



Regional Municipality of Durham
Regional Municipality of York

Durham York Energy Centre 2019 Compliance Monitoring Report

EAAB File No.: EA-08-02
Condition 5

Date: October 25, 2019

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1.0 Introduction

1.1 Purpose

The *Durham York Energy Centre 2019 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 3rd of each year, corresponding to the anniversary date of the Notice of Approval. This annual compliance report covers the period from November 3, 2018 to November 2, 2019.

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.

Appendix A

EA Notice of Approval Compliance Table

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EA Notice of Approval Compliance Table
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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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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: <ol style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • The Compliance Monitoring Program was submitted to the Director and Advisory Committee via letter dated October 14, 2011. 	October 2011	Yes

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Condition No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
4.2	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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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
4.4	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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> Agreed 	N/A	Yes
4.7	The proponent shall implement the Compliance Monitoring Program, as it may be amended by the Director.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> This annual report is the ninth 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.	<ul style="list-style-type: none"> This annual report is the ninth 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.	<ul style="list-style-type: none"> This annual report is the ninth 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.	<ul style="list-style-type: none"> Agreed 	November 2019	Yes
5.5	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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> Complaint Procedure is required by Condition 10 of the ECA 	N/A	Yes

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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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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
7.3	<p>The Community Communications Plan shall include at a minimum details on:</p> <p>a) How the proponent plans to disseminate information to interested members of the public and any Aboriginal communities;</p> <p>b) How interested members of the public and any Aboriginal communities will be notified and kept informed about site operations; and,</p> <p>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.</p>	<ul style="list-style-type: none"> Completed. 	September 18, 2013.	Yes
7.4	<p>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:</p> <p>a) Activities that are part of the undertaking, including monitoring activities;</p> <p>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,</p> <p>c) Information on the Complaint Protocol required by Condition 6 of this Notice of Approval.</p>	<ul style="list-style-type: none"> 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?
7.5	The proponent shall hold public meetings to discuss the design, construction and operation of the undertaking, including, but not limited to: <ul style="list-style-type: none"> a) At least one meeting prior to the start of construction; b) At least one meeting prior to the receipt of non-hazardous municipal solid waste on site; and, 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. 	<ul style="list-style-type: none"> • 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 4th, 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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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 4th, 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.	<ul style="list-style-type: none"> • Complete • Required by ECA Condition 17: Advisory Committee 	January 20, 2011 Carried into the ECA	Yes
8.2	The proponent shall provide administrative support for the advisory committee including, at a minimum: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> Letters of invitation dated December 15, 2010 were sent to MECP District Manager. 	December 15, 2010	Yes
8.8	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;	<ul style="list-style-type: none"> 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 Annual Compliance Reports Complaint Protocol Community Communications Plan 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018 Annual Waste Diversion Reports Ambient Air Quality Monitoring Plan 2013, 2014, 2015, 2016, 2017, 2018, 2019 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?
	<p>j) Odour Management and Mitigation Plan and the Odour Management and Mitigation Monitoring Reports required by Condition 18;</p> <p>k) Noise Monitoring and Reporting Plan as required by Condition 19;</p> <p>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,</p> <p>m) Notice in writing of the date that municipal solid waste is first received as required by Condition 23.</p>	<ul style="list-style-type: none"> • Third Party Auditor's Reports prepared by a qualified professional 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 • 2012, 2013, 2014, 2015, 2016, 2017, 2018 Annual Groundwater and Surface Water reports covering the previous year activities • Soil Testing Plan • Details of first receipt of waste and fire were brought to EFWAC via EFWAC meeting held on April 9th, 2015. • Notice to the Ministry of First receipt of waste is on the project website. • The following documents are to be provided as they are prepared: • Future third party auditor's reports, waste diversion reports, environmental monitoring reports, compliance monitoring reports, and the annual facility operations report as required by Condition 15(1) of the Environmental Compliance Approval. • Items listed are built in to the approved EFWAC Terms of Reference 		
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 style="list-style-type: none"> • First meeting held January 20, 2011 was within three months of November 3, 2010 date of approval • 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. 	January 20, 2011	Yes
8.10	<p>The Terms of Reference shall, at minimum, include:</p> <p>a) Roles and responsibilities of the advisory committee members;</p> <p>b) Frequency of meetings;</p> <p>c) Member code of conduct;</p> <p>d) Protocol for dissemination and review of information including timing; and,</p> <p>e) Protocol for dissolution of the advisory committee.</p>	<ul style="list-style-type: none"> • Terms of Reference submitted to MECP via letter dated February 18, 2011. • Terms of Reference approved via letter from the Director dated March 3, 2011. 	February 18, 2011	Yes
8.11	The proponent shall submit the advisory committee's Terms of Reference to the Director and Regional Director.	<ul style="list-style-type: none"> • 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?
		<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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: <ol style="list-style-type: none"> 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. 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. 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. 	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 2018 annual monitoring report has been submitted to the Director and Regional Director. Future monitoring reports to be submitted by November 3rd of each successive year. 	Ongoing	Yes
10.5	The proponent shall post the Waste Diversion Program Monitoring Plan and the annual reports required on the proponent's web site for the undertaking.	<ul style="list-style-type: none"> 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			
11.1	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.	<ul style="list-style-type: none"> 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
11.2	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.	<ul style="list-style-type: none"> Submission deadline revised to August 31, 2011 via letter from the Director dated June 30, 2011. Submitted August 31, 2011 	August 31, 2011	Yes
11.3	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.	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The submitted document meets these requirements. The Regions and The MECP met and discussed the first annual report on July 30th, 2014. No changes were requested. Meetings to discuss the 2014, 2015, 2016 and 2017 Annual Reports were held with Regions and MECP on July 20, 2015, July 	May 30, 2012	Yes

