# **Durham York Energy Centre 2020 Compliance Monitoring Report**

**EAAB File No.:** EA-08-02

Condition 5

**Date:** October 02, 2020

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#### 1.0 Introduction

#### 1.1 Purpose

The *Durham York Energy Centre 2020 Compliance Monitoring Report* has been prepared in accordance with Condition 5.3 of the Notice of Approval to Proceed with the Undertaking for the Durham and York Residual Waste Study (Ministry of Environment Conservation and Parks EAB File Number EA-08-02). Annual compliance reports are based on a reporting period ending November 3<sup>rd</sup> of each year, corresponding to the anniversary date of the Notice of Approval. This annual compliance report covers the period from November 3, 2019 to November 2, 2020.

Annual compliance monitoring reports follow the reporting structure established in the *Durham York Energy Centre Compliance Monitoring Program* submitted to the EAB Director on October 14, 2011 in accordance with Condition 4.1 of the Notice of Approval. As outlined in the Compliance Monitoring Program, the Annual Report consists of the following three parts.

Appendix A	EA Notice of Approval Compliance Table	Documents the proponent's progress on requirements of EA Notice of Approval
Appendix B	EA Study Document Compliance Table	Documents the proponent's progress on commitments made in the EA study document
Appendix C	Advisory Committee Annual Report	Provides a report on activities of the Advisory Committee during the reporting period as required by Condition 8.2 of the Notice of Approval

### 1.2 Background

The Durham York Energy Centre is an energy from waste facility located in the Municipality of Clarington, Ontario. The facility began receiving waste on February 9, 2015. Commissioning was completed in the fall of 2015, followed by Acceptance testing which led to commercial operations starting on January 28, 2016. Owned by the Regional Municipality of Durham and the Regional Municipality of York ("the Regions"), the facility processes up to 140,000 tonnes of solid, non-hazardous, municipal solid waste per year. Heat generated by waste combustion is used to generate electricity and steam. Recyclable metals are also recovered from the ash. The facility is designed, built, and operated by Covanta Energy Limited. The facility was approved under the *Environmental Assessment Act* by the Minister of the Environment and the Lieutenant Governor in Council on November 3, 2010. A multi-media Environmental Compliance Approval for waste, air and noise, and stormwater was issued on June 28, 2011 (#7306-8FDKNX). Facility construction commenced in January 2012 and full commercial operations commenced in January 2016 with the issuance of the Facility Acceptance Test certificate.



**EA Notice of Approval Compliance Table** 

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
1.	Definitions				
	N/A	N/A		N/A	N/A
2.	General Requirements				
2.1	The proponent shall comply with the provisions in the environmental assessment which are hereby incorporated in this Notice of Approval by reference except as provided in these conditions and as provided in any other approval or permit that may be issued for the site or the undertaking.	•	Commitments in the EA are carried forward in the Environmental Compliance Approval.	Carried into the ECA	Yes
2.2	These conditions do not prevent more restrictive conditions being imposed under other statutes.	•	Agreed	N/A	Yes
2.3	A statement must accompany the submission of any documents, reporting requirements or written notices required by this Notice of Approval to be submitted to the Director or Regional Director identifying which conditions the submission is intended to address in this Notice of Approval.	•	Submissions under the EA have included identification of each Condition being satisfied.	N/A	Yes
3.	Public Record				
3.1	Where a document, plan or report is required to be submitted to the ministry, the proponent shall provide two copies of the final document, plan or report to the Director: a copy for filing in the specific public record file maintained for the undertaking and a copy for staff use.	•	Required by Condition 16 (1) of the Environmental Compliance Approval	Carried into the ECA	Yes
3.2	The proponent shall provide additional copies of the documents required for the public record file to the following for access by the public:  a) Regional Director; b) District Manager; c) Clerks of the Regional Municipality of Durham, the Regional Municipality of York, and the Municipality of Clarington; and, d) Advisory Committee (as required in Condition 8 of this Notice of Approval).	•	Ongoing	Carried into the ECA	Yes
3.3	The EAAB file number EA-08-02 shall be quoted on all documents submitted by the proponent pursuant to this Condition.	•	Ongoing	N/A	Yes
4.	Compliance Monitoring Program				
4.1	The proponent shall prepare and submit to the Director a Compliance Monitoring Program outlining how it will comply with conditions in the Notice of Approval and other commitments made in the environmental assessment	•	The Compliance Monitoring Program was submitted to the Director and Advisory Committee via letter dated October 14, 2011.	October 2011	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
	A statement shall accompany the submission of the Compliance Monitoring Program indicating that the submission is intended to fulfil Condition 4 of this Notice of Approval.	•	See Section 1.1 of the Compliance Monitoring Program	October 2011	Yes
4.3	The Compliance Monitoring Program shall be submitted within one year from the date of approval, or a minimum of 60 days prior to the start of construction, whichever is earlier.	•	The Compliance Monitoring Program was submitted on October 14, 2011. This is within one year of November 3, 2010 approval date.  The October 14, 2011 submission date is more than 60 days prior to the start of construction in January 2012	October 2011	Yes
	The Compliance Monitoring Program shall describe how the proponent will monitor its fulfilment of the provisions of the environmental assessment pertaining to the mitigation measures, public consultation, and additional studies and work to be carried out; the fulfilment of all other commitments made by the proponent during the environmental assessment process; and the conditions included in this Notice of Approval.		Progress will be tracked on the compliance tables provided in Appendix A and Appendix B	October 2011	Yes
4.5	The Compliance Monitoring Program shall contain an implementation schedule.	•	Agreed	October 2011	Yes
4.6	The Director may require amendments to the Compliance Monitoring Program, including the implementation schedule. If any amendments are required by the Director, the Director will notify the proponent of the required amendments in writing.	•	Agreed	N/A	Yes
4.7	The proponent shall implement the Compliance Monitoring Program, as it may be amended by the Director.	•	Agreed	N/A	Yes
4.8	The proponent shall make the documentation pertaining to the Compliance Monitoring Program available to the ministry or its designate in a timely manner when requested to do so by the ministry.	•	Required by Condition 14 (1) of the Environmental Compliance Approval	N/A	Yes
5.	Compliance Reporting				
5.1	The proponent shall prepare an annual Compliance Report which describes its compliance with the conditions of approval set out in this Notice of Approval and which describes the results of the proponent's environmental assessment Compliance Monitoring Program required by Condition 4.	•	This annual report is the tenth annual submission in accordance with this condition	November 3, 2011 and annually thereafter until all EA conditions are met.	Yes
5.2	The annual Compliance Report shall be submitted to the Director within one year from the date of approval, with the first report being due in 2011, and shall cover all activities of the previous 12 month period.	•	This annual report is the tenth annual submission in accordance with this condition	November 3, 2011 and annually thereafter	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
5.3	Subsequent compliance reports shall be submitted to the Director on or before the anniversary of the date of approval each year thereafter. Each Compliance Report shall cover all activities of the previous 12 month period.	•	This annual report is the tenth annual submission in accordance with this condition	November 3, 2011 and annually thereafter	Yes
5.4	The proponent shall submit annual Compliance Reports until all conditions in this Notice of Approval and the commitments in the environmental assessment are satisfied.	•	Agreed	November 2019	Yes
	Once all conditions in this Notice of Approval have been satisfied, or have been incorporated into any other ministry approval, the proponent shall indicate in its annual Compliance Report that the Compliance Report is its final Compliance Report and that all conditions in this Notice of Approval have been satisfied.	•	Agreed	November 2019	Yes
5.6	The proponent shall retain either on site or in another location approved by the Director, a copy of each of the annual Compliance Reports and any associated documentation of compliance monitoring activities.	•	Reports to be retained on site. See Section 1.3 of the Compliance Monitoring Program.  Required by Condition 14(2) of the Environmental Compliance Approval	Carried into the ECA	Yes
5.7	The proponent shall make the Compliance Reports and associated documentation available to the ministry or its designate in a timely manner when requested to do so by the ministry.	•	Agreed Required by Condition 14(1) of the Environmental Compliance Approval	Carried into the ECA	Yes
6.	Complaint Protocol				
6.1	The proponent shall prepare and implement a Complaint Protocol setting out how it will deal with and respond to inquiries and complaints received during the design, construction and operation of the undertaking.	•	Protocol submitted to the Director via letter dated March 10, 2011. Director requested minor modifications to protocol in letter dated March 25, 2011 Revised protocol approved by the Director via letter dated July 13, 2011	March 10, 2011	Yes
6.2	The Complaint Protocol shall be provided to the advisory committee for review prior to submission to the Director.	•	Protocol was reviewed by the Advisory Committee on January 20, 2011 and revised based on comments received by January 31, 2011.	January 20, 2011	Yes
6.3	The proponent shall submit the Complaint Protocol to the Director within one year from the date of approval or a minimum of 60 days prior to the start of construction, whichever is earlier.	•	Protocol was submitted within one year of the November 3, 2010 date of approval.  March 10, 2011 submission date is more than 60 days prior to the start of construction in January 2012.	March 10, 2011	Yes
6.4	The Director may require the proponent to amend the Complaint Protocol at any time. Should an amendment be required, the Director will notify the proponent in writing of the required amendment and date by which the amendment must be completed.	•	Complaint Procedure is required by Condition 10 of the ECA	N/A	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
6.5	The proponent shall submit the amended Complaint Protocol to the Director within the time period specified by the Director in the notice.	•	Complaint Procedure is required by Condition 10 of the ECA	N/A	Yes
7.	Community Involvement				
7.1	The proponent shall prepare and implement a Community Communications Plan. The plan shall be prepared in consultation with the EAAB and to the satisfaction of the Director.	•	Regions submitted a final plan via letter dated September 18, 2013. This plan has been submitted prior to receipt of waste. The Community Communications Plan was approved by the Director via letter dated September 30, 2013.	September 18, 2013	Yes
7.2	The proponent shall finalize and submit the Community Communications Plan to the Director prior to the initial receipt of non-hazardous municipal solid waste at the site.	•	Regions submitted a final plan via letter dated September 18, 2013. This plan has been submitted prior to receipt of waste.	September 18, 2013.	Yes
	The Community Communications Plan shall include at a minimum details on:  a) How the proponent plans to disseminate information to interested members of the public and any Aboriginal communities; b) How interested members of the public and any Aboriginal communities will be notified and kept informed about site operations; and, c) The procedures for keeping interested members of the public and Aboriginal communities informed about information on documents related to the undertaking, and when and how the information will be made available.	•	Completed.	September 18, 2013.	Yes
	The proponent shall give notice of and provide information about the undertaking to interested members of the public and Aboriginal communities through an internet web site and by other means. Such information shall include:  a) Activities that are part of the undertaking, including monitoring activities; b) Reports and records related to the undertaking that are required to be submitted under this Notice of Approval or under any other ministry approvals that apply to the undertaking; and, c) Information on the Complaint Protocol required by Condition 6 of this Notice of Approval.	•	Web site is currently operational Documents posted on the website currently include, but are not limited to, the Complaint Protocol, Environmental Compliance Approval, Archived EA documentation, Groundwater and Surface Water Monitoring Plan, Soil Monitoring Plan, Ambient Air Monitoring Plan, Emissions Monitoring Plan, Noise Monitoring Plan, Odour Management and Mitigation Plan, Compliance Monitoring Plan, Community Communications Plan, Waste Diversion Program Monitoring Plan, Third Party Audit Plan, Spill Contingency and Emergency Response Plan, Advisory Committee advertisements, agendas, and minutes, and annual monitoring reports prepared in accordance with the approved monitoring plans. Additional information will be posted to the website as it becomes available Required by ECA Condition 16: Public Access to Documentation	Carried into the ECA	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
	<ul> <li>The proponent shall hold public meetings to discuss the design, construction and operation of the undertaking, including, but not limited to:</li> <li>a) At least one meeting prior to the start of construction;</li> <li>b) At least one meeting prior to the receipt of non-hazardous municipal solid waste on site; and,</li> <li>c) At least one meeting a minimum of six months but not later than 12 months after the initial receipt of non-hazardous municipal solid waste on the site.</li> </ul>	•	Pre-construction public meeting was held at the Durham Regional Offices on December 7, 2011 from 5:00 pm to 6:30 pm. Public meeting prior to receipt of waste was held in Clarington on June 25, 2014 from 5:00 pm to 8:00 pm. Public meeting within 12 months of first receipt of waste was held at the Durham York Energy Centre on February 4 <sup>th</sup> , 2016 from 5:00 to 8:00 pm.	December 2011 June 2014 February 4, 2016	Yes
7.6	The proponent shall provide notice of the public meetings a minimum of 15 days prior to the meeting.	•	Meeting notices for the December 2011 pre-construction meeting were advertised in local newspapers during the week of November 14, 2011 and posted on the project website.  Meeting notices for the June 2014 prior to receipt of waste meeting were advertised in local newspapers from May 28 through June 5, 2014.  Meeting notices for the February 2016 meeting were advertised in local papers from January 20th to February 3rd, 2016.	November 2011 June 2014 January 2016	Yes
7.7	The proponent shall give the Director written notice of the time, date and location of each of the required community meetings a minimum of 15 days prior to the meeting.	•	The MECP Environmental Approvals Branch and District Office received an invitation to the December 7, 2011 pre-construction meeting on November 18, 2011.  The MECP Environmental Approvals Branch District and Central Offices received an invitation to the June 25, 2014 prior to waste meeting on June 3, 2014.  The MECP Environmental Approvals Branch District and Central Offices received an invitation to the February 4 <sup>th</sup> , 2016 meeting via letter dated January 18, 2016.	November 2011 June 2014 January 2016	Yes
8.	Advisory Committee				
8.1	The proponent shall establish an advisory committee to ensure that concerns about the design, construction and operation of the undertaking are considered and mitigation measures are implemented where appropriate.	•	Complete Required by ECA Condition 17: Advisory Committee	January 20, 2011 Carried into the ECA	Yes
	The proponent shall provide administrative support for the advisory committee including, at a minimum:  a) Providing a meeting space for advisory committee meetings; b) Recording and distributing minutes of each meeting; c) Preparing and distributing meeting notices; and, d) Preparing an annual report about the advisory committee's activities to be submitted as part of the Compliance Reports required by Condition 5 of this Notice of Approval.	•	Meeting minutes and related correspondence are posted on the project website.  Annual report on advisory committee activities is included as Appendix C of this report.  Required by ECA Condition 17, and the Energy from Waste Advisory Committee (EFWAC) approved Terms of Reference	N/A	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
8.3	The proponent shall invite one representative from each of the following to participate on the advisory committee:  a) Each of the lower tier municipalities in the Regional Municipality of Durham; and, b) Each of the lower tier municipalities in the Regional Municipality of York.	•	Letters of invitation dated December 15, 2010 were sent to all listed municipalities	December 15, 2010	Yes
8.4	The proponent shall invite one representative from Central Lake Ontario Conservation Authority, and any other local conservation authorities that may have an interest in the undertaking to participate on the advisory committee.	•	Letter of invitation dated December 15, 2010 was sent to Central Lake Ontario Conservation Authority	December 15, 2010	Yes
8.5	The proponent shall invite one representative from each of the following local community groups to participate on the advisory committee:  a) DurhamCLEAR; b) Durham Environmental Watch c) Zero Waste 4 Zero Burning	•	Letters of invitation dated December 15, 2010 were sent to all listed local community groups.	December 15, 2010	Yes
8.6	The proponent may also invite other stakeholders to participate in the advisory committee, including but not limited to, interested members of the public, Aboriginal communities, and other federal or provincial agencies.	•	Letters of invitation dated December 15, 2010 were sent to Durham Region Health Department and York Region Public Health Services.  Aboriginal communities received separate invitation to participate in other consultation activities. See Condition 9.1	December 15, 2010	Yes
8.7	A representative from the ministry shall be invited to attend meetings as an observer.	•	Letters of invitation dated December 15, 2010 were sent to MECP District Manager.	December 15, 2010	Yes
	The advisory committee shall be provided with a copy of the documents listed below for information and may review the documents as appropriate and provide comments to the proponent about the documents, including the:  a) Compliance Monitoring Program required by Condition 4; b) Annual Compliance Report required by Condition 5; c) Complaint Protocol required by Condition 6; d) Community Communications Plan required by Condition 7; e) The annual reports required by Condition 10; f) Ambient Air Monitoring and Reporting Plan and the results of the ambient air monitoring program required by Condition 11; g) Air Emissions Monitoring Plan required by Condition 12; h) Written report prepared and signed by the qualified professional required by Condition 16.5; i) Spill Contingency and Emergency Response Plan required by Condition 17;	•	Advisory Committee has reviewed and provided comments where applicable to the following documents:  Advisory Committee Terms of Reference Compliance Monitoring Plan 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020 Annual Compliance Reports Complaint Protocol Community Communications Plan 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019 Annual Waste Diversion Reports Ambient Air Quality Monitoring Plan 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020 Ambient Air Quarterly and Annual reports Air Emissions Monitoring and Reporting Plan	Carried into the ECA	Yes

