

**Durham York Residual Waste Study EA: Formal Submission Review Period -- Technical Reviewers Comment Summary Tracking Table**

Contact	Address	Comment Summary	Response Summary (if required)
		Comment	Response
<b>PROVINCIAL AGENCIES</b>			
<b>MINISTRY OF THE ENVIRONMENT – ENVIRONMENTAL MONITORING AND REPORTING BRANCH</b>			
Jinliang (John) Liu, Senior Science Advisor on Climate Change	125 Resources Road, Toronto, ON M9P 6V3	<p>On September 24, 2009, Environmental Monitoring and Reporting Branch (EMRB) sent you a memorandum summarizing our review of the air dispersion modelling aspects of the Durham/York Residual Waste Study (“Project”). EMRB’s review focused on the air dispersion modelling conducted by the proponent’s modelling consultant, based on the 140,000 tonnes per year scenario. 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 were provided.</p> <p>The proponent has since submitted an amended Project Report, which is now only for the proposed maximum design capacity of 140,000 tonnes of waste per year. EMRB has been requested to review the air dispersion modelling aspects of the amended Report contained in the following documents:</p> <ul style="list-style-type: none"> <li>• Revisions to Air Quality Technical Assessment (December 10, 2009) (<a href="http://www.durhamyorkwaste.ca/pdfs/study/amended-ea-study-docs/Durham-York-AMENDED-AQ-Technical-Memo-12-03-09.pdf">http://www.durhamyorkwaste.ca/pdfs/study/amended-ea-study-docs/Durham-York-AMENDED-AQ-Technical-Memo-12-03-09.pdf</a> )</li> <li>• Amended Appendix C-1 - Air Quality Assessment Technical Study Report, (December 10, 2009) (<a href="http://www.durhamyorkwaste.ca/pdfs/study/amended-ea-study-docs/Amended-Air-Quality-Report/1009497-06-DurhamYork-AQ-Technical-Report-Dec-04-2009.pdf">http://www.durhamyorkwaste.ca/pdfs/study/amended-ea-study-docs/Amended-Air-Quality-Report/1009497-06-DurhamYork-AQ-Technical-Report-Dec-04-2009.pdf</a>)</li> <li>• Amended Appendix C-1 – Appendix B: Emission Inventory (December 10, 2009) (<a href="http://www.durhamyorkwaste.ca/pdfs/study/amended-ea-study-docs/Amended-Air-Quality-Report/Appendix-B-Emission-Inventory-Dec-4-09-FINAL.pdf">http://www.durhamyorkwaste.ca/pdfs/study/amended-ea-study-docs/Amended-Air-Quality-Report/Appendix-B-Emission-Inventory-Dec-4-09-FINAL.pdf</a> )</li> <li>• Amended Appendix C-1 – Appendix D: CALPUFF Methodology (December 10, 2009) (<a href="http://www.durhamyorkwaste.ca/pdfs/study/amended-ea-study-docs/Amended-Air-Quality-Report/Appendix-D-CALPUFF-Dec-4-09-final.pdf">http://www.durhamyorkwaste.ca/pdfs/study/amended-ea-study-docs/Amended-Air-Quality-Report/Appendix-D-CALPUFF-Dec-4-09-final.pdf</a>)</li> <li>• Amended Appendix C-1 – Appendix G: Deposition Predictions at Special Receptors (December 10, 2009) (<a href="http://www.durhamyorkwaste.ca/pdfs/study/amended-ea-study-docs/Amended-Air-Quality-Report/Appendix-G-G1-G4-Deposition-Predictions-Dec-4-09.pdf">http://www.durhamyorkwaste.ca/pdfs/study/amended-ea-study-docs/Amended-Air-Quality-Report/Appendix-G-G1-G4-Deposition-Predictions-Dec-4-09.pdf</a> )</li> </ul> <p>While I was the principal reviewer, other modellers from the EMRB also provided help during the review process.</p>	Noted.
		<p><b><u>EMRB Comments on the Air Dispersion Modelling Aspects of the Amended Project Report</u></b></p> <p>The following are comments based on EMRB’s review of the modelling aspects of the documents listed above:</p> <ul style="list-style-type: none"> <li>• EMRB’s review did not identify any significant issues with the air dispersion modelling aspects of</li> </ul>	Noted.