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	<p>Operations Manual for Air Quality Monitoring in Ontario, March 2008, as amended from time to time;</p> <p>b) The proposed start date for and frequency of the ambient air monitoring and reporting to be carried out;</p> <p>c) The contaminants that shall be monitored as part of the Ambient Air Monitoring and Reporting Plan; and,</p> <p>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.</p>	<p>26, 2016, August 25, 2017, and July 19, 2018 respectively. Discussions on the 2018 reports are scheduled for November 1st, 2019.</p>		
11.5	<p>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.</p>	<ul style="list-style-type: none"> • 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	<p>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.</p>	<ul style="list-style-type: none"> • 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
11.7	<p>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.</p>	<ul style="list-style-type: none"> • 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
11.8	<p>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.</p>	<ul style="list-style-type: none"> • 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	<p>The proponent shall post the Ambient Air Monitoring and Reporting Plan and the results of the ambient air monitoring program on the proponent's</p>	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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: <ol style="list-style-type: none"> 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, 	<ul style="list-style-type: none"> 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 <i>Environmental Protection Act</i> 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.	<ul style="list-style-type: none"> Director revised submission deadline to August 31, 2011 via letter dated June 30, 2011. Plan submitted August 31, 2011 	August 31, 2011	Yes
12.6	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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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?
		<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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			
14.1	<p>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:</p> <p>a) The site is secure;</p> <p>b) The operation of the undertaking is not causing any nuisance impacts;</p> <p>c) The operation of the undertaking is not causing any adverse effects on the environment;</p> <p>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,</p> <p>e) Only non-hazardous waste is being received at the site.</p>	<ul style="list-style-type: none"> Agreed See Environmental Compliance Approval Conditions 3 (6), 3 (7), 3 (8), 5 (5), 14 (3), and 14 (5) 	Carried Into the ECA	Yes
14.2	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.	<ul style="list-style-type: none"> Agreed See Environmental Compliance Approval Conditions 5 (5), 14 (3), and 14 (5) 	Carried into the ECA	Yes
14.3	<p>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:</p> <p>a) The name and signature of the person that conducted the daily inspection;</p> <p>b) The date and time of the daily inspection;</p> <p>c) A list of any deficiencies discovered during the daily inspection;</p> <p>d) Any recommendations for action; and,</p> <p>e) The date, time, and description of actions taken.</p>	<ul style="list-style-type: none"> Agreed See Environmental Compliance Approval Conditions 5 (5), 14 (3), and 14 (5) 	Carried into the ECA	Yes
14.4	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.	<ul style="list-style-type: none"> 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	The proponent shall maintain a written daily log which shall include the following information: a) Date; b) Types, quantities, and source of non-hazardous municipal solid waste received; c) Quantity of unprocessed, processed and residual non-hazardous municipal solid waste on the site; d) Quantities and destination of each type of residual material shipped from the site; e) The record of daily site inspections required to be maintained by Condition 14.3; 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> ; g) A record of any waste that was refused at the site, including: amounts, reasons for refusal and actions taken; and, h) The name and signature of the person completing the report.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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?
		<ul style="list-style-type: none"> • 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. 		
16.3	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.	<ul style="list-style-type: none"> • 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. 	December 8, 2011	Yes
16.4	<p>The audit shall include, at a minimum, the following:</p> <ul style="list-style-type: none"> a) A detailed walkthrough of the entire site; b) A review of all operations used in connection with the undertaking; and, 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. 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. 	<ul style="list-style-type: none"> • 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
16.5	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.	<ul style="list-style-type: none"> • 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. • The first Operations Phase Audit report was submitted to the MECP on April 29, 2016. 	Carried into the ECA	Yes

Condition No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
		<ul style="list-style-type: none"> 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. 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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
17.3	The Spill Contingency and Emergency Response Plan shall include, but is not limited to:	<ul style="list-style-type: none"> Additional requirements included in Environmental Compliance Approval Condition 11 (2). Completed. 	September 24, 2013	Yes

Condition No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
	<p>a) Emergency response procedures, including notification procedures in case of a spill, fires, explosions or other disruptions to the operations of the facility;</p> <p>b) Cell and business phone numbers and work location for all person(s) responsible for the management of the site;</p> <p>c) Emergency phone numbers for the local ministry office, the ministry 's Spills Action Centre, and the local Fire Department;</p> <p>d) Measures to prevent spill, fires and explosions;</p> <p>e) Procedures for use in the event of a fire;</p> <p>f) Details regarding equipment for spill clean-up and all control and safety devices;</p> <p>g) Shut down procedures for all operations associated with the undertaking including alternative waste disposal site locations;</p> <p>h) Maintenance and testing program for spill clean-up equipment and firefighting equipment;</p> <p>i) Training for site operators and emergency response personnel; and,</p> <p>j) A plan, identifying the location and nature of wastes on site.</p>			
17.4	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.	<ul style="list-style-type: none"> 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
17.5	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.	<ul style="list-style-type: none"> 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
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 style="list-style-type: none"> Odour Management and Mitigation Plan submitted to MECP on August 31, 2011. Revised Odour Management and Mitigation Plan submitted May 4, 2012. 	August 21, 2012	Yes