Condition No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
	<ul> <li>j) Odour Management and Mitigation Plan and the Odour Management and Mitigation Monitoring Reports required by Condition 18;</li> <li>k) Noise Monitoring and Reporting Plan as required by Condition 19;</li> <li>l) Groundwater and Surface Water Monitoring Plan, the results of the groundwater and surface water monitoring program, and the annual report on the results of the groundwater and surface water monitoring program required by Condition 20; and,</li> <li>m) Notice in writing of the date that municipal solid waste is first received as required by Condition 23.</li> </ul>	as required by Condition 16.5  Spill Contingency and Emergency Response Plan  Odour Management and Mitigation Plan  Noise Monitoring and Reporting Plan  Groundwater and Surface Water Monitoring Plan		
8.9	The proponent shall hold the first advisory committee meeting within three months of the date of approval. At the first meeting, the advisory committee shall develop a Terms of Reference outlining the governance and function of the advisory committee.	<ul> <li>First meeting held January 20, 2011 was within three months of November 3, 2010 date of approval</li> <li>Draft Terms of Reference were reviewed by the Committee and revised based on comments received both at the meeting or submitted in writing by February 14, 2011.</li> </ul>	January 20, 2011	Yes
	The Terms of Reference shall, at minimum, include:  a) Roles and responsibilities of the advisory committee members; b) Frequency of meetings; c) Member code of conduct; d) Protocol for dissemination and review of information including timing; and, e) Protocol for dissolution of the advisory committee.	<ul> <li>Terms of Reference submitted to MECP via letter dated February 18, 2011.</li> <li>Terms of Reference approved via letter from the Director dated March 4, 2011.</li> </ul>	February 18, 2011	Yes
8.11	The proponent shall submit the advisory committee's Terms of Reference to the Director and Regional Director.	Terms of Reference submitted to MECP via letter dated February 18, 2011.	February 18, 2011	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
		•	Terms of Reference approved via letter from the Director dated March 4, 2011.		
9.	Consultation With Aboriginal Communities				
9.1	The proponent shall continue to consult with any interested Aboriginal communities during the detailed design and implementation of the undertaking.	•	Letters dated March 14, 2011 were sent to 22 Aboriginal communities inviting them to meet with the project team to discuss future consultation efforts.  Letters dated October 26, 2012 to Aboriginal Communities identified in the EA to advise of project updates and the project website as a resource for continuous updates.  The MECP EAB Director, Regional Director, and Approvals Program Director were copied on all correspondence to Aboriginal Communities.	Ongoing	Yes
10.	Waste Diversion				
10.1	The proponent shall make a reasonable effort to work cooperatively with all lower tier municipalities to ensure that waste diversion programs, policies and targets set by the Regional Municipalities are being met.	•	Both Regions continue to work with local municipalities to improve waste diversion and report waste diversion statistics to the Resource Productivity and Recovery Authority annually. Both Regions have long term waste management and diversion plans in place.	Ongoing	Yes
10.2	The proponent shall prepare and implement a Waste Diversion Program Monitoring Plan.	•	Waste Diversion Program Monitoring Plans for Durham Region and York Region were submitted to the EAB Director and Regional Director on October 21, 2011.  The EAB Director approved the Waste Diversion Program Monitoring Plans via letter dated November 25, 2011.	October 21, 2011	Yes
10.3	The Waste Diversion Program Monitoring Plan shall provide a description of monitoring and reporting which shall at minimum include:  a) Results of at source diversion programs and policies to determine the waste diversion rates and practices at both the regional and lower tier municipal level within the Regional Municipalities of Durham and York.  b) Progress in the diversion programs, policies, practices and targets described in the environmental assessment, at both the regional and lower tier municipal level within the Regional Municipalities of Durham and York.  c) Monitoring results for any additional diversion programs, policies, practices and targets carried out within the Regional Municipalities of Durham and York, which are not described in the environmental assessment.	•	Completed	October 21, 2011	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
10.4	The proponent shall prepare and submit to the Director and Regional Director, commencing one year after the approval of the undertaking, annual reports detailing the results of the Waste Diversion Program Monitoring Plan.	•	2019 annual monitoring report has been submitted to the Director and Regional Director. Future monitoring reports to be submitted by November 3 <sup>rd</sup> of each successive year.	Ongoing	Yes
	The proponent shall post the Waste Diversion Program Monitoring Plan and the annual reports required on the proponent's web site for the undertaking.	•	The Waste Diversion Monitoring Plan and annual reports for Durham and York Regions are posted on the project website	Ongoing	Yes
11.	Ambient Air Monitoring and Reporting				
	The proponent shall prepare, in consultation with the ministry's Central Region Office and to the satisfaction of the Regional Director, an Ambient Air Monitoring and Reporting Plan for the undertaking.	•	Final Plan submitted to the Regional Director August 31, 2011 Consultation activities described under Condition 11.3 MECP Approval via letter dated May 30, 2012 MECP Approval of monitoring locations via letter dated June 5, 2012.	August 31, 2011	Yes
	The proponent shall submit the Ambient Air Monitoring and Reporting Plan to the Director and Regional Director a minimum of nine months prior to the start of construction or by such other date as agreed to in writing by the Regional Director.		Submission deadline revised to August 31, 2011 via letter from the Director dated June 30, 2011. Submitted August 31, 2011	August 31, 2011	Yes
	The proponent shall establish a working group that will provide advice on the development of the Ambient Air Monitoring and Reporting Plan. The Regions will, at a minimum, extend an invitation to Health Canada, the Durham Region Health Department, York Region Public Health Services, one participant from the advisory committee, and any other relevant federal or provincial government agencies including the ministry.	•	Letters of invitation dated March 16, 2011 were sent to all listed working group participants with copies to the Director and Regional Director.  Two participants were appointed by the Advisory Committee. Health Canada declined to participate. At Health Canada's suggestion, a representative from the Ontario Ministry of Health participated instead. First working group meeting occurred on April 28, 2011. Monitoring plan was revised based on comments received from the working group and circulated for comments to the MECP Central Region Office, the Ambient Air Monitoring Working Group, and the Advisory Committee on July 7, 2011. The monitoring plan was revised based on comments received by August 15, 2011. The Final Monitoring Plan was submitted to the Regional Director on August 31, 2011.	March 16, 2011	Yes
11.4	The Ambient Air Monitoring and Reporting Plan shall include at minimum:  a) An ambient air monitoring program which includes an appropriate number of sampling locations. Siting of the sampling locations shall be done in accordance with the Ministry of the Environment's	•	The submitted document meets these requirements.  The Regions and The MECP met and discussed the first annual report on July 30 <sup>th</sup> , 2014. No changes were requested.	May 30, 2012	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
	Operations Manual for Air Quality Monitoring in Ontario, March 2008, as amended from time to time; b) The proposed start date for and frequency of the ambient air monitoring and reporting to be carried out; c) The contaminants that shall be monitored as part of the Ambient Air Monitoring and Reporting Plan; and, d) At least one meeting on an annual basis between the proponent and the Regional Director to discuss the plan, the results of the ambient air monitoring program and any changes that are required to be made to the plan by the Regional Director.		Meetings to discuss the 2018 Annual Reports were held with Regions and MECP on November 1 <sup>st</sup> , 2019. Discussions on the 2019 reports are currently being scheduled.		
	The proponent shall implement the ambient air monitoring program prior to the receipt of non-hazardous municipal solid waste on the site or at such other time that may be determined by the Regional Director and communicated to the proponent in writing and shall continue the monitoring until such time as the Regional Director notifies the proponent in writing that the Ambient Air Monitoring Program is no longer required.	•	Agreed Submitted plan includes monitoring of ambient air for one year prior to facility commissioning to establish background concentrations. Ambient Air monitoring commenced in April 2013.	April 2013	Yes
11.6	The Regional Director may require changes to be made to the Ambient Air Monitoring and Report Plan and the proponents shall implement the plan in accordance with the required changes.		Addressing revisions required by the MECP to the Plan are included in the Ambient Air Monitoring and Reporting Plan.  The implementation and reporting of Ambient Air Monitoring is a requirement of ECA Condition 7(4)	Carried into the ECA	Yes
	The proponent shall report the results of the ambient air monitoring program to the Regional Director in accordance with the Ambient Air Monitoring and Reporting Plan.	•	Agreed In accordance with ECA Condition 7(4)(c) ambient air results will be posted to the website upon submission to the MECP Regional Director.  Quarterly Reports and annual Ambient Air Monitoring Reports have been posted to the project website.  The implementation and reporting of Ambient Air Monitoring is a requirement of ECA Condition 7(4)	Carried into the ECA	Yes
	Audits will be conducted by the ministry, as outlined in the Ministry of the Environment's Audit Manual for Air Quality Monitoring in Ontario, March 2008 to confirm that siting and performance criteria outlined in the Operations Manual are met. The proponent shall implement any recommendations set out in the audit report regarding siting of the sampling locations and performance criteria. The proponent shall implement the recommendations in the audit report within three months of the receipt of an audit report from the ministry.	•	The monitoring program was written with reference to the MECP Audit Manual. The MECP, Central Region, Technical Support Section conducts performance and site audits of the ambient air monitoring stations regularly.  The implementation and reporting of Ambient Air Monitoring is a requirement of ECA Condition 7(4)	Carried into the ECA	Yes
11.9	The proponent shall post the Ambient Air Monitoring and Reporting Plan and the results of the ambient air monitoring program on the proponent's	•	The Ambient Air Monitoring and Reporting Plan has been posted on the website.	Carried into the ECA	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
	web site for the undertaking upon submission of the plan or results of the program to the ministry.	•	Ambient Air Monitoring Reports will be posted to the website as they are completed.  The implementation and reporting of Ambient Air Monitoring is a requirement of ECA Condition 7(4)		
12.	Emissions Monitoring				
12.1	The proponent shall install, operate and maintain air emissions monitoring systems that will record the concentrations of the contaminants arising from the incineration of waste.	•	Requirement of Environmental Compliance Approval Condition 7(2)	Carried into the ECA	Yes
12.2	The air emissions monitoring systems shall be installed and operational prior to the receipt of non-hazardous municipal solid waste at the site.	•	Requirement of Environmental Compliance Approval Condition 7(2) First receipt of waste occurred on February 9, 2015 Continuous emissions monitoring system was installed and operational prior to first receipt of waste.	February 9, 2015	Yes
12.3	The proponent shall prepare and implement an Air Emissions Monitoring Plan. The Plan shall be prepared, in consultation with the ministry and to the satisfaction of the Director.	•	Air Emissions Monitoring Plan submitted for comments to the MECP and to the Advisory Committee via letter dated July 23, 2011.  Final plan incorporating comments from MECP and Advisory Committee submitted via letter dated August 31, 2011  MECP provided comments via letter dated August 21, 2012.  Regions and Covanta revised the Air Emissions Monitoring Plan on October 5, 2012, November 8, 2012, and February 11, 2013 to address comments from the MECP.  The Air Emissions Monitoring Plan was approved by the MECP Director via letter dated April 9, 2013.	August 31, 2011	Yes
12.4	The Air Emissions Monitoring Plan shall include, at a minimum:  a) Identification of all sources of air emissions at the site to be monitored; b) Identification of which contaminants will be monitored by continuous emissions monitoring and which by stack testing; c) The proposed start date for and frequency of air emissions monitoring; d) The frequency of and format for reporting the results of air emissions monitoring; e) The contaminants that shall be monitored, which shall include at a minimum those contaminants set out in Schedule 1 to this Notice of Approval; and,	•	Completed.	August 31, 2011	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
	f) A notification, investigation and reporting protocol to be used in the event that the concentration(s) of one or more of the contaminants released from an emission source that requires approval under Section 9 of the Environmental Protection Act exceeded the relevant limits.				
12.5	The proponent shall submit the Air Emissions Monitoring Plan to the Director, a minimum of six months prior to the start of construction or by such other date as agreed to in writing by the Director.	•	Director revised submission deadline to August 31, 2011 via letter dated June 30, 2011. Plan submitted August 31, 2011	August 31, 2011	Yes
	The proponent shall implement the Air Emissions Monitoring Plan such that the monitoring commences when the first discharges are emitted from the facility to the air or at such other time as the Director may agree to in writing and shall continue until such time as the Director notifies the proponent in writing that the Air Emissions Monitoring Plan is no longer required.	•	ECA Condition 5 details requirements for operation and maintenance of the air pollution control (APC) and continuous emissions monitoring systems (CEMS) equipment.  ECA Condition 6 details the facility performance requirements for combustion, APC and CEMS.  ECA Condition 13 details actions required to notify the MECP in the event of a spill.	Carried into the ECA	Yes
12.7	The proponent shall post the reports of the air emissions monitoring systems on the proponent's web site for the undertaking.	•	Required by Condition 16 (1) (a) of the Environmental Compliance Approval Web site reporting of emissions data is operational	Carried into the ECA	Yes
12.8	For those contaminants that are monitored on a continuous basis, the proponent shall post on the proponent's website for the undertaking the results of the monitoring for each of those contaminants in real time.	•	Web site reporting of emissions data is operational Required by ECA Condition 16 (2)	Carried into the ECA	Yes
13.	Air Emissions Operational Requirements				
13.1	The proponent is expected to operate the undertaking in accordance with Schedule 1 of the Notice of Approval. If the facility is not operating in accordance with Schedule 1, the operator is required to take steps to bring the facility back within these operational requirements.	•	All air emissions operational and monitoring requirements of the Environmental Assessment are carried into the ECA.  During the period covered by this report, the facility was compliant with all air emissions requirements in Schedule 1.	Carried into the ECA	Yes
13.2	Schedule 1 sets out the operational requirements the ministry expects the facility to meet during the normal operating conditions of the facility when operating under a steady state but does not include start up, shut down, or malfunction.	•	Schedule 1 is carried into the ECA as Schedule "C"  ECA Condition 5 details requirements for operation and maintenance of the air pollution control (APC) and continuous emissions monitoring systems (CEMS) equipment.  ECA Condition 6 details the facility performance requirements for combustion, APC and CEMS.  ECA Condition 7 details the testing and monitoring requirements of the CEMS.  ECA Condition 13 details actions required to notify the MECP in the event of a spill.	Carried into the ECA	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
		•	Schedule "F" of the ECA details the CEMS specifications required by the MECP		
13.3	The timing and frequency of monitoring for a contaminant in Schedule 1 shall be as required by the approval granted to the facility under the <i>Environmental Protection Act</i> , should approval be granted.	•	Timing and frequency are in accordance with Schedule "C" of the Environmental Compliance Approval.  ECA Condition 7 details timing and frequency for source testing.	Carried into the ECA	Yes
14.	Daily Site Inspection				
	The proponent shall conduct a daily site inspection of the site including the non-hazardous municipal solid waste received at the site, each day the undertaking is in operation to confirm that:  a) The site is secure; b) The operation of the undertaking is not causing any nuisance impacts;	•	Agreed See Environmental Compliance Approval Conditions 3 (6), 3 (7), 3 (8), 5 (5), 14 (3), and 14 (5)	Carried Into the ECA	Yes
	c) The operation of the undertaking is not causing any adverse effects on the environment;     d) The undertaking is being operated in compliance with the conditions in this Notice of Approval and any other ministry approvals issued for the undertaking; and,     e) Only non-hazardous waste is being received at the site.				
	If, as a result of the daily inspection, any deficiencies are noted by the employee in regard to the factors set out in Condition 14.1 above, the deficiency shall be remedied immediately by the proponent. If necessary to remedy the deficiency, the proponent shall cease operations at the site until the deficiency has been remedied.	•	Agreed See Environmental Compliance Approval Conditions 5 (5), 14 (3), and 14 (5)	Carried into the ECA	Yes
	A record of the daily inspections shall be kept in the daily log book required in Condition 15. The information below must be recorded in the daily log book by the person completing the inspection and includes the following information:	•	Agreed See Environmental Compliance Approval Conditions 5 (5), 14 (3), and 14 (5)	Carried into the ECA	Yes
	<ul> <li>a) The name and signature of the person that conducted the daily inspection;</li> <li>b) The date and time of the daily inspection;</li> <li>c) A list of any deficiencies discovered during the daily inspection;</li> <li>d) Any recommendations for action; and,</li> <li>e) The date, time, and description of actions taken.</li> </ul>				
	The proponent shall retain either on site or in another location approved by the District Manager, a copy of the daily log book and any associated documentation regarding the daily site inspections.	•	Agreed See Environmental Compliance Approval Conditions 5 (5), 14 (3), and 14 (5) Required by Condition 14 (2) of the Environmental Compliance Approval	Carried into the ECA	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
15.	Daily Record Keeping				
15.1	<ul> <li>The proponent shall maintain a written daily log which shall include the following information:</li> <li>a) Date;</li> <li>b) Types, quantities, and source of non-hazardous municipal solid waste received;</li> <li>c) Quantity of unprocessed, processed and residual non-hazardous municipal solid waste on the site;</li> <li>d) Quantities and destination of each type of residual material shipped from the site;</li> <li>e) The record of daily site inspections required to be maintained by Condition 14.3;</li> <li>f) A record of any spills or process upsets at the site, the nature of the spill or process upset and the action taken for the clean up or correction of the spill or process upset, the time and date of the spill or process upset, and for spills, the time that the ministry and other persons were notified of the spill pursuant to the reporting requirements of the <i>Environmental Protection Act</i>;</li> <li>g) A record of any waste that was refused at the site, including: amounts, reasons for refusal and actions taken; and,</li> <li>h) The name and signature of the person completing the report.</li> </ul>	•	Agreed See Environmental Compliance Approval Conditions 5 (5), 14 (3), and 14 (5)	Carried into the ECA	Yes
15.2	The proponent shall retain, either on site or in another location approved by the District manager, a copy of the daily log book and any associated documentation.	•	Agreed See Environmental Compliance Approval Conditions 5 (5), 14 (3), and 14 (5)	Carried into the ECA	Yes
15.3	The proponent shall make the daily log book and any associated documentation available to the ministry or its designate in a timely manner when requested to do so by the ministry.	•	Agreed Required by Condition 14(1) of the Environmental Compliance Approval	Carried into the ECA	Yes
16.	Third Party Audits				
16.1	The proponent shall retain the services of a Qualified, Independent Professional Engineer to carry out an independent audit of the undertaking.	•	Complete	December 8, 2011	Yes
16.2	Within six months from the date of approval or other such date as agreed to in writing by the Regional Director, the proponent shall submit to the Director and the Regional Director, the name of the Qualified, Independent Professional Engineer and the name of the company where he/she is employed.	•	Deadline to submit name of auditor revised to September 30, 2011 via letter from the Director and Regional Director dated June 30, 2011.  Deadline to submit name of external auditor extended to 30 days prior to the commencement of construction to allow for the ministry's comment on the draft audit plan via letter from the MECP Director and Regional Director dated September 30, 2011.	November 16, 2011	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
		•	Regions submitted name of construction-phase auditor on November 16, 2011, more than 30 days prior to commencement of construction in January 2012.  Regions submitted name of acceptance testing phase auditor via letter dated September 18, 2013.  Regions submitted name of auditor for operations phase via letter dated June 9, 2014.  Regions provided notice to the MECP of the new Third Party Auditor via letter dated December 19, 2017.		
	The proponent shall submit an audit plan to the satisfaction of the Regional Director that sets out the timing of and frequency for the audits, as well as the manner in which the audits are to be carried out.	•	Construction Phase Audit Plan approved by the Regional Director and Regional Director via letter dated December 8, 2011.  Acceptance test audit plan approved by Regional Director via letter dated July 23, 2014.  Operations Phase audit plan approved by MECP via letter dated October 24, 2013.  Revised Operations Phase Audit Plan submitted to the MECP via letter dated April 14, 2020, and approved by MECP via letter dated May 6, 2020.	December 8, 2011	Yes
	<ul> <li>The audit shall include, at a minimum, the following:</li> <li>a) A detailed walkthrough of the entire site;</li> <li>b) A review of all operations used in connection with the undertaking; and,</li> <li>c) A detailed review of all records required to be kept by this Notice of Approval or under any other ministry approvals for the undertaking.</li> <li>d) The proponent shall obtain from the Qualified, Independent Professional Engineer, a written report of the audit prepared and signed by the Qualified, Independent Professional Engineer that summarizes the results of the audit.</li> </ul>	•	Audit plans for construction phase, acceptance testing phase, and operations phase comply with these requirements.  Carried into ECA Condition 15 (2)	Carried into the ECA	Yes
	The proponent shall submit the written report summarizing the result of the audit to the Regional Director no later than 10 business days following the completion of the audit.	•	The first Construction Phase Audit report was submitted to the MECP on June 15, 2012.  The second Construction Phase audit report was submitted to the MECP on April 15, 2013.  The third Construction Phase Audit report was submitted to the MECP on September 20, 2013.  The fourth Construction Phase Audit report was submitted to the MECP on April 14, 2014.  The Acceptance Phase Audit report was submitted to the MECP on March 23, 2016.	Carried into the ECA	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
		•	The first Operations Phase Audit report was submitted to the MECP on April 29, 2016. The second Operations Phase Audit report was submitted to the MECP on April 28, 2017. The third Operations Phase Audit report was submitted to the MECP on April 30, 2018. The fourth Operations Phase Audit report was submitted to the MECP on April 30, 2019. The fifth Operations Phase Audit report was submitted to the MECP on October 2, 2020. Carried into ECA Condition 15 (3)		
16.6	The proponent shall retain either on site or in another location approved by the Regional Director, a copy of the written audit report and any associated documentation.		Copies of all audit reports are retained on site.  Copies of future audit reports will be retained on site as required by Condition 14 (9)(d) of the Environmental Compliance Approval.  Carried into ECA Condition 15 (3).	Carried to the ECA	Yes
16.7	The proponent shall make the written audit report and any associated documentation available to the ministry or its designate in a timely manner when requested to do so by the ministry.	•	Agreed Required by Condition 14 (1) of the Environmental Compliance Approval.	Carried into the ECA	Yes
16.8	The proponent shall post the written audit report on the proponent's web site for the undertaking following submission of the report to the ministry.	•	All audit reports to date have been posted to the project website. Future reports will be posted to the website as required by Condition 16(1)(d) of the Environmental Compliance Approval	Carried into the ECA	Yes
17.	Spill Contingency and Emergency Response Plan				
17.1	The proponent shall prepare and implement a Spill Contingency and Emergency Response Plan.	•	Required by Condition 11 of the Environmental Compliance Approval.  Draft Spill Contingency and Emergency Response Plan was submitted to the MECP via letter dated September 24, 2013.  Final Spill Contingency and Emergency Response Plan was submitted to the MECP via letter dated January 29, 2014.  MECP approved the Spill Contingency and Emergency Response Plan via Environmental Compliance Approval amendment dated August 12, 2014.	September 24, 2013	Yes
17.2	The proponent shall submit to the Director, the Spill Contingency and Emergency Response Plan a minimum of 60 days prior to the receipt of non-hazardous municipal solid waste at the site or such other date as agreed to in writing by the Director.	•	Deadline to submit plan revised to 120 days prior to the commencement date of operation by Environmental Compliance Approval Condition 11 (3).  The draft Spill Contingency and Emergency Response Plan was submitted via letter dated September 24, 2013 to the MECP.	September 24, 2013	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
	<ul> <li>The Spill Contingency and Emergency Response Plan shall include, but is not limited to:</li> <li>a) Emergency response procedures, including notification procedures in case of a spill, fires, explosions or other disruptions to the operations of the facility;</li> <li>b) Cell and business phone numbers and work location for all person(s) responsible for the management of the site;</li> <li>c) Emergency phone numbers for the local ministry office, the ministry 's Spills Action Centre, and the local Fire Department;</li> <li>d) Measures to prevent spill, fires and explosions;</li> <li>e) Procedures for use in the event of a fire;</li> <li>f) Details regarding equipment for spill clean-up and all control and safety devices;</li> <li>g) Shut down procedures for all operations associated with the undertaking including alternative waste disposal site locations;</li> <li>h) Maintenance and testing program for spill clean-up equipment and firefighting equipment;</li> <li>i) Training for site operators and emergency response personnel; and,</li> <li>j) A plan, identifying the location and nature of wastes on site.</li> </ul>	•	Additional requirements included in Environmental Compliance Approval Condition 11 (2). Completed.	September 24, 2013	Yes
	The proponent shall provide the Spill Contingency and Emergency Response Plan to the District Manager, the local Municipality of Clarington and the local Municipality of Clarington Fire Department a minimum of 30 days prior to the initial receipt of non-hazardous municipal solid waste at the site or such other date as agreed to in writing by the Director.	•	Deadline to submit finalized plan to the Director revised to 120 days prior to the commencement date of operation by Environmental Compliance Approval Condition 11 (3). Document was submitted to the District Manager, local municipality, and fire department for comments prior to final submission.  Draft Spill Contingency and Emergency Response Plan was submitted to the MECP via letter dated September 24, 2013. Draft Spill Contingency and Emergency Response Plan was also developed in consultation with the local municipality and local fire department in advance of the final submission to the MECP. Municipal building code and fire code requirements for construction are reviewed with each building permit submission.	September 24, 2013	Yes
	The proponent shall take all necessary steps to contain and clean up a spill on the site. A spill or upset shall be reported immediately to the ministry's Spills Action Centre at (416) 325-3000 or 1-800-268-6060.	•	Agreed. Required by Condition 12 of the Environmental Compliance Approval. Required by Condition 13(3) of the Environmental Compliance Approval.	Carried into the ECA	Yes

Condition No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
18.	Odour Management and Mitigation			
18.1	The proponent shall prepare, in consultation with the ministry's Central Region Office and to the satisfaction of the Regional Director, and implement an Odour Management and Mitigation Plan for the undertaking.	<ul> <li>Odour Management and Mitigation Plan submitted to MECP on August 31, 2011.</li> <li>Revised Odour Management and Mitigation Plan submitted May 4, 2012.</li> <li>Odour Management and Mitigation Plan approved by Regional Director via letter dated August 21, 2012.</li> </ul>	August 21, 2012	Yes
18.2	The proponent shall submit the Odour Management and Mitigation Plan to the Regional Director a minimum of six months prior to the start of construction or at such other time as agreed to in writing by the Regional Director.	<ul> <li>Deadline to submit plan revised to August 31, 2011 via letter from the Director and Regional Director dated June 30, 2011.</li> <li>Plan submitted in draft form to MECP and Advisory Committee for comments via email dated July 25, 2011.</li> <li>Plan incorporating MECP and Advisory Committee comments submitted August 31, 2011</li> </ul>	August 31, 2011	Yes
	The Odour Management and Mitigation Plan shall include at a minimum:  a) Standard operating and shut down procedures; b) Maintenance schedules; c) Ongoing monitoring for and reporting of odour; d) Corrective action measures and other best management practices for ongoing odour control and for potential operational malfunctions; e) A schedule for odour testing at sensitive receptors; and, f) A section that specifically addresses odour control measures should operation of the undertaking be disrupted or cease.	<ul> <li>Addressed in the approved odour management and mitigation plan.</li> <li>Additional requirements listed in Environmental Compliance Approval Condition 8 (9).</li> </ul>	August 31, 2011	Yes
18.4	The proponent shall prepare and submit the Odour Management and Mitigation Monitoring Reports annually to the Regional Director with the first report submitted beginning six months following the initial receipt of non-hazardous municipal solid waste at the site or such other date as agreed to in writing by the Regional Director.	<ul> <li>Final Odour Monitoring and Mitigation Plan is compliant with these requirements.</li> <li>The first annual Odour test was held simultaneously with the first Stack (source) test as agreed to by the MECP on October 8, 2015. Odour test report was submitted to the MECP on November 25, 2015.</li> <li>The second annual Odour report was submitted in December 2016, after requesting an extension to the date.</li> <li>The third annual Odour report was submitted on November 24, 2017.</li> <li>The fourth annual Odour report was submitted to the MECP on November 26, 2018.</li> <li>Required by ECA Condition 7(8)</li> </ul>	Carried into the ECA	Yes
18.5	The Odour Management and Mitigation Monitoring Reports shall be submitted every 12 months from the date of the submission of the first report or until such time as the Regional Director notifies the proponent in	Required by ECA Condition 7(8)	Carried into the ECA	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
	writing that the Odour Management and Mitigation Monitoring Reports are no longer required.				
18.6	The proponent shall post the Odour Management and Mitigation Monitoring Reports on the proponent's web site for the undertaking following submission of the reports to the Regional Director.	•	Odour Management and Mitigation Plan posted to the website. Required by Condition 16(1)(e) of Environmental Compliance Approval	Carried into the ECA	Yes
19.	Noise Monitoring and Reporting				
19.1	The proponent shall prepare and implement a Noise Monitoring and Reporting Plan for the undertaking.	•	Noise Monitoring and Reporting Plan was submitted to the Director via letter dated September 15, 2011  Noise Monitoring and Reporting Plan was approved by the MECP via Amendment Approval dated August 12, 2014	September 15, 2011	Yes
19.2	The proponent shall submit the Noise Monitoring and Reporting Plan to the Director a minimum of 90 days prior to the start of construction or such other date as agreed to in writing by the Director.	•	Final plan submitted via letter dated September 15, 2011 Final submission date is more than 90 days prior to start of construction in January 2012	September 15, 2011	Yes
19.3	The Noise Monitoring and Reporting Plan shall include a protocol to ensure that the noise emissions from the facility comply with the limits set out in the Ministry of the environment's Publication NPC-205 "Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban)", October 1995, as amended from time to time.	•	Acoustic audits have been completed for 2015 and 2016.  Noise Monitoring and Reporting Plan as amended in June 2017 does not require additional acoustic audits unless requested by the MECP	September 15, 2011	Yes
19.4	The proponent shall post the Noise Monitoring and Reporting Plan on the proponent's web site for the undertaking following submission of the plan to the Director.	•	Noise Monitoring and Reporting Plan posted to the website. Required by Condition 16(1)(f) of the Environmental Compliance Approval	September 15, 2011	Yes
20.	Groundwater and Surface Water Monitoring and Reporting				
20.1	Prior to the start of construction, the proponent shall identify any areas where the undertaking may affect groundwater or surface water. For those areas, the proponent shall prepare and implement, in consultation with the ministry's Central Region Office and to the satisfaction of the Regional Director, a Groundwater and Surface Water Monitoring Plan.	•	Groundwater and Surface Water Monitoring and Reporting Plan submitted to the Regional Director via letter dated September 15, 2011 Groundwater and Surface Water Monitoring Plan was approved by the Regional Director via letter dated October 14, 2011	September 15, 2011	Yes
20.2	The proponent shall provide the Groundwater and Surface Water Monitoring Plan to any other government agencies for review and comment, as may be appropriate.	•	Groundwater and Surface Water Monitoring Plan was provided to the Central Lake Ontario Conservation Authority and the Advisory Committee for comments in August 2011	August, 2011	Yes
20.3	The Groundwater and Surface Water Monitoring Plan shall include at a minimum:  a) A groundwater and surface water monitoring program; b) The proposed start date and frequency of groundwater and surface water monitoring;	•	Included in the approved plan Meeting was held with Regions and MECP on September 17, 2013 to discuss the 2012 Annual Report Meeting was held with Regions and MECP on June 5, 2014 to discuss the 2013 Annual Report.	September 15, 2011	Yes

Condition No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
	<ul> <li>c) The contaminants that shall be monitored as part of the groundwater and surface water monitoring program; and,</li> <li>d) At least one meeting each year between the proponent and the Regional Director to discuss the plan, the results of the monitoring program and any changes that are required to be made to the plan by the Regional Director.</li> </ul>	<ul> <li>Meeting was held with Regions and MECP on July 20, 2015 to discuss the 2014 Annual Report</li> <li>Meeting was held with Regions, Covanta and MECP on July 26, 2016 to discuss the 2015 Annual Report.</li> <li>Meeting was held with Regions, Covanta and MECP on August 25, 2017 to discuss the 2016 Annual Report.</li> <li>Meeting was held with Regions, Covanta and MECP on July 19, 2018 to discuss the 2017 Annual Report.</li> <li>Meeting was held with the Regions, Covanta and MECP on November 1, 2019 to discuss the 2018 Annual report.</li> </ul>		
20.4	The proponent shall submit the Groundwater and Surface Water Monitoring Plan to the Regional Director a minimum of 90 days prior to the start of construction or such other date as agreed to in writing by the Regional Director.	<ul> <li>September 15, 2011 submission date is more than 90 days prior to the start of construction in January 2012.</li> <li>Groundwater Surface Water Monitoring Plan approved by the Regional Director via letter dated October 14, 2011.</li> </ul>	September 15, 2011	Yes
20.5	The Regional Director may require changes to be made to the Groundwater and Surface Water Monitoring Plan and the proponent shall implement the plan in accordance with the required changes.	<ul> <li>The mechanism for changes requested by the MECP is included in the Groundwater and Surface Water Monitoring Plan.</li> <li>Groundwater and Surface Water monitoring is a requirement of ECA Condition 7(14)</li> <li>Request to changes from the Groundwater and Surface Water Monitoring Plan made via letter dated April 29, 2016 and approved by MECP via letter dated May 17, 2016.</li> <li>Request to amend the Groundwater and Surface Water Monitoring Plan made via letter dated January 9, 2020 and approved by MECP via letter dated May 7, 2020.</li> </ul>	Carried into the ECA	Yes
20.6	The groundwater and surface water monitoring program shall commence prior to the receipt of non-hazardous municipal solid waste at the site or such other time as agreed to in writing by the Regional Director, and shall continue until such time as the Regional Director notifies the proponent in writing that the groundwater and surface water monitoring program is no longer required.	<ul> <li>Approved Groundwater and Surface Water Monitoring Plan commenced prior to start of construction and will continue until the Regional Director notifies the Regions in writing that the monitoring program is no longer required.</li> <li>Baseline groundwater sampling commenced in January 2012, prior to receipt of waste.</li> </ul>	Carried into the ECA	Yes
20.7	Thirty days after waste is first received on site, the proponent shall prepare and submit to the Director and Regional Director, a report containing all of the results of the groundwater and surface water monitoring program.	Groundwater and Surface Water Facility Initiation Reports were submitted to the MECP on March 11, 2015, 30 days from when waste was first received on site February 9, 2015.	March 11, 2015	Yes
20.8	The proponent shall prepare and submit to the Director and Regional Director, an annual report containing the results of the groundwater and surface water monitoring program. The first report shall be submitted 12 months from the start of the monitoring program and every year thereafter.	<ul> <li>Annual reports have been submitted for 2012 – 2019</li> <li>Annual report for 2019 submitted on April 27, 2020.</li> </ul>	Carried into the ECA	Yes

Condition No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
	The proponent shall prepare and submit to the Director and Regional Director, a report containing the results of the groundwater and surface water monitoring program with 30 days of any of the following events:  a) A spill occurs on site; b) A fire or explosion occurs on site; c) A process upset; or, d) Any disruption to normal operations that may directly or indirectly have an impact on groundwater or surface water.	•	Included in the approved Groundwater and Surface Water Monitoring Plan Required by Condition 7(14)(b) of the Environmental Compliance Approval	Carried into the ECA	Yes
	The proponent shall post the Groundwater and Surface Water Monitoring Plan and all reports required by this condition on the proponent's web site for the undertaking following submission of the plan and reports to the ministry.	•	Groundwater and Surface Water Monitoring Plan and reports are posted to the website Future reports will be posted to the website as they are prepared. Required by Condition 7(14)(c) of the Environmental Compliance Approval Required by Condition 16 (1) (g) of the Environmental Compliance Approval	Carried into the ECA	Yes
21.	Types of Waste and Service Area				
	Only non-hazardous municipal solid waste from municipal collection within the jurisdictional boundaries of the Regional Municipality of Durham and the Regional Municipality of York may be accepted at the site.	•	Agreed Required by Conditions 2 (1), 2 (2), and 2 (3) of the Environmental Compliance Approval	Carried into the ECA	Yes
	Materials which have been source separated for the purposes of diversion shall not be accepted at this site. This prohibition does not apply to the non-recyclable residual waste remaining after the separation of the recyclable materials from the non-recyclable materials at a materials recycling facility or other processing facility.	•	Agreed See Condition 2 (3) (b) of the Environmental Compliance Approval	Carried into the ECA	Yes
21.3	The proponent shall ensure that all incoming waste is inspected prior to being accepted at the site to ensure that only non-hazardous municipal solid waste is being accepted.	•	Agreed See Condition 4 (2) and 4 (3) of the Environmental Compliance Approval	Carried into the ECA	Yes
	If any materials other than non-hazardous municipal solid waste are found during inspection or operation, the proponent shall ensure that management and disposal of the material is consistent with ministry guidelines and legislation.	•	Agreed See Condition 4 (3) of the Environmental Compliance Approval	Carried into the ECA	Yes
22.	Amount of Waste				
22.1	The maximum amount of non-hazardous municipal solid waste that may be processed at the site is 140,000 tonnes per year.	•	140,000 tonnes per year is the maximum annual tonnage recognized on page 1 of the Environmental Compliance Approval	Carried into the ECA	Yes

Condition No.	Requirement	Status Remarks Actual or Estima Completion Date	ed Complete?
23.	Notice of the Date Waste First Received		
	Within 15 days of the receipt of the first shipment of waste on site, the proponent shall give the Director and Regional Director written notice that the waste has been received.	Notification letter sent to MECP via email on February 10, 2015, 1 day after waste was first received on site.	Yes
24.	Construction and Operation Contracts		
	In carrying out the undertaking, the proponent shall require that its contractors, subcontractors and employees:  a) fulfill the commitments made by the proponent in the environmental assessment process, including those made in the environmental assessment an in the proponent's responses to comments received during the environm1ental assessment comment periods; b) meet applicable regulatory standards, regarding the construction and operation of the undertaking; c) obtain any necessary approvals, permits or licenses; and, d) have the appropriate training to perform the requirements of their position.	Project Agreement requires Contractor to comply with all authorizations including the Environmental Assessment and Notice of Approval (incorporated by reference) the Certificates of Approval, and all applicable regulations.  Regions provided a full time on-site inspector during construction to monitor compliance with the terms and conditions of the contract, including compliance with EA conditions.  Carried into the ECA. Environmental Compliance Approval Condition 9(1) requires Covanta to document staff training on the EA and ECA conditions and applicable laws and regulations.  Complaint Protocol will remain in effect throughout the construction, commissioning, and operations periods in accordance with Condition 6 of the Notice to Proceed.  All building and other permits have been approved.	CA Yes
25.	Amending Procedures		
	Prior to implementing of any proposed changes to the undertaking, the proponent shall determine what <i>Environmental Assessment Act</i> requirements are applicable to the proposed changes and shall fulfill those <i>Environmental Assessment Act</i> requirements.	Agreed Carried into the E	CA Yes



**EA Study Document Compliance Table** 

Relevant EA Section No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
	General Requirements				
	The Proponents commit that if approval to proceed with the Undertaking is given, it will be the Proponents who are legally responsible for carrying out the Undertaking as approved.	•	The Regions are 100% owners under the Project Agreement Both Regions and the Contractor are named on the Environmental Compliance Approval Application at the MECP's request.  As owners, the Regions remain legally responsible for ensuring that the contractor fulfills its duties under the contract.	Carried into the ECA	Yes
	The Regions will undertake an evaluation of post-closure uses for the property associated with the Project, at the appropriate time when the Project is nearing the end of its life expectancy.	•	Required by Condition 18 of the Environmental Compliance Approval Commitment reaffirmed in Section 16 of the Design and Operations Report submitted with the Waste ECA Application Environmental Compliance Approval Condition 18 requires the Regions to submit a Closure Plan for approval by the MECP at least 9 months prior to facility closure.	Carried into the ECA	Yes
11	Decommissioning of the Facility will be conducted in compliance with applicable regulatory requirements at the time of decommissioning.	•	Required by Condition 18 of the Environmental Compliance Approval	Carried into the ECA	Yes
11.2	Environmental protection awareness, spill prevention planning and contingency training will be implemented for all employees as necessary and appropriate.	•	Final Spill Contingency and Emergency Response Plan was submitted to the MECP January 29, 2014 Staff training requirements including regulatory compliance and emergency response provided in Environmental Compliance Approval Condition 9 (1).	Carried into the ECA	Yes
15	The Regions will prepare and submit to the Director of the EAB of the Ontario MECP an EA Compliance Monitoring Program.	•	Compliance Monitoring Program submitted to the Director via letter dated October 14, 2011 in accordance with Condition 4.1 of the EA Notice of Approval	October 14, 2011	Yes
	Air Quality				
11.1	<ul> <li>Air quality related mitigation/management during construction will include:         <ul> <li>Mitigation and environmental management / monitoring measures will include:</li> <li>Employment of controlled entrances and exits at the construction site to minimize the offsite tracking of mud.</li> <li>Temporary and permanent grassing in disturbed areas.</li> <li>Dust control during dry periods.</li> <li>Possible implementation of an idling protocol as required.</li> <li>Adherence to an equipment maintenance program.</li> </ul> </li> <li>Ambient air quality monitoring for particulate matter will be undertaken to monitor the effectiveness of the mitigation measures.</li> </ul>	•	Construction is substantially complete and the construction general contractor has moved off-site.  Project Agreement requires Contractor to comply with all authorizations including Environmental Assessment and Certificates of Approval, and all applicable regulations.  Regions provided a full time on-site inspector during construction to monitor compliance with the terms and conditions of the contract, including compliance with EA conditions.  Complaint protocol submitted to MECP as per EA Notice to Proceed Condition 6 will be in effect throughout the construction period.	Carried into the ECA	Yes

Relevant EA Section No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
		•	Air Quality during construction is addressed by the contractor in their site Quality Management and/or Site Specific Health and Safety Plans		
11.1	Very low NO <sub>x</sub> (VLN) system in the Facility's stoker	•	Facility is equipped with VLN system.	February 9, 2015	Yes
11.1	SNCR for additional NO <sub>x</sub> control	•	Facility is equipped with SNCR system	February 9, 2015	Yes
11.1	Activated carbon injection after the economizer for mercury and dioxin/furan control	•	Facility is equipped with an activated carbon system	February 9, 2015	Yes
11.1	Acid gas scrubber the removal of gases such as SO <sub>x</sub> and HCl	•	Facility is equipped with an acid gas scrubber	February 9, 2015	Yes
11.1	A fabric filter baghouse to remove solid particulate matter	•	Facility is equipped with a fabric filter baghouse	February 9, 2015	Yes
11.1	The application of design and operations pre-processing odour control measures such as enclosed loading, negative air pressure inside the Facility and fully-enclosed feedstock delivery trucks.	•	Facility design includes negative air pressure and fully enclosed waste receiving and ash loading facilities. Waste delivery trucks are fully enclosed.	February 9, 2015	Yes
	Provision of a Continuous Emissions Monitoring System (CEMS) at the baghouse outlet to monitor and record opacity, moisture, CO, O <sub>2</sub> , NO <sub>x</sub> , SO <sub>2</sub> , HCL and HF. Opacity measurements will be used as the filter bag leak detection system.	•	Facility is equipped with a fully compliant CEMS system	February 9, 2015	Yes
11.1	Provision of a Continuous Emissions Monitoring System (CEMS) at the economizer outlet to monitor and record O <sub>2</sub> , SO <sub>2</sub> and CO.	•	Facility is equipped with O2, SO2 and CO analyzers at the economizer outlet	February 9, 2015	Yes
11.1	Provision of a Continuous Emissions Monitoring System (CEMS) to monitor and record  • Flue gas temperatures at the inlet of the boiler convection section and at the baghouse inlet.  • The temperature and pressure of the feedwater and steam for each boiler.  • The mass flow rate of steam at each boiler.	•	Facility is equipped with each of these controls.	February 9, 2015	Yes
11.1	A long-term continuous dioxins sampling device will be installed to monitor the adsorption of dioxins onto the exchangeable adsorption-resin-filled cartridge.	•	Facility is equipped with a long term dioxin and furan sampling system.	September 2015	Yes
11.1	Emissions (stack) testing and monitoring protocol as required for the ECA under the EPA.	•	As per Condition 7(1) and Schedule D of the Environmental Compliance Approval	Carried into the ECA	Yes

Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
11.1	NPRI emissions reporting that will entail a combination of monitoring or direct measurement, mass balance, process-specific emissions factors and engineering estimates.	<ul> <li>National Pollutant Release Inventory (NPRI) annual reporting is a requirement under the Canadian Environmental Protection Act (Federal)</li> <li>ECA Condition 1(9) requires compliance with all other applicable laws, statues, and regulations</li> <li>2015-2019 Emissions were reported through NPRI.</li> </ul>	Carried into the ECA	Yes
11.1	Proposed ambient air quality monitoring in the immediate vicinity of the Facility for a 3-year period.	<ul> <li>Ambient air monitoring in accordance with the approved monitoring plan commenced in April 2013.</li> <li>Required by ECA Condition 7(4)</li> </ul>	Carried into the ECA	Yes
	Surface Water and Groundwater			
	Surface water and groundwater related mitigation and environmental management / monitoring measures during construction will include:  Construction phase drainage will route stormwater from throughout the Site to a stormwater sedimentation pond and to the extent feasible, maintain existing drainage routes. Permanent SWM ponds may be constructed early to reduce need for sedimentation ponds.  Use of perimeter ditching and site grading as well as silt fencing around forested areas to isolate runoff.  Use of setback transition use areas and erosion control fencing along watercourses.  ESC will be implemented during the construction phase to reduce potential soil loss and runoff velocities.  During the construction phase, stormwater will be routed via conveyance swales and/or storm sewers draining catchbasins to a SWM pond in the southwest corner of the Site.  The pond will discharge to the CN Rail swale and stormwater will subsequently be conveyed to Tooley Creek.  In addition to the pond, lot level, and conveyance controls such as surface stabilization measures, sediment traps, and swales enhanced with rock check dams will also be employed.  Grading plans will be designed to maintain existing drainage patterns which will ensure all captured stormwater will be routed through SWM features.  Dewatering and excavation pumping is expected to establish a sufficiently dry environment to construct the Facility foundations.	<ul> <li>Construction Phase is complete</li> <li>All permanent stormwater controls are in place</li> <li>Required by Condition 4(6) of the Environmental Compliance Approval</li> <li>Regions provided a full time on-site inspector during construction to monitor compliance with the terms and conditions of the contract, including compliance with EA conditions.</li> <li>Groundwater and Surface Water Monitoring and Reporting Plan submitted via email September 15, 2011 in accordance with EA Condition 20 includes monitoring of water quality in Tooley Creek using continuous data loggers, and documentation of regular inspection and maintenance of check dams and other sediment controls.</li> <li>A sediment and erosion control plan has been developed by the contractor and was in effect during the construction phase which monitors surface water. Golder was contracted by Covanta to monitor surface water and erosion and sediment control during the construction phase.</li> <li>Site stormwater management plan has been developed and approved by CLOCA and Clarington (Clarington Master Drainage Plan)</li> </ul>	Carried into the ECA	Yes
11.2	A series of groundwater monitoring wells may be installed within the Site to assess the Facility's effects on both groundwater quantity and quality during construction to be determined at subsequent approvals stage.	Groundwater and Surface Water Monitoring Plan approved by MECP Central Region Director on October 14, 2011 includes groundwater monitoring wells to be installed prior to facility construction and 1 well to be installed after construction.	December 2011	Yes

Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
		Pre-construction groundwater wells installed in December 2011. Baseline monitoring commenced January 2012. All required monitoring wells are now in service		
11.2	Storm water pond design criteria will meet enhanced design guidance criteria found in the MECP SWM Planning and Design Manual;	The stormwater management pond design is compliant with this requirement and is provided in Section 6.2.4 of the Design Report  Stormwater ponds have been designed and constructed on site in the southeast and southwest corners of the EFW property	February 9, 2015	Yes
11.2	<ul> <li>Increase in runoff potential will be mitigated with peak flow attenuation, baseflow augmentation and SWM design that provides an enhanced level of receiving water protection;</li> </ul>	<ul> <li>Pond has been designed with an active storage volume greater than the entire runoff volume from the 100 year storm.</li> <li>Stormwater pond design has been approved and constructed on site.</li> </ul>	February 9, 2015	Yes
11.2	Accidents and malfunctions planning and spill management redundancy and stormwater control from source to discharge will ensure the protection of surface water and groundwater resources.	<ul> <li>Covanta submitted a Spill Contingency and Emergency Response Plan on September 24, 2013 as required by Condition 17.1 of the Notice of Approval and Condition 11(2) of the Environmental Compliance Approval</li> <li>Storage of waste and ash is indoors on impervious surfaces with no drainage to outside the facility.</li> <li>Storage of all chemical reagents is in accordance with applicable regulations. Storage of aqueous ammonia includes secondary containment.</li> <li>Outdoor surface drainage discharges to the stormwater management ponds with gate valves on the outlets, providing an opportunity to contain and remediate any spills occurring outside the process buildings.</li> </ul>	Carried into the ECA	Yes
11.2	Monitoring of stormwater end-of-pipe Facility discharge quality (as required as part of C of A);	Groundwater and Surface Water Monitoring and Reporting Plan was developed in consultation with MECP Central Region Office and approved by the Central Region Director on October 14, 2011. Monitoring commenced in January 2012	Carried into the ECA	Yes
	Soils			
11.2 & 11.3	Soils related mitigation and environmental management / monitoring measures during construction will include:  Topsoil and subsoil salvage and storage.  Apply erosion and sedimentation control measures (also described in surface water).	<ul> <li>Facility construction is complete.</li> <li>Project Agreement requires Contractor to comply with all authorizations including Environmental Assessment and Certificates of Approval, and all applicable regulations.</li> <li>Regions provided a full time on-site inspector during construction to monitor compliance with the terms and conditions of the contract, including compliance with EA conditions.</li> </ul>	January 28, 2016	Yes

Relevant EA Section No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
		•	Erosion and sediment control monitoring is undertaken continuously in accordance with plan approved by the Ministry of Environment, Conservation and Parks, Central Lake Ontario Conservation authority and the Municipality of Clarington Required by ECA Condition 7(10) and 13(4)		
	Acoustic				
11.4	Acoustic related mitigation and environmental management / monitoring measures during construction will include:  • Pile driving effects will be reduced through alternative technologies (e.g., vibratory pile driving), controls, and scheduling.  • Construction vehicle traffic is predicted to be acceptable against applicable criteria, but short-term (i.e., 1-hour) effects during peak demand are possible. These peaking issues will be reduced through scheduling and planning of vehicle trips.  • A monitoring program and contingency plan will be implemented to address any issues that may arise during the construction and post-closure periods of the Facility.	•	Facility construction is complete The Regions submitted a Noise Monitoring and Reporting Plan to the Director in accordance with Condition 19 of the Notice of Approval on September 15, 2011 Project Agreement requires Contractor to comply with all authorizations including Environmental Assessment and Certificates of Approval, and all applicable regulations, including Clarington Noise by-law. Regions provided a full time on-site inspector during construction to monitor compliance with the terms and conditions of the contract, including compliance with EA conditions. Required by ECA Condition 7(5)	Carried into the ECA	Yes
11.4	Noise-related mitigation and environmental management/monitoring measures during operation will include:  The Facility will be designed to current standards incorporating efficiencies and design enhancements that reduce sound emissions.  Where necessary, mitigation measures will be included to ensure applicable noise criteria are met at PORs as predicted.  Mitigation measures may include the use of equipment control options such as enclosures, local or property-line barriers, mufflers and silencers, and acoustic baffles or insulation.	•	The Regions submitted a Noise Monitoring and Reporting Plan in accordance with Condition 19 of the Notice of Approval on September 15, 2011, which includes an annual acoustic audit during the operations phase to monitor compliance with applicable noise criteria.  Noise Monitoring and Reporting Plan was approved by the MECP via Amendment Approval dated August 12, 2014.  Condition 19.3 of the Notice of Approval requires noise emissions from the facility comply with the limits set out in the Ministry of the environment's Publication NPC-205 "Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban)", October 1995, as amended from time to time.  Noise Monitoring and Reporting Plan is in effect.	Carried into the ECA	Yes
	Visual				
11.5	Visual-related mitigation and environmental management / monitoring measures during construction will include:  Staging of construction activities. Timely removal of construction debris.	•	An architectural concept for the facility was developed in consultation with the Municipality of Clarington.  Facility has been constructed and landscaping completed in accordance with approved plan.	January 28, 2016	Yes

Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
	<ul> <li>A monitoring program and contingency plan will be implemented to address any issues that may arise during the construction of the Facility.</li> <li>Investment in architectural enhancements to the Facility.</li> </ul>			
	Visual-related mitigation and environmental management / monitoring measures during operation will include:  • The use of neutral external colours and effective landscaping.  • If concerns regarding Facility visibility are raised by members of the community in the vicinity of the Facility, mitigation measures will be considered such as planting trees or other suitable vegetation at the location to provide a screen within the line of the sight of the Facility.	<ul> <li>An architectural concept for the facility was developed in consultation with the Municipality of Clarington.</li> <li>Landscaping complete in accordance with the approved plan.</li> <li>Need for supplementary, off-site visual remediation will be assessed on a case-by-case basis after the facility is constructed.</li> </ul>	January 28, 2016	Yes
	Natural Environment			
	Natural environment related mitigation and environmental management / monitoring during construction will include:  Protective protocols to avoid killing or harming wildlife during Project activities.  Wildlife corridor along the entire east-west length of the Facility's southern property line may be established to enhance wildlife movement.  Native tree and shrub species will be planted and existing species allowed to grow without disturbance providing additional habitat.  Undertake a pre-construction survey to assess bird nesting activity prior to clearing and grubbing.  Habitat enhancement for Chimney Swifts, if present onsite, and once construction has been completed, compensation for the loss of hedgerow by incorporating native shrubs and trees into landscaping for the Facility.	<ul> <li>Landscape plan as approved by the Municipality of Clarington gives consideration to wildlife habitat.</li> <li>Construction Site Fencing allows for a wildlife corridor to the North and South of the Site.</li> <li>Reconnaissance report prepared by Golder Associates dated November 11, 2011 to address pre-construction bird nesting activities prior to start of construction.</li> <li>For work offsite surrounding the Energy from Waste facility, the Regions retained a consultant to undertake monitoring of Eastern Meadowlark. Reports will be produced and provided to the MNR as per letter dated August 28, 2013 from the MNR.</li> <li>Construction complete.</li> </ul>	January 28, 2016	Yes
	Social / Cultural			
	Social / cultural related mitigation and environmental management / monitoring measures during construction will include:  See Noise above for related mitigation / management measures. See Visual above for related mitigation / management measures Dust control during construction will be accomplished through a number of physical and operational methods such as construction exits, timely revegetation, watering, and staging of work.	<ul> <li>Contract requires Covanta to document any findings of archaeological significance and to deal with these findings as directed in writing by the owner and in accordance with applicable laws.</li> <li>Project Agreement requires Contractor to comply with all authorizations including Environmental Assessment and Certificates of Approval, and all applicable regulations.</li> <li>Regions provided a full time on-site inspector during construction to monitor compliance with the terms and</li> </ul>	January 28, 2016	Yes

Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
	Deeply buried archaeological resources could still exist and standard conditions regarding discovery of human remains and/or other cultural heritage values will apply.	conditions of the contract, including compliance with EA conditions.  To date no findings of archaeological significance have been found on site.  Construction complete.		
	Road/pavement improvements to the South Service Road and Osborne Road to accommodate construction vehicles.	Construction is complete	January 28, 2016	Yes
	Formation of a Thermal Treatment Facility Site Liaison Committee (SLC) for the construction period.	In addition to the Advisory Committee described in Notice of Approval Condition 8, the Regions have formed an Integrated Waste Management Committee (Energy from Waste-Waste Management Advisory Committee) intended to address issues of concern to the local community.     Required by ECA Condition 17	Carried into the ECA	Yes
	Development and implementation of a Community Relations Plan (CRP) through which Durham, York, and Covanta staff will relate to the local community, including advance notification to local authorities and residents near the Facility of any planned unusual noises or activities (e.g., pile driving, steam blows) or other events that may be of concern to the local community during the construction phase. The plan will also establish contacts and procedures for providing accurate and timely information to the community in the event of an unforeseen incident that may cause concern or impact upon the community.	A requirement of the EA Notice of Approval [See Appendix A, Section 7 (Community Communications Plan)]     Community Communications Plan was submitted to the MECP on September 18, 2013.     MECP approval via letter dated September 30, 2013.	September 18, 2013	Yes
	Development and implementation of a community complaints system for construction.	<ul> <li>Complaint protocol approved by the MECP July 13, 2011 as per Condition 6 of the EA Notice of Approval.</li> <li>Requirement of Condition 10 of the Environmental Compliance Approval</li> <li>Monthly reports are sent to the EFWAC and the MECP.</li> </ul>	Carried into the ECA	Yes
	Management of residual waste in enclosed vehicles and on enclosed tipping floor	<ul> <li>Noted in Sections 5.3 and 5.8 of the Design and Operations Report and required by Environmental Compliance Approval Condition 4(2) and 4(5)</li> <li>Construction of an enclosed tipping floor is complete.</li> <li>All waste is delivered to the site in closed vehicles</li> </ul>	Carried into the ECA	Yes
	Air from tipping floor is used as combustion air, destroying odours and maintaining negative pressure within receiving area.	Required by Condition 8 (1) of the Environmental Compliance     Approval Construction of tipping floor and combustion air     system is complete and compliant with these requirements.	Carried into the ECA	Yes

Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
	Management of ash and residues using various measures to reduce ash emissions.	<ul> <li>Requirement of Condition 4 of the Environmental Compliance Approval</li> <li>See Section 8.0 of the Design and Operation Report for additional details.</li> <li>Storage of ash, and residues will be indoors on impervious surfaces with no drainage to outside the facility.</li> <li>Ash is transported to the ash storage building in enclosed conveyors</li> <li>Bottom ash and fly ash handled separately.</li> <li>Building maintained under negative pressure and fully ventilated to a dust collection system</li> <li>Loading of trucks occurs indoors with the doors closed</li> <li>Fly ash is mixed with water, cement and pozzolan to render it non-hazardous and reduce dust.</li> <li>Bottom ash is immersed in quench water and retains 15-25% moisture content, reducing dust potential</li> </ul>	Carried into the ECA	Yes
	Mitigation of vectors/vermin through pest/vector control.	<ul> <li>Requirement of Condition 8 (14) of the Environmental Compliance Approval</li> <li>Noted in Section 13.5 of the Design and Operations Report and Condition 8(14)</li> <li>Pest/Vector control has been subcontracted to a qualified pest control company and monitored for effectiveness.</li> </ul>	Carried into the ECA	Yes
	Mitigation of litter through implementation of litter control program throughout the Site.	<ul> <li>Requirement of Condition 8(12) of the Environmental Compliance Approval</li> <li>Site-wide litter collection daily as per Section 13.4 of the Design and Operations Report and Environmental Compliance Approval Condition 8(12)</li> </ul>	Carried into the ECA	Yes
	Some traffic control measures (traffic signals, loop ramps, etc.) may be required to the adjacent road network to address future traffic conditions in the CEBP.	<ul> <li>Requirement of Condition 8(10) of the Environmental Compliance Approval</li> <li>Energy Drive and private truck access construction is complete, with all required off-site traffic controls.</li> </ul>	May 2015	Yes
	The Host Community Agreement between Durham and the Municipality of Clarington includes the Region assuming the cost of construction of Energy Drive from Courtice Road to Osborne Road to serve the CEBP.	<ul> <li>Host Community Agreement executed on February 18, 2010 includes this provision</li> <li>The expropriation of the lands associated with the host community agreement requirements for the York Durham Energy Centre went before the Ontario Municipal Board. A settlement was reached July 27, 2015.</li> <li>Construction on the facility access road and Energy Drive has been completed.</li> </ul>	July 2015	Yes

Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
	Soil testing for contaminants for a minimum of three years at which time its effectiveness will be evaluated (recommendation by Durham Region Medical Officer of Health, endorsed by both Regional Councils)  Regional Councils)	<ul> <li>Requirement of Condition 13 (4) of the Environmental Compliance Approval</li> <li>Soil Testing plan submitted September 23, 2011</li> <li>Revised Soil Testing Plan submitted to the MECP via letter dated October 5, 2012</li> <li>MECP approval via letter dated March 15, 2013.</li> <li>Soils testing commenced in accordance with the approved plan.</li> <li>The first Soils Testing Report was completed and submitted November 19, 2013.</li> <li>Second (first operational year) Soils Testing Report was submitted on October 23, 2015.</li> <li>Third (second operational year) Soils Testing Report was submitted on November 3, 2016.</li> <li>Fourth (third operational year) Soils Testing Report was submitted on November 24, 2017.</li> <li>Soil testing was undertaken August 19, 2020 and a report is pending following the finalization of laboratory analysis.</li> </ul>	Carried into the ECA	Yes
	Formation of a Thermal Treatment Facility Site Liaison Committee SLC for the operations period.	In addition to the Advisory Committee described in Notice of Approval Condition 8, the Regions have formed an Integrated Waste Management Committee (Energy from Waste-Waste Management Advisory Committee) intended to address issues of concern to the local community.     Required by ECA Condition 17	Carried into the ECA	Yes
	See construction above regarding development and implementation of a Community Relations Plan	A requirement of the EA Notice of Approval [See Appendix A, Section 7 (Community Communications Plan)]     Community Communications Plan was submitted to the MECP on September 18, 2013.     MECP approval via letter dated September 30, 2013.	September 18, 2013	Yes
	See construction above regarding development and implementation of a community complaints system for operations	Appendix A, Complaint Protocol (Notice of Approval Condition 6 applies to construction, commissioning, and operations periods     Complaint Procedure is required by Condition 10 of the ECA	Carried into the ECA	Yes
	Economic			
11.10	Establishment of a hazardous waste depot to serve Clarington residents.	Establishment of the hazardous waste depot commenced when land expropriation for other Host Community Agreement commitments was completed and the Certificates of Approval	October 22, 2019	Yes

Relevant EA Section No.	Requirement		Status Remarks	Actual or Estimated Completion Date	Complete?
		•	and Building Permit for the Durham York Energy Centre were issued. The Clarington Household Special Waste Facility was opened on October 22, 2019.		
11.10	Construction of Energy Drive from Courtice Road to Osborne Road to serve the Energy Park.	•	Construction on the facility access road and Energy Drive is complete.	May 2015	Yes
11.10	Construction of a SWM Facility to serve the Energy Park.	•	Stormwater management requirements for the Energy Park will be assessed if and when development of the Energy Park proceeds.	May 2015	Yes
11.10	Construction of a waterfront trail from Courtice Road to the eastern limit of the Durham property.	•	Waterfront trail has been completed.	2017	Yes
11.10	Transfer of 22 acres of surplus land adjacent to the Courtice WPCP to Clarington.	•	The transfer of 22 acres of land to Clarington was completed on October 15, 2015.	2015	Yes
11.10			An EA was filed on June 19, 2015 and the end of the review period was August 21, 2015.	August 2015	Yes
	Human Health and Ecological Risk				
	Refer to "Air Quality" above.	•	Refer to "Air Quality" above.	N/A	Yes

### Appendix C

**Advisory Committee Annual Report 2020** 

#### Durham York Energy Centre 2020 Compliance Monitoring Report – Appendix C Energy From Waste Advisory Committee Summary Table

Meeting #	Date	Time	Agenda Topic		
EFWAC Meeting #16	July 10, 2019	2:00 – 4:00 PM	2018 DYEC Annual Compliance Report		
			<ul> <li>Permit Amendment for 160,000 Tonnes per Year Capacity</li> </ul>		
			Terms of Reference for the Possible Future Expansion to 250,000 Tonnes per Year Capacity		
EFWAC Meeting #17	October 23, 2020	2:00 – 4:00 PM To be held virtually	2019 DYEC Annual Operations Report		
			Updates on:		
			<ul> <li>Emergency ECA amendment</li> </ul>		
			<ul> <li>Streamed EA for increase to 160K tonnes per year capacity</li> </ul>		
			<ul> <li>Draft TOR for the EA to expand to 250K tonnes per year</li> </ul>		

### **Meeting #16 Agenda**

**Advisory Committee Annual Report** 

If you require this information in an accessible format, please contact The Regional Municipality of Durham at 1-800-372-1102 ext. 3560.





# Energy from Waste Advisory Committee (EFWAC) Agenda Meeting #16

Wednesday, July 10, 2019

2 p.m. to 4 p.m.

**Lower Level Boardroom (LL-C)** 

# Regional Municipality of Durham Headquarters Building 605 Rossland Road East, Whitby

- 1. Welcome and Introductions
- 2. Durham York Energy Centre (DYEC) 2018 Annual Compliance Report (ECA)

The Project Team will respond to questions submitted by EFWAC members regarding the DYEC 2018 Annual Compliance Report.

- 3. Permit Amendment for 160,000 Tonnes per Year Capacity
- 4. Terms of Reference for the Possible Future Expansion to 250,000 Tonnes per Year Capacity
- 5. Next Meeting
- 6. Meeting Adjourns

### **Meeting #16 Minutes and Presentations**

**Advisory Committee Annual Report** 

The minutes from July 10, 2019 meeting are still considered draft. The approved minutes may differ from the draft minutes and will be updated on the website.

If you require this information in an accessible format, please contact 1-800-372-1102 ext. 3560.



#### **Energy from Waste Advisory Committee (EFWAC) Meeting #16**

Date: Wednesday, July 10, 2019

Location: Durham Region Headquarters – Council Chambers, from 2 p.m. to 4 p.m.

Facilitator: Bruce Withrow, Meeting Facilitators International

Archive: <a href="https://www.eventstream.ca/events/durham-region">https://www.eventstream.ca/events/durham-region</a>

Attachment: Durham York Energy Centre Presentation

Attendees: Please see page 14 of 14

1. The meeting of the EFWAC will meet the obligations as detailed under Section 8 of the Notice of Approval to proceed with the Undertaking. This meeting objective is to review the 2018 Durham York Energy Centre (DYEC) Annual Report as submitted in accordance with Condition 15(1) of the Environmental Compliance Approval (ECA) #7306-8FDKNX, which states the following:

By March 31st following the end of each operating year, the Owner shall prepare and submit to the District Manager and to the Advisory Committee, an Annual Report summarizing the operation of the Site covering the previous calendar year.

- There was a question concerning Section 2.4 Rejected Waste asking for clarification of the report's reference to unacceptable waste relating to the external fire inspection and gas cylinders.
  - In response to an inspection completed by the Fire Chief, propane and helium tanks that were being stored in an area on the tipping floor in accordance with Ministry of the Environment, Conservation and Parks' (MECP) direction that all waste be stored indoors, were moved for safety reasons to a caged area outside of the building which required MECP approval to be permitted to store tanks outside.
- 3. In reference to Section 9, Groundwater and Surface Water Monitoring, confirmation was requested that Surface Water sampling did not occur in 2017 or 2018, with a suggestion that if this will be the case in 2019, it be reflected in the Surface Water Monitoring summary under Section 16 Comparison to Report Results from Prior Years.

Due to the construction in the area and its turbulent effect on the water, the MECP agreed that surface water monitoring be halted for up to three years, including 2019, until a time when the area is stabilized. Following the completion of the construction, the program will be re-evaluated to see if the program can be reimplemented.

- 4. It was asked that future reports include all environmental sampling locations identified including ambient air, soil, groundwater and surface water.
  - In the 2018 report, the ambient air location was included which is where the soil testing is also conducted. In the 2019 report, a figure will be added to identify groundwater and surface water.
- 5. Clarification was requested regarding the baghouse temperature operational issue, as described in Section 11 Operational Issues and Mitigation Measures, including confirmation of whether the thermometer reporting a false reading has been replaced, if 115 degrees Celsius was a falsely recorded value.
  - As part of the emissions control process water was introduced, which was in excess and caused evaporated cooling on the thermocouples. The temperature of the thermocouples located at the outlet of the baghouse was verified to not have dropped below the limit of 120 degrees Celsius. As a precautionary measure, the units located at the inlet were removed, cleaned and checked. No further issues were experienced and procedures were updated moving forward.
  - It was confirmed that there are multiple locations where the temperature can be checked as thermocouples are located before and after the baghouse.
- 6. It was asked with regard to Section 11, Operational Issues and Mitigation Measures, if public complaints concerning odour that were received during the facility's cold-iron outage periods were considered.
  - No odour complaints were received during that period and staff confirmed the method of reporting to the MECP.
- 7. Staff were asked in relation to the dioxins and furans exceedance of May 26, 2018, as described on page 28 of the report, if further investigation was taken by staff, beyond what was completed by Stantec, to review the AMESA results for the cartridge that was in place at the time of the exceedance.
  - It was confirmed that the AMESA results were reviewed by staff but as the results aren't a correlated figure at this time, they cannot be confirmed as good or bad or used as evidence, even though the AMESA results were below 60. Staff confirmed that Stantec reviewed the results and the report was submitted to the MECP. In follow up

- to the MECP's review and response to staff and Clarington regarding the results, the MECP did not feel that the DYEC was the probable cause of the exceedance.
- 8. Additionally, did staff look at the congener signatures for the ambient air exceedance results and compare them against those from the incinerator stack test.
  - In response to staff's inquiry to the MECP, it was not evidence in MECP's opinion to attempt to pinpoint the source so it was not taken any further.
  - Staff do not try to determine the source(s); the information is submitted to the MECP for their action. The review by Stantec's toxicologist determined that the issue was not the DYEC.
- 9. ECA condition15 (r), reproduced in Table 1 (page 12), requires an "interpretation of the results and composition to the results from previous Annual reports to demonstrate the Facility's impact on the environment" with reference that there is no adverse affect on the environment in the related Section 16. With consideration to identifying the facility's net impact on the environment, it was asked if staff have considered more detailed reporting to better satisfy condition 15 (r). For example, what was the cumulative emissions of what type during the year, and as included for amount of waste treated and monitoring stations' regulatory thresholds, also include quantifying emissions of various pollutants emitted from the stack in a year, if possible.

Staff review the monitoring results against the regulatory limits for each environmental media.

As an example, staff assess DYEC impacts on the groundwater (GW) in relation to background limits as detailed in regulations or guidelines. With ambient air monitoring staff do the modelling and the monitoring, staff do make statements and explanations when the results are below limits or if exceedances occur. There is an as appendix to annual ORTECH source report and modelling by Golder is included in an appendix to the report. Concentrations measured in the stack are modeled which predicts what contributions of facility will be based on measured emissions.

10. It was asked that the completed stack test values, determined during optimal conditions and which are reported to the National Pollutant Release Inventory, be included in the Annual report to better provide an idea of pollutants, identify concentrations in stack and its annual output, with consideration to also including how the values were determined.

Staff confirmed that results are submitted in accordance with the National Pollutant Release Index guidelines, which goes beyond the ECA.

Reporting is completed in accordance with MECP standards and regulations to identify that the requirements under the ECA permit are being met.

Staff will take the suggestion under advisement and speak with the MECP to see what implications, if any, may need to be considered.

11. It was questioned why the ambient air comparison included in Section 16, Comparison to Report Results from Prior Years, for ambient air and stack emissions referenced the Human Health Risk Assessment (HHRA) as health-based standards. In the EA it wasn't health based and still isn't and causes confusion as to why it is included in the report. Additionally, the standards that are being used are considered outdated in comparison to what is used in other countries and are misleading and the time has not been taken to update Ontario's standards.

Staff clarified that as there are no MECP criteria or standards, and rather than reporting that there is no limit and eliminate the need to reference such, the EA incorporated standards from both Federal and other jurisdictions with a limit which went beyond Provincial and Canadian regulations in order form the reference to be included as a reporting standard. As there are no other standards from MECP, they are included and referenced as health-based standards and identified as such in the chart.

- 12. The nature of the toxicologist's conclusion that the exceedance event detailed in the 2018 Quarter 2 identified in Table 11 (page 28) '2018 Ambient Air Monitoring Quarterly Summary of Exceedances' was not expected to have had an adverse affect on human health or environment was questioned, including who retained the toxicologist and the what the opinion was of the MECP.
  - Staff advised that Stantec's toxicologist was asked to review the event's details and his summary was submitted to the MECP. The MECP also engaged their toxicologist who supported Stantec's conclusion.
- 13. Clarification was requested regarding Appendix 1 to confirm if its intent is to summarize 1) all 2018 operations-related submissions or 2) any reports for the facility that were submitted during 2018.
  - It was confirmed that the EA, ECA reports only, which are intended for the 2018 period, are prepared in accordance with reporting obligations.
- 14. It was commented that the summary for the Groundwater and Surface Water Monitoring (page 32) doesn't reflect the consultant's suggestion in the 2018 Annual Groundwater and Surface Water Monitoring Report that groundwater at the site should continue to be monitored on an ongoing basis to verify that the concentration of increased salt-related parameters is attributable to an increase in salt on roads and not

the DYEC. While the ECA Annual report identified that the Regions are looking to reduce the frequency of monitoring from three times per year to once per year—why.

The MECP approved the request to reduce to monitoring to once per year further to the Regions' rationale that groundwater moves very slow with minimal change visible from samples taken only a few months apart. Additionally, if a problem was the occur, there would be ample time to respond. There has been no impact seen at any of the monitoring wells other than salt referenced by staff and the consultant.

In addition to posting the Regions' request and MECP response on the project website, it will be verified that the communication was directly provided to members of the committee.

- 15. It was questioned if there had been a change in the CEMS and if a system had been installed for particulate matter.
  - Staff confirmed that the installation was for opacity, not particulate matter.
- 16. With reference to Section 2 Municipal Solid Waste, specifically Subsection 2.2 where waste from the Blackstock Landfill, in the Township of Scugog, was mixed with other municipal waste (5:1) at Durham Region's transfer station prior to its delivery to the DYEC, it was asked how waste appropriateness was determined to be sent to the DYEC.
  - Staff advised that the project was coordinated with the MECP and it was determined that it fell within the ECA requirements. A lot of screening of the municipal waste was completed at the landfill site with visits by the MECP to inspect the waste. The Blackstock Landfill project is complete; a preliminary investigation of the Scott Landfill in the Township of Uxbridge to determine if it is a project candidate is underway.
- 17. In follow up to the two Durham Region reports which addressed possible future nitrogen oxide and sulphur dioxide emission exceedances, and with consideration to MECP improving their air monitoring standards to a more stringent level, have staff consulted with Dr. Kyle.

Staff have advised Dr. Kyle's staff on these upcoming changes. The new sulphur dioxide (SO<sub>2</sub>) limit has been approved by Ontario and will come into effect for 2023. The DYEC CEM readings for SO<sub>2</sub> is normally at 0 or in the single digits and the ECA limit is 35 mg/Rm3. For nitrous oxides, staff have not been provided any indication that Ontario will be accepting the new limits in the near future.

With regard to ammonia usage, it was questioned if there was an issue with the Boilers as no readings were showing on Boiler 1 and lower readings than previously report were showing on Boiler 2, and if this is expected to be a recurring issue.

Covanta advised that there was a power supply board issue with the CEMS device for Boiler 1, it was reinstalled and the Boilers are operating normally confirming that the during the time when the readings encountered the glitch, there is nothing to suggest that the facility wasn't operating normally.

18. As a follow up to the question regarding consultation with Dr. Kyle, it was asked Dr. Kyle's response to adding more emissions exceedances for sulphur oxides and nitrogen oxides to an airshed where ambient air exceedances are already expected.

Staff have consulted with Health staff on the proposed expansion. Staff were looking at the projected new regulations and looking at what the readings staff had been seeing at the stations and based on wind direction and trying to indicate where potential sources are.

It was asked if staff have Council approval to conduct voluntary emissions monitoring stack tests beyond 2019, and if so, where is that approval, and if not, to explain why approval does not extend beyond 2019.

Staff advised that Council provided open-ended approval to continue with voluntary source tests in 2020 and beyond.

- 19. With regard to the source tests only occurring twice a year and the removal of some ambient air monitoring stations, with consideration to issues encountered since the start of operations of the facility, it was asked why monitoring has been reduced rather than keeping same or increasing it.
  - It was confirmed that the MECP were satisfied with the results of the fence line monitoring put in place to measure fugitive emissions around the facility; and the additional air monitoring station at the Crago properties, installed at request of Durham and Clarington Councils for a three-year period was removed after having met its obligation.
- 20. It was asked if the AMESA Work Plan, discussed under Section 5.6 Long Term Dioxin and Furan Sampling (LTSS), was submitted to the MECP for approval, and if so, if it was approved, and if not, is there another consultant working on it and/or is it finished. Concern was noted regarding the length of time this issue has been ongoing and it was requested if it was possible to be provided with any related reports on the Work Plan. Additionally, it was requested that staff confirm that the cartridges are used for a 28-day period and whether they are immediately replaced with the next cartridge providing continuous monitoring.

Staff confirmed that the Work Plan is not finished and that updates on the AMESA Work Plan are provided in the ECA reports describing what accomplishments have been reached. Final adjustments have been made to AMESA with the purchase of

additional equipment which was verified by a lab prior to being installed. Another correlation test is scheduled in September (2019). To determine the benefits of the updates, the system will run for a period of time before 2020 in an attempt to collect a final set of data to discuss with the MECP and conclude the AMESA Work Plan. Staff will report back to Council to provide an update on the whether the Work Plan was successful or not and any related next steps.

Staff confirmed that the cartridge collects data during process upset conditions and are always working, but is paused when the Boilers are not combusting waste or undergoing maintenance.

- 21. The date of the last source test was requested and whether the results of this test were yet received by the Regions.
  - Staff confirmed that the source test occurred from June 25 to 28 and that the results had not yet been received.
- 22. Discussion with regard to the accuracy and meaning of the wording referenced in Section 5.5 "worst case" was addressed and it was suggested that the wording instead reflect "run at 100% MCR" for clarification purposes.
  - Staff advised that the wording is consistent with how the MECP source test code is written. Consideration will be made internally to determine if this can be changed going forward.
  - Consideration to include a footnote reference was also mentioned.
- 23. Staff were asked to confirm if the facility's operating capacity of 160K tonnes per year has started to be run at this rate.
  - The DYEC does run at that rate most of the time. The issue is that the DYEC was built for up to 160K tonnes of capacity but has to make allowance for maintenance time, expected or unexpected. Therefore going to 160K tonnes of capacity will not change the rate, only the mass will change.
- 24. With regard to the number of start ups and shut downs including and seven cold-iron outages where both units were offline, does staff think that is number, which seems high, is acceptable and how do they compare to other facilities.
  - Staff advised that HDR oversees the facility and an evaluation is completed by HDR to advise on the performance of the facility; HDR's assessment confirms that this number of outages is not abnormal. Currently, the only issue being experienced at this time is the turbine trips which Covanta is working on.
- 25. Staff were asked if in previous reports the total amount of reagents used in the air pollution control equipment was provided, if there is a reference in the Annual report

made to ammonia reagent use decreasing as well as the feed rate of activated carbon, if it is steady or decreasing.

Staff confirmed that it was steady and that it is still being monitored by HDR; Covanta advised that it is 5.2 kilograms per hour per unit and that it doesn't change.

#### **Presentation**

Highlights from the attached presentation made by Gioseph Anello, Manager, Waste Planning and Technical Services, regarding the process for an amendment to facility capacity to process 160,000 tonnes per year (from 140,000 tonnes per year) and the Terms of Reference for a future facility expansion to process 250,000 tonnes per year include:

- Terms of Reference prepared in 2005 when the Environmental Study was initiated, with the EA submitted to the MECP in 2009 and approved in 2010.
- Durham Council approved direction in 1999 that there would be no new landfills and requested that the long-term waste plan consider energy from waste as a waste disposal option in addition to the Provincial directive to cease disposal contracts with Michigan.
- This capacity amendment request to process 160K tonnes per year requires no infrastructure adjustments to the DYEC.
- Currently the facility is operating between 90% and 95% MCR, and in order for it to stay below the annual maximum of 140K tonnes, the facility is not running as efficiently as it could at 100%. To model the increase to 160K tonnes, the facility was modeled running at 95% and above.
- The amendment to the ECA requires the Regions to undertake an EA which is a streamlined process. A notice of commencement indicating the Regions' intention, as approved by Council, was recently issued including details on the consultation for the 160K tonnes per year amendment. Concurrently, staff will be undertaking an ECA amendment.
- An emissions summary dispersion model was required to identify the impacts to emissions from 140K to 160K tonnes per year. An information report which included the modeled was prepared. This will allow us to run at 100 % MCR or higher but will also allow us to run at 100% for greater number of days during the year. Last year the DYEC had to physically shut down one of the because they were coming up to the limit of 140K tonnes. In 2018, the Regions bypassed about 10K tonnes of waste that went to landfill or composition study, that quantity of waste will be available in 2019 for processing at the DYEC.

- Golder modeled what they considered to be the ambient air using two scenarios and they assumed that the Regions would be operating at the ECA limits to be very conservative and they gave the Regions a very conservative estimate of what the impacts would be.
- The Streamlined EA is a proponent driven process and there is a consultation requirement that goes with it. There will be a report that is produced and there will be a screening criteria checklist that goes with the report. Staff will have to report on potential environmental impacts and the need for any mitigation. Staff have provided a notice to the public that the Regions are commencing the screening and that staff have a consultation plan put together that will be made available to include how many public information sessions will be held. Staff also intend to do social media advisement, a bit of a survey, and advertising in the newspapers.
- Once the Regions have completed this process, which is hoped to be completed by end of 2019. There will then be a notice of completion sent out and then there will be a comment period which the MECP will have out, so that the public can then provide comments on the report.
- As reported in the Waste Servicing and Financing Study, with an approved amendment Durham is looking at a savings of \$1.3M based on an increased generation of electricity, increase from metals revenues recovered, and a cost avoidance going to landfill costs and reduced cost going above 140K tonnes.
- Durham Council approval was received to draft the Terms of Reference for the EA for a future potential expansion to 250K tonnes per year to accommodate growth capacity required at the DYEC.
- The ToR explains how staff intend to do the EA, identifies the proponents, how to undertake the EA, describe why and the need of doing this expansion, the rationale for the undertaking. Staff anticipates getting approval to undertake a focused EA.
   Staff will then do an updating of the site-specific reports.
- The DYEC front end of the facility, receiving pit and crane area, the ash building and processing, and the stack has been oversized to handle 250K tonnes per year. If expansion of the facility is required in the future, a new line will be built off the side off the facility without impacting operations and once complete, the wall would be removed. Oversizing components represent an investment of about \$30M in infrastructure.
- There is a current and future waste disposal capacity need with current disposal needs to be addressed by the DYEC increase from 140K tonnes per year to 160K

tonnes per year increase with a mixed waste pre-sort and transfer station with anaerobic digestion to remove the organics from the waste and create capacity at the DYEC and defer expansion to 250K tonnes per year well beyond 2030.

26. Concern during the initial EA for the existing facility that it would cause a reduction in recycling was noted and it was asked why Durham Region (~50%) is lagging behind York Region (~68%) in terms of recycling. It was further noted that increasing the plant's capacity to process 160K tonnes per year would seem more efficient but ahead of an expansion to process 250K tonnes per year, emphasis on what the alternatives should be with regard to recycling should be considered as part of the EA.

Staff advised that Durham Region's intention is to reach a 62% diversion rate from landfill and that the mixed waste pre-sort will remove organics and recyclables, especially metal and glass. Mixed waste pre-sort is one of the programs to assist Durham Region in reaching a 70% diversion and additionally create capacity at the DYEC and reduce waste being processed at the DYEC.

The government organization, Datacall, responsible for calculating and verifying municipal diversion numbers started using a different methodology and incorporating different activities which is the reason Durham Region reported two values (Durham: 54% and Datacall: 62%). Going forward, staff will use the Datacall methodology to determine the diversion rate, however, it was noted that there are differing categories and York and Durham do not fall in the same category. Datacall does make their data available publicly on their website (<a href="https://rpra.ca/programs/about-the-datacall/">https://rpra.ca/programs/about-the-datacall/</a>).

- 27. It was requested that staff confirm if the reason for the diversion rate increase was due to ash tonnage sent from the DYEC to the landfill as disposed tonnes which if so, was felt that it should not be considered as diversion as it is going to landfill.
  - Staff to verify the reason for the increased diversion rate.
  - Staff confirmed that source separation at the curb will continue even with a mixed waste pre-sort facility and advised they are currently in discussion with the Province about Blue Box regulations, with an expectation that this program will continue. The main focus with the mixed waste pre-sort is to remove the organics from the garbage bag and are in discussions with companies who can use the recyclables which are still being sorted at the facility as a resource.
- 28. With the recent Provincial waste management announcements (supporting of sustainable end markets, clear rules for compostables and packaging, EPR, reduction of plastic waste, reduce and divert organic waste, etc.), it was questioned how the pending changes fit in with projections and modelling and if these pending changes will be part of the EA process or consideration.

Staff advised that the main principles of waste management remain the same. Staff advised Council about three years ago that changes of philosophy to waste management were coming and have factored pending changes into how waste is managed and infrastructure planned. The mixed waste pre-sort and anaerobic digestion facility is consistent with staff's prior projections and current Provincial requirements of removing organics from the disposal stream and their use for energy.

- 29. Regarding the submission process of the final report and notice of completion, to potentially occur later this year, and as the process is proponent driven, clarification was requested to confirm if the report submitted to the MECP and following the notice of commencement being issued, if during that comment period the comments are submitted to the MECP for their consideration as they review the report or to staff.
  - Staff confirmed that comments are submitted to the MECP and staff are asked by the MECP to provide answers.
- 30. As Durham is updating their long-term waste management plan, it was asked if coordination is occurring between the changes happening at the Provincial level and the updates being considered to Durham's long-term plan.
  - Staff confirmed this is correct.
- 31. It was asked how expansion plans for the facility are being affected by the elimination of single use plastics, changes to EPR, etc. with consideration to a future decrease in waste and the need to increase recycling efforts.
  - Staff will be monitoring these initiatives and will make the appropriate adjustments to the growth models
  - Staff confirmed they are members of several organizations that are mandated to address single-use plastics and EPR with several reports having been submitted to the Province with consideration being made to applying same rules to businesses as those of the municipalities. Staff have also been provided clear direction from Council to investigate the removal of single-use plastics from the waste stream. Staff are working with their partners and will report back to Council.
  - Staff reported on the steps taken by Vancouver to eliminate single-use bags, however, there are different legal aspects to be considered and introduced in order for Durham to move forward in this direction.
- 32. Staff were questioned about how the details were portrayed, even misrepresented to media/public, in the July 3 notice of commencement with regard to the statement that on June 26 Council provided approval to conduct an EA with possible future expansion. Only approval was granted for the drafting of the terms of reference with

their return for Council approval prior to submission to the MECP. Additional concern with regard to the approval of the amended Recommendation C of the Waste Servicing and Finance Study was questioned.

Staff clarified that the conducting an EA in itself is the process which includes not only drafting of the terms of reference but the consultation requirements with the public with regard to receiving comments on the draft which once complete will be presented to Council for approval.

Staff also confirmed that Council did amend Recommendation C to approve the commencement of the draft terms of reference for the EA.

- 33. It was asked the type of mixed waste pre-sort facility that was being considered.

  Staff confirmed that it was a state-of-the-art robotic facility with anaerobic digestion.
- 34. Clarification of whether this would be an individual EA was questioned.

Staff confirmed that the amendment from 140K to 160K tonnes per year was a streamlined EA, and that an expansion to 250K tonnes per year would be an individual EA.

Staff further confirmed that for those who are already registered to receive notifications from the website, will continue to receive notifications regarding the streamlined EA.

Staff reiterated that questions can be submitted and that there will be many opportunities to ask staff questions.

Staff additionally advised that due to the delay of the approval of the undertaking with the deferral of Recommendation C of the Waste Servicing and Financing Study, and the recent Council approval within the last two weeks of the amended recommendation, staff are working on identifying the necessary report and answering questions on timing of the approval of moving ahead with the streamlined EA for the 160K tonnes and the draft terms of reference for the EA to expand to 250K tonnes.

35. It was questioned if staff can move forward with the amendment to 160K tonnes per year and not commence the 250K tonnes per year expansion.

Staff confirmed in follow up to the MECP-hosted meeting of June 7 that it is staff understanding that the terms of reference process must be commenced prior to the completion of the streamlined EA to 160k tonnes. The notice of completion for the increase to 160K tonnes per year is anticipated in November / December and prior to that time look at drafting terms of reference and starting consultation in this fall, the completion of the draft terms of reference is anticipated to be presented to Council in the new year (2020).

- 36. It was strongly requested by some members that additional meetings be held with this committee, especially with regard to the various initiatives taking place in the waste management industry including the streamlined EA and future expansion to 250K tonnes per year and related drafting of the EA terms of reference.
  - Staff confirmed that the committee's mandate is focussed as identified in their terms of reference and reminded members that staff are available to respond to questions and meet outside of the annual meeting.

Meeting adjourned at 4:30 p.m.

#### Meeting attendees:

- M. Januszkiewicz, Director, Waste Management Services, The Regional Municipality of Durham (member)
- S. Dittman, Supervisor, Technical Services, Waste Management, The Regional Municipality of York (alternate)
- M. Whitbread, Coordinator, Parks and Environmental Services, City of Oshawa (alternate)
- P. Thistle, Superintendent of Solid Waste, Town of Whitby (member)
- A. Burke, Senior Planner Special Projects, Municipality of Clarington (alternate)
- C. Jones, Director, Planning Regulation, Central Lake Ontario Conservation Authority (member)
- J. Meggit, Manager, Operations, for M. Molinari, Director, Public Works (member), Town of East Gwillimbury
- D. Anderson, Durham Clear (member)
- W. Bracken (Durham Environment Waste alternate) attended for L Gasser, Zero Waste for Zero Burning (member)
- K. Meydam, Durham Environment Watch (member)
- B. Withrow, Facilitator, Meeting Facilitators International
- M. Neild, Facility Manager, Covanta
- G. Anello, Manager, Waste Planning and Technical Services, The Regional Municipality of Durham
- A. Evans, Project Manager, Waste Planning and technical Services, The Regional Municipality of Durham
- L. Waller, Works Technician, Waste Management Services, The Regional Municipality of Durham
- M. Smart, Administrative Assistant, Works Department, The Regional Municipality of Durham

# **Durham York Energy Centre**

Energy from Waste Advisory Committee
July 10, 2019

Gioseph Anello, P.Eng., M.Eng., PMP Manager, Waste Planning and Technical Services The Regional Municipality of Durham





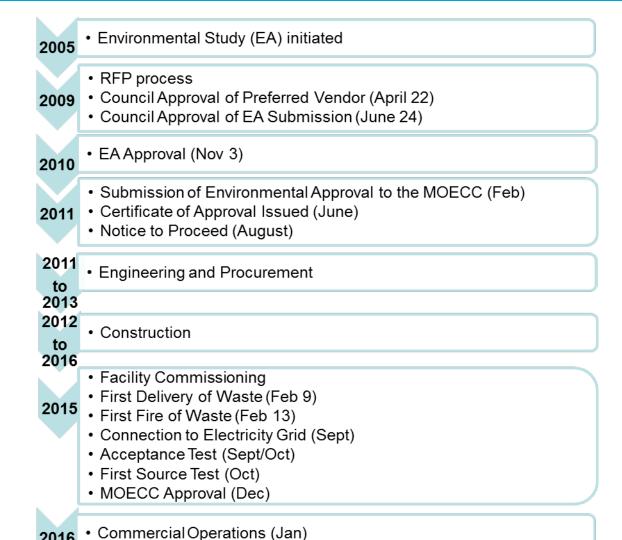
### **Presentation Outline**

- 1. Waste Management and Durham York Energy Centre (DYEC) History (brief)
- 2. Process for Amendment of Capacity
- 3. Terms of Reference for future Environmental Assessment
- 4. Conclusions



### **Durham York Energy Centre History**

- No new landfill in Durham Region resolution of Regional Council
- Long-Term Plan conclusion to consider energy from waste as waste disposal option
- Provincial directive to cease disposal contracts with Michigan (December 31, 2010)





# Capacity Amendment to 160,000 tonnes per year



# Durham York Energy Centre (DYEC) 140,000 to 160,000 tonnes per year

- DYEC already built to handle 160,000 tonnes of waste per year
- Current operations at 90 per cent availability and approximately 90 per cent processing capacity (Maximum Continuous Rating (MCR))
- Modelled operations at 95 per cent availability and up to 110 per cent MCR
- Environmental Assessment: Screening Process
- Environmental Compliance Approval (ECA) Amendment



### **Impact on Emissions**

- Original methodology as the Emissions Summary Dispersion Model used for the 140,000 assessment for hourly, 24-hour and annual concentrations.
- Emission rates for the 160,000 and 140,000 scenario were the same but the flow rate was adjusted according to recent Stack testing data.
- The results indicate that the change in predicted concentrations between the two scenarios is minor. The majority of contaminants show the same values or a decrease in predicted concentration at the Point of Impingement (POI), with and without background levels included.
- Durham York Energy Centre would **still be able to demonstrate compliance** with Ministry of the Environment, Conservation and Parks' limits listed in Ontario Regulation 419/05 and cumulative concentrations of all contaminants would be below the relevant Ambient Air Quality Criteria (AAQC).



### Environmental Screening Process (140,000 to 160,000)

The Environmental Assessment (Screening Process) is a proponent driven, self-assessment process available to waste management projects that requires:

- Completion of a detailed Screening Criteria Checklist that verifies potential environmental effects;
- A written report that details if any potential environmental effects will need to be mitigated; and
- Notification to the public of the commencement of the Screening, consultation on issues or concerns, consultation on mitigation measures and public Notice of Completion.



### **Durham Region's Share of Operating Costs**

# Savings to Durham Region in 2020: \$1.3 million

- Cost Avoidance of Landfill fees
- Lower Disposal Cost
- Increased revenues from electricity production and metals recovery

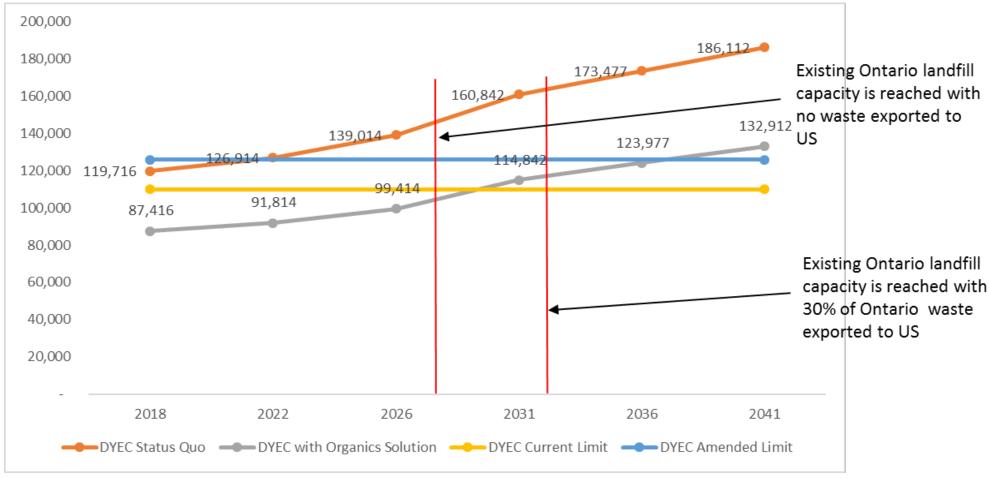
	2019	2020	2021	2022	2023
Covanta Operating Fee	13.2	13.5	13.7	14.0	14.2
Property Taxes	0.5	0.5	0.6	0.6	0.6
Non-Covanta Operating Costs (gross costs)	0.9	0.9	0.9	1.0	1.0
Non-Covanta costs	1.4	1.4	1.5	1.6	1.6
Total Gross Costs	14.6	14.9	15.2	15.6	15.8
Revenues					
Electricity Revenues (IESO)	(7.0)	(7.1)	(7.1)	(7.2)	(7.2)
Materials Recovery Revenues	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
sub-total Revenues	(7.5)	(7.6)	(7.6)	(7.7)	(7.7)
Net Durham DYEC Cost	7.1	7.3	7.6	7.9	8.1
Covanta landfill disposal (beyond DYEC capacity)	0.9	0.9	1.2	1.6	2.0
Status Quo Cost of Disposal	8.0	8.2	8.8	9.5	10.1
With DYEC ECA Administrative Amendment:					
Reduced Covanta Operations Fee > 140,000 tonnes	0.0	(0.4)	(0.6)	(0.9)	(1.3)
Additional Revenues (IESO and material recovery)	0.0	(0.9)	(1.1)	(1.3)	(1.3)
Covanta landfill disposal (beyond 125,720 tonnes)	0.0	0.0	0.0	0.1	0.5
Sub-total Amendment Savings	0.0	(1.3)	(1.7)	(2.1)	(2.1)
Total Cost of Disposal	8.0	6.9	7.1	7.4	8.0



# Terms of Reference Future Environmental Assessment for 250,000 tonnes per year



### Durham Region Disposal Needs (update June 2019)





### **Environmental Assessment Terms of Reference**

- Identification of the Proponent
- Indication of How the Environmental Assessment Is to Be Prepared
- Purpose of the Study or Undertaking
- Description of and Rationale for the Undertaking
- Description of and Rationale for Alternatives
- Description of the Environment and Potential Effects
- Assessment and Evaluation
- Commitments and Monitoring
- Consultation Plan for the Environmental Assessment
- Providing Flexibility to Accommodate New Circumstances

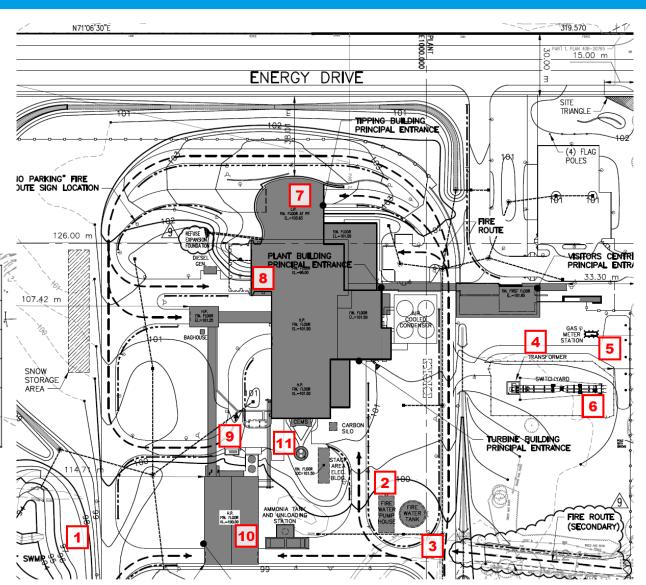


# Durham York Energy Centre (DYEC) Oversized Components for 250,000 tonnes per year

Value of DYEC oversized components approximately \$30 million

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	"	ltem	Facility Sizing (Tonnes per year)		ltem	Facility Sizing (Tonnes per year)	?
	1	Site Work	250,000	7	Tipping Floor and Waste Storage Pit	250,000	Į.
	2	Fire Protection	250,000		Waste Handling Crane	250,000	
	3	Water Supply Piping	400,000		Larger Ash Processing Equipment	250,000	
	4	Sewer System Piping	400,000	10	Larger Ash Building	250,000	
	5	Natural Gas Pipeline	400,000		Stack	250,000	1,
	6	Electrical and Switchyard	250,000				•
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### Conclusions

- There is a current and future waste disposal capacity need
- The interim solution for a permit amendment from 140,000 to 160,000 tonnes per year: good financial and environmental outcome
- Mixed waste pre-sort and transfer with Anaerobic Digestion needed for organics management and disposal capacity requirements
- Terms of Reference for future (2030+) Environmental Assessment



### **Meeting #17 Agenda**

**Advisory Committee Annual Report** 

If you require this information in an accessible format, please contact The Regional Municipality of Durham at 1-800-372-1102 ext. 3560.





## Energy from Waste Advisory Committee (EFWAC) Agenda Meeting #17

Friday, October 23, 2020 2 p.m. to 4 p.m.

# The Regional Municipality of Durham Headquarters Building 605 Rossland Road East, Whitby

In an effort to help mitigate the spread of COVID-19, and to generally comply with the directions from the Government of Ontario, it is requested in the strongest terms that Members participate in the meeting electronically. Regional Headquarters is closed to the public, all members of the public may view the Committee meeting via <u>live streaming</u>, instead of attending the meeting in person.

#### 1. Welcome and Introductions

#### 2. Durham York Energy Centre (DYEC) 2019 Annual Compliance Report (ECA)

The Project Team will respond to questions by EFWAC members regarding the DYEC 2019 Annual Compliance Report.

#### 3. Updates on:

- a. Emergency ECA amendment
- b. Streamed EA for increase to 160K tonnes per year capacity
- c. Draft TOR for the EA to expand to 250K tonnes per year

#### 4. Next Meeting

#### 5. Meeting Adjourns

Notice regarding collection, use and disclosure of personal information:

Written information (either paper or electronic) that you send to Durham Regional Council or Committees, including home address, phone numbers and email addresses, will become part of the public record. This also includes oral submissions at meetings. If you have any questions about the collection of information, please contact the Regional Clerk/Director of Legislative Services.