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		documents listed above  • With regards to the comments included in our September 24, 2009 Memorandum mentioned above:	
		1. <b>The emission rate from the main stack has been corrected</b> 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.	Acknowledged.
		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). <b>This typo is still in the amended report on the same page.</b>	Acknowledged. Correcting this typo was overlooked in the amended report. Since this typo was minor, we do not propose to revise the amended report.
		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. <b>This inconsistency still exists in the amended report.</b> 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.	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).
		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.  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.  Please feel free to let me know if you have further questions on my review comments.	Acknowledged
<b>MINISTRY OF THE ENVIRONMENT – ENVIRONMENTAL ASSESSMENT AND APPROVALS BRANCH</b>			
Victor Low Director, Section 9, <i>Environmental Protection Act</i>	Ministry of the Environment 2 St. Clair Avenue West, Toronto, ON M4V 1L5	Further to the comments provided to you in the letter dated September 25, 2009, and the subsequent amended Environmental Assessment (EA) submitted by the Regional Municipalities of Durham and York on November 27, 2009, please find below comments on the Air Quality Assessment included in the EA.  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).	Acknowledged.
		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 likely to occur due to emissions from the	Acknowledged. 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.

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		proposed undertaking.	
		<p>Furthermore, the EPA Section 9 Director reserves the right to request any new or additional information and/or analysis, as deemed necessary by the ministry, in support of issuing any future approvals under Section 9 of the EPA.</p> <p>Should you have any further questions or comments, please feel free to contact Sherif Hegazy, P.Eng., Senior Air Engineer, at (416) 212-4624.</p>	Acknowledged.
Header Merza Senior Noise Engineer	Ministry of the Environment 2 St. Clair Avenue West, Toronto, ON M4V 1L5	The following are my final notes on the responses provided by for the Durham York Residual Waste Study (copy attached)	
		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.	Noted.
		2. All existing residences, whether situated on lands zoned residential or zoned other designations should be considered as noise points of reception.	All existing residences in the study area were considered as noise points of reception.
		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.	Ambient noise levels within the study area were determined according to NPC-233.
		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 facility such as 150 ktpy and 250 ktpy should be deleted.	<p>An Acoustic Audit will be recommended during construction of 140,000 tpy facility.</p> <p>The initial capacity for which approval is being sought through the environmental assessment process is 140,000 tonnes per year while the future need for a capacity of up to 400,000 tonnes per year is recognized. Any subsequent expansions would be subject to additional approval requirements, in consultation with the MOE.</p>
Tesfaye Gebrezghi Director, Section 39, Environmental Protection Act	Ministry of the Environment 2 St. Clair Avenue West, Toronto, ON M4V 1L5	<p>The technical reviewer in the Waste Unit of the Environmental Assessment and Approvals Branch has completed the detailed technical review of the above-noted Environmental Assessment (EA) submitted by the Regional Municipalities of Durham and York.</p> <p>The undertaking, as defined by the Durham and York Residual Waste Study EA, is a thermal treatment waste management facility (Energy-From-Waste (EFW) facility) capable of processing 140,000 tonnes of post-diversion residual waste per year, recovering materials with potential beneficial uses and producing electricity and/or energy for in-plant use, delivery to the grid and for district heating/cooling.</p> <p>The facility is to be located in the municipality of Clarington, in the east end of Durham Region, south of</p>	No Response Required. Additional detail will be provided on the operations of the facility as part of the Part V application under the Environmental Protection Act.