Condition No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
		<ul style="list-style-type: none"> Odour Management and Mitigation Plan approved by Regional Director via letter dated August 21, 2012. 		
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 style="list-style-type: none"> Deadline to submit plan revised to August 31, 2011 via letter from the Director and Regional Director dated June 30, 2011. Plan submitted in draft form to MECP and Advisory Committee for comments via email dated July 25, 2011. Plan incorporating MECP and Advisory Committee comments submitted August 31, 2011 	August 31, 2011	Yes
18.3	The Odour Management and Mitigation Plan shall include at a minimum: <ul style="list-style-type: none"> 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 style="list-style-type: none"> Addressed in the approved odour management and mitigation plan. Additional requirements listed in Environmental Compliance Approval Condition 8 (9). 	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 style="list-style-type: none"> Final Odour Monitoring and Mitigation Plan is compliant with these requirements. 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. The second annual Odour report was submitted in December 2016, after requesting an extension to the date. The third annual Odour report was submitted on November 24, 2017. The fourth annual Odour report was submitted to the MECP on November 26, 2018. Required by ECA Condition 7(8) 	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 writing that the Odour Management and Mitigation Monitoring Reports are no longer required.	<ul style="list-style-type: none"> Required by ECA Condition 7(8) 	Carried into the ECA	Yes
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.	<ul style="list-style-type: none"> Odour Management and Mitigation Plan posted to the website. Required by Condition 16(1)(e) of Environmental Compliance Approval 	Carried into the ECA	Yes

Condition No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
19.	Noise Monitoring and Reporting			
19.1	The proponent shall prepare and implement a Noise Monitoring and Reporting Plan for the undertaking.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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: <ol style="list-style-type: none"> A groundwater and surface water monitoring program; The proposed start date and frequency of groundwater and surface water monitoring; The contaminants that shall be monitored as part of the groundwater and surface water monitoring program; and, 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. 	<ul style="list-style-type: none"> 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. Meeting was held with Regions and MECP on July 20, 2015 to discuss the 2014 Annual Report Meeting was held with Regions, Covanta and MECP on July 26, 2016 to discuss the 2015 Annual Report. Meeting was held with Regions, Covanta and MECP on August 25, 2017 to discuss the 2016 Annual Report. 	September 15, 2011	Yes

Condition No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
		<ul style="list-style-type: none"> Meeting was held with Regions, Covanta and MECP on July 19, 2018 to discuss the 2017 Annual Report. Meeting to discuss the 2018 Annual report is scheduled for November 1, 2019. 		
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 style="list-style-type: none"> September 15, 2011 submission date is more than 90 days prior to the start of construction in January 2012. Groundwater Surface Water Monitoring Plan approved by the Regional Director via letter dated October 14, 2011. 	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 style="list-style-type: none"> The mechanism for changes requested by the MECP is included in the Groundwater and Surface Water Monitoring Plan. Groundwater and Surface Water monitoring is a requirement of ECA Condition 7(14) 	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 style="list-style-type: none"> 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. Baseline groundwater sampling commenced in January 2012, prior to receipt of waste. 	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.	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Annual reports have been submitted for 2012 – 2018 Annual report for 2019 April 30, 2020. 	Carried into the ECA	Yes
20.9	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.	<ul style="list-style-type: none"> 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
20.10	The proponent shall post the Groundwater and Surface Water Monitoring Plan and all reports required by this condition on the proponent's web site	<ul style="list-style-type: none"> Groundwater and Surface Water Monitoring Plan and reports are posted to the website 	Carried into the ECA	Yes

Condition No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
	for the undertaking following submission of the plan and reports to the ministry.	<ul style="list-style-type: none"> • 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 		
21.	Types of Waste and Service Area			
21.1	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.	<ul style="list-style-type: none"> • Agreed • Required by Conditions 2 (1), 2 (2), and 2 (3) of the Environmental Compliance Approval 	Carried into the ECA	Yes
21.2	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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • Agreed • See Condition 4 (2) and 4 (3) of the Environmental Compliance Approval 	Carried into the ECA	Yes
21.4	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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 140,000 tonnes per year is the maximum annual tonnage recognized on page 1 of the Environmental Compliance Approval 	Carried into the ECA	Yes
23.	Notice of the Date Waste First Received			
23.1	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.	<ul style="list-style-type: none"> • Notification letter sent to MECP via email on February 10, 2015, 1 day after waste was first received on site. 	February 2015	Yes
24.	Construction and Operation Contracts			
24.1	In carrying out the undertaking, the proponent shall require that its contractors, subcontractors and employees: <p>a) fulfill the commitments made by the proponent in the environmental assessment process, including those made in the environmental assessment and in the proponent's responses to comments received during the environmental assessment comment periods;</p>	<ul style="list-style-type: none"> • 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. 	Carried into the ECA	Yes

Condition No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
	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.	<ul style="list-style-type: none"> • 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. 		
25.	Amending Procedures			
25.1	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.	<ul style="list-style-type: none"> • Agreed 	Carried into the ECA	Yes

Appendix B

EA Study Document Compliance Table

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EA Study Document Compliance Table
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Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
General Requirements				
2	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.	<ul style="list-style-type: none"> 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
11	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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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	Air quality related mitigation/management during construction will include: <ul style="list-style-type: none"> Mitigation and environmental management / monitoring measures will include: Employment of controlled entrances and exits at the construction site to minimize the offsite tracking of mud. Temporary and permanent grassing in disturbed areas. Dust control during dry periods. Possible implementation of an idling protocol as required. Adherence to an equipment maintenance program. Ambient air quality monitoring for particulate matter will be undertaken to monitor the effectiveness of the mitigation measures. 	<ul style="list-style-type: none"> 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?
		<ul style="list-style-type: none"> 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 _x (VLN) system in the Facility's stoker	<ul style="list-style-type: none"> Facility is equipped with VLN system. 	February 9, 2015	Yes
11.1	SNCR for additional NO _x control	<ul style="list-style-type: none"> Facility is equipped with SNCR system 	February 9, 2015	Yes
11.1	Activated carbon injection after the economizer for mercury and dioxin/furan control	<ul style="list-style-type: none"> Facility is equipped with an activated carbon system 	February 9, 2015	Yes
11.1	Acid gas scrubber the removal of gases such as SO _x and HCl	<ul style="list-style-type: none"> Facility is equipped with an acid gas scrubber 	February 9, 2015	Yes
11.1	A fabric filter baghouse to remove solid particulate matter	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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
11.1	Provision of a Continuous Emissions Monitoring System (CEMS) at the baghouse outlet to monitor and record opacity, moisture, CO, O ₂ , NO _x , SO ₂ , HCL and HF. Opacity measurements will be used as the filter bag leak detection system.	<ul style="list-style-type: none"> 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 ₂ , SO ₂ and CO.	<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Facility is equipped with each of these controls. 	February 9, 2015	Yes
11.1	<ul style="list-style-type: none"> A long-term continuous dioxins sampling device will be installed to monitor the adsorption of dioxins onto the exchangeable adsorption-resin-filled cartridge. 	<ul style="list-style-type: none"> Facility is equipped with a long term dioxin and furan sampling system. 	September 2015	Yes
11.1	<ul style="list-style-type: none"> Emissions (stack) testing and monitoring protocol as required for the ECA under the EPA. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> NPRI emissions reporting that will entail a combination of monitoring or direct measurement, mass balance, process-specific emissions factors and engineering estimates. 	<ul style="list-style-type: none"> National Pollutant Release Inventory (NPRI) annual reporting is a requirement under the Canadian Environmental Protection Act (Federal) ECA Condition 1(9) requires compliance with all other applicable laws, statues, and regulations 2015, 2016, and 2017 Emissions were reported through NPRI. 	Carried into the ECA	Yes
11.1	<ul style="list-style-type: none"> Proposed ambient air quality monitoring in the immediate vicinity of the Facility for a 3-year period. 	<ul style="list-style-type: none"> Ambient air monitoring in accordance with the approved monitoring plan commenced in April 2013. Required by ECA Condition 7(4) 	Carried into the ECA	Yes
Surface Water and Groundwater				
11.2	<p>Surface water and groundwater related mitigation and environmental management / monitoring measures during construction will include:</p> <ul style="list-style-type: none"> 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 style="list-style-type: none"> Construction Phase is complete All permanent stormwater controls are in place Required by Condition 4(6) of the Environmental Compliance Approval 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. 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. 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. Site stormwater management plan has been developed and approved by CLOCA and Clarington (Clarington Master Drainage Plan) 	Carried into the ECA	Yes
11.2	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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

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Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
		<ul style="list-style-type: none"> Pre-construction groundwater wells installed in December 2011. Baseline monitoring commenced January 2012. All required monitoring wells are now in service 		
11.2	<ul style="list-style-type: none"> Storm water pond design criteria will meet enhanced design guidance criteria found in the MECP SWM Planning and Design Manual; 	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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; 	<ul style="list-style-type: none"> Pond has been designed with an active storage volume greater than the entire runoff volume from the 100 year storm. Stormwater pond design has been approved and constructed on site. 	February 9, 2015	Yes
11.2	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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 Storage of waste and ash is indoors on impervious surfaces with no drainage to outside the facility. Storage of all chemical reagents is in accordance with applicable regulations. Storage of aqueous ammonia includes secondary containment. 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. 	Carried into the ECA	Yes
11.2	<ul style="list-style-type: none"> Monitoring of stormwater end-of-pipe Facility discharge quality (as required as part of C of A); 	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Topsoil and subsoil salvage and storage. Apply erosion and sedimentation control measures (also described in surface water). 	<ul style="list-style-type: none"> Facility construction is complete. 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. 	January 28, 2016	Yes

Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
		<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Staging of construction activities. Timely removal of construction debris. 	<ul style="list-style-type: none"> 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 style="list-style-type: none"> A monitoring program and contingency plan will be implemented to address any issues that may arise during the construction of the Facility. Investment in architectural enhancements to the Facility. 			
11.5	<p>Visual-related mitigation and environmental management / monitoring measures during operation will include:</p> <ul style="list-style-type: none"> 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 style="list-style-type: none"> An architectural concept for the facility was developed in consultation with the Municipality of Clarington. Landscaping complete in accordance with the approved plan. Need for supplementary, off-site visual remediation will be assessed on a case-by-case basis after the facility is constructed. 	January 28, 2016	Yes
Natural Environment				
11.6	<p>Natural environment related mitigation and environmental management / monitoring during construction will include:</p> <ul style="list-style-type: none"> 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 style="list-style-type: none"> Landscape plan as approved by the Municipality of Clarington gives consideration to wildlife habitat. Construction Site Fencing allows for a wildlife corridor to the North and South of the Site. Reconnaissance report prepared by Golder Associates dated November 11, 2011 to address pre-construction bird nesting activities prior to start of construction. For work offsite surrounding the Energy from Waste facility, the Regions have 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. Construction complete. 	January 28, 2016	Yes
Social / Cultural				
11.7, 8, 9	<p>Social / cultural related mitigation and environmental management / monitoring measures during construction will include:</p> <ul style="list-style-type: none"> 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 style="list-style-type: none"> 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. 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 	January 28, 2016	Yes

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Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
	<ul style="list-style-type: none"> Deeply buried archaeological resources could still exist and standard conditions regarding discovery of human remains and/or other cultural heritage values will apply. 	<p>conditions of the contract, including compliance with EA conditions.</p> <ul style="list-style-type: none"> To date no findings of archaeological significance have been found on site. Construction complete. 		
	<ul style="list-style-type: none"> Road/pavement improvements to the South Service Road and Osborne Road to accommodate construction vehicles. 	<ul style="list-style-type: none"> Construction is complete 	January 28, 2016	Yes
	<ul style="list-style-type: none"> Formation of a Thermal Treatment Facility Site Liaison Committee (SLC) for the construction period. 	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> Development and implementation of a community complaints system for construction. 	<ul style="list-style-type: none"> Complaint protocol approved by the MECP July 13, 2011 as per Condition 6 of the EA Notice of Approval. Requirement of Condition 10 of the Environmental Compliance Approval Monthly reports are sent to the EFWAC and the MECP. 	Carried into the ECA	Yes
	<ul style="list-style-type: none"> Management of residual waste in enclosed vehicles and on enclosed tipping floor 	<ul style="list-style-type: none"> 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) Construction of an enclosed tipping floor is complete. All waste is delivered to the site in closed vehicles 	Carried into the ECA	Yes
	<ul style="list-style-type: none"> Air from tipping floor is used as combustion air, destroying odours and maintaining negative pressure within receiving area. 	<ul style="list-style-type: none"> 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?
	<ul style="list-style-type: none"> Management of ash and residues using various measures to reduce ash emissions. 	<ul style="list-style-type: none"> Requirement of Condition 4 of the Environmental Compliance Approval See Section 8.0 of the Design and Operation Report for additional details. Storage of ash, and residues will be indoors on impervious surfaces with no drainage to outside the facility. Ash is transported to the ash storage building in enclosed conveyors Bottom ash and fly ash handled separately. Building maintained under negative pressure and fully ventilated to a dust collection system Loading of trucks occurs indoors with the doors closed Fly ash is mixed with water, cement and pozzolan to render it non-hazardous and reduce dust. Bottom ash is immersed in quench water and retains 15-25% moisture content, reducing dust potential 	Carried into the ECA	Yes
	<ul style="list-style-type: none"> Mitigation of vectors/vermin through pest/vector control. 	<ul style="list-style-type: none"> Requirement of Condition 8 (14) of the Environmental Compliance Approval Noted in Section 13.5 of the Design and Operations Report and Condition 8(14) Pest/Vector control has been subcontracted to a qualified pest control company and monitored for effectiveness. 	Carried into the ECA	Yes
	<ul style="list-style-type: none"> Mitigation of litter through implementation of litter control program throughout the Site. 	<ul style="list-style-type: none"> Requirement of Condition 8(12) of the Environmental Compliance Approval Site-wide litter collection daily as per Section 13.4 of the Design and Operations Report and Environmental Compliance Approval Condition 8(12) 	Carried into the ECA	Yes
	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Requirement of Condition 8(10) of the Environmental Compliance Approval Energy Drive and private truck access construction is complete, with all required off-site traffic controls. 	May 2015	Yes
	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Host Community Agreement executed on February 18, 2010 includes this provision 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. Construction on the facility access road and Energy Drive has been completed. 	July 2015	Yes

Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> Requirement of Condition 13 (4) of the Environmental Compliance Approval Soil Testing plan submitted September 23, 2011 Revised Soil Testing Plan submitted to the MECP via letter dated October 5, 2012 MECP approval via letter dated March 15, 2013. Soils testing commenced in accordance with the approved plan. The first Soils Testing Report was completed and submitted November 19, 2013. Second (first operational year) Soils Testing Report was submitted on October 23, 2015. Third (second operational year) Soils Testing Report was submitted on November 3, 2016. Fourth (third operational year) Soils Testing Report was submitted on November 24, 2017. 	Carried into the ECA	Yes
	<ul style="list-style-type: none"> Formation of a Thermal Treatment Facility Site Liaison Committee SLC for the operations period. 	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> See construction above regarding development and implementation of a Community Relations Plan 	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> See construction above regarding development and implementation of a community complaints system for operations 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Establishment of a hazardous waste depot to serve Clarington residents. 	<ul style="list-style-type: none"> Establishment of the hazardous waste depot commenced when land expropriation for other Host Community Agreement commitments was completed and the Certificates of Approval and Building Permit for the Durham York Energy Centre were issued. 	October 22, 2019	Yes

Relevant EA Section No.	Requirement	Status Remarks	Actual or Estimated Completion Date	Complete?
		<ul style="list-style-type: none"> The Clarington Household Special Waste Facility was opened on October 22, 2019. 		
11.10	<ul style="list-style-type: none"> Construction of Energy Drive from Courtice Road to Osborne Road to serve the Energy Park. 	<ul style="list-style-type: none"> Construction on the facility access road and Energy Drive is complete. 	May 2015	Yes
11.10	<ul style="list-style-type: none"> Construction of a SWM Facility to serve the Energy Park. 	<ul style="list-style-type: none"> Stormwater management requirements for the Energy Park will be assessed if and when development of the Energy Park proceeds. 	May 2015	Yes
11.10	<ul style="list-style-type: none"> Construction of a waterfront trail from Courtice Road to the eastern limit of the Durham property. 	<ul style="list-style-type: none"> Waterfront trail has been completed. 	2017	Yes
11.10	<ul style="list-style-type: none"> Transfer of 22 acres of surplus land adjacent to the Courtice WPCP to Clarington. 	<ul style="list-style-type: none"> The transfer of 22 acres of land to Clarington was completed on October 15, 2015. 	2015	Yes
11.10	<ul style="list-style-type: none"> Commencement of the EA for servicing the Clarington Science Park. 	<ul style="list-style-type: none"> 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				
	<ul style="list-style-type: none"> Refer to "Air Quality" above. 	<ul style="list-style-type: none"> Refer to "Air Quality" above. 	N/A	Yes

Appendix C

Advisory Committee Annual Report 2019

**Durham York Energy Centre 2019 Compliance Monitoring Report – Appendix C
Energy From Waste Advisory Committee Summary Table**

Meeting #	Date	Time	Agenda Topic
Meeting #14	July 12, 2017	2:00 – 4:00	<ul style="list-style-type: none"> • 2016 DYEC Annual Compliance Report
Meeting #15	November 28, 2018	2:00 - 4:00	<ul style="list-style-type: none"> • 2017 DYEC Annual Compliance Report
Meeting #16	July 10, 2019	2:00 - 4:00	<ul style="list-style-type: none"> • 2018 DYEC Annual Compliance Report • Permit Amendment for 160,000 Tonnes per Year Capacity • Terms of Reference for the Possible Future Expansion to 250,000 Tonnes per Year Capacity

Meeting #14 Agenda

Advisory Committee Annual Report



AGENDA

Energy from Waste Advisory Committee (EFWAC)

Meeting #14

Wednesday, July 12, 2017

2:00 to 4:00 PM

Lower Level Boardroom (LL-C)

Durham Regional Headquarters Building

605 Rossland Road East, Whitby

- 1. Welcome and Introductions**
- 2. Durham York Energy Centre (DYEC) 2016 Annual Compliance Report (ECA)**

The Project Team will respond to questions submitted by EFWAC members regarding the DYEC 2016 Annual Compliance Report.
- 3. Next Meeting**
- 4. Meeting Adjourns**

Meeting #14 Minutes and Presentations

Advisory Committee Annual Report

The minutes from Meeting #14 were not finalized before the 2018 Compliance Report and therefore are included in the 2019 Annual Compliance Report.

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



Energy from Waste Advisory Committee (EFWAC) Meeting #14 Minutes

Date: Wednesday, July 12, 2017

Location: Durham Region Headquarters – Room LL-C from 2 p.m. to 4 p.m.

Facilitator: Bruce Withrow, Meeting Facilitators International

Attendees: Please see page 8 of 8

1. On page 14 of the Durham York Energy Centre (DYC) 2016 Annual Report (Annual Report), there is a description of Unacceptable Waste as follows “Unacceptable Waste refers to incoming waste which does not meet the incoming waste quality criteria, is of hazardous nature and requires caution when handling.” How does this material get to the DYEC and how is it disposed of once it is received?

Prior to being received at the DYEC, the waste is subject to sorting by the residents, at the transfer station and on the receiving floor. Approximately four tonnes of unacceptable waste was received at the DYEC (less than .003% of the total waste received). The unacceptable waste is disposed of through our licensed hazardous material companies listed in the Annual Report.

2. The Airzone third-party peer review memo listed in the Council Information Package report is titled as “preliminary” and they stated that they would not sign-off on the Source Test results until a full review is completed.

The preliminary Airzone memo includes the Source Test sampling only. AirZone will complete their review once the final Source Test report has been received and the modelling verified.

3. The Source Test report once finalized must show a signature sign-off page and the laboratory sampling and modeling also need signatures.

The final Source Test report include a submittal page that includes a revision history table to track any changes. The report is submitted directly to the Ministry of the Environment and Climate Change (MOECC) by the third-party source test consultant. The sampling and laboratory notes in the appendices are signed.

4. The AirZone peer review report for the October 2016 Source Test has not yet been released. Is there a problem and if there is, then this issue must be settled prior to the next Source Test.

There were no problems identified with the sampling and analysis of the Source Testing. However, there has been ongoing discussion with regards to the modelling parameters that needed further discussion with the Source Test consultants and the MOECC. There was also a discussion regarding the need to add the ambient air values to the modeled POI. These requests are beyond the ECA requirements. The AirZone report will be released once it has been finalized.

5. Were there any MOECC comments on the Annual Report.

There was one addendum issued based on the MOECC's comments:

The following errors have since been identified in the 2016 Annual Report.

- a. In the second sentence of Section 11 - Operational Issues and Mitigation Measures, 'dioxins in furans' should be revised to 'dioxins and furans'.
- b. In Appendix 2 - Bottom Ash Sampling Results, Table-Summary of Plant Operating Conditions, 'kg' should be revised to 'tonnes' in the column titled Generated Bottom Ash (kg).

6. The report also discussed the ambient air monitoring. There were no exceedances of the particulate matter in 2016 but there was significant construction in the area. Have the Owners recorded higher levels of particulate matter? Will the MOECC be able to provide additional monitoring in the area?

There were no exceedances of the Total Suspended Particulate reported in 2016 or the first half of 2017. There was one exceedance of benzo (a) pyrene, which was not caused by the DYEC. The municipalities can request the MOECC to deploy their mobile ambient air station through the district office.

7. Given that Durham Region has a focus on diversion, how did the extended outage from May to August affect our diversion rates and where was the waste eventually disposed of?

The extended outage did not affect Durham Region's diversion rate. Covanta is responsible for the transportation and the disposal of the bypass waste. In 2016, the bypass waste was disposed of at the Niagara Falls NY, Covanta facility and the landfills located in Thorold, Ontario. York Region's bypass waste went to the Emerald energy-from-waste facility in Brampton, Ontario.

8. The Source Test sampling procedures are monitored by AirZone and HDR. The final AirZone report has not yet been issued. It is therefore difficult to comment on the integrity of the Source Test. In the previous Source Test reports, it is mentioned that the sampling method was modified from the Environment Canada approved EPS 1/RM/2 method. It

also states that any modifications to the method must be approved by Environment Canada.

The sampling train was modified to eliminate one connection and the solvents modified. The statement from Ortech indicated that the MOECC approved the Source Test pre-test plan that included the modification. Ortech was therefore, approved to continue with the testing using the modified method.

The statement from Ortech was distributed to the EFWAC members.

The Owners are satisfied that Ortech, AirZone and the MOECC have indicated their approval for this modification.

9. The Annual Report includes recommendations in Section 17. With regards to the first two bullets:

- continue to review the results from the baghouse leak detection system and other measures implemented through the Abatement Plan to assess their effectiveness and make any further recommendations for improvement;
- continue to refine operating and evaluation procedures to improve the correlation between results obtained from the Long-Term Dioxin and Furan Sampling System and results obtained through reference source testing methods;

Who is responsible for the implementation of these recommendations?

It will be Covanta's responsibility to implement these recommendations and to report on the revised Standard Operating Procedures (SOPs) and their effectiveness. The Owners' consultant, HDR, will be conducting a review of the SOPs and will be monitoring the performance of the baghouse and the leak detection.

The second bullet deals with the long-term sampling system for Dioxins and Furans (AMESA). The Owners and Covanta are working with the MOECC to develop a workplan that will modify some of the AMESA components in an effort to improve the AMESA correlation with the Source Test as required in the Environmental Compliance Approval (ECA). The Owners have also obtained the assistance of a specialist in the Dioxins and Furans field. The AMESA manufacturer has also been engaged and is working with all parties to improve the correlation. There will be modifications and performance measurements. The Source Test will also be modified to run for a continuous 40-hour period during the Dioxin and Furan testing to determine if this longer period will improve the correlation.

10. In section 10.5 of the Annual Report titled "Sewage Works", it is suggested that the two ponds were cleaned out.

As a result of the inspection performed in the fall of 2015, after the completion of the site construction, maintenance was performed on both the east and west ponds between February and April 2016. Both ponds were dewatered using silt control discharge bags placed on vegetated areas.

Is it expected that the clean-out will be a regular occurrence?

The two ponds were oversized to meet the needs of the ultimate site capacity and therefore will have a significant retention time and lots of volume to accommodate the buildup of silt. Therefore, the clean-outs should occur on an infrequent basis.

11. The AMESA system is expected to be “certified”. There have been modifications to the AMESA. Who has approved and signed off on these modifications.

All AMESA modifications were discussed with the manufacturer and are part of the MOECC approved plan. With regards to the question of “certification”:

The question as stated infers that the AMESA system is subject to the same requirements as Source Testing. It is not. Schedule “E” of the ECA, references that Source Testing procedures will follow a protocol prepared in conformance with the Source Testing Code. Furthermore, the Director of the MOECC is given specific authority not to accept the results of Source Testing if procedures set forth either by the MOECC or by the Source Testing Code are not followed. Certification requires that specific procedures and standards are defined. The Source Testing Code establishes that standard; Ortech has conducted all required ECA testing to date in fulfillment of that standard as the MOECC has accepted all test reports submitted.

The AMESA is also not subject to certification standards established by the ECA for Continuous Emission Monitors. Certification standards for Continuous Emission Monitors are established for a number of parameters in Schedule “F” of the ECA. Notably, the Long-Term Sampling System for Dioxin, the AMESA system, is not referenced in Schedule “F”. This is in recognition that no specific requirements for certifying the AMESA system exist and that it does not represent a compliance parameter. Recognizing this fact, the ECA goes to further state that the performance of the AMESA system will be evaluated “in accordance with the principles outlined by 40 CFR 60, Appendix B, Specification 4.” Performance evaluation of the AMESA system has followed these principles in fulfillment of the ECA.

12. The AMESA readings have not yet been made available to the public. Will there be a report coming on the AMESA correlation efforts?

The Owners, Covanta, and consultants are working on the development of a work plan that will outline the modification that will be trialed to improve the correlation. It is understood that the AMESA is being used in Europe. The Owners are not clear how the

data is being used to adjust performance or if similar issues were experienced in Europe. The AMESA manufacturer has been consulted and is part of the team developing the workplan. The manufacturer has not expressed any concerns with the AMESA inspection or its operation. Several recommendations have been made regarding the length of the correlation testing and equipment cleaning schedule. The manufacturer has not expressed a concern over any differences between our operation and the European operations.

13. In the Source Test report the Dioxin and Furan analytical results and emissions data for the tests performed at the Quench Inlet of each Boiler are provided. What does this data mean?

The data for the Dioxins and Furans at the Quench Inlet of each Boiler provides the quantity of Dioxins and Furans in the combustion gases prior to being cleaned in the Air Pollution Control (APC) system. This allows the tracking of the efficiency of the APC.

14. The failure to meet the temperature in the combustion chamber of greater than 1,000 degrees Celsius (°C) can affect the quantity of the Dioxins and Furans in the system.

At 1,000°C Dioxins and Furans are destroyed. However, as the gas cools to around 400°C then there is denovo creation of Dioxins and Furans. It is important to ensure that the cooling of the gas occurs over a short time to minimize the quantities of denovo Dioxins and Furans.

15. Are there any protection mechanisms if the APC stops working? Do we solely depend on the leak detection system in the baghouse to notify the operators of a problem?

The failure of the APC would initiate a feed stop to prevent any exceedances. There are other systems for the removal of Dioxins and Furans from the flue gases such as the activated carbon system.

16. Are we measuring Dioxins and Furans below the detection limits?

The Owners are measuring Dioxins and Furans below the limit of quantification (LoQ), which is 32 pg TEQ/m³. The Owners also follow the guidelines for values below the detection limits and how they are calculated in the TEQ.

17. Between the Source Tests, how do we measure the levels of Dioxins and Furans?

Between the Source Tests, the Owners rely on the DYEC facility performance and the ambient air measurements to establish if the DYEC is operating under normal operating conditions. There are no continuous emissions monitors for Dioxins and Furans.

The fly ash is also tested quarterly to establish the levels of Dioxins and Furans. The fly ash is tested after the stabilization to determine the quantity in any potential leaching process.

18. When there was a Dioxins and Furans' exceedance, the performance indicators at the DYEC did not indicate an issue. Are there considerations to improving the facility monitoring?

Through the Abatement Plan there have been improvements made in the operations through revised SOPs and the baghouse monitoring has been improved with the installation of a leak detection system. These changes seem to have improved our compliance to date.

19. There seem to be Provincial initiatives that will affect manufacturing and the extended producer responsibilities. How will this affect the waste that goes to the DYEC?

The Owners are part of workshops and committees and are aware of the proposed legislation. The Owners are continuing to analyze the potential impacts and staff will be reporting to Durham Region Council. The DYEC was constructed with sufficient operational flexibility to accommodate these changes.

20. The reporting summaries do not indicate that there were Dioxin and Furan exceedances and do not reflect the poor performance at the DYEC. The EFWAC mandate is to review issues and advise the Owners.

The Owners were very transparent in the reporting of the exceedance and the follow up actions taken during the Abatement Plan. There were several reports prepared, along with news releases and notices on the Regional and project websites. Subsequent Source Test results demonstrated that the DYEC is operating within its compliance limits.

21. Why are Public Service Announcements (PSAs) used to disseminate information to the public. These PSAs may not be picked up by the news agencies.

The Owners use various media tools to ensure that the DYEC information is available to the public.

22. Will there be a Finance report on the DYEC construction and the 2016 reconciliation.

Once the yearend reconciliation has been completed, it will be reported to Durham Region Council. There will be a construction costs update report provided to Durham Region Council.

23. Will there be environmental performance adjustment granted to Covanta for 2016?

As reported to Durham Region Council, there will not be an environmental performance adjustment for 2016.

24. When will the motion regarding the recording of the meetings be addressed?

This motion has been discussed at Durham Region Council. There are currently discussions and assessments concerning the implications and financial impact of this motion for all the advisory committees. Durham Region staff will await Council direction on this issue.

25. Are the Opacity readings at the DYEC accepted as a surrogate for the particulate matter? Have there been any indication of high opacity readings. When the boilers are offline, is there a difference in the particulate matter (PM) readings at the ambient air monitoring stations?

The MOECC does accept the Opacity as a surrogate for the PM. It is not possible to correlate the Opacity to the PM. The Owners have not had any Opacity readings that are above the compliance limits. The Owners do not see a trend in the PM at the ambient air monitoring stations when the boilers are off line.

26. Where is the Opacity measured at the DYEC?

The Flue gas is measured at both boiler outlets before it is released to the stack.

27. With regards to the roof fire at the DYEC, will there be a report and what will be the modifications to ensure that this does not happen again.

The roof fire reports are being prepared and will be used to develop the corrective actions. The Owners anticipate the requirement to: update the fire detection and fighting equipment, the roof re-designed for the steam release and a repair to the damage. HDR will review the root cause analysis and the proposed corrective action and advise the Owners. There may also be a separate investigation by the insurance group.

There will also be follow up of the Emergency Response Plan to ensure lessons learned are captured.

28. What is the current diversion rate for the Regions?

Durham is reporting a 54% diversion rate and York anticipates a 67% diversion rate.

29. Committee members were canvassed as to whether they would be okay with the meetings being recorded and streamed on the website. The majority of the members did not object to this motion.

30. The frequency of the EFWAC meetings will continue to follow the Environmental Assessment Notice of Approval and the Terms of Reference. Staff will continue to schedule meetings for once a year during operations.

Meeting adjourned at 4 p.m.

Meeting attendees:

- M. Januszkiewicz, Director, Waste Management Services, The Regional Municipality of Durham (member)
- L. McDowell, Director, Environmental Promotion and Protection, The Regional Municipality of York (member)
- M. Saulnier, Director, Operations Services, City of Oshawa (member)
- N. Colucci, Director, Public Works, Township of Brock (member)
- B. Kester, Director, Public Works, Township of Uxbridge (member)
- B. Brooks, Superintendent of Solid Waste, Town of Whitby (member)
- F. Langmaid, Manager, Special Projects, Municipality of Clarington (member)
- C. Darling, CAO, Central Lake Ontario Conservation Authority (member)
- L. Gasser, Zero Waste 4 Zero Burning (member)
- W. Bracken, Durham Environment Watch (alternate)
- K. Meydam, Durham Environment Watch (member – attended at the table)
- B. Withrow, Facilitator, Meeting Facilitators International
- G. Anello, Manager, Waste Planning and Technical Services, The Regional Municipality of Durham
- L. Milne, Manager, Sustainable Waste Management, The Regional Municipality of York
- M. Smart, Administrative Assistant, Works Department, The Regional Municipality of Durham

Meeting #15 Agenda

Advisory Committee Annual Report



AGENDA

Energy from Waste Advisory Committee (EFWAC)

Meeting #15

Wednesday, November 28, 2018

2 to 4 p.m.

Lower Level Boardroom (LL-C)

Durham Regional Headquarters Building

605 Rossland Road East, Whitby

- 1. Welcome and Introductions**
- 2. Durham York Energy Centre (DYEC) 2017 Annual Compliance Report (ECA)**

The Project Team will respond to questions submitted by EFWAC members regarding the DYEC 2017 Annual Compliance Report.
- 3. Next Meeting**
- 4. Meeting Adjourns**

Meeting #15 Minutes and Presentations

Advisory Committee Annual Report

The minutes from Meeting #15 were not finalized before the 2018 Compliance Report and therefore are included in the 2019 Annual Compliance Report.

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



Energy from Waste Advisory Committee (EFWAC) Meeting #15

Date: Wednesday, November 28, 2018

Location: Durham Region Headquarters – Room LL-C from 2:30 p.m. to 4:30 p.m.

Facilitator: Bruce Withrow, