re-determination of the Regions' long term disposal capacity needs.

Members of the public and the GRT have raised concerns that it is not clear as to how and when the need for future expansion of the facility will be determined. The amended EA (November 2009) does not describe the processes and protocols that will be applied to identify the need for expansion. In order to ensure that the need for future expansion is properly and adequately identified, the ministry required that the Regions prepare a detailed description of the process that will be followed to identify the need for expansion.

The Regions have provided a written response to the ministry in which they have identified the process that will be followed to determine the need for expansion. The Regions have committed to the thorough review of existing waste management systems to determine the need for expansion. The review will include the identification of any potential short comings that may exist in the current waste management systems, such as the availability of long term processing capacity for recyclable or organic material and development of additional strategies to increase waste diversion. The review will examine ways to maximize the use of existing approved disposal capacity and the consideration of any additional infrastructure improvements to increase diversion performance. The waste management system review will also examine the current waste systems' performance and projected waste management needs of the Regions. This will be determined by obtaining waste generation data from the Regions and analyzing the data to determine performance.

In addition, per capita waste generation estimates and population projections would be determined to project the amount and composition of waste the Regions will need to manage during the planning period. This estimate will then be used to project the long-term waste disposal capacity requirements of the Regions. The Regions anticipate the

review and update of the Integrated Waste Management Master Plans at least once every five years.

The ministry is satisfied that the proposed process to determine the need for facility expansion and the above mentioned commitments address the concerns raised. Any expansion of the facility beyond the 140,000 tonnes per year capacity for which approval is currently being sought will be considered to be a new undertaking. Any future expansion of the facility will therefore be subject to the applicable approval requirements under the EAA and any associated regulations.

Waste Management Contingency Plan

The amended EA (November 2009) includes a brief overview of a contingency plan to address the waste management needs of the Regions during facility construction, disruptions to operations, or in the event that the EA could be refused. Should operations at the facility cease, the amended EA (November 2009) states that waste will be stored on site until operations resume or that an alternative disposal site will be utilized for short term management needs.

Members of the public and the GRT have raised concerns that the level of detail in the description of the facility contingency plan is not sufficient nor is it apparent if the plan is feasible. In order to address the lack of detail about the facility contingency plan, the ministry's comments on the amended EA (November 2009) requested that the Regions prepare a more detailed contingency plan to account for both short term and long term disruptions to operations. The plan was to include the identification of alternative disposal capacity, the legislative requirements or contact agreements associated with the use of any alternative disposal capacity, how waste collection and transfer may be modified, and any notification procedures. The plan was to address the possibility that the amended EA (November 2009) could be refused.

The Regions have provided a written response to the ministry in which they have outlined a framework for a contingency plan to address waste management needs during facility construction, disruptions to operations, and in the event that the amended EA (November 2009) could be refused. A formal plan will be developed during the EPA approvals process, should the undertaking be approved. Each Region has established an individual waste management contingency plan. Durham Region has entered into an agreement with Modern Landfill Incorporated, located in Niagara County Lewiston, New York, USA. The terms of the agreement are for a three year period commencing January 01, 2011. The agreement also includes an option to extend the agreement for two additional one year periods if necessary. York Region will continue its agreement with the City of Toronto's Greenlane Landfill, in London Ontario.

In the event that operations at the facility are disrupted, waste will be stored in the facility tipping building for up to a period of four days. Should the operational disruption continue for a period greater than four days, waste will be hauled by Covanta, the facility

operator, to one of three permitted disposal sites under the charge of the operator in the USA. Operation reports will be prepared and submitted during the EPA approvals process to provide the detailed information on the procedures for managing and redirecting waste during the use of waste management contingency plans.

Should this amended EA (November 2009) be refused, the Regions will enter into discussions with the ministry to determine an alternative approach to addressing their long term waste management needs. In the meantime, the waste management contingency plans to address waste management needs during facility construction will be continued until a new alternative is identified.

The ministry is satisfied that the waste management contingency plan proposed by the Regions and the above mentioned commitments address the concerns raised.

Volatile Organic Compound Emissions

In response to the concerns raised in the comments by the public and the GRT on the original EA (July 2009) with respect to the site specific Air Quality Assessment, the Regions have committed to carrying out additional site specific analysis. This commitment will be achieved by providing additional information to support seeking future approvals under Section 9 of the *Environmental Protection Act* (EPA). However, members of the public and the GRT have raised concerns that the amended EA (November 2009) does not include a sufficient level of information on Volatile Organic Compounds (VOC) associated with the operation of the proposed facility.

The ministry has expressed concern that the amended EA (November 2009) identifies that no readily available VOC emission data applicable to the proposed facility was noted. It is the ministry's expectation that the Regions provide VOC emissions testing as part of the undertaking's stack testing commitments.

The Regions have provided a written response to ministry in which they have committed to determining the list of contaminants that will be stack tested in conjunction with the ministry during the EPA Certificate of Approval process, should the undertaking be approved. The Regions anticipate that any stack testing requirements will be included in the terms and conditions associated with the EPA approvals process. The ministry is satisfied that the proposed above mentioned commitments address the concerns raised.

3.3.2 Conclusion

The ministry is satisfied that the concerns raised by interested members of the public, the GRT and Aboriginal communities during the original EA (July 2009) agency and public comment period and the GRT comment period on the amended EA (November 2009) have been addressed. The ministry is satisfied with the Regions' proposed mitigation measures to ensure that any potential impacts are appropriately managed. The ministry is also satisfied that potential environmental effects of the proposed undertaking can be

managed through the commitments made in the amended EA (November 2009) and in response to the concerns raised during the EA process.

4. Summary of the Ministry Review

This Review explains the ministry's evaluation of the Durham and York Residual Waste Study EA (July 2009) and amended EA (November 2009). The Review has concluded that the Regions have prepared the amended EA (November 2009) in accordance with the requirements of the EAA and the approved ToR. The ministry is satisfied that the amended EA (November 2009) provides sufficient information to enable a decision to be made about the application to proceed with the undertaking for which approval is being sought.

The amended EA (November 2009) has assessed and evaluated a sufficient number of alternatives to arrive at a preferred undertaking. The ministry is satisfied that the evaluation of alternatives and the preferred undertaking assessed a reasonable range of potential environmental effects. The ministry is also satisfied that the amended EA (November 2009) provides sufficient detail on the proposed mitigation and monitoring measures to address any potential negative environmental effects.

The amended EA (November 2009) identifies how the Regions have provided sufficient time and opportunities for the GRT, interested members of the public and Aboriginal communities to comment during the EA process. The ministry is satisfied that the amended EA (November 2009) clearly documents the consultation methods utilized by the Regions to engage these groups during the EA process. The amended EA (November 2009) clearly sets out the issues and concerns raised and how they have been addressed. The Regions consultation methods were found to be in accordance with the requirements of the ToR.

The Review has also concluded a number of outstanding concerns remain that must be considered when making a decision to proceed with the undertaking. However, these issues can be addressed through commitments made in the amended EA (November 2009) and during the Review process. Prior to the Minister making a decision on whether or not to approve the proposed undertaking, the ministry will consider whether any commitments made in the amended EA and during the Review process will be addressed through proposed conditions of EA approval.

5. What Happens Now?

The Review will be made available for a five-week comment period. During this time, all interested persons, including the public, the GRT and Aboriginal communities can submit comments to the ministry about the proposed undertaking, the original EA (July 2009), amended EA (November 2009), the addendum to Section 9.2 of the amended EA (December 2009) or the ministry Review. At this time, anyone can request that the Minister refer either all or part of the amended EA (November 2009), which includes the addendum to section 9.2 of the amended EA (December 2009) to the Environmental Review Tribunal for a hearing if they believe that their concerns have not been addressed.

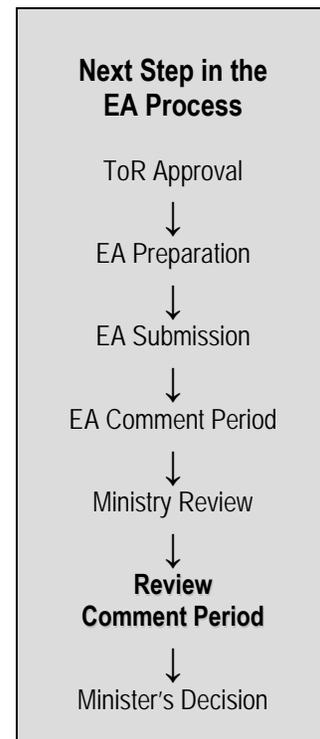
At the end of the Review comment period, ministry staff will make a recommendation to the Minister concerning whether the amended EA (November 2009) has been prepared in accordance with the ToR and the requirements of the EAA and whether the proposed undertaking should be approved. When making a decision, the Minister will consider the purpose of the EAA, the ToR, the amended EA (November 2009), the Review, the comments submitted during on the original EA (July 2009), the amended EA (November 2009) and the Review comment periods and any other matters the Minister may consider relevant.

The Minister will make one of the following decisions:

- Give approval to proceed with the undertaking;
- Give approval to proceed with the undertaking subject to conditions; or
- Refuse to give approval to proceed with the undertaking.

Prior to making that decision, the Minister may also refer any outstanding matters to mediation or refer either part of or the entire amended EA (November 2009) to the Environmental Review Tribunal for a decision.

If the Minister approves, approves with conditions or refuses to give approval to the undertaking, the Lieutenant Governor in Council must concur with the decision.



5.1 Additional Approvals Required

If EAA approval is granted, the Regions will still require other legislative permits and approvals to design, construct and operate the proposed undertaking. Such permits and approvals cannot be issued prior to EAA approval, unless they are required for the acquisition of property or rights in property, feasibility studies, research or the establishment of a reserve fund or some other financing mechanism in connection with the undertaking.

If EAA approval is granted, the proponent must still obtain any other permits or approvals required to construct and operate this undertaking.

The Region has committed to obtain all other approvals and regulatory permits that may be required. Section 15 of the EA outlines the additional approvals that may be required to design and construct the proposed undertaking. These approvals include:

- Ministry of the Environment's Section 53, *Ontario Water Resources Act*;
- Ministry of the Environment's Section 34, *Ontario Water Resources Act*;
- Ministry of the Environment's *Environmental Protection Act* Section 9 – Air and Noise;
- Ministry of the Environment's *Environmental Protection Act* Section 27 – Waste;
- Land zoning requirements in accordance with the *Planning Act*;
- Municipal Building and Infrastructure Permits;
- Tree Removal Permits;
- Noise by-law exemptions;
- Road Occupancy Permits;
- Road closure by-laws;
- Temporary construction access permits;
- Municipal sign by-laws;
- Canada – U.S. Air Quality Agreement; and
- Ontario Power Authority Power Purchase Agreement.

The above list is not all inclusive and other approvals may be required as the project proceeds.

5.2 Modifying or Amending the Proposed Undertaking

The amended EA (November 2009) identifies a process to address minor and major changes to the undertaking if approval is granted. Any proposed change to the undertaking would have to be considered in the context of the EAA and Ontario Regulation 101/07 (Waste Management Projects) and any environmental assessment requirements met before any change to the undertaking can be implemented.

Note: Cette publication hautement spécialisée n'est disponible qu'en anglais en vertu du règlement 441/97, qui en exempte l'application de la Loi sur les services en français. Pour obtenir de l'aide en français, veuillez communiquer avec le ministère de l'Environnement au 1-800-461-6290.

APPENDIX A

ENVIRONMENTAL ASSESSMENT ACT
REQUIREMENTS

Appendix A: Environmental Assessment Act and Terms of Reference Requirements of the Environmental Assessment

EA Decision Making Process	EAA and ToR Requirements	Description and Characteristics of the Requirements	Analysis of the EA
Problem/Opportunities	Identify an existing problem or opportunity	The EA should contain a brief explanation of the problem or opportunity that prompted the proposed activity.	<ul style="list-style-type: none"> • Prior to the commencement of the EA process, the Regions of Durham and York (Regions) exported residual MSW to the United States of America (USA), in particular the State of Michigan, for disposal. The USA government has initiated a process of passing legislation that, if successful, would see the Michigan border closed to MSW from Canada. As a result, the Regions would no longer have sufficient waste disposal capacity. The Regions therefore initiated the EA process to establish a new long term sustainable and local waste disposal solution to jointly manage the post diversion residual MSW each jurisdiction generates for the next 35 years. • The purpose of the undertaking is intended to provide the Regions of Durham and York with a long term sustainable solution to manage the solid waste remaining after diversion (reuse, reduction, recycling and composting) and to minimize the amount of waste requiring landfill disposal. • The Regions have provided a detailed description of the problem. The EA adequately described its purpose.
	Purpose of the Undertaking: s.6.1(2)(a)	If a specific undertaking has been identified provide a brief description.	
Alternatives	Description and Statement of the Rationale for the Alternatives to: Alternative to s.6.1(2)(b)(iii)	“Alternatives to” represent functionally different ways of addressing the problem or opportunity.	<ul style="list-style-type: none"> • Section 7 of the EA included a description and rationale for three ‘alternatives to’ including: mechanical treatment, biological treatment and thermal treatment.

EA Decision Making Process	EAA and ToR Requirements	Description and Characteristics of the Requirements	Analysis of the EA
	<p>Description and Statement of the Rationale for the Alternatives methods:</p> <p>Alternative Methods s.6.1(2)(b)(ii)</p>	<p>A reasonable range of “alternatives to” should be identified and evaluated. The proponent should be able to justify that it has considered a reasonable range of alternatives.</p> <p>The “do nothing” alternative to should be included in the evaluation and will represent the “bench mark” situation.</p> <p>“Alternative methods” include a description of different ways of implementing the preferred “alternative to”</p> <p>A reasonable range of “alternative methods” should be identified and outlined.</p>	<ul style="list-style-type: none"> • A reasonable range of ‘alternatives to’ has been identified and evaluated. • The preferred ‘alternative to’ selected was thermal treatment with capacity to process residual waste and to recover energy; the removal of materials that may be sold to market from the ash/char residue; and, the landfilling of any remaining process residues. • Section 8 of the EA presents and describes the rationale for ‘alternative methods’. • A reasonable range of ‘alternative methods’ has been described in the EA to address the problem identified, and are within the capability of the Region to implement. • The EA clearly explains how the Region evaluated the ‘alternative methods’ to determine the proposed undertaking.
Evaluation	Description of the Environment s.6.1(2)(c)(i)	<p>Proponents must consider the broad definition of the environment including the natural, biophysical, social, economic, built and cultural conditions.</p> <p>The EA must provide a description of the existing environmental conditions in the study area.</p> <p>The EA must identify those elements of the environment that may be reasonably expected to be affected, either directly or indirectly, by the proposed undertaking and/or the alternatives.</p>	<ul style="list-style-type: none"> • The study area is bounded by the geographical boundaries of Durham and York. • The Regions considered the broad definition of the environment including the natural, biophysical, social, economic, built, and cultural environment. • The EA provided a description of the existing environment within the study area to establish baseline conditions. • The EA identified the elements of the environment that may be reasonably expected to be affected by the proposed undertaking and the alternatives.

EA Decision Making Process	EAA and ToR Requirements	Description and Characteristics of the Requirements	Analysis of the EA
	<p>Description of Potential Environmental Effects s.6.1(2)(c)(ii)</p>	<p>Both positive and negative environmental effects should be discussed.</p> <p>The EA must identify methods and studies used to analyze the potential environmental effects. The methods used are contingent on the type of project.</p> <p>Impact assessment methods and criteria used during the evaluation should be identified.</p> <p>The methods chosen must be clear, traceable and replicable so that interested parties can understand the analysis and logic used throughout the EA.</p>	<ul style="list-style-type: none"> • Potential positive and negative environmental effects were described for the ‘alternatives to’, ‘alternative methods’ and the undertaking in Section 7, 8 and 11 of the EA. • The description included the potential for impacts on the following aspects of the environment: <ul style="list-style-type: none"> • Natural • Social-Economic • Cultural • Agricultural • Transportation • Cost • The EA identified methods and studies used to analyze the potential environmental effects of the alternatives and the proposed undertaking including: <ul style="list-style-type: none"> • Air Quality Assessment • Site Specific Human Health and Ecological Risk Assessment • Natural Environment Impact Assessment • Acoustic Assessment • Traffic Assessment • Visual Assessment • Economic Assessment • Social/Cultural Assessment • Geotechnical Investigation • Surface Water and Groundwater Assessment • Stage 2 Archaeological Assessment and Built Heritage • Facility Energy and Life Cycle Assessment

EA Decision Making Process	EAA and ToR Requirements	Description and Characteristics of the Requirements	Analysis of the EA
			<ul style="list-style-type: none"> The methods chosen to analyze the environmental effects are clear, traceable, and replicable.
	Description of the Actions Necessary to Prevent, Change, Mitigate or Remedy the Environmental Effects s.6.1(2)(c)(iii)	A description of future commitments, studies and a work plan may be included as part of the actions necessary to prevent, change, mitigate or remedy environmental effects for each alternative for the ultimate purpose of comparing them.	<ul style="list-style-type: none"> The potential environmental effects and mitigation measures for the preferred undertaking have been considered throughout the evaluation. A description of future commitments to prevent, change, mitigate or remedy environmental effects are provided in Sections 13 of the EA. Commitments include: <ul style="list-style-type: none"> Mitigation measures for net environmental effects Contingency plans Monitoring programs Additional Studies
	Evaluation of Advantages and Disadvantages to the Environment s.6.1(2)(d)	The preferred alternative should be identified through this evaluation.	<ul style="list-style-type: none"> Advantages and disadvantage to the environment are evaluated throughout the EA. The evaluation of advantages and disadvantages to the environment is outlined in Sections 10 and 11. An evaluation of the advantages and disadvantages of the alternatives to the environment led to the selection of the preferred alternative in sections 7 and 8. The Regions' decision making is clear, traceable, and reproducible. The Regions' clearly demonstrated why the preferred alternative was selected over the others.

EA Decision Making Process	EAA and ToR Requirements	Description and Characteristics of the Requirements	Analysis of the EA
	Description of Consultation with Interested Stakeholders s.6.1(2)(e)	<p>A description of stakeholder consultation that occurred during the preparation of the EA needs be documented and should include consultation methods used, frequency of consultation, dates that events occurred, target audience, descriptions of key milestones for which stakeholders are providing input, comments received.</p> <p>The EA must identify any Aboriginal consultation efforts that have been made including methods for identifying potentially interested First Nations, who was consulted, when and how consultation occurred and any comments received from First Nations.</p> <p>The EA should include outline conflict resolution techniques to resolve issues used by the proponent to resolve outstanding issues with any stakeholders. There must be clear documentation as to how issues and concerns have been addressed.</p>	<ul style="list-style-type: none"> • The Regions completed a comprehensive consultation program (Section 16) to ensure that interested persons, groups, organizations, agencies, and local Aboriginal communities had an opportunity to provide comment and input into the EA. Specific efforts included: <ul style="list-style-type: none"> • The establishment of a Joint Waste Management Group • The establishment of Site Liaison Committee • Media advertising was used to ensure interested parties were aware of consultation events. • The project website was continually updated to provide information to the public and to communicate how concerns could be expressed. • Public advisories • Notices • News releases • Advertisements in major and local newspapers (including non-English publications) • Advertisements on local radio stations prior to each community event • Public service announcements • Notifications via bus ads and ads in local movie theatres • Interested members of the public were also provided with an opportunity to make delegations outside of the formal public consultation process at any time during the EA process.

EA Decision Making Process	EAA and ToR Requirements	Description and Characteristics of the Requirements	Analysis of the EA
			<ul style="list-style-type: none"> The EA identified Aboriginal consultation efforts including methods for identifying potentially interested Aboriginal communities, describing how consultation occurred, and included comments received from Aboriginal communities as part of the EA.
Selection Process	Proposed Undertaking	The description of the undertaking should specify what the proponent is seeking approval for under the EAA.	<ul style="list-style-type: none"> The proposed undertaking includes the construction and operation of a thermal treatment waste management facility capable of processing up to 140,000 tonnes of residual municipal solid waste (the waste remaining after diversion) annually. The facility will include an electrical power generating system which will produce electricity for in-house use and delivery to the municipal grid. The proposed undertaking was selected because it was the alternative that on balance had the most advantages and least disadvantages. The preferred waste management system, technology, and site ranked highest in the criteria that were assessed to be very important or important. The Regions evaluated the ‘alternatives’ in a manner that is clear, traceable, and replicable. The description of the proposed undertaking is provided in Section 10 and includes information on the location, characteristics, design, site features, operation, and environmental control measures of the site. The description of the proposed undertaking demonstrates that it can adequately address the Regions’ long term waste management needs.
	Description and Statement of the Rationale for the undertaking s.6.1(2)(b)(i)	The description should include information on the location, attributes, dimensions, emissions etc. The evaluation process should identify which is the preferred undertaking.	

EA Decision Making Process	EAA and ToR Requirements	Description and Characteristics of the Requirements	Analysis of the EA
Next Steps and Additional Commitments	Additional ToR Commitments	Outline any further commitments made by the proponent in the ToR.	<ul style="list-style-type: none"> • The Regions have committed to undertaking additional studies and assessments as part of the applications for section 9 approval under the Environmental Protection Act (EPA), should the undertaking be approved. • The Regions have also committed to carrying out an odour impact assessment and an acoustic assessment as part of the applications for section 9 approval under the EPA, if the undertaking is approved. • The Regions have committed to continuous monitoring of stack emissions, if the undertaking is approved.
	Additional Approvals	Outline additional approval requirements. Provide sufficient detail about the nature of the approval.	<ul style="list-style-type: none"> • The Regions have committed to obtain all other approvals and regulatory permits that may be required , if the undertaking is approved. Section 9.315 of the EA outlines the additional approvals that may be required to design and construct the proposed undertaking, if the undertaking is approved. These approvals include: <ul style="list-style-type: none"> • Municipal Building Permits for the Maintenance Facility; • Ministry of the Environment’s Section 53, <i>Ontario Water Resources Act</i>; • Ministry of the Environment’s Section 34, <i>Ontario Water Resources Act</i>; • Ministry of the Environment’s <i>Environmental Protection Act</i> Section 9 – Air and Noise; • Ministry of the Environment’s <i>Environmental Protection Act</i> Section 27 – Waste; • Land zoning requirements in accordance with the <i>Planning Act</i>;

EA Decision Making Process	EAA and ToR Requirements	Description and Characteristics of the Requirements	Analysis of the EA
			<ul style="list-style-type: none"> • Municipal Building and Infrastructure Permits; • Tree Removal Permits; • Noise by-law exemptions; • Road Occupancy Permits; • Road closure by-laws; • Temporary construction access permits; • Municipal sign by-laws; • Canada – U.S. Air Quality Agreement; and • Ontario Power Authority Power Purchase Agreement. <p>(The above list is not all inclusive and other approvals may be required as the project proceeds)</p>

APPENDIX B

SUBMISSIONS RECEIVED DURING INITIAL COMMENT PERIOD

Copies are available in hard copy at the
Environmental Assessment and
Approvals Branch

A full electronic version is available on
the Region of Durham's Project website
(www.durhamyorkwaste.ca/)

APPENDIX C

SUPPLEMENTAL INFORMATION

Copies are available in hard copy at the
Environmental Assessment and
Approvals Branch

a full electronic version is available on
the Region of Durham's Project website
(www.durhamyorkwaste.ca/)

TABLES

Table 1. Government Review Team Comment Summary Table

Proposal: Durham York Residual Waste Environmental Assessment Study

Proponent: Regions of Durham and York

Submitter	Summary of Comments	Proponent's Response
Go Transit	No comment received.	None required.
Ministry of Aboriginal Affairs	No comment received.	None required.
Ministry of Culture	No comment received.	None required.
Ministry of Economic Development	The Ministry of Economic Development does not have a role to play in the Environmental Assessment (EA) and suggest that it be deleted from GRT list.	Comment noted.
Ministry of Energy and Infrastructure	No comment received.	None required.
Ministry of Health and Long-Term Care	No comment received.	None required.
Ministry of Natural Resources	No comment received.	None required.
Ministry of Trade and Investment	No comment received.	None required.
Ministry of Transportation	No comment received.	None required.
Ontario Power Generation	No comment received.	None required.
Ontario Realty Corporation	No comment received.	None required.
Ministry of Community Safety and Correctional Services	No comment received.	None required.
Ministry of the	No comment received.	None required.

Submitter	Summary of Comments	Proponent's Response
Environment - Water and Waste Water Unit		
Ministry of the Environment York-Durham District Office	No comment received.	None required.
Ministry of the Environment – Environmental Monitoring And Reporting Branch (EMRB)	<p>EMRB's review focused on the air dispersion modelling conducted by the proponent's modelling consultant. The EMRB review did not include a review of the emission estimates. Primary objectives of the EMRB review were to verify whether the modelling options selected were reasonable and whether the source characteristics were correctly transferred into the model input files. No significant issues, concerns or problems were identified, but specific comments on some minor issues:</p> <p>1) The emission rate from the main stack was incorrectly input into the PM2.5 model run for the "Facility+ On-site Traffic" scenario.</p> <p>2) In the deposition modelling the consultant used the same EMRB-approved particle size of 2.5 microns for both dry and wet deposition estimates for particles although a different particle size of 1 micron was quoted for wet deposition estimate.</p> <p>3) The emission rates listed in Table B3-5 of Appendix B - Emission Inventory of the Final Appendix C-1, do not agree with those listed in</p>	<p>1) The emission rate from the main stack has been corrected and the model has been re-run for this scenario to gauge the potential effects on the modelling results.</p> <p>2) As requested by the EMRB, a particle size distribution of 2.5 microns was assumed in selecting the wet and dry particle deposition parameters. The quoted value of 1 micron in Appendix D (page D-50) is a typo.</p> <p>3) The emission rates presented in Table B3-5 for the five contaminants are correct, while the emissions listed in Appendix G were inadvertently increased relative to those in Appendix B. The dispersion model predictions presented in the report for these contaminants can therefore be considered conservative as they are based on emission rates which are about 37% higher than those estimated in the emission inventory.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>Table G1 of Appendix G - Deposition Predictions at Special Receptors, of the Final Appendix C-1, for at least the following compounds, acetaldehyde, bromodichloromethane, bromoform, carbon tetrachloride and ethylene dibromide.</p> <p>In summary, EMRB's review did not identify any significant issues with the air dispersion modelling aspects of the Draft Appendix C-1 and the Final Appendix C-1. Correction of the above mentioned minor issues would not change the general conclusion of the air dispersion modelling results.</p>	
<p>Ministry of the Environment – Air and Noise Unit</p>	<p><i>Air Comments</i></p> <p>In general, the methodology followed in the EA for the assessment of environmental impacts due to air emissions of contaminants from the undertaking is consistent with regulatory and ministry requirements.</p> <p>The following comments are provided for consideration and are important when consideration is given for an application under section 9 of the Environmental Protection Act (EPA):</p> <p>1) Uncertainties in the emissions inventory may potentially result in directly-proportional uncertainties in the assessment of human health and ecological impacts.</p> <p>2) The EA identified a list of contaminants of potential concern that are expected to be emitted</p>	<p>The EA has been amended to include a significant amount of detail to attempt to address the request of Air and Noise Units. In addition the following responses have been provided:</p> <p><i>Air Responses</i></p> <p>1) While all emissions estimation procedures have some degree of associated uncertainty, the methodology considered in the EA was based on standard practice for emissions estimation, using the best sources of data available for each contaminant.</p> <p>At the EA stage, a detailed design of the proposed facility has not been undertaken and therefore detailed process information is not available at this time. This data would be available at the time of the submission of the application for Section 9 approvals and would be included in the application package.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>from similar EFW facilities. The EA disregarded some contaminants (Table B3-6) due to a lack of publicly available emission estimation methodologies for these contaminants. Some of these contaminants have ministry point of impingement limits (e.g., Acetone, Acrolein), and their assessment would be required for applications for approval under section 9 of the EPA.</p> <p>3) The EA selected the use of the CALPUFF atmospheric dispersion model based on technical considerations, given that the facility is located in close proximity to a lake. The use of a different model may potentially result in a different spatial distribution of ground-level contaminant concentrations within the modelling domain, and may therefore potentially impact the results of both the human health and ecological impact assessments. Given the above, the CALPUFF atmospheric dispersion model is to be used for all future applications for approval under section 9 of the EPA.</p> <p>4) The EA includes limited information on the technical details and specifications of the processes and sources of emissions in the proposed undertaking, or on the technologies and processes to be implemented by Covanta, the preferred EFW Proponent, to allow for a detailed technical review of these sources, their emissions, and operations, as would be required for approval under section 9 of the EPA.</p>	<p>2) The comprehensive list of Chemicals of Potential Concern (CoPCs) was developed for this study to ensure that a wide range of potential substances would be considered in the emissions estimation procedure.</p> <p>3) It is the intention of the Proponents to continue the use of the CALPUFF modeling software for all remaining approvals and permitting activities with respect to this facility including approvals under Section 9 of the EPA.</p> <p>4) Documentation to be submitted in support of approval under Section 9 of the EPA will include more specific details on the technology design and processes to be implemented by Covanta.</p> <p>5) The statement in the executive summary of the EA that process upsets resulted in exceedances of Ministry limits is incorrect.</p> <p>6) Odours have been assessed qualitatively in the Air Quality Technical Study and are not expected to cause nuisance issues with the proposed facility design and mitigation measures. Based upon proposed mitigation measures for odour control, there is not expected to be adverse off-property odour effects due to the onsite operations.</p> <p>7) The revised description of the undertaking to be included in the amended EA seeks approval for the initial design capacity of 140,000 tonnes per year (tpy) only.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>5) Page 26 of the EA's Executive Summary states that inclusion of "process upsets" in the maximum emissions scenario will not result in adverse ecological impacts, however the same paragraph does not say the same about human health effects. Further, on page 30 of the Executive Summary, the report states that consideration of process upsets will result in exceedances of ministry acute limits (1-hour) for two contaminants. These exceedances should be addressed by the proponent.</p> <p>6) The EA does not adequately address odour impacts, and primarily states that odour impacts would be mitigated through proper design of the facility. The EA does not include a description or characterization of the expected wastes to be received at the facility, odour characteristics of the wastes, the potential odour emissions that may occur during the handling, processing and transportation of the wastes, nor does the EA include odour-related emissions and impacts based on operation of the similar EFW facilities operated by Covanta, the preferred EFW Proponent, to demonstrate that the proposed undertaking is not likely to cause an adverse effect.</p> <p>7) The EA was primarily completed for a capacity of 140,000 tonnes per year of waste processing at the facility, and was scaled to include an alternate 400,000 tonnes per year operating scenario. However, the analysis does not adequately support the expansion to 400,000 tonnes per year, and the</p>	<p>8) The results of the on-site ambient monitoring for PM_{2.5} and ozone are similar to those measured at numerous Ontario ministry and federal monitoring stations in southern Ontario. Measured PM_{2.5} levels were below the CWS level for the one-year measurement period. Again, as noted in Appendix A, Section A2.3.2, the measured levels are very similar to those in numerous areas of Ontario.</p> <p>9) Noted.</p> <p><i>Noise Responses</i></p> <p>1) The land uses located to the west, northwest, and north from the proposed Facility site are zoned commercial/industrial, and there are no existing residential receptors.</p> <p>2) The existing facilities that are located closer to the monitoring Location 1 and which may influence existing sound levels include Durham Region WPCP, Manheim Oshawa Auction and Copart Auto Auction. Also, the OPG Darlington Nuclear Generation Facility is located further to the east. Neither of those facilities will influence ambient sound levels at monitoring Location 2. However, the Highway 401 is considered the main contributor at the monitoring Location 2.</p> <p>3) This technical study was prepared for EA process where the worst case scenarios were evaluated in order to assess facility noise impact. However, no</p>

Submitter	Summary of Comments	Proponent's Response
	<p>estimation of emissions does not necessarily correlate to the quantity of wastes being processed.</p> <p>8) Ambient air quality monitoring data included in the EA indicates that, for two contaminants (PM2.5 and ozone), the monitored data marginally complies or exceeds applicable ministry limits.</p> <p>9) The EA indicates that there are currently no sensitive receptors in the newly developed industrial park adjacent to the facility, and that the surrounding land is primarily undeveloped land owned by the Region of Durham. The Region of Durham should include environmental considerations in decisions on any future developments in the industrial park.</p> <p><i>Noise Comments</i></p> <p>1) Three points of reception were selected to represent the nearby residences. Additional points of reception need to be assessed due to their close proximity and wide exposure to the facility.</p> <p>2) Ambient noise levels were measured at two locations. The measured ambient noise levels are conflicting as they show higher levels at the house located farther from Highway 401 (the major source of ambient noise in the study area) and lower levels at the house located closer to Highway 401. If higher sound levels are to be used as the performance limits in lieu of the ministry Exclusion</p>	<p>details were available on the specific design of the facility which may influence noise generation, so the noise abatement action plan is addressed qualitatively.</p> <p>4) An Acoustic Audit will be recommended after each stage of facility construction.</p> <p>5) Acoustic Assessment Report Check-list is a part of the report prepared for a C of A application. It will be completed, signed and included in the submission package.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>Limits for Class 2 Areas (Urban), then such levels need to be verified by noise predictions at all points of reception using the most up-to-date road traffic data.</p> <p>3) A Noise Abatement Action Plan was not included. Instead, several noise controls (both physical and administrative) were considered (more as assumptions than recommendations) in the noise analysis and results.</p> <p>4) An acoustic audit is recommended once the facility is operational to ensure that the applicable noise criteria are met at the offsite receptors.</p> <p>5) The Acoustic Assessment Report Check-List in Appendix A is blank.</p>	
<p>Ministry of the Environment – Waste Unit</p>	<p>The Environmental Assessment and Approvals Branch Waste Unit offers the following comments on the technical aspects of the EA Document as they relate to the proposed waste management activities:</p> <p>1) The EA does not contain sufficient details on the conceptual design and the operational procedures for the preferred undertaking.</p> <p>2) The review of the information presented in such a format has presented the ministry with a challenge, due to the large size of the submission.</p> <p>3) In addition, the information contained in the</p>	<p>The EA has been amended to include a significant amount of detail to attempt to address the request of Waste Unit. In addition the following responses have been provided:</p> <p>1) EA amended to address comment.</p> <p>2) EA amended to address comment.</p> <p>3) EA amended to address comment.</p> <p>4) EA amended to address comment.</p> <p>5) Section 8.4.2 discusses the need for on-site buffer to potentially mitigate off-site impacts. This buffer is</p>

Submitter	Summary of Comments	Proponent's Response
	<p>various study reports is occasionally inconsistent, creating uncertainty with respect to the final design of the proposed undertaking.</p> <p>4) The incoming waste stream has not been fully characterized.</p> <p>5) A buffer of 100 metres to mitigate potential offsite impacts has been proposed as appropriate for the site. The proposed buffer must be determined on the basis of a distance required to mitigate site specific impacts.</p> <p>6) The conceptual design of the waste-receiving building has lacks the appropriate level of detail.</p> <p>7) The combustion air is proposed to be withdrawn from the waste receiving building. However, there is no discussion on how the seasonal temperature swings will affect the ventilation of the building and the combustion process.</p> <p>8) The tipping floor cleaning is proposed, however no information on the design of the necessary infrastructure or the operational procedures has been provided.</p> <p>9) The waste storage is proposed to be distributed above and below the tipping floor, however, no details on how the above the tipping floor storage will be undertaken, has been provided.</p> <p>10) Several references to drains, wastewater pits</p>	<p>not required by legislation but rather developed based on “set-back” requirements related to other waste management processing facilities such as composting facilities. The 100m setback was used as guidance in determining an appropriate site size for consideration in the siting process. Given the location of the Clarington 01 site, the actual setback of the facility from “sensitive” receptors is significantly more than 100m.</p> <p>6) Additional detail with respect to the design of the receiving building will be provided as part of the application for Certificate of Approval (Waste) under Section 9 of the EPA.</p> <p>7) Although, the temperature variation may seem large to an individual, relative to the temperatures realized in the thermal treatment process, seasonal temperature variation are insignificant and will have no impact on the combustion process.</p> <p>8) Specific details with respect to tipping floor cleaning will be provided as part of the Section 9 EPA submission including the infrastructure required and operational procedures to be followed.</p> <p>9) EA amended to address comment.</p> <p>10) Specific details with respect to the location of drains, wastewater pits and containment areas will be provided as part of the Section 9 EPA submission including the infrastructure required and operational</p>

Submitter	Summary of Comments	Proponent's Response
	<p>and containment areas are made throughout the various reports, however, none of the reports shows the location of these wastewater holding areas or their design features.</p> <p>11) The full description of the materials that will be stored outdoors and the design of the storage facility, including the spill containment must be provided.</p> <p>12) There is insufficient information on the design of the residuals building. Conceptual design must be provided for the filtered ventilation system, the various processing and waste storage areas and the waste loading/unloading areas.</p> <p>13) The fly ash surge bins have been proposed, but no information on their design or their proposed locations have been included in the EA Document.</p> <p>14) The "Air Quality Assessment" Report includes consideration of impacts from emergency power generation equipment. However, no identification of the critical processes and/or equipment has been provided in the submitted EA Document.</p>	<p>procedures to be followed.</p> <p>11) Based on the conceptual level design, there will be no outdoor storage areas. Should outdoor storage of any materials be required, the storage facilities will be designed and permitted (if required) in accordance with all relevant legislation including the ministry's Guideline for Environmental Protection Measures at Chemical and Waste Storage Facilities (April 2005).</p> <p>12) EA amended to address comment.</p> <p>13) EA amended to address comment.</p> <p>14) EA amended to address comment.</p>
<p>Ministry of the Environment – Environmental Assessment Project Coordination Section</p>	<p>1) The EA entitled <i>The Greater Toronto Area Interim Waste Authority Environmental Assessment</i> is referenced as an example of the most recent efforts carried out by the Regions. It is concluded that these efforts did not yield any new landfill capacity. It should be noted although no new landfill capacity was developed out of the Greater</p>	<p>The EA has been amended to include a significant amount of detail to attempt to address the request of Environmental Assessment Project Coordination Section.</p> <p>In addition the following responses have been provided:</p>

Submitter	Summary of Comments	Proponent's Response
	<p>Toronto Area Interim Waste Authority EA several potential sites were identified, including sites in Durham and in York.</p> <p>2) It is not clearly understood as to why a joint initiative, to manage the residual MSW generated by the Regions, is considered a better alternative than each municipality managing its waste independently</p> <p>3) It is not clear as to why York Region's current waste management strategies are considered short term.</p> <p>4) In the section 2 summary of the EA study it is stated that the continued transport of waste to a landfill located outside Ontario is not sustainable and that a non-local landfill option would expose the Regions to significant public policy risks that are not within their control. It is not understood why this assessment of a non-local landfill option was not applied to the assessment of the management of process residual waste (bottom and fly ash) or in the development of contingency planning to address operational shut downs.</p> <p>5) The study area for the EA has been defined to include only the jurisdictional boundaries of the Regions, and therefore only considers this defined area for study and evaluation in the EA process. The evaluation and study of the other jurisdictions identified in the proposed service area on the</p>	<p>1) EA amended to address comment.</p> <p>2) EA amended to address comment.</p> <p>3) Although York Region has secured additional capacity through contractual relationships with private sector waste disposal capacity providers, these contracts do not run for the full length of the planning period and therefore York Region, over the long-term, does not have sufficient waste disposal capacity to satisfy its requirements.</p> <p>4) EA amended to address comment.</p> <p>5) Any expansion beyond the capacity to support the importation of wastes from outside Durham and York Regions will be addressed as part of the approval under O.Reg. 101/07 (or the applicable piece of legislation at that time).</p> <p>6) EA amended to address comment.</p> <p>7) EA amended to address comment.</p> <p>8) EA amended to address comment.</p> <p>9) EA amended to address comment.</p> <p>10) EA amended to address comment.</p> <p>11) EA amended to address comment.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>undertaking for which approval is being sought has not been undertaken.</p> <p>6) It is not apparent as to the current volumes of residual MSW that will require management for each Region by the proposed undertaking.</p> <p>7) The description of the "Do Nothing" alternative is not an adequate representation of the current waste management practices for the Regions, as set forth in section 2 of the EA study.</p> <p>8) Although the Regions can enter into a contract or agreement with the preferred technology vendor for the disposal of process residues, the management of any process residues requiring disposal is ultimately the responsibility of the Regions.</p> <p>9) The EA should provide a list of environmental categories (such as natural, social, economic and cultural) and the criteria that will be used to assess the effects of each alternative as related to each environmental category.</p> <p>10) It is not apparent if the Regions are intending to commit to the increased diversion targets (70 percent for Durham by 2013 and 70 percent for York by 2016) or how these diversion targets will be specifically achieved.</p> <p>11) It is not apparent why the assumptions for population increase and waste diversion targets</p>	<p>12) EA amended to address comment.</p> <p>13) EA amended to address comment.</p> <p>14) System 2b was not identified as the preferred system but rather it was recommended this system by carried forward for further investigation as part of the RFQ process.</p> <p>15) EA amended to address comment.</p> <p>16) EA amended to address comment.</p> <p>17) EA amended to address comment.</p> <p>18) EA amended to address comment.</p> <p>19) EA amended to address comment.</p> <p>20) EA amended to address comment.</p> <p>21) EA amended to address comment.</p> <p>22) EA amended to address comment.</p> <p>23) EA amended to address comment.</p> <p>24) EA amended to address comment.</p> <p>25) EA amended to address comment.</p> <p>26) EA amended to address comment.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>differ between the 250,000 tonnes per year and 400,000 tonnes per year scenarios.</p> <p>12) The waste to be managed for the EA study that has been defined in sufficient detail includes only the residual MSW remaining after diversion generated by the Regions, and therefore only considers this waste supply for study and evaluation in the EA process. The evaluation and study of the other waste types or streams on the undertaking for which approval is being sought has not been undertaken.</p> <p>13) The application of the qualitative approach is difficult to follow and at times untraceable. It is not understood what determines a major advantage, an advantage, a neutral ranking, a disadvantage or a major disadvantage nor how these advantages and disadvantages are compared to arrive at an overall conclusion of potential net effects.</p> <p>14) It is not understood why a residual processing system technology was considered in the evaluation and comparison of "Alternatives To" if the information available about the system technology was limited.</p> <p>15) It is not understood why existing landfill capacity and/or the siting of new landfill capacity was excluded from the EA study considering that the management of any process residual materials</p>	<p>27) EA amended to address comment.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>from the thermal treatment of waste will ultimately require landfill disposal capacity and forms part of the undertaking for which approval will be sought.</p> <p>16) It is not understood why proximity to an electrical grid connection and steam and/or heat load are considered in the requirement for proximity to infrastructure criterion.</p> <p>17) It is not understood why the maximum scenario of 400,000 tonnes was not evaluated to the same level of detail as the 150,000 tonnes and 250,000 tonnes scenarios, considering that the EA seeks approval for a facility to process 400,000 tonnes of waste.</p> <p>18) Information and details related to the evaluation used in the procurement process have not been provided.</p> <p>19) It is not understood why vendors are being requested to submit a proposal to design and build a thermal treatment waste management facility capable of processing 140,000 tonnes of MSW annually when the EA is seeking approval for a facility capable of managing 400,000 tonnes.</p> <p>20) It is not clearly understood how the maximum system capacity required by the Regions was determined to be 400,000 tonnes per year.</p> <p>21) It is not clearly understood how the maximum system capacity required by the Regions was</p>	

Submitter	Summary of Comments	Proponent's Response
	<p>determined to be 400,000 tonnes per year.</p> <p>22) The information pertaining to the identification, isolation and final disposal of unacceptable or hazardous waste materials is not provided in a sufficient level of detail.</p> <p>23) It is not understood why capacity for other sources of waste were considered in the proposed expansion of the facility from its initial design capacity to the final maximum operating capacity. It is also not understood why the initial design capacity includes a contingency of additional capacity and the subsequent expansion phases do not or why the additional capacity is only required during the initial design stage.</p> <p>24) A commitment to confirm the assumptions used in the development of site specific studies should be undertaken prior to expansion and this commitment should not be excluded should expansion take place within the first five years of operation.</p> <p>25) The level of detail in the description of the facility contingency plan is not sufficient nor is it apparent if the plan is feasible.</p> <p>26) It is not considered acceptable to undertake any change to an undertaking approved under the EAA, no matter how insignificant, without first consulting with the ministry. Any changes to the</p>	

Submitter	Summary of Comments	Proponent's Response
	<p>EA, whether they require an amendment or not, must be discussed in consultation with the ministry and receive ministerial approval before the change can be undertaken.</p> <p>27) There is no information pertaining to the locations of the consultation events discussed in the EA.</p>	
<p>Ministry of the Environment – Ecological Standards Section, Standards Development Branch</p>	<p>1) The Inhalation Toxicity report assesses this pathway indirectly by assuming that the TRVs developed for human health airborne contaminants will be lower and therefore protective for ecological receptors. Although the assumptions bulleted in this section are reasonable, the report should provide examples of airborne contaminants where human Toxicity Reference Values (TRVs) are more stringent than wildlife TRVs.</p> <p>2) In the Ecological Risk Assessment Baseline Case report, it is stated that the higher Hazard Quotients (HQs) calculated for a number of contaminants in different environmental media were purely driven by baseline concentrations of these contaminants which could be found everywhere else in Ontario. While this statement may be true for some contaminants, it should be supported by data or references which show similarities.</p> <p>3) Exposure of Vegetation to Sulfur Dioxide (SO₂), Nitrogen Dioxide (NO₂) and Hydrogen Fluoride (HF) - It is not clear why the estimated annual NO₂</p>	<p>The EA has been amended to include a significant amount of detail to attempt to address the request of Ecological Standards Section, Standards Development Branch. In addition the following responses have been provided:</p> <p>1) In order to address this comment ecological TRVs where they exist were compared to those used as human TRVs for a range of organic and inorganic chemicals. Ecological inhalation values were obtained from, or derived using equations found in Gallegos <i>et al.</i>, (2007) and Archbold <i>et al.</i>, (2007) and the Agency for Toxic Substances and Disease Registry (ATSDR). Standard human health inhalation TRVs were obtained from various jurisdictions. The comparison confirmed that human TRVs are always much lower than the corresponding ecological TRV for the same chemical, allowing the conclusion that if human health is protected then ecological health should be protected as well.</p> <p>2) This statement was making reference to the nature/location of the site which is situated in an industrialized area (presence in the immediate vicinity</p>

Submitter	Summary of Comments	Proponent's Response
	<p>concentrations listed in Table 8-14 and Table 8-24 are similar for the 140,000 tpy and 400,000 tpy scenarios. It is not also clear why these NO₂ estimates are similar for the project case and process upset project case.</p> <p>4) Effects on Vegetation from SO₂ and NO₂ Traffic Case Emissions - The impact of the exceedances of NO₂ phytotoxicity benchmarks listed in Table 8-17 and Table 8-27 for all assessed ecological receptor locations should be discussed in this section. The fact that NO₂ participates in photochemical oxidation reaction which lead to the production of ozone and peroxyacynitrates (PAN) which are well documented phytotoxicants and are more harmful than NO₂ should be discussed. The report should include analysis of the potential impact of these secondary contaminants on sensitive vegetation, particularly sensitive crops in farm A (ECO 17).</p> <p>5) The synergetic effects on vegetation of low concentrations of NO₂ and SO₂ should also be discussed in this section.</p> <p>6) It is not clear why the annual NO₂ concentrations listed in Table 8-17 and Table 8-27 for the two different scenarios (baseline traffic case and total project impact) are similar.</p> <p>7) The final Beryllium TRV used for muskrat listed in Table 1 in Appendix J is 0.427 mg/kg-bw/day whereas the ERA worked example for this TRV in</p>	<p>of several other industrial complexes, HWY 401). As pointed in the reported the HQs that indicated a potential risk were not supported during field observations and surveys.</p> <p>3) The annual estimated NO₂ concentrations for the two scenarios are similar because no major changes in the annual emissions have been predicted to occur. Similar no major changes in emissions were estimated to occur in the project and project upset case.</p> <p>4) The selection of the receptor locations at which effects on vegetation was evaluated was conducted to ensure that the selected locations are representative of the future area use (the current use of the area is industrial and that the use of the area for cropping is only temporary).</p> <p>5) The effect of pollutant mixtures were considered when evaluating the results, but not presented for this report as is difficult to draw conclusions on the interaction of NO₂ and SO₂ at lower concentrations because the effects would be very subtle.</p> <p>6) The annual estimated NO₂ concentrations for the two scenarios are similar because no major changes in the emission rates are expected to occur. Similarly no major changes in emissions are estimated to occur in the project and project upset case.</p> <p>7) The correct TRV is the one used in Appendix J (is 0.427 mg/kg-bw/day). The discrepancy was due to the</p>

Submitter	Summary of Comments	Proponent's Response
	<p>Appendix O is 0.393 mg/kg-bw/day. This discrepancy should be clarified.</p> <p>8) The units of measurement for the parameters listed in the Table (baseline concentrations before and after MOE comments) in Appendix B-2 are missing.</p>	<p>body weight of the test animal (rat) which was initially reported as 0.35 kg, based on a generic rat body weight from US EPA.</p> <p>8) EA amended to address comment.</p>
<p>Ministry of the Environment – Central Region</p>	<p>1) Excavation to 7.6 m below ground surface may be necessary and that groundwater will likely be encountered during excavation. The Regions acknowledge that a Permit to Take Water (PTTW) may be required if construction requires dewatering of greater than 50,000 L per day, and indicate that a Category 2 Permit may be required.</p> <p>2) It is recommended that the identification of private water wells within the projected zone of influence during construction dewatering and develop a monitoring and mitigation plan for these private water wells.</p> <p>3) The proposed Stormwater Water Management system will require a Certificate of Approval under Section 53 of the <i>Ontario Water Resources Act</i> (OWRA).</p> <p>4) Effluent discharge, if any, from the residual waste facility will also require a Certificate of Approval for Sewage Works including a monitoring plan under Section 53 of the OWRA.</p>	<p>The EA has been amended to include a significant amount of detail to attempt to address the request of Central Region. In addition the following responses have been provided:</p> <p>1) Comment acknowledged and will be integrated into project planning at the detailed design stage.</p> <p>2) EA amended to address comment.</p> <p>3) EA amended to address comment.</p> <p>4) EA amended to address comment.</p> <p>5) EA amended to address comment.</p> <p>6) The facility will comply with all relevant emissions standards, including those contained in the 1989 CCME guidance document.</p> <p>7) Dioxins and furans have been considered together in this assessment as a contaminant group (as TEQ Toxic Equivalents) for comparison with the applicable MOE limits. Therefore, for clarity, the text in Table 2-2 (and elsewhere in the report), 'Dioxins (TEQ Toxic</p>

Submitter	Summary of Comments	Proponent's Response
	<p>5) Air Quality Assessment Technical Study Report <i>Executive Summary</i> - On page 1 (and page 40 of the main report), the four waste trains listed add up to 410,000 tonnes per year (tpy). The Regions should confirm if total waste to be accepted by the facility is 400,000 tpy or 410,000 tpy.</p> <p>6) The Air Quality Assessment Technical Study does not mention the CCME <i>Operating and Emission Guidelines for Municipal Solid Waste Incinerators, June 1989</i> or the CCME <i>Canada-Wide Standards for Dioxins and Furans, 2001</i>. The Regions should ensure that the project complies with all relevant regulations/ standards/ guidelines.</p> <p>7) Air Quality Assessment Technical Study Report - On page 7, Table 2-2 Summary of Contaminants of Potential Concern does not list furans.</p> <p>8) Air Quality Assessment Technical Study Report - The list of emission sources on page 46 does not list the HVAC in the scale house or the emissions from front end loaders in the tipping building.</p> <p>9) Air Quality Assessment Technical Study Report - On page 49, the report concludes that contaminants without emission data available would be emitted from the facility in negligible amounts. Contaminants with Ministry standards (such as acetone, styrene and acrolein) were omitted using this rationale. TSS recommends the</p>	<p>Equivalents)' is equivalent to 'Dioxins and Furans (TEQ Toxic Equivalents)' or 'Chlorinated dibenzo-p-dioxins' (nomenclature used in O. Reg 419/05).</p> <p>8) At the EA stage, a detailed design of the proposed facility has not been undertaken and therefore detailed source information is not available at this time. This data would be available at the time of the submission of the application for Section 9 approvals and would be included in the application package.</p> <p>9) EA amended to address comment.</p> <p>10) EA amended to address comment.</p> <p>11) For emissions based on manufacturer's guarantees or manufacturer information, the estimates consider the mitigative effects of the APC. For emissions estimates based on the literature review, estimates are intended to be conservative and, thus, may not consider the mitigative effects of the APC.</p> <p>12) It is expected that requirements for ambient odour monitoring would be evaluated and discussed with the ministry during permitting under Section 9 of the EPA (after the detailed facility design is completed).</p> <p>15) Non-chlorine dust suppressants will be used as required and where feasible.</p> <p>16) The truck traffic route evaluated in the modelling is expected to produce the maximum (i.e. worst case) impact at the receptors in closest proximity to the</p>

Submitter	Summary of Comments	Proponent's Response
	<p>Regions provide testing data from similar facilities or peer-reviewed scientific literature to confirm that the contaminants considered negligible (and therefore, not assessed in the Air Quality or Human Health Risk Assessments) are not being emitted in significant amounts.</p> <p>10) Air Quality Assessment Technical Study Report - The third column of Tables 4-1 to 4-2 on pages 50-54 is erroneously labeled Scenario 1A – MCR (it should be labeled Scenario 1B – MCR).</p> <p>11) Air Quality Assessment Technical Study Report - The report does not mention if the effects of the air pollution controls (APCs) have already been considered in the emission estimates in Scenario 1 or whether the emissions listed are conservative because they do not include the proposed APCs.</p> <p>12) Air Quality Assessment Technical Study Report - The report lists mitigation measures for odour, but no modelling or monitoring has been completed for the project.</p> <p>13) It is recommended that an odour monitoring program be implemented for this facility. Monitoring should be conducted prior to construction (for background values) and after construction is complete</p> <p>14) Air Quality Assessment Technical Study</p>	<p>proposed facility, where the cumulative effect of emissions from the facility plus the vehicle traffic will be greatest. The route used in the modelling is expected to be the most likely route for vehicles to follow when travelling from the transfer stations to the site. If other paths were to be used, this would tend to spread out the vehicle emissions over a number of routes, thus reducing the impact of the vehicle emissions at any given receptor.</p> <p>17) EA amended to address comment.</p> <p>18) It should be noted that the MOE Operations manual references the probe siting criteria provided in U.S. Code of Federal Regulations, Title 40, Volume 5, Part 58, Appendix E (Probe and Monitoring Path Siting Criteria), Revised July 1, 1999. This reference has however, been superseded by a newer version of this regulation. The most recent version of the 40 CFR, Part 58, Appendix E (revised October 17, 2006) specifies a minimum separation distance from trees of 10-m (Table E-4). Therefore the siting of the Courtice Road monitoring station met current U.S. EPA probe siting requirements.</p> <p>19) EA amended to address comment.</p> <p>20) EA amended to address comment.</p> <p>21) EA amended to address comment.</p> <p>22) EA amended to address comment.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>Report - The Regions have not listed any mitigation measures to address air quality issues during decommissioning.</p> <p>15) Air Quality Assessment Technical Study Report - Non-chlorine based dust suppressants are recommended to protect water quality if dust suppression techniques will be utilized.</p> <p>16) Air Quality Assessment Technical Study Report - The Regions have only examined truck traffic following the shortest path to the site using Highway 401. Other routes should be modeled as traffic will also arrive/depart from transfer stations within the two Regions and potentially via other routes.</p> <p>17) Air Quality Assessment Technical Study Report - <i>Appendix A: Review of Ambient Air Quality</i> Table A-2-5 presents the summary of ambient PM_{2.5} measurements. The maximum concentration is reported as the 98th percentile. TSS recommends adding the actual maximum PM_{2.5} concentration and re-labelling the 28.6 µg/m³ concentration as the 98th percentile concentration to maintain consistency with the other tables in the report. Additionally, the hourly SO₂ average concentrations from the electronic spreadsheet provided is 7.42 µg/m³ and the Appendix A, Table A2-1 reports as 3.5 µg/m³. In addition, values are</p>	

Submitter	Summary of Comments	Proponent's Response
	<p>also inconsistent for hourly and daily ambient NO₂ measurements; and daily ambient PM_{2.5} measurements.</p> <p>18) Appendix A refers to the supplementary document <i>Final Report on Ambient Air Monitoring at the Courtice Road Monitoring Station</i>, dated June 15, 2009. The comments below refer to this report:</p> <ul style="list-style-type: none"> - Tall trees were situated less than 20 metres northeast (NE) of the monitoring station which does not meet the siting criteria from the MOE document <i>Operations Manual for Air Quality Monitoring in Ontario</i>, March 2008. Based on the windrose patterns, interference in wind flow in the NE quadrant is observed. - Typically, the predominant winds during the winter are north (N)/northwest (NW) and during the summer are southwest (SW) (this may be somewhat different when the site is situated in close proximity to the lake, such as in this case). The influence of the trees on the ambient measurements (background) for the above noted parameters may impact measurement efficiency. <p>19) Concerns with the editing of the raw data for the Courtice Station and data validity.</p> <p>20) The EA statement of purpose of the project</p>	

Submitter	Summary of Comments	Proponent's Response
	<p>should be updated to reflect this change in York's current practices. It is not evident from the report why this strategy can only be maintained in the short-term.</p> <p>21) The "Do Nothing" alternative is described as landfill-only system and has not been included for analysis. This does not appropriately characterize the existing system in York Region, as materials potentially sent to the Dongara plant will result in material/fuel recovery. The Do Nothing alternative should be carried through the evaluation for each of the alternatives to create an accurate representation of the benefits and costs of current practices compared to the other alternatives.</p> <p>22) In order for the 400,000 tpy design capacity scenario to be properly evaluated and approved by the ministry, the Regions should compare, evaluate and assess each of the Alternatives To, Alternative Methods and the Preferred Undertaking at this maximum scenario at the same level of detail as the lesser scenarios.</p>	
<p>Ministry of the Environment – Human Toxicology And Air Standards Section, Standards Development Branch</p>	<p>The following are comments to the proponent's responses dated July 31, 2009 in response to the re-submission of the risk assessment:</p> <p>1) Tables in the Multi-Pathway Risk Assessment for the 400,000 tpy scenario indicate that for the COPCs listed, the hazard quotient (HQ) values for the baseline (background) case are always the same</p>	<p>The EA has been amended to include a significant amount of detail to attempt to address the request of the Human Toxicology And Air Standards Section, Standards Development Branch. In addition the following responses have been provided:</p> <p>1) EA amended to address comment.</p> <p>2) Where TRVs were available then they were used,</p>

Submitter	Summary of Comments	Proponent's Response
	<p>as HQ values for the “project case” and “process upset project case” for all receptors (Tables 7-58 through 7-78). This means there is no incremental contribution from the facility. The proponent should provide an explanation to address how the emissions from a 400,000 tpy municipal solid waste thermal conversion facility would not affect the HQ of the cumulative exposure.</p> <p>2) Air guidelines, standards and criteria are not necessarily a toxicity reference value (TRV). For one, they may be dated, and superseded by new scientific information. Therefore, risk calculations resulting from these ‘regulatory’ values may not be valid risk characterizations. Appropriate TRVs should be incorporated and the risks for adverse effects to human health recalculated.</p> <p>3) A risk assessment report should be a stand-alone document. A detailed summary of all information used to understand and interpret data must be included in the main text of the report. Any reference to supporting documents should be included either as an appendix in the report or at least be in a CD that accompanies the report. A risk assessor will not review web sites to reveal important documents and/or information. Any reports referred to should be available as mentioned in our earlier comment. Information in appendices or attachments pertinent to the report must be included in the report.</p>	<p>either as RfC or UR. However, we will undertake a detailed review of all chemicals where benchmarks were used and attempt to find UR or RfCs from credible agencies. In the event that no such RfC or UR are found then we maintain that it is reasonable to provide benchmarks for the purposes of the EA, and have already acknowledged that that they may not be as robust as TRVs.</p> <p>3) To clarify the Generic Risk Assessment was only one of the sources of information for selection of COPC for the assessment. This was stated as an editorial comment in the previous round of comments, however, we will supply the MOE of a full version of this report for their files on CD.</p> <p>4) EA amended to address comment.</p> <p>5) In short, baseline chemical concentrations were compared to the Ontario Typical Range (OTR) values or similar published concentrations. This is also based on professional experience having conducted baseline risk assessment in numerous other areas of Ontario.</p>

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	<p>4) The proponent responses adequately address most of MOE's comments. However, outstanding issues identified by other MOE team members for the 400,000 t/y scenario such as emissions and deposition modeling need to be resolved before SDB would be able to thoroughly assess information, calculations, interpretations and conclusions on this scenario.</p> <p>5) The proponent asserted that the lifetime cancer risk (LCR) (Table 7-12) and HQ values reported in Tables 7-14 & 7-15 that are in excess of the regulatory benchmarks of (10^{-6} and 0.2, respectively) are entirely driven by the high baseline (background) concentrations and that such baseline (background) results would be expected for any community in Southern Ontario. The risk assessment would benefit from the inclusion of data to support the assertion that similar high background concentrations would be found in any community in Southern Ontario.</p>	
Ministry of Agriculture, Food and Rural Affairs	This Ministry is has no concerns with the proposed EA.	Noted.
Canadian Environmental Assessment Agency	Perhaps the EA could be more explicit in stating there are no federal triggers.	Noted.
Canadian Nuclear Safety Commission	No comment received.	None required.

Submitter	Summary of Comments	Proponent's Response
Department of Indian and Northern Affairs	No comment received.	None required.
CN Rail	No comment received.	None required.
Environment Canada	No comment received.	None required.
Environment Canada Environmental Assessment and Federal Programs	No comment received.	None required.
Fisheries and Oceans Canada	No comment received.	None required.
Transport Canada	No comment received.	None required.
Health Canada	<p>Based on noise and air quality information presented in the <i>Environmental Assessment Study Document (EASD)</i>, HC has the following comments for this thermal treatment facility:</p> <p>1) Tables 7-2 and 7-3 of the <i>Air Quality Assessment Technical Study Report (AQTSR)</i> indicate that the 24-hour particulate matter less than 2.5 microns (PM2.5) maxima predicted for both the 140,000 tonnes per year (tpy) and 400,000 tpy project scenarios reach 70% and 71%, respectively of the Canada Wide Standard (CWS) (CCME, 2000). Given that airborne levels of PM2.5 are already elevated in the vicinity of the project and that this contaminant is considered to be a non-threshold contaminant (i.e. adverse human health effects may be observed at any level of exposure), (CCME, 2000) HC suggests that the AQTSR discuss best available technologies and procedures that may be applied to mitigate PM2.5 emissions from the</p>	<p>The EA has been amended to include a significant amount of detail to attempt to address the request of Health Canada. In addition the following responses have been provided:</p> <p>1) A site specific baseline concentration of 24 ug/m³ was applied for PM2.5 for baseline concentrations. It is acknowledged that this is close to the CWS. The 24 hr concentration at the Max GLC for the project was predicted to be 0.53 ug/m³ (Appendix E). Therefore, given that the PM2.5 concentrations at ground level are not expected to be above 1 ug/m³, no additional mitigation measures are recommended or required.</p> <p>2) The maximum predicted 1-hour NO_x concentrations represents the maximum predicted value over a 5-year period and is not intended to be indicative of the average or typical facility contribution to baseline levels. The maximum predicted NO_x concentrations for the facility alone are well below the applicable O. Reg. 419 standard (less</p>

Submitter	Summary of Comments	Proponent's Response
	<p>proposed facility.</p> <p>2) Tables 7-3, 7-5 and 7-7 of the <i>AQTSR</i> and Tables 7-22 and 7-54 of the <i>Site Specific Human Health and Ecological Risk Assessment - Technical Study Report (HHERATSR)</i> identify considerable increases in NO₂ levels as a result of the project. Given that NO₂ plays a major role in the atmospheric reactions that produce ground-level ozone, which is known to be associated with respiratory and cardiovascular health effects, and that NO₂ by itself is linked with respiratory health effects (EPA, 1995), HC advises that the <i>AQTSR</i> discuss mitigation measures that may be applied to minimize project-related emissions.</p> <p>3) Pages 7-3 and 7-5 of the <i>AQTSR</i> indicate that annual maximum ground level concentrations (GLC) and maximum concentrations at special receptors for chloroform are predicted to reach 81% of the provincial air quality criterion. Chloroform exposure through inhalation is associated with central nervous system depression and effects on the liver (EPA, 2000). While the background concentration accounts for virtually all of the maximum GLC, HC suggests that the <i>AQTSR</i> includes monitoring of this COPC to confirm that the proposed project will not contribute significantly to the overall airborne levels of this COPC.</p> <p>4) Table 7-8 of the <i>AQTSR</i> indicates that under the</p>	<p>than 25%).</p> <p>3) Chloroform is expected to be emitted in trace amounts from the facility with the maximum predicted annual average concentration being about five orders of magnitude less than the background level used in the assessment. Given this large difference between model predicted levels and ambient levels, it would not be expected that any uncertainty in the emissions estimates would significantly affect the results of the EA. However, Health Canada's comment will be considered when monitoring requirements are developed for inclusion in the Facility's CofA during the Section 9 approvals process.</p> <p>4) Please note that there was an error in Tables 7-7 and 7-8 in the metals section of each table, in which the background concentration for a different averaging period was added to the maximum predicted concentration. Given that concentrations remain below the provincial air quality criterion we do not believe that additional mitigation measures are warranted. However, cadmium will likely be a COPC that will be monitored during the 3 year ambient air monitoring program.</p> <p>5) It should be noted that the process upset emission rates used in the assessment provide a very conservative estimate of worst-case emissions (particularly for HAPs) that could be expected to be encountered over the course of the operating life of the facility.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>400,000 tpy scenario, the 24-hour concentrations of cadmium are predicted to increase considerably, more than doubling over background to 73% of the provincial air quality criterion at receptors. The <i>Priority Substances List Assessment Report</i> of cadmium and its compounds completed under the <i>Canadian Environmental Protection Act (CEPA)</i> indicates that “<i>cadmium is entering the environment in a quantity or concentration or under conditions that may constitute a danger in Canada to human health</i>” (Government of Canada, 1994), thereby meeting the criteria to be added to the <i>Schedule 1</i> list of toxic substances under <i>CEPA</i>. Therefore, HC suggests that the <i>AQTSR</i> discusses mitigation measures that may be implemented to reduce project-related emissions of this COPC.</p> <p>5) Tables 7-11 and 7-12 of the <i>AQTSR</i> indicate that airborne levels of sulphur dioxide (SO₂), hydrogen fluoride (HF), particulate matter less than 2 microns (PM_{2.5}), particulate matter less than 10 microns (PM₁₀), cadmium, bromodichloromethane, chloroform, and xylenes are predicted to increase considerably in the case of process upsets. Given the potential human health implications of these substances, HC advises that the <i>AQTSR</i> discuss measures to minimize the air quality impacts of process upsets to the extent possible.</p> <p>6) Tables 7-24 and 7-56 of the Human Health and Environmental Risk Assessment (<i>HHAERA</i>) present concentration ratio (CR) values for</p>	<p>The facility will include the following continuous monitors which will aide in identifying the occurrence of process upsets: opacity, moisture, CO, O₂, NO_x, SO₂, HCl, and HF.</p> <p>Process upset plans will be developed by the vendor at a later date to ensure compliance with their CofA.</p> <p>6) Noted.</p> <p>7) This TSR confirmed all different land uses in the area according to the ministry and HC guidelines, and concluded that there are no schools, hospitals, daycares, places of worship, recreational spaces and nursing homes in Acoustic Study Area which includes adjacent lands within 1000 m of the facility property boundaries. Outside this distance the model results show little to no influence of the proposed facility.</p> <p>8) The hours of 23:00h to 07:00h were used as stipulated by the ministry as the regulating agency for this project. Also, National Guidelines for Environmental Assessment: Health Impacts of Noise, Draft Version, May 2005 uses the same day-night definition. We also do not anticipate any change in the assessment results, even if suggested day-night adjustment is made. Therefore, we believe that night time definition used is applicable for this assessment.</p> <p>9) EA amended to address comment.</p>

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	<p>respiratory irritants that are predicted to increase considerably for the 1-hour and 24-hour timescales, both for project and process upset scenarios. Given that exposure to respiratory irritants may be associated with acute and chronic human health effects (Rom and Markowitz, 2007), HC advises that the EA document discusses methods to mitigate project- related emissions of all respiratory irritant COPCs to the extent feasible.</p> <p>7) Page 13 <i>Appendix C-5 Acoustic Assessment Technical Study Report (TSR)</i> states that “a total of 53 different land users are located in the <Acoustic Study Area> (ASA), but only residential and farm houses are considered as critical receptors for detail modelling purpose.” HC also considers schools, hospitals, daycares, places of worship, recreational spaces and nursing homes as critical receptors. Therefore, HC suggests that the <i>TSR</i> confirms the presence of absence of these receptors. Should these additional receptors be present in the study area, HC suggests that they be included in the acoustic assessment.</p> <p>8) Page 14 of the <i>TSR</i> states that HC uses the hours of 23:00h to 0:700h to define the night time portion of the day-night sound level (DNL). Please note that HC uses 22:00h rather than 23:00h as the starting point for the night time period.</p> <p>9) Page 13 of the <i>TSR</i> identifies three critical receptors as being “<i>representative</i>” for noise</p>	<p>10) A Section 5.5 Human Perception of Loudness section will be reworded to eliminate potential confusion.</p> <p>11) The TSR assumed that duration of exposure for each representative receptor will be the same as construction activities. However, the daily activities may vary, and daily exposure is expected to be less since our assessment included the worst possible scenario.</p> <p>12) Noted.</p> <p>13) The backup alarms were not assessed separately in this TSR , since they are considered as emergency equipment. Also, the construction equipment sound levels were obtained as a peak levels which were assumed to include a full cycle of the machine operation, including backup alarms. However, it is common recommendation that on-site traffic flow is designed to minimize back-up requirements.</p> <p>14) The TSR included an assessment of all acoustically significant trucks, but did not include assessment of any small truck (pickup trucks) associated with maintenance, and employee arrival/departure. Similarly, the most common forklifts are gas powered, and they do not generate significant sound at the source. Those sources will be at a minimum, and will not make any noticeable noise impact at the sensitive receptors.</p>

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	<p>modelling purposes. However, Page 24 of the <i>TSR</i> states that two noise “<i>monitoring locations were chosen to be representative of noise sensitive receptors.</i>” It is unclear to HC the reason for selecting two monitoring locations, rather than three. Therefore, HC suggests that the selection of noise monitoring locations is explained further so that HC is able to review the representativeness of the baseline conditions.</p> <p>10) Page 30 of the <i>TSR</i> discusses human perception of loudness. Table 5-2 “<i>Human Perception to a Change in Loudness</i>” indicates that a 1-3 dB change in sound level is “<i>insignificant due to imperceptibility.</i>” This statement can be misleading to readers in the way it conveys potential impacts. For example, backup alarm sounds can be readily noticeable, yet barely change the average sound level. HC suggests that references to audibility based on a change in sound levels be avoided unless the new source of noise is very similar to the existing source with respect to the frequency spectrum (e.g. traffic plus more traffic).</p> <p>11) Page 10 of the <i>TSR</i> indicates that construction activities may last up to 30 months. However, the <i>TSR</i> does not provide the duration of exposure for each representative noise receptor. HC suggests that the <i>TSR</i> provides this information to enable HC to provide advice on the potential human health implications from noise during construction activities.</p>	<p>15) Sections 2.4 to 2.6 of the <i>TSR</i> describe estimated noise adjustments as per applicable noise guidelines and standards. Table 6 presents the result of acoustic calculation and modelling for the worst case scenario including all applicable adjustments described in the relevant sections of the report.</p> <p>16) At this stage of the facility design, there are no anticipated nighttime construction activities. However, if nighttime construction activities are considered in the future, the scenario will be addressed through a Certificate of Approval process.</p> <p>17) The information to indicate the potential effectiveness of using vibratory pile driving could be included in the final report. Vibratory pile driving can be effective in reduction of impulsive noise, but is highly dependent upon geotechnical conditions. It is not possible to determine the possibility, or the extent of applicability of this method until detailed geotechnical work is completed.</p> <p>18) The low frequency noise is not typically included in EA studies. However, the low frequency noise will be part of the acoustic audit and will be addressed, if required.</p> <p>19) The conclusion on Page 40 is based on acoustical calculation and modelling including all applicable noise adjustments.</p>

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	<p>12) Page 10 of the <i>TSR</i> states that “<i>construction of the Facility for the 140,000 tpy scenario was considered as the worst case <for construction noise> and no modelling was performed for 400,000 tpy scenario.</i>” HC has noted that section 6.1.3 of the report indicates that the 400,000 tpy scenario is the worst case in the context of traffic-related construction activities. In each of these scenarios, it is difficult for HC to verify these conclusions about worst case scenarios without further information. Therefore, HC suggests that evidence is provided to support these conclusions in order to ensure that potential human health effects are not underestimated.</p> <p>13) Table 3-2 of the <i>TSR</i>, “<i>Construction Noise Source Summary</i>” does not include backup alarms. Therefore, it is unclear whether or not they have been considered as a tonal source, with an adjustment made for the relative contribution of this source in estimating the change in percentage highly annoyed (%HA) at each receptor. As backup noise alarms can generate a considerable number of noise complaints for projects in general, HC suggests that this source be included in the noise assessment.</p> <p>14) Page 22 of the <i>TSR</i> identifies “<i>minor sources</i>” of noise, including trucks and forklifts. However, the <i>TSR</i> states that these sources are not included in the noise assessment because “<i>the number and</i></p>	

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	<p><i>nature of these smaller noise sources are not known and the contribution of these smaller sources is expected to be insignificant due to the setback distances involved between the process areas and the closest receptors.</i>” To prevent underestimating the potential human health impact of these sources, HC suggests that a worst-case scenario for these noise sources is estimated and included in the noise assessment.</p> <p>15) Page 32 of the <i>TSR</i> includes Table 6-2 “<i>Comparison to Federal Guidelines (Facility for 140,000 tpy Scenario Site Preparation)</i>.” The Table does not appear to have applied applicable noise adjustments (e.g. seasonal, time of day, type of area – rural or suburban, pure tone or impulse correction, construction duration longer than a year) in calculating the %HA and change in %HA for the three noise receptors (CSA, 2005). Therefore, HC suggests applying applicable noise adjustments in the noise assessment in order to account for potential human health implications that may be associated with the project.</p> <p>16) Page 32 of the <i>TSR</i> also states that the noise assessment “<i>analysis assumes that the Facility would not include night time construction activities.</i>” If it is the case that nighttime construction activities will not occur, HC suggests that this is confirmed in the <i>TSR</i>. If construction may occur during nighttime hours, HC suggests that the noise impacts of these activities on</p>	

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	<p>receptors are reflected in the assessment.</p> <p>17) Table 6-4 on page 34, “<i>Comparison to Federal Guidelines (Facility for 140,000 tpy Scenario Structural Phase with Daytime Pile Driving)</i>” shows that the change in %HA exceeds the suggested level of 6.5% at each receptor. The <i>TSR</i> indicates that pile driving may not be required or that vibratory pile driving is a possible method of lessening noise impacts associated with this activity. However, the <i>TSR</i> does not provide information to indicate the potential effectiveness of using vibratory pile driving. Therefore, HC suggests that the <i>TSR</i> includes information to estimate noise impacts from vibratory pile driving activities if it is used in the project.</p> <p>18) Page 21 of the <i>TSR</i> identifies noise sources that may have a significant amount of acoustic energy in the low frequency range (e.g. pumps, compressors, turbine, boilers, condenser, a back-up power generator, and ID and process fans.) Although the human ear is less sensitive to low-frequency noise, perception can sometimes occur by way of vibrations in residences because of noise-induced “rattle” in these environments. Research indicates that annoyance related to noise is greater when low frequency noise is present (CSA 2005; Schomer and Averbuch, 1989). Assessment of sound environments is usually undertaken using A-weighted decibel levels (dBAs) which reflect the frequencies most audible to the</p>	

Submitter	Summary of Comments	Proponent's Response
	<p>human ear. Since low-frequency noise is not typically included in such assessments, HC suggests that the <i>TSR</i> include an assessment of the impacts of low frequency noise on receptors, including mitigation measures as appropriate to ensure that potential annoyance effects are addressed.</p> <p>19) Page 40 of the <i>TSR</i> concludes that a change in %HA from operational noise will not exceed 6.5% at any noise receptor because the predicted sound level at points of reception will be 45dBA or less. HC suggests that the <i>TSR</i> clarify whether or not this conclusion includes consideration of all applicable adjustments (as described under HC's comments on Construction Noise, above) in the operational sound levels.</p>	
<p>Safe Environments Program, Regions and Programs Branch, Health Canada</p>	<p>1) <i>Table 4-2 (COPC Considered for the Human Health and Ecological Risk Assessment)</i> – Aluminum is listed as a contaminant of potential concern (COPC) in Appendix C-1, however, it is not assessed in the risk assessment report. Please provide an explanation as to why aluminum was not included in the risk assessment.</p> <p>2) <i>Table 7-3 (Inhalation TRVs and Inhalation Benchmarks for Selected COPC) – Benzo(a)pyrene</i> -- Health Canada recommends that Canadian TRVs be used preferentially over TRVs from other jurisdictions (Health Canada, 2004a). Please consider using Health Canada's inhalation risk unit</p>	<p>The EA has been amended to include a significant amount of detail to attempt to address the request of the Safe Environments Program, Regions and Programs Branch, Health Canada. In addition the following responses have been provided:</p> <p>1) Aluminum was not considered a contaminant of concern in the risk assessment based on screening conducted and lack of suitable emissions factors for this element. It was not listed in Table 4-2 of the report, nor could we find reference to it in our Appendix C-1. Regardless if it was included in the Appendices it was in error.</p>

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	<p>value for benzo(a)pyrene instead of the WHO (2000) TRV, and re-assess the human health risks for the carcinogenic PAHs that were assessed using the benzo(a)pyrene TEQ.</p> <p>3) <i>Table 7-3 (Inhalation TRVs and Inhalation Benchmarks for Selected COPC)</i> – When converting from an oral TRV to an inhalation TRV, an adult body weight of 70.7 kg and an adult inhalation rate of 15.8 m³/day were used. HC suggests using a toddler exposure (for noncarcinogens) with a body weight of 16.5 kg and an inhalation rate of 9.3 m³/day because the toddler is a more sensitive receptor with respect to non-carcinogens.</p> <p>4) <i>Table 7-5 (Oral TRVs for Selected COPC)</i> – Health Canada (2004b) values differ from several values used in the assessment. These are presented in the table below. For arsenic and total chromium, no justification was provided in the HHRA or in Appendix H as to why Health Canada values were not used.</p> <p>5) <i>Table 7-10 (Maximum Concentration Ratio (CR) Values using Baseline Ground Level Air Concentrations for CACs)</i> – Please indicate the rationale for the selection of the 90th percentile value instead of the 95th percentile or maximum, as this may have an impact on the overall baseline CRs.</p>	<p>2) Given that the project is being carried out in Ontario and under the purview of the ministry, their approach to TRV selection was followed. We recognize that where projects are conducted under CEAA that it is appropriate to use Health Canada TRVs preferentially.</p> <p>3) From the Regions' review of the WHO 2000 TRV derivation we believe that it satisfies the requirements of TRV selection in Ontario.</p> <p>4) The Regions' have reviewed the CR values for all of these chemicals and they are typical HQ<0.00001, thus adopting the toddler approach would not affect the conclusions of the risk assessment.</p> <p>5) Given that the project is being carried out in Ontario and under the purview of the ministry, their approach to TRV selection was followed.</p> <p>6) For background concentrations, the ministry has accepted the 90th percentile value as a reasonable choice for Environmental Assessments which reflects the spatial and temporal variations between measured and predicted maxima.</p> <p>7) Summing the CRs and HQs for those chemicals with similar toxic endpoints was completed at the request of the ministry.</p> <p>8) There was no exposure frequency allocated to this scenario, rather the concentration ratio was simply a</p>

Submitter	Summary of Comments	Proponent's Response
	<p>10) <i>Table 7-13 (Maximum Concentration Ratio (CR) and Lifetime Cancer Risk (LCR) Values using Baseline Ground Level Air Concentrations for Chemical Mixtures)</i> – This table presents CRs for groups of substances with similar toxic effects. However, some of the substances that are in these categories do not have baseline data, and thus it is unclear how these values can be derived. Please provide a discussion about the appropriateness of summing CRs for substances with similar toxic endpoints given that data for specific substances in each grouping is missing.</p> <p>11) <i>Section 7.3.3 (Receptor Screening)</i> - There is no discussion about the specific receptor characteristics. Please provide a discussion about the commercial/future development scenario and the commercial/industrial receptor group.</p> <p>12) <i>Appendix C, Table 2-2 (Summary of Contaminants of Potential Concern)</i> – Several substances on this list do not appear to have been assessed in the report and no explanation is provided as to why they have been excluded. Please provide a discussion about how and why these substances were screened out from further assessment.</p> <p>13) <i>Table 4-2 (COPC Considered for the Human Health and Ecological Risk Assessment)</i>- Bromoform is assessed as both a carcinogen and a non-carcinogen in the report, but this is not</p>	<p>division of the air concentration by the RfC at that specific location. This would thus represent an overestimate of potential risk at any one particular commercial scenario.</p> <p>9) This was defined or determined by the Air Quality team. However, the term appreciable emissions used by the HHERA team should have been changed to “no credible emissions factor sources were found for incineration”.</p> <p>10) If the chemicals were on the original list but were not included for quantitative assessment it was because for incineration facilities the AQ Team were unable to find emissions factors for these chemicals. None of the chemicals were excluded on a toxicological or health basis from this project.</p> <p>11) EA amended to address comment.</p> <p>12) EA amended to address comment.</p> <p>13) EA amended to address comment.</p> <p>14) EA amended to address comment.</p> <p>15) EA amended to address comment.</p> <p>16) EA amended to address comment.</p> <p>17) EA amended to address comment.</p> <p>18) EA amended to address comment.</p>

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	<p>indicated in the Table (i.e. it should read “Bromoform (tribromomethane)b” with the “b” footnote).</p> <p>14) <i>Table 4-2 (COPC Considered for the Human Health and Ecological Risk Assessment)</i> - Carbon monoxide (CO) is not listed in Table 4-2 as a criteria air contaminant (CAC) chemical of potential concern (COPC); however, it is assessed in the report.</p> <p>15) <i>Section 5.2.1 (Baseline Ambient Air Quality Results)</i> – Baseline CO results (presented in Appendix A) are not presented in this section. Health Canada suggests that there be a discussion of baseline CO results in this Section.</p> <p>16) <i>Section 5.2.1.2 – NO2</i> – “<i>The measured annual NO2 level at the Courtice Road station was similar to that in other urbanized area of Ontario such as Toronto...and was well below the annual national ambient air quality objectives (NAAQO) maximum desirable level of 60 µg/m3</i>”. Please present the annual average for NO2 in this Section.</p> <p>17) Page 180, Local Farmers, Farmer – Infant – first sentence – “famer” should read “farmer”</p> <p>18) Appendix G – there are no inhalation rates presented in the receptor characteristics tables. Please present the inhalation rates for each of the receptor groups assessed in the report in the</p>	

Submitter	Summary of Comments	Proponent's Response
	receptor tables in Appendix G.	
Municipality of Clarington	No comment received.	None required.
Municipality of Clarington Fire Chief	No comment received.	None required.
City of Oshawa	No comment received.	None required.
The Corporation of the City of Pickering	No comment received.	None required.
Town of Ajax	No comment received.	None required.
The Corporation of the Town of Whitby	No comment received.	None required.
Township of Brock	No comment received.	None required.
Township of Scugog	No comment received.	None required.
Township of Uxbridge	No comment received.	None required.
The Regional Municipality of York	No comment received.	None required.

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Central Lake Ontario Conservation Authority		
Ganaraska Region Conservation Authority	No comment received.	None required.
Kawartha Conservation Authority	No comment received.	None required.
Lake Simcoe Region Conservation Authority	No comment received.	None required.
Nottawasaga Valley Conservation Authority	Response from Patti Young: The study area is outside of the NVCA watershed – Document has been returned.	None required.
Toronto and Region Conservation Authority	The preferred site is not within TRCA's jurisdiction; therefore TRCA staff has no comments on the final EA document.	None required.
Hydro One Inc.	As Hydro One facilities are within the study area of this EA, Hydro One would like to be included in the loop- and would like to receive all the info related to assessing the subject EA such that Hydro	Comment noted.

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	One will be able to assess the impact on our facilities.	
Commissioner/ Medical Officer of Health Durham Region	Comment including Direction Memo (2009-COW-01) and a copy of the letter from Dr. Lesbia Smith date July 24, 2009 were sent to Gavin Battarino of the MOE. The facility as proposed will not pose an unacceptable public health risk if the facility performs as assumed in the SSHERA.	Comment noted.
Medical Officer of Health and Director of Public Health Programs York Region	No comment and do not require further involvement with this proposal.	None required.
Durham District School Board	No comment received.	None required.
Durham Catholic District School Board	No comment received.	None required.
<i>Summary of GRT Comments on Amended EA</i>		
Ministry of the Environment – Environmental Monitoring And Reporting Branch	EMRB's review did not identify any significant issues with the air dispersion modelling aspects of documents. The following are comments with regards to the responses to our September 24, 2009 Memorandum comments:	1) Acknowledged. 2) Acknowledged. Correcting this typo was overlooked in the amended report. Since this typo was minor, we do not propose to revise the amended report.

Submitter	Summary of Comments	Proponent's Response
	<p>1) The emission rate from the main stack has been corrected in the model input for the PM2.5 model run for the "Facility+ On-site Traffic" scenario. The corrected model outputs have been incorporated into the amended report.</p> <p>2) In the deposition model run reviewed by EMRB, the modelling consultant used the same EMRB-approved particle size of 2.5 microns for both dry and wet deposition estimates for particles although a different particle size of 1 micron was quoted for wet deposition estimate (Appendix D – CALPUFF Methodology of the Final Appendix C-1, Page D-50, 3rd bullet from the top). This typo is still in the amended report on the same page.</p> <p>3) The emission rates listed in Table B3-5 of Appendix B - Emission Inventory of the Final Appendix C-1, do not agree with those listed in Table G1 of Appendix G - Deposition Predictions at Special Receptors, of the Final Appendix C-1, for at least the following compounds, acetaldehyde, bromodichloromethane, bromoform, carbon tetrachloride and ethylene dibromide. This inconsistency still exists in the amended report. As the proponent confirmed that the emission rates listed in Table B3-5 are correct and the emission rates listed in Table G-1 are higher. Therefore, the model results are more conservative if emission rates listed in Table G-1 were used.</p>	<p>3) This inconsistency was not addressed in the amended report as the values in Appendix G-1 were higher than those in Table B3-5, and therefore the results and analysis presented in the final report were conservative (i.e. over-estimated the actual impact of emissions of these contaminants).</p> <p>4) Acknowledged.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>4) It is anticipated that the amendments necessary to address our outstanding our comments on the minor issues would not change the general conclusion of the air dispersion modelling results.</p> <p>As indicated in our previous memorandum, that the results of the reviews by Environmental Assessment and Approvals Branch and Central Region Technical Support staff on various aspects of the Environmental Assessment reports (i.e. emission estimates, traffic patterns, etc.) may potentially affect EMRB's review of the air dispersion modelling.</p>	
<p>Ministry of the Environment – Air and Noise Unit</p>	<p><i>Air</i></p> <p>1) The documentation submitted has addressed some of the concerns raised in the letter dated September 25, 2009, and acknowledged that additional and/or detailed site-specific analysis will be submitted to the ministry in support of future approvals under Section 9 of the Environmental Protection Act (EPA).</p> <p>2) In particular, an odour impact assessment for the worst case emissions scenario would be required, as well as an emissions inventory prepared in accordance with the requirements of O.Reg. 419/05. The odour impact assessment can build on any odour impact assessment that has been completed as part of the EA process, to demonstrate that adverse odour impacts are not</p>	<p><i>Air</i></p> <p>1) Acknowledged.</p> <p>2) An odour impact assessment will be provided as part of the supporting information provided for the environmental approvals/permits of the facility once detailed design data of the facility is available.</p> <p><i>Noise</i></p> <p>1) Noted.</p> <p>2) All existing residences in the study area were considered as noise points of reception.</p> <p>3) Ambient noise levels within the study area were determined according to NPC-233.</p>

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	<p>likely to occur due to emissions from the proposed undertaking.</p> <p><i>Noise</i></p> <p>1) Only one noise review letter dated September 25, 2009 was issued by the EAAB. Any reference to other letters/dates such as September 16, 2009 should be deleted.</p> <p>2) All existing residences, whether situated on lands zoned residential or zoned other designations should be considered as noise points of reception.</p> <p>3) Ambient noise levels within the study area should be based on the MOE Exclusion Limits of Leq(1h) 50 dBA day & 45 dBA night in accordance with MOE Publication NPC-205. If higher ambient noise levels are to be used in lieu of the MOE Exclusion Limits, then such elevated sound levels should be supported by either noise predictions (in accordance with MOE Publication NPC-206) or noise measurements (in accordance with MOE Publication NPC-233). If noise measurements are used, then contributions from non-vehicular traffic sources should be limited to facilities that are not undergoing municipal or provincial noise mitigation programs.</p> <p>4) Acoustic Audits should be carried out for the two considered phases of the facility, namely 140 ktpy and 400 ktpy. Reference to other phases of the</p>	<p>4) An Acoustic Audit will be recommended during construction of 140,000 tpy facility.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>facility such as 150 ktpy and 250 ktpy should be deleted.</p>	
<p>Ministry of the Environment – Waste Unit</p>	<p>Although the information requested below is not critical for consideration of the EA submission, it is identified as “outstanding” to ensure that it is given due consideration and included in the future Part V application:</p> <p>1) Page 10-27 contains a description of the emergency situation procedure when both boilers are shutdown. The proposal is to purchase power from the utility company to operate the fans to provide negative pressure in the Tipping Building. However, the details of treatment of the odourous air exhausted from the building have not been included in the EA.</p> <p>2) Page 10-28 contains a description of the high temperature combustion zone within the boiler/furnace combustion chamber. The expected combustion temperature as well as any supplementary fuel provisions should be further described. As the design and proposed operational conditions of this equipment are critical in ensuring that emissions of contaminants and odours are minimized, detailed information would need to be submitted in the future Part V application.</p> <p>3) Page 10-40 contains references to floor trenches and a settling basin to collect and contain</p>	<p>Requested information will be provided as requested in the future Part V application under the Environmental Protection Act.</p>

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	<p>wastewater to be used for quenching residue in the ash discharges. The description of this system is too general. The locations of these floor trenches and the settling basin must be identified and shown on the floor plan. And the design of the settling basin, including any leakproofing provisions, as well as the expected wastewater quality must be described in the future Part V application.</p> <p>4) Although, the review of the various versions of the EA has been a time-intensive effort, the waste reviewer noted a significant improvement in the content quality of the amended (November 27, 2009) EA document. The revisions did not only provide the necessary clarification of the site's proposed design and operational procedures but also included the required revisions to ensure that the proposal complies with the Ministry's requirements.</p>	
<p>Ministry of the Environment – Environmental Assessment Project Coordination Section</p>	<p>1) A more detailed explanation substantiating that the York Region waste management strategy is only short term should be provided.</p> <p>2) Subsection 3.4 of the EA study states that the “Do Nothing” alternative described in the EA does not meet the purpose of the undertaking and will therefore not be considered in this study. This statement contradicts the requirements set forth in the ministry's Code of Practice: Preparing and Reviewing Environmental Assessments in Ontario (Codes), which states that for the purposes of comparison and evaluation of the “Alternatives</p>	<p>1) York Region's waste disposal strategy is defined as “short-term” relative to the disposal planning period defined by this EA and also when considering the typical planning period associated with the development of new waste disposal infrastructure. York Region has committed to this project for a minimum of 25 years through the signing of a Memorandum of Understanding with the Region of Durham.</p> <p>2) The following provides a comparison of the preferred Undertaking to the “Do Nothing”</p>

Submitter	Summary of Comments	Proponent's Response
	<p>To”, a “Do Nothing” system is a required component of the EA process.</p> <p>3) The description of the “Do Nothing” alternative is not an adequate representation of the current waste management practices for the Regions, as set forth in section 2 and 3.4 of the EA study.</p> <p>4) It is not understood why existing landfill capacity and/or the siting of new landfill capacity was excluded from the EA study considering that the management of any process residual materials from the thermal treatment of waste will ultimately require landfill disposal capacity and forms part of the undertaking for which approval will be sought.</p> <p>5) It is not clear as to how and when the existing waste management systems will be reviewed or what processes and protocols will be applied to determine the projected long term disposal capacity requirements of the Regions.</p> <p>6) The EA does not include a contingency plan to address the possibility that the EA could be refused.</p> <p>7) Section 9.3 of the Amended EA and the Addendum to Section 9.2 of the Amended EA do not make reference to whether or not the information compiled during the procurement process will be made available for review upon the conclusion of the procurement process.</p>	<p>alternative:</p> <ul style="list-style-type: none"> • The preferred Undertaking has the ability to generate energy of sufficient quantity to market to the Ontario electrical grid with a better environmental performance per kwh than some current forms of energy generation supplying power to the grid. • The preferred Undertaking has the ability to capture additional resources for recycling that would normally be lost to landfill disposal. • The preferred Undertaking will provide a local residual waste management solution that is not subject to the significant public policy risks associated with the export of waste outside the Region's jurisdictional control. • The environmental performance of the proposed EFW facility has been demonstrated to be preferred overall from a full life cycle analysis when compared to a remote landfill alternative including generating systematically less GHG emissions per tonne of waste when compared to a remote landfill alternative. • The preferred Undertaking is a locally owned and operated long-term solution providing a greater degree of control over the economic and environmental performance of the facility; and,

Submitter	Summary of Comments	Proponent's Response
		<p>The preferred Undertaking allows the Proponents the opportunity to take responsibility for the waste they generate and not burden another municipality with having to deal with someone else's waste issues.</p> <p>3) We recognize that York Region has secured alternative waste disposal capacity for a portion of their residual waste stream, however, this capacity is not sufficient to manage the entire disposal capacity need of the Region and does not address the initial need of 20,000 tonnes/year disposal capacity as discussed in this EA.</p> <p>4) Covanta is currently proposing the use of Republic's Pine Ave. Landfill in Niagara Falls, New York as the primary site for ash management and the Modern Landfill in Model City, New York as a backup should it be required. However, Covanta has committed to investigating more local landfill alternatives now that they have been identified as the preferred vendor.</p> <p>5) A review of the existing waste management systems will include the identification of any potential short-comings that may exist in the current waste management systems such as the availability of long-term processing capacity for recyclable and/or organic material and developing additional strategies to increase waste diversion. The review would also examine ways to maximize the use of existing approved disposal capacity and consider necessary</p>

Submitter	Summary of Comments	Proponent's Response
		<p>additional infrastructure to further improve diversion performance (i.e. current diversion rates, capture rates etc.).</p> <p>The waste management system reviews would examine the current waste systems' performance and projected waste management needs of the Regions. This is determined by obtaining current residential and IC&I waste generation data from the Regions and analyzing the data to determine performance. In addition, per capita waste generation estimates and populations projections would be determined to project the amount and composition of waste the Regions will need to manage during the planning period. This intervention will then be used to project long-term waste disposal capacity requirements. The assessment of the current system performance and evaluation of options would address short and long-term needs.</p> <p>Typically the Regions review and update their Integrated Waste Management Master Plans at a minimum every 5 years, however, continuously review and update system components as required.</p> <p>6) Each Region has established short-term disposal capacity to manage the post-diversion residual waste until the EFW facility is constructed and operating. The following describes the respective short term contingency plans.</p> <p>Durham Region: Durham Region has secured an</p>

Submitter	Summary of Comments	Proponent's Response
		<p>agreement in the Modern Landfill Inc. for the landfill disposal of non-hazardous residual waste. The terms of the agreement are for a three year period commencing January 01, 2011, with the option to extend for two (2) additional one (1) year periods. The landfill disposal location is: Modern Landfill Pletcher Road, Niagara County Lewiston, New York, USA</p> <p>York Region: York Region's current contract with the City of Toronto and the Greenlane Landfill would be utilized to manage York Regions residual waste disposal capacity need until such time as the EFW facility is operating.</p> <p>Should this EA be refused, the Regions would have to enter into discussions with the MOE to determine their alternatives to proceed in securing long-term disposal capacity. In the meantime, these short-term contracts already established would manage the waste disposal requirements until a new alternative is identified. However, please note that these contracts are temporary and do not provide a local waste disposal solution nor do they meet the purpose and need of the undertaking.</p> <p>7) Following the completion of the procurement process, the Proponents will make available to the Ministry of the Environment, upon request to the Proponents, information/documentation with respect to the procurement process that would be subject to</p>

Submitter	Summary of Comments	Proponent's Response
		release in accordance with the purchasing policies of the Region of Durham and the provisions of the Municipal <i>Freedom of Information and Protection of Privacy Act</i> .
Ministry of the Environment – Central Region	<p>1) During the October 13, 2009 meeting, the issue of potential odour emissions from the facility was discussed. At the time of the meeting the ministry was obtaining clarification from the Regions as to why odours were not addressed in the Air Quality Impact Assessment. There was no agreement that no further modelling or monitoring was required. Consequently, the response from Durham / York should be revised to reflect this at variance conclusion.</p> <p>2) The issue of potential odour impacts from the proposed facility was also discussed during the December 1, 2009 workshop. To substantiate Regions' conclusions that adverse off-property odour effects are not expected as a result of onsite operations, the MOE recommended that the Regions' submit an odour mitigation plan, at the time of detailed design studies, to the Director of Central Region for approval. This plan should include:</p> <ul style="list-style-type: none"> - An overview of the potential odour emissions that may occur during the handling, processing and transportation of the wastes - Several odour surveys conducted at the 	<p>1) The statement in the comment response table was not meant to imply that odour modelling or monitoring would not be considered during the permitting phase of the project.</p> <p>2) Section 5.2.4 of the amended Air Quality Technical Study Report provides a commitment to provide an odour management plan to the ministry for review and approval during the permitting phase of the Facility. Odour monitoring requirements will be addressed in this plan. The specific requirements noted by the ministry will be addressed in the odour management plan.</p> <p>3) Acknowledged.</p> <p>4) Acknowledged.</p>

Submitter	Summary of Comments	Proponent's Response
	<p>tipping area, truck queues and any other potential odour sources that might be identified</p> <ul style="list-style-type: none"> - An estimate of odour emission rates from the different sources as noted above - Dispersion modelling to assess the impacts at the nearest sensitive receptors <p>3) Since the Regions found no readily available VOC emission data applicable to the proposed facility, the Ministry recommends the Regions include VOC emissions testing as part of the Stack Testing commitment in Table 13-1 "<i>Summary of Environmental Mitigation and Commitments to Future Work</i>" of the ESD.</p> <p>4) The Regions have committed to an ambient air quality monitoring in the immediate vicinity of the facility for a 3-year period. The proponent should submit an ambient air monitoring plan to Central Region, Technical Support Section for review and approval prior to the beginning of construction of the facility.</p>	
<p>Ministry of the Environment – Ecological Standards Section, Standards Development Branch</p>	<p>Overall, the ecological risk assessment is well presented and the proponent has appropriately responded to my previous review comments dated on July 7, 2009 and September 25, 2009 and I have no further comments.</p>	<p>Noted.</p>

Table 2. Public Comment Summary Table

Proposal: Durham York Residual Waste Environmental Assessment Study

Proponent: Regions of Durham and York

Submitter	Summary of Comments	Proponent's Response
Area Residents	General comments stating opposition to the project.	Comments have been received and forwarded to the ministry for consideration.
Area Residents	General comments regarding concerns with the decision-making processes of the municipal and/or regional councils, including requests for a referendum.	Comments regarding the municipal political process, including requests for a referendum, cannot be addressed within the scope of this environmental assessment.
Area Resident	Comment stating that the proponents' political preferences drove key decisions, as opposed to arriving at conclusions as a result of orderly, rigorous and transparent studies, i.e. conclusions based on factual data evaluated properly to produce a defensible outcome.	The conclusions reached and recommendations made by the consultant team over the course of the subject environmental assessment (EA) have been based on a rigorous and objective, third-party assessment of both first and second-order data and information that has yielded a traceable and, therefore, defensible EA document.
Area Resident	Comment stating that Durham Region's support of the facility is contradictory with their participation on the Inter-Governmental Declaration on Clean Air.	Disagree with this comment.
Area Residents	The Durham Region energy from waste (EFW) consultants appear to be employees of Covanta, which is the current preferred vendor for construction of the incinerator. This would be a conflict of interest.	Stantec Consulting Limited is not employed by Covanta.
Area Resident	The proponents selected two consulting firms, Jacques Whitford (now Stantec) and MacViro (now Genivar), both of whom were members of the Canadian Energy from Waste Association (CEFWC) until the last year - Jacques Whitford (Stantec)	The team's experience in the completion of EA studies together with its technical expertise in energy-from-waste applications was considered an asset to the proponents of the subject EA study. At no time did the consultant team perform its contractual obligations in anything but a professional and objective manner.

Submitter	Summary of Comments	Proponent's Response
	<p>apparently no longer a member.</p> <p>The principal funders of the CEFWC are Covanta Energy, Veolia Montenay and Waste Management/Wheelabrator Technologies. All 3 became pre-qualified vendors eligible to submit a bid for the Durham project.</p>	
Area Resident	<p>Comment regarding the purpose of EA and how it is to produce an environmentally safe facility. In addition, the process is public (and supposedly transparent) in order that the public is assured that the proposed facility is safe. If, at the end of an EA, the public is not satisfied that it is safe, it follows that the EA has failed and the facility should not be built.</p>	<p>The conclusions reached and recommendations made by the consultant team over the course of the subject EA have been based on a rigorous and objective, third-party, assessment of both first and second-order data and information that has yielded, a traceable and, therefore, defensible EA document.</p>
Area Residents	<p>Comments directed to the Ministry of the Environment (MOE), urging them to stand by their mandate to protect the air, land and water for a healthy environment within the community, by not approving the project.</p>	<p>Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.</p>
Area Resident	<p>Comment stating that the building of an incinerator would be in contradiction to all other environmental initiatives that the government is currently working toward, including the recently passed Bill 167 which calls for the reduction and elimination of toxins.</p>	<p>Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.</p>
Area Resident	<p>The Ontario Waste Diversion Act 2002 has the purpose "to promote the reduction, reuse and recycling of waste and to provide for the development, implementation and operation of waste diversion programs to promote the reduction, reuse and recycling of waste and to provide for the development, implementation and operation of waste</p>	<p>Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.</p>

Submitter	Summary of Comments	Proponent's Response
	diversion programs.”	
Area Resident	Would the toxics and carcinogens emitted from this facility be permitted under the Toxics Reduction Act?	The actions required by the Province to meet the government implementation of the Toxics Reduction Act are beyond the scope of the EA.
Area Residents	Comments were received stating that energy from waste facilities often emit more greenhouse gas (GHG) emissions than coal plants, or add cumulatively to GHG emissions, and the development of the facility would be contrary to Ontario's goals for reducing greenhouse gas emissions.	The actions required by the Province to meet its GHG reduction targets are beyond the scope of the EA.
Area Resident	Comment received stating that Ontario needed a waste policy strategy to include the manufacture of plastics, paper and wood products that goes beyond diversion.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Resident	A comment was received stating that the Government of Ontario has demonstrated that it is committed to the health of our environment. Further, the submitter urged the Government of Ontario to make the safer, greener decision regarding the proposed incinerator in Durham Region.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Residents	Comments were received stating that development of the facility would not be in compliance with the ministry's Zero Waste vision for the province.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Resident	Considering the ministry's vision for Ontario as found in the Environmental Bill of Rights' (EBR) Statement of Environmental Values, the EA fails to follow a planning process that leads to a preferred technology, preferred site and preferred vendor that	The EA was undertaken in accordance with the approved Terms of Reference (ToR).

Submitter	Summary of Comments	Proponent's Response
	represent environmentally responsible decision-making.	
Area Residents	Comments were received directing the ministry to honour their obligation to consider cumulative effects, and implementation of Certificate of Approval (CofA) requirements.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Resident	The EA Study Document ignores the current Ontario and global context and appears to assume that the EA Study can come to a conclusion without considering current global and Ontario based environmental, health and economic conditions.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Resident	Comments regarding sustainability/resource and energy conservation and a statement that the EA ignores this and the ministry Vision Statement (EBR) and the ministry's Zero Waste Vision.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Resident	Comment regarding air quality/healthy communities/health risk in relation to the ministry's Vision Statement and concerned that the National Pollutant Release Inventory (NPRI) reporting from 469 facilities in the Durham/York regions illustrated the fact that there were emissions above thresholds for the EA.	A facility being required to report to the NPRI does not imply an exceedance of any health-based regulatory guidelines or standards. The NPRI is a reporting system that allows the federal government to track annual contaminant releases from industrial sources across the country that meet certain emissions thresholds and is not a regulatory permitting tool.
Area Resident	Clarington Council approved a zero-waste motion and the Regional Works Committee endorsed that position. These motions proposed that the Region achieve that target by 2038. However this target is incompatible with an incinerator because increased	Although the Regions are focused on continually increasing diversion, the population growth projections for the Regions will offset the increase in diversion, resulting in a similar quantity of waste requiring management over the planning period. Should waste

Submitter	Summary of Comments	Proponent's Response
	diversion is a gradual process and the incinerator needs a minimum quantity of waste to function.	diversion targets not be achieved a facility expansion would be required in the future.
Area Resident	Request to put the project on hold until it can be demonstrated to be a rational part of a long-term materials strategy.	Waste diversion is a high priority for both Durham and York Regions. Initiatives including recycling, composting and diversion of household hazardous waste have been investigated as part of this project. The Regions will continue to invest in, encourage and promote diversion programs so that these diversion targets can be met and to reduce the amount of waste requiring disposal at the proposed facility. The Regions are dedicated to educating their residents of the resources available to them and hopefully through this education, people will become more involved with diversion efforts.
Area Resident	A request was directed at the ministry to order that a more comprehensive and extensive assessment to be done, or to authorize an Assessment done by the Province.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Residents	Comments were received that asserted that should the project be approved the ministry must require the most stringent and comprehensive environmental surveillance possible, including soil, agricultural products, ambient air and human bio-monitoring.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Residents	Concerns were raised about the agreement between the Regions of York and Durham and that the Region of Durham should not have to cover York Regions costs and still keep them as a partner considering they "backed out" of the agreement.	York Region is continuing as a full partner in the preparation of the EA submission and as such is contributing 50% of those costs. York Region has reduced its share of waste to be processed at the facility to 20,000 tonnes per year and as such will contribute proportionately to the construction and operation costs of the facility.

Submitter	Summary of Comments	Proponent's Response
Area Resident	Concern raised regarding the legal/jurisdiction environment and that only contractual aspects are reviewed from the point of view from citizens' rights and stewardship mandates and makes no mention of previous Supreme Court decisions.	The EA was undertaken in accordance with the approved ToR, including the consideration of the appropriate municipal, provincial, and federal legislative requirements.
Area Resident	Just because something may be meeting a particular standard at a given time does not necessarily make it safe. Moreover, that is when the system works as it is expected to do. In actuality, provisions must be made for system failures.	The EA was undertaken in accordance with the approved ToR, including the consideration of the "worst-case" scenario and associated process upsets.
Area Residents	<p>The fact that York region is only a 20% partner in the capital costs also argues against treating the EA study area as a homogenous area when looking at the capital costs, debt burden and tax impacts.</p> <p>What consideration was given to compensating for the economic disparities between regions, and prorating the economic impacts according to commitment to capital costs?</p>	Each Region undertook a financial assessment to determine the financial viability and impacts associated with moving forward with the proposed undertaking. These financial assessments fall outside the scope of this EA study.
Area Residents	York Region is contributing nothing to this solution. There was not even an EA done for any location in York Region, nor was there an EA done in any other area of Durham.	<p>York Region is continuing as a full partner in the preparation of the EA submission and as such is contributing 50% of those costs. York Region has reduced its share of waste to be processed at the facility to 20,000 tonnes per year and as such will contribute proportionately to the construction and operation costs of the facility.</p> <p>In accordance with the approved ToR, the alternative waste management solutions and alternative sites considered to address the waste management problems were within the boundaries of both York and Durham Regions. The evaluation and siting process was carried</p>

Submitter	Summary of Comments	Proponent's Response
		out appropriately in accordance with the ToR.
Area Residents	Was the Greenbelt considered during the siting and evaluation process?	Yes, the Greenbelt was considered during the evaluation and siting processes for the proposed facility
Area Resident	Can the Minister and staff explain the approval of the Highway 407 East Link, even though it is located in the Greenbelt?	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. Any decision by the Province on other undertakings is beyond the scope of the EA.
Area Resident	A comment was received quoting previous political statements by the Honourable Ruth Grier (1994) and Honourable Leona Dombrowsky (2003) that opposed incineration that should be considered during the ministry's review.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Resident	A request was received by the ministry to ensure that air emissions monitoring commitments made during a Energy From Waste Site Liaison Committee meeting (January 14, 2009) be made a requirement of the EA for the facility.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Resident	A comment was received stating that the ministry would fail to protect the Canadian environment and its citizens if the project is approved.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Residents	Comments received requesting either a public hearing or an Environmental Review Tribunal (ERT) for approval of a waste incinerator project.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.

Submitter	Summary of Comments	Proponent's Response
Area Residents	A comment was received stating the opinion that waste management should be controlled by the Federal and Provincial government and not by municipalities.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.
Area Residents	Comments were received that stated support for project.	Comment noted.
Area Residents	Received requests for notification when the EA will be submitted, as well as several requests for copies of the EA or for information regarding where it was available for review.	Upon submission of the EA notification will be sent to all those interested persons who participated in the EA process. Notification will also include where the EA will be made available for review.
Area Residents	Comments were received voicing concerns that there was a lack of adequate opportunities for consultation, or that the project was not adequately publicized.	It is the opinion of the Proponents that sufficient consultation was completed to support the conclusions of the Environmental Assessment. All public consultation conducted as part of this study was in accordance with the approved ToR.
Area Residents	Received comments identifying other organizations and groups that oppose the project.	The Regions are aware that 75 Durham Region doctors, Canadian Union of Public Employees, Canadian Auto Workers Union, Durham Regional Labour Council, Canadian Labour Congress and several local community groups are opposed to the proposed facility. Their concerns have been taken into consideration.
Area Resident	A comment was received stating that a petition was signed by over 2,200 residents (dated June 24, 2009) and given to Durham Region Council. And that the response indicated that this did not show enough opposition.	There is no record of this response provided by Council.
Area Resident	A comment was received requesting records of the public consultation efforts for the project.	Details regarding public consultation can be found in the Record of Consultation which has been posted on the region's project website. Additional details can also be found in the EA under Section 16 – Consultation Summary.

Submitter	Summary of Comments	Proponent's Response
Area Residents	A comment was received voicing the opinion that there was inadequate time for councilors and the public to adequately review, analyze and comment on the EA documents.	Please note that the review period provided for public, Committee and Council review of the Draft EA Study Document was in accordance with the approved Terms of Reference and accepted practices.
Area Residents	A comment was received that identified concern regarding the reduced need for Clarington's peer review of the documents. Clarington peer reviewers were dismissed by Clarington Council July 6th and were not permitted to complete their pre-submission discussions with staff and the Project Team.	It is the opinion of the Project Team that all of the comments submitted by Clarington's Peer Reviewers have been addressed. Following the comments received on the Draft EA, no comments have been received from Clarington on the formal EA submission.
Area Resident	A comment was received stating the opinion that there was a lack of presentation to the Health and Social Services Committee of the most recent Air Quality Report (AQR) or the Human Health and Ecological Risk Assessment (HHERA).	No requests were made to the Consultant Team regarding providing presentations to the Health and Social Services Committee on the AQR or HERA. The Consultant Team has made presentations whenever asked to do so, at numerous Committee and Council meetings, on all issues including those related to Health.
Area Resident	A comment was received stating the lack of communication regarding the completion of the public consultation period on July 15, 2009.	In order to complete the Record of Consultation for inclusion with the final EA documentation, we had to stop receiving comments on the EA on July 15, 2009 to facilitate assembly of the documentation and printing. Any comments submitted after July 15 th can be forwarded directly to the ministry.
Area Residents	A question was received asking if comments could be submitted via email, and a request was made to update public notices to reflect this information.	Submissions can be forwarded by e-mail, and all subsequent notices regarding the EA process will include this information.
Area Resident	A question was received asking why the EA was not posted on the EBR website.	The EA and notice has not been posted on the EBR website as this was not a requirement.
Area Resident	A question was received asking who the current government review team (GRT) members are.	The most recent GRT list was provided. The GRT list is also available on the Project website.
Area Resident	A question was received asking if the EA study had been circulated to any federal stakeholders and who these individuals are.	The EA was circulated to the GRT. The GRT is made up of both provincial and federal members. The most recent GRT list was provided. The GRT list is also

Submitter	Summary of Comments	Proponent's Response
		available on the Project website.
Area Resident	A request for a copy of the proposal submitted by Covanta was received.	All information related to the Request for Proposals (RFP) that can be released publicly has been included in Section 9 and 10 of the EA document.
Area Resident	Comment that there was a lack of consultation with the Métis.	Aboriginal communities, including the Métis, were consulted appropriately. Please refer to the most recent contact lists available on the Project website.
Area Resident	A question was received asking if the proponents have any concrete recommendations to ensure that a community relations committee becomes an effective forum to discuss community concerns and follow through with corrective actions by the Regions and the selected project contractor?	A site liaison committee has been established as part of the EA study. It is intended that a community relations committee will be maintained for the facility over its operating period. The mandate of this committee during operation of the facility has not yet been established.
Area Resident	Comment that although the Report on Consultation on Proposed Siting Methodology and Criteria describes the consultation process undertaken, it is equally important to show how the results of the consultation were considered in making any changes to the methodology and criteria and in assigning priorities for the comparison of short listed sites.	Please refer to the Record of Consultation which documents consultation undertaken to date and how comments were considered.
Area Resident	Comment stating that most public advertisements used thermal treatment, residual waste, energy from waste terminology, instead of providing clear explanations in lay terms to interested and potentially impacted members of the public.	The terms “thermal treatment” or “energy from waste” are commonly accepted terms for the proposed waste management alternative. The term “undertaking” is a term used and required during the environmental assessment process.
Area Residents	Concerns were received regarding the appropriateness of the selected site, and that the facility would be situated too close to many sensitive receptors.	The Clarington 01 site has the most advantages and fewest disadvantages compared to the other alternative sites. The EA has been amended to include additional rationale clarifying the evaluation and site selection processes. Please refer to Sections 7(Alternatives To) and 8 (Alternative Methods) of the amended EA document for the revised descriptions of the

Submitter	Summary of Comments	Proponent's Response
		Alternatives To and Alternative Methods evaluations.
Area Resident	A comment was received identifying a lack of opportunities within the site selection process to identify new willing sellers (i.e., feedback loops), as per Report No: PSD-070-07 from Clarington's General Purpose and Administration Committee.	<p>Section 8.5.2 of the EA describes the identification of "Willing Seller" sites.</p> <p>It is the opinion of the Project Team that all of the comments submitted by Clarington's Peer Reviewers have been addressed. Following the comments received on the Draft EA, no comments have been received from Clarington on the Formal EA submission.</p>
Area Resident	A question was received asking if all relevant future land use designations and policies in the Durham Regional Official Plan and the Clarington Official Plan are considered.	Yes, all relevant future land use designations and policies were considered during the EA process.
Area Residents	A comment was received stating that as part of the site selection process a number of reports were prepared. The Regions' project team previously committed to release these reports in July; however they have not been. It is premature for the regions' project team to complete their analysis and determine the preferred site in advance of these studies being released, comments provided and due consideration of them.	The evaluation and siting process was carried out appropriately in accordance with the ToR. All supporting information and reports used in the evaluation and siting process were submitted to the ministry with the EA.
Area Resident	A comment was received stating that as per Clarington staff reports and peer reviewers addressed in PSD-097-07: The Regions should consider carrying forward at least two geographically separate sites through the RFP to provide for the optimum siting opportunity in relation to the specific technology and the specific HHERA.	The EA was undertaken in accordance with the approved ToR. The siting process was designed to arrive at a preferred site. Each Vendor evaluated in the RFP was providing a technology consistent with that identified in the evaluation of "Alternatives to" and as a result, it was not necessary to carry two sites forward in the RFP process.

Submitter	Summary of Comments	Proponent's Response
Area Resident	A comment was received stating that by choosing to separate the site selection and technology, the project team in effect turned Step 7 as described in the EA ToR into Steps 7 and 8. Does MOE consider the separating of the two decisions to be consistent with the EA ToR?	In January 2008, the Regions sought clarification with respect to the separation of the siting and procurement process, to ensure consistency with the approved ToR.
Area Residents	A comment was received stating that the site selection process was scoped towards public lands, thereby showing a preference for the Clarington 01 site and a predetermined outcome adopted by Durham Council.	<p>The evaluation and siting process was carried out appropriately in accordance with the ToR. The EA has been amended to include additional information clarifying the evaluation and site selection processes.</p> <p>It is the opinion of the Project Team that all of the comments submitted by Clarington's Peer Reviewers have been addressed. Following the comments received on the Draft EA, no comments have been received from Clarington on the Formal EA submission.</p>
Area Resident	A comment was received regarding the extreme difference between Clarington 01 and East Gwillimbury air sheds (Industrial criteria air pollutant emissions). The comment also stated that there a decision on site selection had a great impact on results of the AQR and HHERA .	The HHERA team had conducted a Generic Risk Assessment that flagged a couple of issues of concern but overall concluded that it was likely that a facility could be located either in York or Durham. Regardless of where the facility was to be placed, it would need to be demonstrated that it would not have an impact on human or ecological health, including from a cumulative point (baseline + project). The role of the HHERA team was to assess the potential for risk to humans and the environment once a site and vendor were selected.
Area Resident	A comment was received stating that in Clarington peer review, it is discussed how the 'advantages and disadvantages' evaluation generated a number of	The evaluation and siting process was carried out appropriately in accordance with the ToR. The EA has been amended including additional information

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	<p>questions and concerns from the peer reviewers regarding how the sites were ranked in order to select a preferred site.</p>	<p>clarifying the evaluation and site selection processes.</p> <p>It is the opinion of the Project Team that all of the comments submitted by Clarington's Peer Reviewers have been addressed. Following the comments received on the Draft EA, no comments have been received from Clarington on the formal EA submission.</p>
<p>Area Residents</p>	<p>A question was asked that if the only independent reviewers, Clarington's Peer Review Team, are still not satisfied with the way decisions arose from the Site Identification Process, how can we be sure that the best site was chosen?</p>	<p>It is the opinion of the Project Team that all of the comments submitted by Clarington's Peer Reviewers have been addressed. Following the comments received on the Draft EA, no comments have been received from Clarington on the formal EA submission.</p>
<p>Area Residents</p>	<p>A comment was received stating that in the opinion of Senes, public health and safety and natural environment are separate issues and should have been dealt with as separate criteria for impact and fairness of assessment for the preferred site.</p>	<p>The evaluation and siting process was carried out appropriately in accordance with the ToR. The EA has been amended including additional information clarifying the evaluation and site selection processes.</p> <p>It is the opinion of the Project Team that all of the comments submitted by Clarington's Peer Reviewers have been addressed. Following the comments received on the Draft EA, no comments have been received from Clarington on the formal EA submission.</p>
<p>Area Resident</p>	<p>A comment was received stating that it appears that because land does have to be expropriated to facilitate this project, that in fact Clarington 01 does not meet the criteria set out in Table 4.5 making Clarington 01 disadvantaged in respect to complexity of required agreements.</p>	<p>There are no expropriations required to facilitate the use of Clarington Site 01.</p>
<p>Area Resident</p>	<p>A comment was received stating that as per William McCrae in peer review report PSD 071-09, the matter of mitigation on a number of issues has not been properly handled in the analysis of the sites and as such is not reflected in the final assessment of</p>	<p>The evaluation and siting process was carried out appropriately in accordance with the ToR. The EA has been amended including additional information clarifying the evaluation and site selection processes.</p> <p>It is the opinion of the Project Team that all of the</p>

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	<p>advantage and disadvantage under the various indicators.</p> <p>How are we to know whether or not these mitigating factors led to differences between the two sites in the final evaluation?</p>	<p>comments submitted by Clarington's Peer Reviewers have been addressed. Following the comments received on the Draft EA, no comments have been received from Clarington on the formal EA submission.</p>
Area Resident	<p>A comment was received stating that a range or an actual proposed capacity for the facility, is not indicated for the site selection process, as per peer review reports PSD-097-07 and PSD-093-07.</p>	<p>Given the imprecise nature of the calculation of building size, infrastructure requirements, buffer zone needs, etc, up until the actual site and vendor were determined the Regions feel that the estimated numbers used throughout the siting process were consistent and will not have led to the exclusion of any sites because of size.</p> <p>The EA has been amended including additional information clarifying the evaluation and site selection processes.</p>
Area Resident	<p>Comment expressed that if incineration is so benign it should be located in the immediate urban areas.</p>	<p>The opportunity to identify sites within "immediate urban areas" was provided for in the EA study. The Long-list of sites included sites within "urban areas".</p>
Area Resident	<p>A comment was received stating that the Oshawa Airport is federally regulated</p>	<p>Comment noted. Section 8.0 of the EA study has been updated to reflect this comment.</p>
Area Resident	<p>A question was received regarding the fact that the Clarington 01 site was advantaged over the Gwillimbury site even though information for the Clarington site was missing.</p>	<p>Yes, Clarington Site 01 remains advantaged. The studies completed on the site specific impacts confirmed the suitability of the site for establishing a new energy from waste facility.</p>
Area Resident	<p>A comment was received stating that Table 8-25 claims that Clarington site is neutral and advantaged and Gwillimbury is disadvantaged in both cases. Is this summary correct?</p>	<p>The evaluation and siting process was carried out appropriately in accordance with the ToR. The EA has been amended including additional information clarifying the evaluation and site selection processes.</p>
Area Resident	<p>A question was received asking why are both the Clarington 01 and the Gwillimbury's rated as Advantage for institutions around facility when</p>	<p>The evaluation and siting process was carried out appropriately in accordance with the ToR. The EA has been amended including additional information</p>

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	<p>Clarington is planning offices, day care center, restaurant, etc. on site while Gwillimbury has current industrial use and Waste facility Depot in surrounding area? Additionally, why wasn't the Waterfront Trail considered?</p>	<p>clarifying the evaluation and site selection processes.</p> <p>Please refer to Sections 7(Alternatives To) and 8 (Alternative Methods) of the amended EA document for the revised descriptions of the Alternatives To and Alternative Methods evaluations. In addition, Section 10 has been revised providing a more detailed description of the undertaking.</p> <p>Section 8 also outlines the evaluation and site selection processes and provides a relative comparison considering the potential effects of traffic and potential effects on recreational uses (i.e, Waterfront trail).</p>
Area Residents	<p>Comments were received requesting that alternatives to the project be considered, or that other alternative waste management options were more appropriate than the proposed facility and were not adequately considered.</p>	<p>In accordance with the approved ToR, in determining the scope of alternative systems to be evaluated, the focus was on covering the range of options to recover resources, both materials and energy, from the residual waste stream rather than all possible combinations of the alternative approaches available for consideration.</p>
Area Resident	<p>A question was received regarding what ministry buffer requirement was considered for this EA. Approximately 2000 people may work in the Clarington Energy Business Park (CEBP) and should they be counted as sensitive receptors?</p>	<p>Section 8.8.9.2 discusses the documents referenced in determining the appropriate "buffer" distances. The future build out of the CEBP was taken into consideration when evaluating potential sites.</p>
Area Residents	<p>Comments were received that stated that almost the whole Clarington 01 Site with the exception of hedgerows is used for agriculture purposes. Not only site itself, but the whole future Energy Park is located on Canada's best prime agricultural soil that is found nowhere else. Protection of prime agricultural land is not seriously considered by any government, even though it is Clarington's largest industry.</p>	<p>Although the Clarington Site 01 has been used for agricultural purposes in the past, it is designated industrial. The EA considered the proximity to prime agricultural land during the evaluation and siting processes.</p>

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Area Resident	A question was received asking why the existing Wesleyville site was not considered as a potential site for the facility.	Your comments regarding adapting the existing site in Wesleyville have been noted. During the siting process the Wesleyville site was investigated but since the owner did not offer the site as a "willing seller" host site, it was not considered further.
Area Resident	A comment was received stating that here is a lack of clarity as to which "Do Nothing" alternative was considered as varying definitions are found for the "Do Nothing" alternative in the EA study and background documents, which are substantially different.	The EA has been amended to include further discussion and clarification on the "Do Nothing" alternative and how it was taken into consideration.
Area Resident	A comment was received stating that enhanced waste diversion is a viable, "reasonable" and a more economical and safer alternative option that was ignored. Waste analyses by several Durham residents have demonstrated that enhanced diversion, along with reduction, and reuse- which Durham has barely considered in their plans- would render an incinerator economically unviable.	Please refer to Section 7.4.1 of the EA document for a discussion on the consideration of additional diversion.
Area Resident	A comment was received stating that describing the incinerator as an "energy from waste" project, without fully explaining the range of potential impacts clearly and openly in the early stages, meant that the average member of the public who might be aware of this project, assumed this to be a benign option.	The result of the comparative evaluation of alternative technologies was reported accurately to the public over the course of the EA process.
Area Resident	A comment was received stating that a request for the results of the assessment of soil, fruit and vegetable samples for the Environmental Baseline Study was received.	A number of samples (including soil and produce) were obtained as part of the Environmental Baseline Study. The results of the tests conducted on the samples are outlined in the Environmental Baseline Study Report, which forms part of Appendix B of the HHERA.
Area Resident	A comment was received regarding how the loss of hedgerow and tree habitat (i.e., grass and shrub	Following the implementation of mitigation measures

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	<p>habitat) and its impact to local wildlife would be mitigated. The existing hedgerows plus connection to other hedgerows must be protected to follow up the Provincial Biodiversity Plan.</p>	<p>including potential hedgerow compensation, planting plan for the wildlife corridor, and incorporation of landscaping plan that will take advantage local plant species, the facility is not anticipated to have a significant effect on the natural features and ecological functions of the site. Any wildlife on-site would retreat to similar habitat in the vicinity of the site.</p> <p>Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.</p>
Area Resident	<p>A comment was received identifying the lack of mitigation for the Courtice Water Pollution Treatment Plant.</p>	<p>The Courtice Water Pollution Treatment Plant EA is outside the scope of the EA.</p>
Area Residents	<p>A comment was received that the impact on surface water from this facility or its outfall concentrates only on Tooley Creek, and no concerns about the quality of Tooley Creek wetland or Lake Ontario itself even though this large surface water body that is closest to the site in question.</p>	<p>The proposed facility footprint lies within the Tooley Creek watershed area. By analyzing the existing drainage pattern the Regions were able to determine that surface water runoff enters Tooley Creek north of the Canadian National (CN) Rail line. Lake Ontario and the Tooley Creek coastal wetland are downstream of the existing surface water drainage receiving point.</p> <p>Proposed stormwater management design is careful to avoid increasing peak flows as indicated in the comment. Peak flow attenuation is proposed in conceptual storm water management design. Surface water runoff will be directed toward existing drainage patterns to Tooley Creek to avoid creating water losses and to maintain the watershed's water balance. Surface water runoff will be subject to enhanced water quality treatment levels which are the most rigorous provincial</p>

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		storm water management criteria. Sanitary effluent from the facility is proposed to be directed to the sanitary sewer and subsequently the Courtice Water Pollution Control Plant.
Area Resident	A comment was received identifying that Lake Ontario is under federal jurisdiction and shouldn't the EA process be coordinated with the provincial EA?	The federal government has been consulted with throughout the process and has determined that the project does not trigger the requirements of the Canadian Environmental Assessment Act (CEAA).
Area Resident	A comment was received stating that the EA does not specify how waste water is to be processed and discharged.	Stormwater will be directed to an on-site storm water management pond and wastewater directed to the sanitary sewer.
Area Resident	Comments were submitted on the effects of climate change on water resources.	Unfortunately, the exact effects of future climate change on water resources cannot be predicted with a significant degree of certainty. The predictive judgment of a number of well recognized and accepted scientific bodies regarding climate change effects on water resources are cited.
Area Residents	Comments were received regarding concerns that the potential for groundwater contamination from residual ash was not adequately considered.	<p>Potential effects on surface and groundwater were discussed as part of the Surface Water and Groundwater Assessment Technical Study Report conducted at the Clarington 01 site indicating no significant net or cumulative effects.</p> <p>At no time is there any possibility of the groundwater at the Clarington 01 site becoming contaminated by leachate from the ash.</p>
Area Resident	Concerns expressed with potential use of bottom ash in construction material and that the EA is in error in stating that this is practiced in Europe because contaminants, initially trapped in the bottom slag (or ashes), have been shown to be leaching out over time.	Although disposal options do exist in Ontario for both the benign bottom ash as well as the hazardous fly ash. Shipment of ash across the border is Covanta's proposed ash disposal solution in their response to the RFP. Covanta representatives have already indicated that they will be pursuing Ontario based landfill options where available. Details regarding how Covanta

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		proposes to stabilize fly ash on site as well as contingency plans for ash management should the US border close to ash shipments from the Durham/York facility will be finalized at the detailed design stage in preparation for the application for the Certificate of Approval.
Area Residents	Concerns were raised regarding the potential for cumulative effects as a result of the development of the project, in addition to the existing facilities in the area, including St. Mary's Cement, Darlington Nuclear Power Plant, Bowmanville Wood Products, Highway 401 and the proposed Highway 407 extension.	Cumulative effects analysis is not required by provincial EA legislation; however the Study Team cooperated with Ontario Power Generation (OPG) and the Ministry of Transportation (MTO) to provide appropriate comments in the EA documentation regarding cumulative effects. The HHERA considers the additional effects of the actual emissions from the new facility added to current ambient conditions. Ambient air data has been monitored since September 2007. Local biomonitoring of environmental media including soil, water, vegetation, fish and small mammals was carried out to establish the current baseline conditions at the Clarington 01 site.
Area Residents	Comments were received that stated that the detailed data in the EA is for a 140,000 tonnes per year (tpy) facility and are concerned about the environmental impact of a facility that could be expanded to 400,000 tpy.	The EA has been amended to seek approval for a capacity of 140,000 tpy. While the future need for a capacity of up to 400,000 tpy is recognized. Any subsequent expansions would be subject to additional approval requirements.
Area Resident	A comment was received stating that there is a lack of redundancies and "fail safes" contemplated in the EA.	Details with respect to "redundancies" and "fail safes" related to facility operation will be included as part of the Design and Operations Report to be submitted as part of the CofA (waste) application.
Area Resident	A comment was received stating that there are no quantifications for the expected equipment failure rates or any operator improper action(s) that may result in emission exceedances. The Risk Analysis is	The Process Upset Case addresses this concern. Evaluation of the Process Upset Case involved the quantitative (i.e. measureable) assessment of COPC emissions from the Facility operating at upset

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	predicated on everything operating perfectly; instead of planning for the worst case, this is an instance of presenting the best outcomes. For such instances of less than optimal operation, the duration and exposures subjected to the general population should also have been provided.	conditions (i.e., Facility startup, shutdown, loss of air pollution control systems).
Area Resident	A comment was received stating that there are no indication of penalties to the operator if emissions exceed the stated values, power production commitments are not fulfilled or compliance documents are non representative.	The contractual agreement with the preferred Vendor (which includes these types of penalties) is outside the scope of the EA study.
Area Resident	A comment was received stating that there is no indication that the incinerator will be for household waste only and that Carbon-Rich construction material will not be processed, particularly if the household recycling programme is successful and deprive the waste stream of much of its combustible material.	The facility is designed to manage only those post-diversion residual wastes from Durham and York Region. Any expansion beyond this capacity to support the importation of wastes from outside Durham and York Regions (as discussed and allowed for in the approved EA ToR) would be addressed as part of the approval under O.Reg. 101/07 (or the applicable piece of legislation at that time).
Area Resident	A comment was received stating that there is no epidemiological data whatsoever to assess the health impacts of incineration and the risks are assessed on the basis of "Models" - these are what their name imply, an idealization of reality.	The effects of bioconcentration of chemicals were indeed taken into consideration during the fate and transport modelling conducted for those chemicals that have the ability to bioconcentrate in the environment. The reviewer is referred to Section 4.2.2 of the HHERA Technical Report.
Area Resident	A comment was received stating that there is a total absence of consideration about the genetic aspects and on the implications for human fertility and embryonic health.	These issues are taken into consideration by the regulatory agencies when developing the toxicity reference values for the contaminants of concern. They are incorporated into the science and toxicology of the development of these values.
Area Resident	A comment was received stating that although there is a study of the past in the form of Archeological and Built Heritage studies, there is no attempt to provide a	The EA planning process is one that plans for the future and takes into account the long-term potential impacts (positive and negative) of the undertaking.

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	forward-looking study of the future legacy being contributed by the project.	
Area Resident	A comment was received stating that there are arguments that taint the outcome of this study. The most glaring of these is the claim that Clarington sites offer the least in terms of travel distance.	A site-specific traffic impact study was conducted at the Clarington 01 site which showed that there would be no significant impacts as a result of the trucks transporting waste to, and ash from, the proposed facility.
Area Resident	A comment was received stating concerns about the process to address minor or major amendments.	Section 12 of the EA document provides the context for the consideration of changes to the undertaking in the event that an amendment is to occur following Approval of the EA.
Area Resident	A question was asked that in the event of an emergency how and how long would it take to empty the refuse pit?	The time required to perform this task would be determined during detailed design.
Area Residents	Several comments were received that identified concerns with Covanta and their past environmental performance record.	Following an extensive procurement process, Covanta has been selected as the contractor and operator of the proposed Durham/York facility. More details regarding the selection of Covanta as the preferred vendor are outlined in the Regional Municipality of Durham's Joint Works and Finance and Administration Report 2009-J-18 of April 14, 2009 titled "Recommendation of a Preferred EFW Proponent: Request for Proposals 604-2008".
Area Resident	A comment was received stating that Durham should consider purchasing the equipment in the event the vendor goes bankrupt.	Durham and York Regions will own the facility and its equipment.
Area Residents	Several comments were received regarding concerns about the potential costs and financial risks associated with the facility.	Financial risks associated with the proposed Durham/York facility were examined as part of the Site Specific Economic Impact Assessment and considered acceptable.
Area Residents	Several comments were received regarding concerns raised about the perception that property values would decrease or that taxes may increase as a result	There is no indication that existing energy from waste facilities in other jurisdictions have an adverse impact

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	of the construction and operation of the facility.	on host community property taxes or real estate values. For more details, please refer to Appendix C-8 of the EA document for a report titled "Social/Cultural Assessment Technical Study Report".
Area Residents	A comment was received stating concerns regarding the reduced potential for the creation of long-term jobs from the development of other alternative waste management options, and that the facility would lead to the privatization of public work.	The exact number of long term jobs directly created at the facility has not yet been determined. The estimated number of 33 is within the expected range. However, the creation of jobs is not the primary objective of this project. Any jobs created either directly or indirectly will have a positive effect on the area and on the economy.
Area Resident	A question was received asking if the proponent has considered as a factor in the economic study the potential competition from a research park located on the campus of Durham College and the University of Ontario Institute of Technology (UOIT) as a competitor to the CEBP for prestige occupants?	Consideration of this research park is outside the scope of this EA Study.
Area Resident	A question was received asking what efforts were made to study and quantify the job creation potential of the aggressive diversion, stabilized landfill and zero waste options before adopting thermal treatment?	The purpose of this EA study is to identify a long-term solution for the management of post-diversion residual waste. Job creation was not taken into consideration as part of the systems evaluation, but rather the system's ability to manage the residual waste stream.
Area Resident	A comment was received stating that there the economic assessment expects some revenues to offset operating costs but there are no contracts in place, or even firm assurances, to confirm these revenues. What steps have the proponents taken to secure revenue from power, steam and carbon credits?	Durham Region has negotiated an agreement with the Ontario Power Authority for the sale of electricity. This agreement cannot be signed until EA approval is granted.
Area Resident	A comment was received regarding the assessment of the potential costs and benefits of the facility.	Financial risks associated with the proposed Durham/York facility were examined as part of the Site Specific Economic Impact Assessment and considered acceptable.

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Area Resident	A comment was received regarding the Updated Business Case.	The Deloitte Business Case is outside the scope of this EA study. The Business Case was completed for Durham Region to assist the Region in determining the financial viability and impacts to the Region associated with moving forward with this facility. Although, information from the business case has been utilized in the EA economic assessment, the economic assessment is not dependant on the results of the business case.
Area Resident	A comment was received questioning the efficiency and cost effectiveness of the facility to generate electricity.	EFW facilities are first and foremost solid waste management facilities providing one solution to disposal of post-diversion residual waste as an alternative to disposal of the Region's waste in a distant landfill. The generation of energy is a useful secondary by-product of the primary solid waste management function of an EFW facility. On a per household basis, an EFW facility processing the residual waste from a single household produces enough power to run the energy efficient lights of that household.
Area Resident	A comment was received stating that the power generation figures presented by Durham Region staff are not supported by the bid by Covanta. The power generation scenarios 2, 3 that include the effects of district heating should not be considered in the EA study because they appear to be an afterthought to the project. There is at present no infrastructure to support district heating in the land designated for the CEBP, there are no tenants in the CEBP. The claims of energy savings due to district heating are not supported by facts.	<p>The assessment of potential economic benefits of the undertaking did not take into account any revenue from district heating. Should this be an available option in the future, it would represent an additional source of revenue from the facility to reduce overall operating costs.</p> <p>A Facility Energy and Life Cycle Analysis (LCA) was completed for the Clarington 01 site which examined the costs and benefits regarding energy generation and use at the proposed Durham/York facility. The facts to support the energy savings are given in the Facility Energy and LCA report.</p>

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		The 20 MW figure mentioned in reports is the nominal size of the turbine generators, not the operating electrical output.
Area Resident	A question was received asking if the buildings in the CEBP require emergency heating facilities (gas, kerosene) as a backup?	At this point, there are no agreements in place for district heating from the facility. Should this opportunity arise, an assessment as to the potential requirements would need to be completed.
Area Resident	A comment was received stating that the original figures for the Electrical Energy Grid split used in table 4-3 (section 4.2.1 – Electrical energy) are attributed to the Ontario Power Authority's (OPA) Integrated Power System Plan (IPSP) but there is no citation in the references section of the Life Cycle Analysis report.	The reference is in the text. It is noted that the reference is not repeated in the references section.
Area Resident	A comment was received stating that the Facility Energy and LCA report makes claims of advantages of EFW technology but these claims appear to be based on simplistic assumptions about energy generation in Ontario.	<p>LCA model analysis results are given in the appendices to the report and are clearly supportive of the conclusions reached in the report.</p> <p>Table 4-3 is a representation of a future custom energy grid which takes into account diurnal and annual variation as well as the replacement of coal-fired generation and, as is clearly stated in the report, it is believed that it will yield a conservative estimate of energy offset benefits.</p>
Area Resident	A question was received asking why potential district heat from Darlington Nuclear is not used?	The Regions cannot comment on the operations of the Darlington Nuclear facility.
Area Resident	A question was received asking about the differences in LCA model results for greenhouse gas emissions between the Durham/York Residual Waste EA and the Metro Vancouver Study.	LCA of waste management options is an approach that allows for the comparison of waste management alternatives, based on a set of variables that are specific to the local/regional circumstances in which the waste management facilities or systems may be located. In addition, LCA model approaches vary in regards to the emission parameters considered, the robustness of the

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		data set that is used to support the model and in regards to greenhouse gas emissions, the consideration of some or all of the potential sources and/or offsets that could apply. It is the combination of the differences in fundamental assumptions used in the modeling that results in the primary differences between the findings of each study.
Area Residents	A comment was received regarding traffic impacts to the region associated with the operation of the facility.	A site-specific traffic impact study was conducted at the Clarington 01 site which showed that there would be no significant impacts as a result of the trucks transporting waste to, and ash from, the proposed facility.
Area Resident	A comment was received stating that the EA does not properly account for the distances travelled by wastes and ignores the distances travelled by the wastes prior to the getting to the transfer stations.	The distance waste would have to be transported was taken into consideration as part of the comparative site evaluation process.
Area Residents	Comments were received regarding the transportation and final management of ash.	Shipment of ash across the border is Covanta's proposed ash disposal solution in their response to the RFP. Covanta representatives have already indicated that they will be pursuing Ontario based landfill options where available. Details regarding how Covanta propose to stabilize fly ash on site as well as contingency plans for ash management should the US border close to ash shipments from the Durham/York facility will be finalized at the detailed design stage in preparation for the application for the CofA.
Area Resident	A comment was received stating that the peer review consultants for Traffic Impact Analysis found significant errors in the way traffic calculations were done, if adjusted could change ranking of East Gwillimbury as advantaged under truck haulage emissions criteria.	It is the opinion of the Project Team that all of the comments submitted by Clarington's Peer Reviewers have been addressed. Following the comments received on the Draft EA, no comments have been received from Clarington on the formal EA submission.
Area Resident	A comment was received stating that the Traffic	With respect to the Traffic Impact Study, the Manheim

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	Impact Study did not account for potential effects of the increased traffic associated with Manheim Auction Sale Day.	Auction Sale Day is a distinct event occurring at a specific time of day and on a regular weekly schedule. With good communication and careful scheduling, the impact of the additional truck traffic should be minimal, provided that the present situation is not already creating traffic problems on the existing roads.
Area Resident	A question was received asking why rail wouldn't be used to transport materials to and from the facility to reduce potential impacts to traffic on Highway 401.	Rail haul was considered as a part of this project, but was not studied in detail because it is best suited for long haul application and was deemed to be much more costly than truck haul and provide relatively minor benefits in return.
Area Resident	A question was received asking why the Clarington 01 site was identified as having a major advantage over the Gwillimbury site, considering that the Highway 407 link likely would not be used because of the fact that it is a tolled highway.	A site-specific traffic impact study was conducted at the Clarington 01 site which showed that there would be no significant impacts as a result of the trucks transporting waste to, and ash from, the proposed facility.
Area Resident	A question was received asking if the increased population (due to the Growth Plan projection) travel pattern was considered?	A site-specific traffic impact study was conducted at the Clarington 01 site which showed that there would be no significant impacts as a result of the trucks transporting waste to, and ash from, the proposed facility.
Area Residents	A comment was received stating concerns about the facility processing waste shipped in from outside of Durham and York Regions.	The initial design capacity for which approval is being sought does not contemplate the import of waste from outside the Durham and York Region.
Area Resident	A question was received asking which other municipalities in the Greater Toronto Area (GTA) besides York and Durham does the Host Community Agreement refer to and where is that information found in the EA study documentation?	The Host Community Agreement is outside the scope of this EA study.
Area Residents	A question was received asking what approvals would Durham and York require if they were to process Industrial, Commercial and Institutional (ICI) waste beyond what is traditionally managed at	The facility designed to process 140,000 tpy of residual municipal solid waste (MSW) from Durham and York Region. Any expansion beyond this capacity to support additional waste streams would be addressed as part of

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	regional disposal facilities at present?	the approval under O.Reg. 101/07 (or the applicable piece of legislation at that time).
Area Resident	A question was received asking where the detailed analysis of the impacts of burning biosolids could be found in the EA documents?	This has not been included in the EA assessment, nor does the approval being sought in the amended EA document include this waste stream.
Area Residents	Comments were received regarding the potential waste stream entering the facility, how hazardous materials will be identified, sorted and removed.	An extensive list of unacceptable materials that are prohibited from the facility is used to guide personnel operating the truck scale and personnel on the tipping floor in how to deal with any non-processible waste that has not been removed before arriving at the facility. Front end loader operators and the waste pit crane operators are trained to identify and remove such waste, including hazardous materials. Waste that is removed from the incoming waste stream is set aside for transport to the appropriate disposal facility.
Area Resident	A comment was received identifying concerns that there is no sorting facility planned for the facility.	No qualified vendors put forth options where significant secondary sorting would be completed prior to combustion. The comparison of risk is based on concentration of emission and does not necessarily reflect the material being combusted.
Area Resident	<p>A comment was received stating that the cost of the incinerator is currently estimated at over 200 million tax dollars, with another possible cost for expansion in the future. There is also another \$14 million a year to run it. When the cost of natural gas goes up, so will the cost of running this incinerator. There will also be a health cost to running this incinerator which will increase cancer rates and cardiovascular diseases.</p> <p>The cost to recycle some things is currently high, but unlike the cost of natural gas, the cost of these evolving technologies will decrease in time as our</p>	<p>Financial risks associated with the proposed Durham/York facility were examined as part of the Site Specific Economic Impact Assessment.</p> <p>Waste diversion is a high priority for both Durham and York Regions. As a result of public feedback through the consultation process, the proposed thermal treatment facility is being designed to handle Durham and York's residual waste only after 65% diversion has already been achieved. In future years, the diversion rate will have to increase to even higher rates to offset the effects of population growth in the Regions. The</p>

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	<p>society adjusts to building a sustainable environment. We know that reusing, recycling and reducing waste will eventually lead to the final answer in dealing with waste; the elimination of waste. Things, such as plastics that could be recycled will be burned, releasing dozens of toxins into the air.</p>	<p>Regions will continue to invest in, encourage and promote diversion programs so that these diversion targets can be met and to reduce the amount of waste requiring disposal at the proposed facility. The Regions are dedicated to educating their residents of the resources available to them and hopefully through this education, people will become more involved with diversion efforts. However, even with extensive diversion efforts, disposal capacity is still required for the remaining waste.</p> <p>The results of the HHERA conducted at the Clarington 01 site have indicated that no adverse effects are expected from the proposed Durham/York energy-from-waste facility. As such, it is not expected that there would be any adverse effects on human health or the environment, as a result of emissions from the facility.</p>
Area Resident	<p>A comment was received stating that the EA forecast is dismissive of zero waste initiatives and represents a “status quo” approach to waste planning which only serves the interest of proponents of incineration.</p>	<p>Zero waste initiatives including recycling, composting and diversion of household hazardous waste have been investigated as part of this project. Waste diversion is a high priority for both Durham and York Regions. As a result of public feedback through the consultation process, the proposed thermal treatment facility is being designed to handle Durham and York's residual waste only after 65% diversion has already been achieved. In future years, the diversion rate will have to increase to even higher rates to offset the effects of population growth in the Regions. However, even with extensive diversion efforts, disposal capacity is still required for the remaining waste.</p>
Area Resident	<p>A comment was received stating that in Europe they have a different waste stream than we have. They have regulations which limit what can be burned, and</p>	<p>Please note, the emissions to air are a function of the air pollution control (APC) technologies. We agree that European facilities in some cases process a different</p>

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	they have secondary separation, not only source separation as will be the case here. We cannot compare their emissions or risks to ours.	waste stream, however, this does not necessarily equate to different emissions. Assessments involving emissions from the stack have been based on the performance standards of the APC equipment, not on the waste being processed.
Area Residents	A comment was received that claimed that the approved ToR did not include consideration of bottom ash or fly ash, or the management of these toxic by-products.	The EA was carried out in accordance with the ToR approved by the Minister of the Environment (March 2006). Bottom ash and fly ash are considered within EA.
Area Residents	Questions were received asking why have the many impacts of ash disposal been excluded from the consideration of the EA study and why the review of mixing the fly ash with Portland cement to "stabilize" it was left out of this EA.	Bottom ash and fly ash are considered within the EA. Details regarding how Covanta propose to stabilize fly ash on site as well as contingency plans for ash management should the US border close to ash shipments from the Durham/York facility will be finalized at the detailed design stage in preparation for the application for the CofA.
Area Residents	Questions were received asking how ash would be stored at the facility. In particular, section 10.6.3.1 of the main EA document implies that bottom ash would be stored indoors, while Section 10.4 of the Durham-Clarington Host Community Agreement states: "...Bottom ash can be stored outside if fully screened."	Despite what has been written into the Host Community Agreement regarding the possibility of storing bottom ash outdoors, there is no provision for such storage. The facility as proposed in Covanta's response to the RFP provides for bottom ash screening, storage, and transfer to truck for removal to be carried out entirely within the totally enclosed residuals storage building.
Area Resident	A comment was received stating that if approved, it must be a condition of EA approval that bottom ash testing would be conducted by independent consultants with results made publicly available.	All facility design and operations requirements concerning the preferred alternative will be the subject of subsequent Environmental Protection Act (EPA) approvals and associated permits. Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period

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		on the ministry Review. It is at this time that the ministry will respond to comments directly related to the scope of this EA and the ministry's Review.
Area Resident	A question was received asking where in the EA documents could they find a complete description and chemical profile of process residues and public and occupational health, as well as environmental impacts, of residue production, storage, transport and final disposal over a 25 – 35 year period?	<p>The EA document does not provide a description of the chemical profile of the process residuals, however, it does contain a commitment that these residuals will be managed in a manner appropriate for their chemical specifications.</p> <p>The facility will be designed and operated in accordance with all public and occupational health legislative requirements.</p>
Area Resident	A question was received asking how is it possible to assess the accuracy of residual waste quantity estimates for the planning period (2011-2045) and if the preferred alternative to manage that is appropriate, without knowing for which period 60% diversion is assumed and from what dates would 70%, then 75% diversion be assumed?	<p>The discussion regarding waste generation projections over the course of the specified planning period for the EA study is provided in section 3.3 of the EA document and include a discussion of enhancements to current waste diversion programs that are provided in subsection 3.3.1.5.</p> <p>Discussion of the characterization and quantities of post-diversion residual waste that would require management, including the charting of total projected waste generated together with the amount diverted and the residual amount for each year of the planning period is provided in Figures 7-8 and 7-9 of subsection 7.4.1.5 "Characterization and Quantities of Post-Diversion Residual Waste".</p>
Area Residents	Questions were received asking if increased diversion rate may affect the anticipated energy output of the plant and reduce the expected energy recovery and, if so, will there be a need to pull higher energy content materials back in the waste stream away from	To accommodate a potential shift in the energy content of the waste material being received at the facility, the RFP provided a range of energy values. It will be the responsibility of the operator to manage the material appropriately. As has been stated throughout this EA

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	diversion to maintain the post diversion waste energy content needed for the facility and potentially undermining diversion efforts?	study, this facility will not compete with either Region's waste diversion efforts.
Area Residents	A comment was received that questioned the numbers presented in the Deloitte business case which took into consideration population increases and other factors.	The Deloitte Business Case is outside the scope of this EA study. The Business Case was completed for Durham Region to assist the Region in determining the financial viability and impacts to the Region associated with moving forward with this facility. Although, information from the business case has been utilized in the EA economic assessment, the economic assessment is not dependant on the results of the business case.
Area Resident	A comment was received stating that the analysis of typical waste assumed to be suitable for incineration include obvious candidates for recycling contained therein, even with present technology.	Please refer to Section 7.4.1 of the EA document for a discussion on the consideration of additional diversion. As part of the assessment of potential residual waste quantities requiring disposal, a 75% waste diversion scenario was taken into consideration.
Area Residents	Comments were received that stated manufacturers should be responsible for reducing packaging or using environmentally sensitive packaging to reduce waste in the region.	The Regions agree that extended producer responsibility, along with more stringent packaging laws, and incentives for further research into new ways of recycling plastics and using recycled materials are important issues, however they were not included in the scope of this project.
Area Residents	A comment was received stating that there new legislation at the provincial and federal levels are necessary to bring the diversion rates even higher by giving producers part of the responsibility for recycling.	<p>The Regions agree new legislation at the provincial and federal levels are necessary to bring the diversion rates even higher by giving producers part of the responsibility for recycling, however they were not included in the scope of this project.</p> <p>Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.</p>
Area Residents	Several comments were received regarding zero	Any comments on provincial policies or decisions

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	waste and how the project would negatively affect the ministry's zero waste vision. Many suggested that use of current and new landfill facilities could provide additional time to identify a more suitable alternative waste strategy.	directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.
Area Resident	A comment was received quoting that "there are 50 million tonnes of new landfill capacity in Southern Ontario" (John Barber, The Globe and Mail - June 6, 2007).	The statements about the extent of new landfill capacity in Southern Ontario have not been proven and we have not seen any documented evidence to substantiate these claims.
Area Residents	Comments were received that noted Europe would no longer consider the development of EFWs.	The concept that the European Union (EU) has outlawed the construction of new incinerators is false. The latest directive approved in November 2008 includes EFW incineration as a means of recovery in the hierarchy of Waste Management. In fact there are plans to build many new incinerators across the EU in the coming years by almost all of the member countries.
Area Resident	A comment was received regarding locations for the disposal of construction waste in York Region.	York Region has recently opened its first Community Environmental Centre located at 130 McCleary Court in the City of Vaughan. This site will accept the types of materials described, provided that they are separated. For example, clean dry wall (that has not been painted) can be separated and recycled at this facility. The site also takes residual waste (ie., waste or garbage materials that are not able to be recycled) for a fee.
Area Residents	Comments were received stating that water accumulation in the bottom of the pit and the need for bottom drainage.	The refuse pit is completely sealed so that any water entering the pit is contained. The small amount of water that may enter the pit either with the incoming waste or because of tipping floor wash down would be mixed with the waste and ultimately incinerated.
Area Residents	Comments were received on the preliminary conceptual design drawings.	The site plans are based on preliminary designs provided by Covanta. Different facility layouts were

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Area Resident	A comment was received noting that based on the calculations of 140k/tpy x 75% and how the operation with one burner is possible to 52.5 tpy and how the related emissions are relatively dismissed.	<p>considered for the 140,000 and 400,000 tpy facilities.</p> <p>Comment noted. Operation at this capacity would not result in emissions that would generate higher ground level concentrations than the scenarios examined in the assessment and was therefore not examined.</p> <p>The emissions estimation procedures were based on ministry guidance documents and standard quantification practices. The design information provided by Covanta (including manufacturer's guarantees) were used to conservatively estimate worst-case emissions from the facility for an extensive list of contaminants of potential concern.</p>
Area Resident	A comment was received regarding the Covanta proposal and how the EA is not the place for "marketing"	This piece of pollution control equipment is manufactured by Covanta who hold a patent on the technology. The identification used for this equipment accurately reflects its technology and is appropriate for an EA.
Area Resident	A comment was received regarding the use of "per second units" for contaminant emission rates attempting to show that emissions are small.	The air quality dispersion model used in the assessment requires emission be input in units of grams per second to perform hourly dispersion calculations. The tables reflect the values actually used in the dispersion model. These are standard units used in expressing emission rates which are well-understood by air quality practitioners and regulators.
Area Resident	A comment was received stating that there is no validation for using the CALPUFF model and disagrees with the model results and contour lines and gradients.	The CALPUFF model is routinely used to perform regulatory dispersion modelling in numerous jurisdictions and was approved by the ministry for use in this study.
Area Resident	A comment was received stating a disagreement with the location of max changes with throughput capacity and statistical max less than 400k/tpy than at 140k/tpy on figures 7-09, 7-10, 7-15, and 7-16 of the EA.	For an explanation of the statistical maxima please refer to page 135 of the AQR which notes that "The predicted maximum ground level concentrations for the 140,000 tpy facility unit emission rate are higher than

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		those for the 400,000 tpy facility with a unit emission rate. This is due to the unit emissions being divided between the additional flues and stacks in the larger facility, as compared to the 140,000 facility scenario.
Area Resident	A comment was received stating that the EA should acknowledge and assess against proposed new air standards under Regulation 419.	The proposed standards were posted on the EBR on July 31 2009 the same day as submission of the final EA and therefore could not be considered in the AQR. If these proposed standards are implemented, the facility will have to demonstrate compliance with these criteria when applying for their CofA under Section 9 of the EPA.
Area Resident	A comment was received stating that the emissions limits for carbon monoxide (CO), dioxins and furans and organic matter do not meet the proposed revised A7 Guideline: Combustion and Air Pollution Control Requirements for New Municipal Waste Incinerators.(A& Guideline) The EA acknowledges the proposed changes to the air standards but does not purport that they will be able to meet them should they come into force.	The EA conservatively assessed the facility as if these proposed changes were not implemented (i.e. assessed a higher emissions case). If the proposed revisions to A7 Guideline are implemented, the facility will have to meet these limits as a condition of their Certificate of Approval under Section 9 of the EPA.
Area Resident	A comment was received stating that there are no background concentrations or ambient monitoring data provided for combustion gases.	The contaminants chosen for monitoring were ones that are commonly associated by the public as being of concern with waste incinerators such as dioxins and furans, PAHs, criteria air contaminants and metals, and could be cost-effectively monitored.
Area Resident	A question was received asking if the assumptions to estimate process upset are reasonable?	The methodology used to assess process upsets followed the U.S. Environmental Protection Agency (U.S. EPA) / California Air Resources Board (CARB) guidance.
Area Resident	A question was received about Article V of the Ozone Annex to the Canada – U.S. and why if the facility emissions for the chemicals identified in the article are high enough to exceed the reporting criterion the	Note that the reporting criteria required under Article V of the Ozone Annex to the Canada – U.S. Air Quality Agreement are not an indicator of whether emissions are 'high' or 'low' and is not an emissions limit – it is a

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	Project team chose not to obtain ambient background measurements for these chemicals?	reporting threshold. The contaminants chosen for the monitoring were ones that are commonly associated by the public as being of concern with waste incinerators.
Area Resident	A question was received about the Stockholm Convention, which is an international treaty on Persistent Organic Pollutants and whether or not the facility will violate it?	The federal government is responsible for ensuring that Canadian commitments to international treaties are met. The facility will meet all currently enacted Federal guidelines for municipal waste incinerators.
Area Resident	A comment was received about the comparison of ambient air quality levels on a Regional scale.	The ambient air quality levels are a result of a number of different emission sources: industrial, vehicle traffic, commercial, residential, etc. Comparison against regional totals (industrial plus community emissions) is appropriate as this provides a better indication of the actual air quality of the region and the relative change due to an additional source.
Area Resident	A comment was received stating that the PM (particulate matter) _{2.5} values are very high in the study area and the addition of the facility may/will trigger exceedances of various regulatory benchmarks.	The results of the dispersion modelling showed the predicted ground-level concentrations were below the applicable provincial regulatory standard for PM _{2.5} . In addition, a human health and ecological risk assessment was conducted which determined that there will be no adverse impacts on human health or the environment due to the operation of the facility.
Area Resident	A comment was received stating that ozone levels are already high in the study area and are already in exceedance of some of the NAAQO criteria. Furthermore, NO ₂ emissions are documented in the HHERA to be of concern in the traffic case.	Ozone formation was assessed in Section 7.5 of the AQR following accepted methodologies used in other EA Studies. The changes in regional ozone levels due to facility-related emissions are expected to be small. In the direct vicinity of the facility, a decrease in maximum ozone levels may occur due to the chemical transformation of nitrogen monoxide (NO) to nitrogen dioxide (NO ₂).
Area Resident	A comment was received stating that the 401 widening will have an impact, but there is no quantitative assessment of the impact provided.	As there is no data currently available on the proposed 401 widening, potential emissions from this project could not be assessed. The expansion will require an environmental assessment and the air quality impacts of

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		the widening would be assessed at that time.
Area Residents	Comments were received stating concerns about the use of the CALMET model in the AQR	The ministry has reviewed, requested modifications to, and accepted the final WRF and CALMET model output generated for this study.
Area Residents	Comment was received stating that the comments submitted by Clarington's Peer Reviewers have not been addressed.	It is the opinion of the Project Team that all of the comments submitted by Clarington's Peer Reviewers have been addressed. Following the comments received on the Draft EA, no comments have been received from Clarington on the formal EA submission.
Area Resident	A question was received asking if the ambient air monitoring at the Courtice Station was included as an appendix?	The ambient air quality monitoring conducted at the Courtice Road Site is summarized in Appendix A of the AQR.
Area Resident	Comments were received stating concerns about the use of the CALPUFF modelling in the AQR.	The CALPUFF modelling system is recommended in ministry Guideline A-11 for applications where wind circulation may be driven by lake or sea breeze, or other situations where steady-state straight line transport assumptions may not be appropriate. The ministry approved the use of CALPUFF for this assessment.
Area Resident	A question was received asking if it is appropriate to adjust for meteorological anomalies and remove some data points?	This procedure is based on ministry protocols published in Guideline A-11 and these values are removed as dispersion models generally over-predict maximum ground level concentrations. The model predictions at special receptor locations, which were used in the HHERA, conservatively did not consider meteorological anomalies
Area Residents	Comments were received stating that the estimated emissions of the 400,000 tpy facility are close to 3 times those of the 140,000 tpy facility.	Addressed via an amendment to the EA Study document.
Area Residents	Comments were received about the differences in the maximum concentrations of emission from the 400,000 tpy facility and those of the 140,000 tpy	Addressed via an amendment to the EA Study document.

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	facility.	
Area Resident	A question was received asking what were the predicted maximum concentrations or the predicted statistical maximum concentrations used in the HHERA?	The model predictions at special receptor locations were used in the HHERA conservatively and did not consider meteorological anomalies. The ministry would require that statistical maximum concentrations be used, therefore the approach taken in the air quality and HHERA was more conservative than what is required by the ministry.
Area Resident	A comment was received stating that the proposed monitoring program for the facility does not continuously monitor for heavy metals, fine and ultrafine particulate matter and the organic carcinogens.	The final monitoring requirements for the facility will be determined by the ministry during the required permitting under Section 9 of the EPA. Continuous stack sampling of metals, speciated volatile organic compounds (VOC) or PAHs is not currently technically feasible. Annual sampling is routinely required by the ministry for many facilities (including incinerators) and is widely considered an adequate method to characterize emissions from industrial sources.
Area Resident	A question was received asking if comparisons of emissions from other Covanta facilities have been provided to justify the claim that the proposed facility is "state-of-the-art".	The emissions criteria which were included in the RFP document represented a compilation of better than A-7 and EU regulated limits and provided the Maximum Achievable Control Technology (MACT) standard by which vendors were evaluated. In their submissions to the RFP, all vendors, including Covanta, guaranteed emission figures that met or exceeded those requested in the RFP.
Area Resident	A question was received asking what guarantees do the public have that if the incinerator is approved, that standards would not be watered down further in future approvals processes?	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.
Area Residents	Comments were received about compliance with the proposed emissions revisions to the A7 guideline.	Should a new A-7 guideline be approved, the Regions will enter into discussions with the ministry to determine how best to address this new guideline and

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Area Residents	Concerns were raised regarding the potential for cumulative effects on the air quality in the region.	<p>how to notify the public of any potential changes.</p> <p>Cumulative effects analysis is not required by provincial EA legislation; however the Regions provide appropriate comments in the EA documentation regarding cumulative effects. Potential emissions from the proposed Durham/York facility were considered in conjunction with emissions from sources currently present in the surrounding area as part of AQR conducted at the Clarington 01 site. The results of the dispersion modelling of the cumulative impact of the proposed facility showed the maximum predicted ground-level concentrations were below the applicable regulatory limits for all contaminants. The results of the HHERA have indicated that no adverse effects are expected from the proposed facility.</p>
Area Residents	Comments were received regarding emissions standards and the monitoring of toxic emissions.	Emissions standards and monitoring were discussed as part of the HHERA. The Regions will incorporate all of the continuous monitoring specified under Ontario's A-7 and EU 2000/76/EC criteria which are set based on MACT criteria. A Continuous Emissions Monitoring system will provide for the monitoring of hydrochloric acid (HCl), hydrogen fluoride (HF), sulfur dioxide (SO ₂), nitrogen oxide (NO _x), CO, oxygen (O ₂), opacity (a measure of particulate) and moisture on a year-round continuous basis.
Area Residents	Concerns were raised regarding ambient air environmental monitoring.	The proposed Host Community Agreement with the Municipality of Clarington includes ambient air monitoring for the first 3 years of facility operation.
Area Resident	A comment was received stating that the description of the options for Acid Gas scrubbing is not sufficient.	This description is provided as a conceptual basis for the site-specific evaluation of the preferred undertaking at the preferred site location. These descriptions are not meant to provide a detailed assessment of the relative design performance of APC component options.

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Area Resident	A comment was received stating that the EA study did not include emission of N ₂ O from combustion.	N ₂ O was considered in the AQR.
Area Resident	A comment was received outlining concerns with compliance with the ICF report entitled Determination of the Impact of Waste Management Activities on Greenhouse Gas Emissions: 2005 Update, Final Report	The ICF model was considered to be incapable of providing a full analysis of LCA impacts for all aspects of the thermal treatment system now was it considered to have been subjected to rigorous peer review. The Municipal Solid Waste Decision Support Tool (MSW-DST) was therefore selected for the analysis.
Area Residents	A comment was received stating that the NO _x control system will not meet ministry's Ontario Guideline A-7 requirements.	The Facility will meet the ministry A-7 Guideline. By itself, the VLN process reduces NO _x emissions to close to the A-7 limit. As will be normal practice, when operated in conjunction with SNCR system, NO _x emissions will be well below the applicable standards.
Area Resident	A comment was received stating outdated data for climatic conditions, such as air temperature and precipitation, were used in the assessment.	The air temperature and precipitation data was based on Canadian Climate Normals for the period 1971-2000, which is the most recent climatological data available from Environment Canada. A climate review examines long-term trends for a region which are more appropriate for comparative purposes than looking at an individual year.
Area Residents	Comment were received stating that the Gwillimbury site has significantly less air contaminants and yet this site and the Clarington 01 sites are both evaluated as being neutral.	<p>Many factors besides local emissions sources affect the air quality of a particular area including meteorology, regional air quality trends, source release characteristics of the local emissions sources, and source-receptor distances.</p> <p>Comparisons of the measured data at the Courtice site to other monitoring locations throughout Ontario are provided in Appendix A, Section A2 of the AQR.</p> <p>The air quality monitoring showed that measured contaminant levels were below air quality criteria at both the Clarington and East Gwillimbury sites and the measured ambient levels would not preclude the</p>

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		inclusion of the Project at either of these sites.
Area Resident	A comment was received stating concerns about the location and set up of monitoring station to collect meteorological and ambient air data for the Baseline Study.	The siting of the monitoring station required some compromises in order to obtain a site with power, adequate security and sufficiently far enough away from major roadways to be considered representative of neighbourhood scale air quality. These compromises in configuration have been previously used and the results reviewed and accepted by the ministry. Any deviations are not expected to affect the results of the monitoring.
Area Resident	Where is the evidence that the additional annual emissions particulate matter added to the Clarington air shed would have no impact on the health of residents?	<p>The results of the dispersion modelling of the cumulative impact of the proposed facility in conjunction with existing air quality levels showed the maximum predicted ground-level concentrations were below the applicable regulatory limits for all contaminants.</p> <p>The dispersion modelling of PM_{2.5} emissions from the project (including current background PM_{2.5} levels) predicted that the maximum ground-level concentrations were below the applicable regulatory limit for PM_{2.5}.</p>
Area Resident	A comment was received stating that the Air Quality Technical Report in its ground level concentration of EFW estimates that within 8 km from the facility increase in air pollution would be around 10% to 20% above background level. Since the background level in Oshawa-Courtice-Bowmanville area is already very high, mainly due to St. Marys Cement plant, this increase is unacceptable.	The results of the HHERA conducted at the Clarington 01 site have indicated that no adverse effects are expected from the proposed Durham/York energy-from-waste facility. As such, it is not expected that there would be any adverse effects on human health or the environment, as a result of emissions from the facility.
Area Residents	Comments were received regarding the production of greenhouse gas emissions from the incinerator.	A Study was completed comparing the emissions from an EFW facility and those from a remote landfill. The study found that on a life cycle basis, thermally treating the residual waste to produce electricity and recover

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		additional metals from the ash produces less greenhouse gas emissions that contribute to global warming, less smog precursors and less acid gases than the current practice of transporting the waste and disposing of it in a remote landfill.
Area Resident	A question was asked regarding the sensitivity of the radiation sensors and how the waste will be screened.	The sensitivity of the radiation sensors are typically quite sensitive, however, this would be finalized at the detailed design stage.
Area Resident	A question was received regarding how to determine possible equipment failures and/or emissions violations for chemicals not detected continuously .	The contaminants and parameters measured by the Continuous Emissions Monitoring system will provide an indication of the operation of all the air pollution controls systems that control all contaminants being emitted from the facility. For instance, continuously monitoring opacity provides an indication of the proper operation of the fabric filter, which controls emissions of particulate and metals. Monitoring of O ₂ and temperature in the boiler economizer will provide an indication of the effectiveness of the combustion processes which are used to control VOC emissions.
Area Resident	A comment was raised stating that no rationale was provided regarding the selection of COPCs for ambient air monitoring and whether other compounds were monitored.	The contaminants chosen for the monitoring were ones that are commonly associated by the public as being of concern with waste incinerators such as dioxins and furans, PAHs, criteria air contaminants and metals, and could be cost-effectively monitored. No other contaminants were monitored. All contaminants that were monitored are included in the report.
Area Resident	A comment was received stating that the facility would produce 1.38 tonnes of CO ₂ per tonne of waste burned and at this rate the emissions per kilowatt hour (kWh) become higher than the equivalent coal CO ₂ emissions.	The Facility Energy and LCA does not compare the EFW facility to coal-fired electricity generation, rather it compares GHG emissions to other forms of waste disposal, i.e., remote landfill.

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Area Resident	A comment was received stating that the Canadian and Ontario GHG emissions are presented as tonnes/year while the project GHG emissions are presented as kilotonnes/year.	The project-related GHG emissions were expressed as percentages of the Provincial and National totals in the report, which is the key metric used to assess the significance of these emissions, as per CEAA guidance. The difference in units used to express Canada/Ontario totals versus the project was inadvertent and doesn't affect the conclusions of the assessment.
Area Resident	A comment was received about the inputs to and coefficients for MSW-DST model not stated in the use of the US EPA/Research Triangle Institute's MSW-DST	The coefficients for the different components of the model are determined during the analysis from the data provided to RTI who ran the model on the Regions' behalf.
Area Resident	A comment was received stating that in section 4.2.6 – Landfill Information, the assumption is that landfill gas (methane) is collected and flared. What is the justification for assuming this? Why not compare the best alternative for landfill, namely energy recovery from methane?	The comparison is made to a landfill with gas collection and flaring to reflect the most likely landfill configuration in the remote landfill scenario.
Area Resident	A comment was received about the impacts of the production of CO ₂ and GHG.	See the Table 8-2 Summary of Project Annual GHG Emissions (page 275) of the AQR for requested information. Table 8-2 presents GHG emissions for both the 140,000 and 400,000 tpy scenarios.
Area Residents	Several comments were received identifying the fact that 75 Doctors in Durham Region oppose the incinerator and have signed a petition to that fact.	The Regions are aware that 75 Durham Region doctors have expressed their opposition to the proposed facility. Their concerns were submitted to the proponents for consideration in the EA.
Area Residents	Comments were received identifying that 33,000 doctors in Europe have petitioned against incineration technology due to health effects.	Please note that an open letter was sent to the European Parliament in June of 2008 by various associations including the ISDE (International Society of Doctors of the Environment) on behalf of the 33,000 physicians they collectively represent, not by the actual physicians themselves. The open letter was not a petition of doctors citing concerns regarding the health effects caused by incineration and opposition to this method of

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		waste disposal, rather, in the letter, the associations collectively asked the plenary of the European Parliament to take into account health considerations when voting on the amended draft of the new Waste Framework Directive.
Area Residents	Comments were received identifying the need for a baseline health study, which reasonably and ethically ought to be addressed.	These concerns were addressed in a separate document entitled Review of International Best Practices of Environmental Surveillance for Energy-From-Waste Facilities. It was concluded that such a baseline health study would not be warranted in this case.
Area Resident	A comment was received stating concerns with the small sample sizes of environmental media collected to determine baseline concentrations.	The baseline study was undertaken using credible methodology and scientific approach. Such sample sizes are common and allow for statistical analysis to be completed. However, based on comment from the ministry during the draft, the baseline concentrations used in the risk assessment were revised to be the maximum concentration in the specific environmental media. The exception was for the soil samples where it was mutually agreed that there were enough samples for the ministry to accept statistical representation.
Area Resident	A comment was received stating that the soil, terrestrial vegetation, small mammals, surface water, sediment and fish were sampled within only a 1 km radius of the site.	The 1 km radius was selected based on the HHERA and the review of scientific literature. There are no ministry standards for such a radius.
Area Residents	Comments were received stating concerns from impacts local food products and the potential uptake of chemicals emitted from the facility.	The HHERA included an assessment of local food products and the potential uptake of chemicals emitted from the facility. The results of the HHERA indicate that there would not be an adverse impact to either the produce or to wildlife or people consuming these

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		products.
Area Residents	Many comments were received related to health concerns associated with the facility, including cancer, breathing problems, asthma, autism, and childhood illness and exposure to toxic chemicals such as dioxins and furans.	HHERA conducted at the Clarington 01 site has indicated that no adverse effects are expected from the facility. As such, it is not expected that there would be any adverse effects on human health or the environment.
Area Residents	Comments were received stating that there is no scenario to evaluate the emissions from the Facility operating at upset conditions in combination with existing baseline conditions and existing traffic emissions.	The Process Upset Project Case includes – Baseline (including traffic), Project Alone (including traffic) and Process Upsets. Therefore, it accounts for what the commenter is asking for.
Area Resident	A comment was received stating that it appears there is no Assessment Scenario in the HHERA to address non-facility traffic emissions.	The Project Case includes monitored baseline chemical concentrations that include those from industry and traffic, traffic from the facility and the chemical emissions from the facility. Non-facility traffic emissions do not need to be modeled as they have already been included in the baseline monitoring data.
Area Resident	A comment was received stating that there are conflicting statements that appear in the HHERA.	These conflicting statements will be addressed as an addendum to the HHERA technical Study.
Area Resident	A question was received asking if any of the results for the Maximum Predicted Concentrations at Special Receptors at 140 000 tpy exceed any benchmarks?	There were no exceedances at any of the receptor locations for the 140,000 tpy scenario.
Area Resident	A question was received asking why the Project Team decide against baseline monitoring of HCl?	There was no decision against measuring for HCl in the baseline, it is just not typically done. HCl may be included in the ambient air monitoring program contemplated for the operational facility.
Area Resident	A comment was received stating that the Project Team makes a very broad statement regarding the baseline assessment in the Human Health Multi-Pathway Assessment.	Baseline chemical concentrations were compared to the Ontario Typical Range (OTR) values or similar published concentrations. This is also based on professional experience having conducted baseline risk assessment in numerous other areas of Ontario.

Submitter	Summary of Comments	Proponent's Response
Area Resident	A question was received asking if the ministry agreed that the Baseline Case model risks can be largely attributed to two sources of uncertainty in the risk assessment process.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.
Area Resident	A comment was received stating that despite knowledge that compounds such ozone, acrolein and 1,3-butadiene are emitted from incinerators, no emissions data is available from vendors, operators and the industry in general. Is it acceptable to the MOE to exclude these chemicals from the HHERA?	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.
Area Resident	A comment was received stating that the study team makes no mention that when CR values are calculated using World Health Organization (WHO) benchmarks, values close to 1 result for the following CACs: Maximum Concentration Ratio Values Using Baseline Ground Level Air Concentrations.	The concentration ratios were indeed close to 1, but did not exceed 1 for the scenario.
Area Resident	A question was received asking if the data to support the statement the exceedance of annual NO ₂ was not unexpected as any urban area in Ontario would produce similar results?	The supporting information for the supposition that NO ₂ concentrations are similar in most urban areas in Ontario is not provided in the report, but was rather based on past experience of the HHERA team. A table providing typical NO ₂ ranges in Ontario will be provided as an addendum.
Area Resident	A question was received asking if the ministry is satisfied with the rationale provided for not using the National Illness Costs of Air Pollution (ICAP) model released by the Canadian Medical Association and the Air Quality Benefits Assessment Tool (AQBAT) released by the federal government.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.
Area Resident	A question was received asking if the ministry approves of the statement that elemental mercury (Hg ⁰) is assessed in the Inhalation Assessment for direct inhalation exposure but it is not included in possible food chain uptakes as it does not bio-	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.

Submitter	Summary of Comments	Proponent's Response
	accumulate.	
Area Resident	A question was received asking about dioxin and furan soil loading estimates for the normal operation and process upset scenarios in the Inhalation Assessment.	There is an error in the text on page 75 of the Inhalation Assessment. The dioxin and furan loading levels are accurately reflected in Table 6-1 of the EA. The levels in the assessment should have been 2.6% and 7.3% for the 140,000 tpy and 8.1 and 12% for the 400,000 tpy scenario.
Area Resident	A comment was received stating that the heavy metal loading to fish by facility emissions is extremely concerning. What are the reasons for this and does the MOE approve?	Methyl mercury concentrations were not measured in the baseline fish tissue so no percent loading could be predicted. It should be also noted in the project team's opinion the fate and transport model very much over predicts fish concentrations in body burdens. Regardless these concentrations did not pose an undue risk to receptors in the HHERA. Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.
Area Resident	A comment was received urging the ministry to be very thorough in their review of the models used in the site specific studies.	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.
Area Resident	A question was received asking if the ministry approves or supports the models used in the site specific studies?	Any comments on provincial policies or decisions directly related to the scope of this EA should be forwarded to the ministry during the comment period on the ministry Review.
Area Resident	A question was received asking how is the information of Neurodevelopmental injury from toxics described by the Landrigan/Grandjean group incorporated into the Hazard Quotient (HQ) for metals and organics and is there a reference provided to show that this has been done?	The specific information from the Landrigan/Grandjean group (2008) has not been incorporated into the specific toxicity reference values used in this study. However, each of the individual toxicity reference values does protect for neurodevelopmental injury, either directly if this is the critical point of departure or mode of effect

Submitter	Summary of Comments	Proponent's Response
		for a particular chemical, or if another health endpoint is compromised at a lower dose in the toxicity studies it is selected to form the basis of the toxicity reference value. Therefore, neurodevelopmental injury is accounted for in toxicity reference values for those chemicals where this is a potential health impact.
Area Resident	A comment was received stating that no actual data on facility emissions from any equivalent facility anywhere was used. The risk assessor has used the maximum allowable emissions from the Ontario A-7 guideline.	The incinerator emissions were in many cases specific to the proposed facility, while in other cases the air quality standards that were set by the Regions as part of the RFP process were used. These values are the lower of the Guideline A-7 or the EU standards. By using the limits of operation in the risk assessment we are conservatively overestimating the total exposure to people and the environment. The facility will not be able to operate at the margin of these guidelines throughout the lifetime of the facility, and for many chemicals the facility is likely to emit an order of magnitude or less of an individual chemical routinely.
Area Resident	A question was received asking how accurate is the Meteorologic Dispersion and Deposition Modelling, based as it is in another complex mathematical model?	The CALPUFF dispersion model used in the assessment is an approved Ontario MOE and US EPA model for conducting air quality assessments. The model was extensively validated by the US EPA during its development to ensure its accuracy. Dr. Smith did not review the dispersion modelling and her comments therefore reflect that the dispersion model review was conducted by the MOE and not herself. The CALPUFF model includes algorithms for fumigation due to low level thermal inversions and thermal internal boundary layers.
Area Resident	A comment was received stating that the Multipathway Exposure Assessment model uses more than a thousand variables and 124 highly complex formulae, and thus susceptible to error and	There are indeed a number of variables and formulae used in the site specific risk assessment. All of these values and formulas are taken from the US EPA, ministry or Health Canada guidance or measured site

Submitter	Summary of Comments	Proponent's Response
	manipulation.	specific data. They have been validated for use on numerous other assessments by regulatory agencies. The results of the entire risk assessment were reviewed in detail by Intrinsik, Senes and the ministry to ensure that such errors did not exist or would not impact the conclusions of the risk assessment.
Area Resident	A comment was received stating that the Non cancer risk assessment uses the HQ appears to be a crude indicator covering all other diseases which may accrue from the facility. When current knowledge about the myriad non cancer effects of PM, inorganics, and organic pollutants is appreciated, the current HQ method may be regarded as primarily cosmetic.	The derivation of exposure doses and the use of toxicity reference values in the threshold (non-carcinogenic) chemicals is well established and based on years of research and refinement by the US EPA, Health Canada and the WHO, amongst others. It does account for the myriad of noncarcinogenic effects that a chemical can have. It is the most sensitive effect, or that that occurs at the lowest dose of a chemical that is selected for the basis for the derivation of the toxicity reference values used in the HQ. After uncertainty factors, typically between 100 and 1000 fold, of protection are added onto the concentration that was shown to be without effect, it is used in the HQ.
Area Resident	A comment was received stating that the HHERA shows exceedances of health benchmarks, in the baseline case and project case. There is a concern that the HHERA does not reflect conclusions drawn by the Canadian Medical Association or the Ontario Medical Association regarding air pollution.	<p>There were some exceedances of benchmarks in the Baseline Case that then extend into the Project Case and Upset Project Case. This did not increase, nor were chemical concentrations emitted from the proposed facility sufficient enough to increase these risks or contribute to new risks being calculated.</p> <p>The HHERA followed standard protocols and approved methods by the ministry, the US EPA and Health Canada. The intention of this guidance is to ensure when properly applied that the resulting risk assessment leads to an overestimation of potential risk.</p> <p>The results of the HHERA conducted at the Clarington</p>

Submitter	Summary of Comments	Proponent's Response
		01 site have indicated that no adverse effects are expected from the proposed facility. As such, it is not expected that there would be any adverse effects on human health or the environment, as a result of emissions from the facility.
Area Resident	A comment was received stating that the HHERA LRASA is a drastic underestimation.	The maximum concentrations of contaminants were determined through the atmospheric modeling to fall typically within 2 km of the facility. Ground level air concentrations of contaminants and their subsequent deposition to soil and other environmental media would be greatest in this area. However, the HHERA Team extended their study zone out to 10 km to better communicate potential risks to local residents. Any area beyond this 10 km radius would receive a lower concentration of chemical emissions from the facility and hence receptors are protected through the assessment of risk within the LRASA.
Area Resident	A comment was received stating that the HHERA resulted in no adverse health effects because of the legal compliance, this is a health issues.	The ministry defines acceptable risk as HQ<0.2 for multi-pathway assessments, HQ or CR<1.0 for inhalation assessment and a incremental lifetime cancer risk less than 1-in-1,000,000 or 10 ⁻⁶
Area Resident	A comment was received stating that the HHERA assumes wrongly that only the farmers eat local foods. It also assumes wrongly that city residents buy their food from the super-market and that it originates from other pristine uncontaminated environments.	The risk assessment did not conclude that there would be a risk from ingesting locally produced food. Farmers were used as a surrogate for the general public as they were assumed to have the highest ingestion rate, so equally those consuming local food would be equally protected. It is for this reason that a more conservative HQ of 0.2 is used as the acceptable regulatory benchmark for identifying potential risk to receptors.
Area Resident	A comment was received stating that assuming a Process Upset Case of 20% unrealistic.	It is very conservative to assume that for 20 % of the operating time that the facility will be in upset

Submitter	Summary of Comments	Proponent's Response
		conditions. This would not be allowed to happen through regulatory oversight and yet was still used as a conservative estimate of upset conditions for the risk assessment.
Area Resident	A comment was received stating that bio-concentration effects are ignored.	These results are generated based on bio-concentration factors applied in the fate and transport modeling.
Area Resident	A comment was received stating concerns about health effects related to breast milk from polychlorinated biphenyls (PCBs) and dioxins.	PCBs and dioxin are considered to have a threshold concentration by the ministry. This concentration was not exceeded by the addition of the facility.
Area Resident	A comment was received stating concerns regarding health effects of ingesting local groundwater were not assessed appropriately.	<p>This is addressed in Section 6.7. US EPA (2005) guidance on evaluating the changes in environmental media from air emissions states that groundwater is not a substantive exposure pathway for combustion emissions. The potential for the Project to result in measurable changes to the potable groundwater aquifers is considered very low.</p> <p>It was also determined that a large proportion of residents in the LRASA obtain their drinking water from municipal supply services that will be unaffected by air emissions from the Facility. As a result, the groundwater ingestion pathway has not been considered this HHERA.</p>
Area Residents	Comment were received stating concerns with adverse health effects from emissions of existing municipal waste incinerators.	Of all of the issues and chemicals related to emissions have been addressed in the HHERA conducted at the Clarington 01. The results indicate no adverse effects are expected from the proposed facility. As such, it is not expected that there would be any adverse effects on human health or the environment, as a result of emissions from the facility.
Area Resident	A question was received asking how the St. Mary's Cement test burn proposal in Bowmanville relate in cumulative effects to the HHERA?	At the time of preparation of the HHERA there was no public information available as to how the trial burns at

Submitter	Summary of Comments	Proponent's Response
		St. Mary's Cement would impact their emissions from the facility. This is because the trial burns had yet to occur. The baseline information collected at the Clarington 01 site includes any potential influence the existing St. Mary's facility and were used in the cumulative effects assessment for the project.
Area Resident	A comment was received stating that the HHERA is not based on any epidemiological data.	The risk assessment followed standard protocols and approved methods by the MOE, the US EPA and Health Canada. The intention of this guidance is to ensure when properly applied that the resulting risk assessment leads to an overestimation of potential risk.
Area Resident	A question was received asking by whom and when would it be determined which contaminants would be monitored during the soil testing for contaminants for the proposed minimum of three years.	At this point the specifics of the monitoring program have not been developed. It is anticipated that the protocol for the soils monitoring program would be developed by the Regions, in consultation with Public Health, with final decisions on specifics of which chemicals and frequency of testing being made by the ministry.
Area Resident	A comment was received stating that the concern that dioxins and furans are persistent, do not break down or lose their toxicity under natural conditions, and bioaccumulate in the food chain	The fate and transport model used in the site specific risk assessment did account for the persistency and bioaccumulation potential of dioxins and furans. In fact, they were modeled to be deposited in the environment over the 30 year period of operation of the facility without any upgrades to pollution control technology. The model accounts for their uptake and accumulation in local foods, fish and wild game. The results of the site specific risk assessment indicate that there would not be an undue risk to humans from exposure to these compounds, even after 30 years of facility operation.
Area Resident	A comment was received stating that the Regions' study team did not use the WHO benchmarks as their Toxicity Reference Values (TRVs) for the assessment	The draft of the HHERA did not incorporate the WHO values into the air quality assessment. However, the

Submitter	Summary of Comments	Proponent's Response
	of Particulate Matter 2.5 and Oxides of Nitrogen and instead used ministry Ambient Air Quality Criteria (AAQC) and other air standards as their TRVs.	final report does indeed include this assessment at the request of the peer reviewers. WHO values were also provided in the final HHERA and additional discussion is provided in Table 7-4. This was completed for SO ₂ , NO ₂ , PM ₁₀ and PM _{2.5} .
Area Residents	Comment were received stating concerns about the Mathematical Modeling used to determine the risk in the EA.	The risk assessment followed standard protocols and approved methods by the ministry, the US EPA and Health Canada. The intention of this guidance is to ensure when properly applied that the resulting risk assessment leads to an overestimation of potential risk. Given that it was a deterministic risk assessment, mathematical confidence could not be provided. Rather, a qualitative assessment of uncertainty and how it potentially impacts the findings were provided in both the human health and ecological risk assessment sections.
Area Residents	Comments were received stating that garbage incinerators have been used for many years in Europe, and there is ample epidemiological research on their negative effects on surrounding population.	The Regions are aware of the epidemiological literature surrounding emissions from incinerators from around the world that were built and operated prior to new emissions guidelines taking effect in the late 1990s. Emissions controls and standards being proposed for the facility are lower than those from previous decades and the results of the site specific risk assessment indicate that there would be no undue risk to either humans or the environment.
Area Residents	Comment was received identifying a link between fine particulate air pollution from incineration and increases in mortality, cardiac mortality and mortality from lung cancer.	The Regions are aware these links and they were taken into consideration during the preparation of the risk assessment. The results of HHERA conducted at the Clarington 01 site have indicated that no adverse effects

Submitter	Summary of Comments	Proponent's Response
		are expected from the proposed facility. As such, it is not expected that there would be any adverse effects on human health or the environment, as a result of emissions from the facility.
Area Residents	Comments were received stating concerns for buying local food products due to local pollution resulting from the project.	The site specific risk assessment included an assessment of local food products and the potential uptake of chemicals emitted from the facility. The results of the HHERA indicate that there would not be an adverse impact to either the produce or to wildlife or people consuming these products.
Area Residents	Comments were received stating concerns regarding the potential for emitted chemicals to react synergistically with others to create additional chemicals of concern or unpredicted health issues.	<p>In addition to the evaluation of individual chemicals of concern, an assessment of chemical mixtures was conducted in the HHERA. There are currently no regulatory benchmarks to evaluate chemical mixtures. Furthermore, the evaluation of exposure to chemical mixtures is complicated by the narrow probability of each chemical in the mixture occurring at one specific location at the same time with a receptor also present at that location and time to be exposed to them.</p> <p>Regardless of these limitations chemical mixtures were evaluated for information purposes only in the risk assessment.</p>
Area Resident	A comment was received stating concerns with the latency period of toxic pollutants and chemicals that would be emitted from the facility.	The risk assessment conducted for the facility actually accounted for the 30 years of operation and a latency period of 75 years of exposure to chemicals to people.
Area Residents	Comment was received stating concerns regarding the emission of particulate matter from the facility, and that values presented for particulate matter PM ₁₀ and PM _{2.5} do not reflect the current science on particulate matter.	It should also be noted that there is a Canada Wide Standard for respirable particulate matter (PM _{2.5} and smaller) of 30 ug/m ³ which is currently being phased in (with a target date for all regions to meet this level by 2010). As part of the permitting requirements of the project, Ontario regulations will require the facility to ensure that its PM _{2.5} emissions, in combination with

Submitter	Summary of Comments	Proponent's Response
		<p>local ambient background PM_{2.5} levels, are below the Canada Wide Standard (CWS). Once in operation, these facilities have strict monitoring programs in place to ensure the safety and protection of human health and the environment.</p> <p>The final HHERA was updated to include the WHO values for NO₂, SO₂ and PM.</p>
Area Resident	<p>A question was received asking how were PM concentration and risk incorporated into the HQ? How is this figure derived? Does it reflect the recent epidemiologic literature on the subject?</p>	<p>The PM HQ was derived using both the CWS and the toxicity reference value published by the WHO. The WHO value does indeed attempt to account for the recent epidemiologic literature on the subject, while the CWS value does not.</p>
Area Resident	<p>A comment was received stating that the AQR completed by the Region's Consultants indicates that there's not enough data to assess fine particulate levels according to the Canada-wide standard, because that requires monitoring over a three-year period.</p>	<p>The CWS for PM_{2.5} is based on the average of the 98th percentile concentrations over 3 consecutive years. The monitoring that was conducted (a 15-month period) does provide a good indication of the potential for the CWS standard to be exceeded at the site when considered in conjunction with other longer-term ambient monitoring data, such as that from the MOE Oshawa station. In Oshawa, the 3-year average 98th percentile PM_{2.5} value was 29 ug/m³. Since the 98th percentile PM_{2.5} concentration over the 15 month monitoring period at Courtice (29 ug/m³) was less than 30 ug/m³ and similar to the Oshawa monitoring data, it is unlikely that the CWS would be exceeded at the monitoring site.</p>
Area Residents	<p>Comments were received stating concerns regarding the release of nanoparticles in the emissions from the facility, and their potential effect to human health.</p>	<p>When examining the potential impacts of exposure to PM on human populations, the emphasis in the HHERA was focused on the fine and/or ultrafine fractions of particulate matter including nanoparticles.</p> <p>The results of the HHERA indicate that no acute (1-hr or 24-hr) or chronic (annual average) exposures at the</p>

Submitter	Summary of Comments	Proponent's Response
		maximum ground level concentration exceed the regulatory benchmark for any of the 10 evaluated cases at 140,000 or 400,000 tpy.
Area Residents	Comments were received stating concerns regarding the potential for odour being released from the stack of the facility or from the shipment of garbage to the facility.	Waste is shipped in fully enclosed trucks to minimize odours and is tipped inside the building. The doors to the facility are closed before tipping so that odours do not escape. Air used for the combustion is drawn from the tipping floor which causes a negative pressure in the building, further minimizing the opportunity for odours to escape. There will be no noticeable odours from the stack.
Area Residents	Comments were received stating concerns that potential impacts to Lake Ontario were not considered (i.e., deposition of materials and drinking water).	Lake Ontario was not considered as a specific receptor in the site-specific assessments, however the watersheds leading into Lake Ontario were considered. The highest rate of deposition of parameters emitted to the air would be in the watersheds. Given the large surface area and volume of water in Lake Ontario, any low level concentration of chemical deposit would not be measurable in this waterbody, thus no adverse effects to Lake Ontario or on drinking water obtained from Lake Ontario are anticipated.
Area Resident	A comment was received stating that the Rice Lake is not included, although its distance from "Ground Zero" is much less than Lake Simcoe and its size is about the same as that of Lake Scugog.	This report is appropriately focused on local groundwater and surface water conditions and effects. As such it looks at its resident watershed, Tooley Creek as well as local groundwater conditions.
Area Resident	A comment was received stating that the acoustic impact from steam dumps is not considered.	Steam Dump is considered to be an emergency operation, and is not usually assessed in the environmental assessments. However, if emergency equipment is tested regularly for maintenance purpose it is assessed like emergency generators and fire pumps.
Area Resident	A comment was received stating that noise contour patterns do not properly account for the "Linear	Noise contours maps represent predicted noise impact levels from the proposed facility only, and do not

Submitter	Summary of Comments	Proponent's Response
	Distortion" or "Acoustic Signature" resulting from Hwy401 for both 140 000 tpy and 400 000 tpy scenarios.	include any other existing noise sources in the area.
Area Residents	Comments were received offering product and services to be used during the design, construction and operation of the facility.	The proposed facility is being designed by Covanta with "state-of-the-art" air pollution control technology. Unfortunately, the Proponents at this time cannot comment on the potential for that company to provide services to the facility.

Table 3. Aboriginal Communities Comment Summary Table

Proposal: Durham York Residual Waste Environmental Assessment Study

Proponent: Regions of Durham and York

Aboriginal Communities	Summary of Comments	Proponent's Response
Chippewas of Georgina Island	No comment received.	None required.
Chippewas of Mnjikaning	No comment received.	None required.
Mississaugas of Scugog Island	No comment received.	None required.
Anishinabek Nation/Union of Ontario Indians	No comment received.	None required.
Association of Iroquois and Allied Indians	No comment received.	None required.
Batchewana First Nation	No comment received.	None required.
Beausoleil First Nation	No comment received.	None required.
Caldwell First Nation	No comment received.	None required.
Curve Lake First Nation	No comment received.	None required.
Delaware First Nation (Moravian of the Thames)	No comment received.	None required.
Mississauga of the New Credit First Nation	No comment received.	None required.
Mississaugas of Alderville First Nation	No comment received.	None required.
Mohawks of the Bay of Quinte	No comment received.	None required.
Ojibways of Hiawatha First Nation	No comment received.	None required.
Huronne-wendat Nation	No comment received.	None required.
Oneida Nation of the Thames	No comment received.	None required.
Six Nations of the Grand River	No comment received.	None required.
Wahta Mohawks	No comment received.	None required.

Aboriginal Communities	Summary of Comments	Proponent's Response
Métis Nation of Ontario	No comment received.	None required.
Curve Lake First Nation	No comment received.	None required.
Delaware First Nation (Moravian of the Thames)	No comment received.	None required.
Mississauga of the New Credit First Nation	No comment received.	None required.
Mississaugas of Alderville First Nation	No comment received.	None required.
Mohawks of the Bay of Quinte	No comment received.	None required.
Ojibways of Hiawatha First Nation	No comment received.	None required.
Huronne-wendat Nation	No comment received.	None required.
Oneida Nation of the Thames	No comment received.	None required.
Six Nations of the Grand River	No comment received.	None required.
Wahta Mohawks	No comment received.	None required.
Métis Nation of Ontario	No comment received.	None required.
Huronne-wendat Nation	No comment received.	None required.
Oneida Nation of the Thames	No comment received.	None required.
Six Nations of the Grand River	No comment received.	None required.

MAKING A SUBMISSION?

A five-week public review period ending April 2, 2010 will follow publication of this Review. During this time, any interested parties can make submissions about the proposed undertaking, the environmental assessment or this Review. Should you wish to make a submission, please send it to:

Agatha Garcia-Wright, Director
Environmental Assessment and Approvals Branch
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario M4V 1L5
Fax: (416) 314-8452

Re: Durham and York Residual Waste Study Amended Environmental Assessment
Attention: Gavin Battarino, Project Officer

Under the Freedom of Information and Protection of Privacy Act and the Environmental Assessment Act, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in all submissions become part of the public record files for this matter and can be released if requested.