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		<p>Highway 401 near Courtice Road and adjacent to the Darlington nuclear power plant. The site is owned by Durham Region and currently is surrounded by agricultural lands, commercial properties, and undeveloped land.</p> <p>The proposed design and operational procedures for the site have been found compliant with the current Ministry's regulatory and policy requirements. The description of the proposed undertaking contains sufficient degree of detail, on a conceptual level, to allow the waste reviewer ascertain that the environmental impacts from the proposed waste management activities would comply with the Ministry's requirements. Although the conceptual design of the undertaking has been included in the EA, it is expected that additional technical details will be included in the Part V application to ensure compliance with the Ministry's Part V of the Environmental Protection Act approval requirements.</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>	
		<ol style="list-style-type: none"> <li>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.</li> </ol>	Requested information will be provided as requested in the future Part V application under the Environmental Protection Act.
		<ol style="list-style-type: none"> <li>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.</li> </ol>	Requested information will be provided as requested in the future Part V application under the Environmental Protection Act.
		<ol style="list-style-type: none"> <li>Page 10-40 contains references to floor trenches and a settling basin to collect and contain 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.</li> </ol>	Requested information will be provided as requested in the future Part V application under the Environmental Protection Act.
		<p>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>	No Response Required.
Gavin Battarino Project Officer	Ministry of the Environment 14th Floor 2 St Clair Avenue West	The Ministry of the Environment's (ministry) Environmental Assessment and Approvals Branch Environmental Assessment Project Coordination Section has reviewed the above noted document and associated appendices, dated November 27, 2009 and has the following comments pertaining to the	Please see individual responses below.

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	Toronto ON M4V1L5	environmental assessment (EA) planning process:	
		<b>Section 2: Identification of Proponents</b>	
		<p>1. In subsection 2.1.2.1 of the EA study York Region's current waste management practices are identified as a combined strategy of landfill and the processing of waste to produce "fuel pellets". The conclusion of this subsection claims that the current York Region waste management strategy is only short term, as the waste management contracts which support the strategy expire prior to the conclusion of the 35 year planning period of the EA study, and that the Region still requires long term waste disposal capacity. It is not clear as to why York Region's current waste management strategies are considered short term based solely on the length of operating contracts and not an assessment of the viability of the waste management strategy. A more detailed explanation substantiating that the York Region waste management strategy is only short term should be provided.</p> <p>If the current waste management practices of York Region are not proven to be short term, then the current waste management practices of York Region should be accounted for and their impact taken into consideration on the problem that the EA study sets out to address.</p>	<p>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. The MOU is attached to this table for your information and to identify both Regions' commitment to this project, however, this MOU represents an agreement between the two Regions' and is not part of the EA study being considered for approval.</p> <p>As stated in the EA, the current waste disposal contracts do not provide sufficient capacity to support the residual waste disposal requirements of York Region and therefore alternative disposal options were considered through the completion of this EA study.</p> <p>The current waste management practices (disposal) are based on contractual arrangements with facilities, outside the Regions municipal boundaries, with clearly defined contract end dates. However, the waste to be managed by this Undertaking (20,000 tonnes/year from York Region) is not included in these waste disposal contracts. Therefore, there is an initial need for 20,000 tonnes/year of waste disposal capacity and a long-term need for potentially greater amounts upon expiry of these contracts. The development of any additional capacity within the proposed EFW facility would require a new EA approvals process.</p>
		<b>Section 3: Statement of Purpose</b>	
		<p>1. 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 To", a "Do Nothing" system is a required component of the EA process.</p> <p>The Codes require that the "Do Nothing" alternative should always be considered in the evaluation and comparison of "Alternatives To". The "Do Nothing" alternative is considered the bench mark against which the consequences of the "Alternatives To" being examined can be measured in order to determine, amongst other things, the extent to which each alternative addresses the problem or opportunity which prompted the EA study. The "Do Nothing" alternative is also used to highlight the advantages of proceeding with a particular alternative.</p>	<p>The amended EA document (Nov 27, 2009) provides the rationale for the conclusion that the current waste disposal practices of the Regions (i.e. the "Do Nothing" alternative) are not long-term alternatives and therefore, should nothing be done, the Regions would be left without the required disposal capacity to service the residents of Durham and York. The "Do Nothing" alternative is currently the exporting of waste to landfill outside the municipal boundaries of Durham and York. The following provides a comparison of the preferred Undertaking to the "Do Nothing" alternative:</p> <ul style="list-style-type: none"> <li>The preferred Undertaking has the ability to generate energy of sufficient quantity to market to the Ontario</li> </ul>

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			<p>electrical grid with a better environmental performance per kwh than some current forms of energy generation supplying power to the grid.</p> <ul style="list-style-type: none"> <li>The preferred Undertaking has the ability to capture additional resources for recycling that would normally be lost to landfill disposal.</li> <li>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.</li> <li>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.</li> <li>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,</li> </ul> <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>
		<b>Section 7: The "Alternatives To" The Undertaking</b>	
		<p>1. In subsection 7.1 of the EA study the "Do Nothing" alternative is described as a landfill only system, consisting of a new landfill site capable of managing all wastes that remain after diversion. 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. The ministry's Code of Practice: Preparing and Reviewing Environmental Assessments in Ontario (Codes) states that the "Do Nothing" alternative represents what is expected if none of the alternatives being considered are carried out. The "Do Nothing" alternative identified in this section does not accurately reflect the current waste management practices of the Regions.</p>	<p>Section 7.1 of the EA study references a landfill only system which, with respect to the quantities of residual waste for which approval is being sought in this EA, is the case. 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>2. In subsection 7.4.2.6 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 Codes, which states that for the purposes of comparison and evaluation of the "Alternatives To", a "Do Nothing" system is a required component of the EA process.</p> <p>The Codes require that the "Do Nothing" alternative should always be considered in the evaluation and comparison of "Alternatives To". The "Do Nothing" alternative is considered the bench mark</p>	<p>The amended EA document (Nov 27, 2009) provides the rationale for the conclusion that the current waste disposal practices of the Regions (ie. the "Do Nothing" alternative) are not long-term alternatives and therefore, should nothing be done, the Regions would left without the required disposal capacity to service the residents of Durham and York. The "Do Nothing" alternative is currently the exporting of waste to landfill outside the municipal boundaries of Durham and York. The following provides a</p>

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		<p>against which the consequences of the “Alternatives To” being examined can be measured in order to determine, amongst other things, the extent to which each alternative addresses the problem or opportunity which prompted the EA study. The “Do Nothing” alternative is also used to highlight the advantages of proceeding with a particular alternative.</p> <p>The EA study should identify the “Do Nothing” alternative in a manner that accurately reflects the current waste management practices of the Regions. The EA study should also consider the “Do Nothing” alternative in the evaluation of “Alternatives To”.</p>	<p>comparison of the preferred Undertaking to the “Do Nothing” alternative:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• The preferred Undertaking has the ability to capture additional resources for recycling that would normally be lost to landfill disposal.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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,</li> </ul> <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. In subsection 7.8.5 of the EA study the identification of existing landfill capacity and/or the siting of new landfill capacity to manage the residual materials resulting from the thermal treatment of waste is stated as being outside the scope of the EA study. 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>The EA study acknowledges the requirement for the disposal of process residuals. Therefore the manner in which these residual are processed and ultimately disposed should be included in the EA. The management of any process residual materials requiring disposal are the responsibility of the Regions and should be addressed with the context of the EA. This is to 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.</p>	<p>In accordance with Section 4.1.2, Page 14 of the Approved EA Terms of Reference “identification of existing landfill capacity and/or siting of new landfill capacity to manage these process residues is outside the scope of this EA study”. However, the following briefly describes the currently proposed approach to manage process residues. Please note however, these plans may change as opportunities become available for more local landfill disposal capacity and/or alternative non-landfill uses for the process residues become available.</p> <p>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>



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		<b>Section 9 Vendor Identification Process</b>	
		Comments on section 9 of the amended EA are included in the response to the Addendum to Section 9.2 of the amended EA, submitted on December 14, 2009. The comments on the Addendum are included in this memo and follow the comments provided on the amended EA.	See response below.
		<b>Section 10 Identification and Description of the Undertaking</b>	
		<ol style="list-style-type: none"> <li>Subsection 10.7 of the EA study discusses the potential for facility expansion. 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.</li> </ol>	<p>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 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&amp;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>

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		<p>2. Subsection 10.10 of the EA study discusses facility contingency plans. The EA does not include a contingency plan to address the possibility that the EA could be refused.</p>	<p>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 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.</p> <p>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>
		<b>Addendum to Section 9.2 of the Amended EA</b>	
		<p>1. 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. The EA should provide direction on whether or not this information will be made available, and if so, when and how the information can be obtained.</p> <p>Should you have any further questions or concerns, please feel free to contact the undersigned, at (416) 314-8214.</p>	<p>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 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>.</p>
<b>MINISTRY OF THE ENVIRONMENT – CENTRAL REGION, TECH SUPPORT, APEP</b>			
Marinha Antunes	Ministry of the Environment	Provided below are my comments on the report entitled " <i>Durham/ York Residual Waste Study</i> "	It was our understanding at the conclusion of the discussion

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		Comment	Response
Air Quality Analyst	5775 Yonge Street, Toronto, ON M2M 4J1	<p><i>Environmental Assessment Study Document</i> (ESD), prepared by Stantec as amended November 27, 2009.</p> <p>Responses to the Ministry of the Environment's (MOE) comments are presented in the document entitled "<i>Durham York Residual Waste Study EA: Formal Submission Review Period – Technical Reviewers Comment Summary Tracking Table</i>", which are included in the EA file. A review of the responses was conducted and my comments are summarized below. These comments are also based on the discussions between the Regions, Stantec and the MOE at the workshop coordinated by EAAB held Tuesday, December 1, 2009 at 40 St. Clair Avenue West.</p> <p><b><u>Comment Summary Tracking Table</u></b></p> <p><i>Odour Emissions</i></p> <p>We do not agree with the response provided by the Regions of York and Durham as noted on page 22:</p> <p style="padding-left: 40px;"><i>"Based on clarification from the MOE during a meeting between the MOE, the Regions and Stantec to discuss the air and noise comments (Wed, Oct. 13, 2009), no additional modelling or baseline monitoring is required to assess potential odours from the facility..."</i></p> <p>During the October 13, 2009 meeting, the issue of potential odour emissions from the facility was discussed. At the time of the meeting the MOE 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>of the odour issue at the October 13, 2009 meeting, that the consensus of the agencies present was that odour modelling was not required as part of the EA, since detailed design data is not available at this time, and that more detailed discussion of the odour mitigation measures that have been incorporated in the design of the facility would be sufficient for the purposes of the EA. The odour mitigation discussions were included in Section 5.2.4 of the amended Air Quality Technical Study Report. Additionally, results of odour modelling of ammonia slip emissions from the Facility were included in the comment response table and compared to ammonia odour threshold data available from literature.</p> <p>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>The issue of potential odour impacts from the proposed facility was also discussed during the December 1, 2009 workshop. To substantiate York / Durham's 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"> <li>- An overview of the potential odour emissions that may occur during the handling, processing and transportation of the wastes</li> <li>- Several odour surveys conducted at the tipping area, truck queues and any other potential odour sources that might be identified</li> <li>- An estimate of odour emission rates from the different sources as noted above</li> </ul>	<p>Section 5.2.4 of the amended Air Quality Technical Study Report (December 10, 2009) provides a commitment to provide an odour management plan to MOE for review and approval during the permitting phase of the Facility. Odour monitoring requirements will be addressed in this plan.</p> <p>The specific requirements noted by the MOE will be addressed in the odour management plan.</p>

Contact	Address	Comment Summary	Response Summary (if required)
		Comment	Response
		<p>- Dispersion modelling to assess the impacts at the nearest sensitive receptors</p> <p>Based on the results obtained from the above studies, the proponent should commit to implementing mitigation measures, if necessary.</p>	
		<p><i>VOCs Emissions</i></p> <p>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>	Acknowledged. The list of contaminants that will be stack tested will be determined in conjunction with the MOE during the permitting of the Facility, and it is expected that the stack testing requirements will be included in the terms and conditions of the air Certificate of Approval (CofA) for the Facility.
		<p>Ambient Air Quality Monitoring</p> <p>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>Please contact the undersigned if you should have any questions.</p>	Acknowledged. An ambient monitoring plan will be provided to the MOE for review and approval as part of the permitting process of the Facility.
<b>MINISTRY OF THE ENVIRONMENT – STANDARDS DEVELOPMENT BRANCH</b>			
Aden Takar Ecological Standards Section – Standards Development Branch	Ministry of the Environment 40 St. Clair Avenue West, 7 <sup>th</sup> Floor Toronto, ON M4V 1M2	<p>The purpose of this memorandum is to provide SDB's review comments on the ecological risk assessment (ERA) component of the amended site specific human health and ecological risk assessment technical study report for the proposed Durham/York residual waste processing facility prepared by Stantec dated November 27, 2009.</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>	No Response Required
Samir Abdel-Ghafar Regulatory Toxicologist – Standards Development Branch	Ministry of the Environment 40 St. Clair Avenue West, 7 <sup>th</sup> Floor Toronto, ON M4V 1M2	<p><b>BACKGROUND</b></p> <p>The following are the MOE comments to the proponent's responses included in the addendum dated December 4, 2009 to MOE's comments of October 19, 2009. The numbering of the comments that follow corresponds to that used in previous MOE reviews.</p>	
		<b>Comments on the Human Health Risk Assessment</b>	
		<p><b>Problem Formulation</b></p> <p>1. The proponent indicated that the 400,000 t/y scenario is no longer included in the final report and has committed to conduct a new environmental study to support any increased capacity of the facility beyond 140,000 t/y that may occur in the future. Therefore, this comment and other comments addressing outstanding issues related to the 400,000 tonnes of waste/yr</p>	None required.

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		Comment	Response
		scenario are no longer relevant.	
		<b>COPC Selection</b> 8. Based on the summary of mercury data provided by the proponent, the response is reasonable and no further response is required.	None required.
		<b>Toxicity Assessment-TRV Selection</b> 17. The response is reasonable and no further response is required.	None required.
		<b>Editorial Comments</b> 24. The response is reasonable and no further response is required.	None required.
		<b>SUMMARY AND CONCLUSION</b> The proponent's responses adequately addressed the remaining MOE comments dated October 19, 2009. All MOE comments regarding outstanding issues identified for the 400,000 t/y scenario are no longer required as the 400,000 t/y scenario is no longer part of this RA. The proponent has committed, as required by O.Reg. 101/07, to conduct a new environmental study if any expansion is required in the future. 1. The response is reasonable and no further response is required.	None required.
		<b>PROVISO</b> The comments and conclusions presented in this review assume that the site description, facility description, and modelled air concentrations used in the site-specific risk assessment are accurate and appropriate and have been deemed satisfactory by other members of the review team, unless specifically noted. Our comments and conclusions apply only to the current or proposed use of the site, and to the receptors, exposure scenarios, and chemicals of concern assessed in this screening level risk assessment. New developments in toxicology and environmental sciences not available at the time of this review, inconsistencies raised by other MOE review team members, or changes in the selection of site use, receptors, or chemicals of concern may alter the comments and conclusions presented here.	Comment noted.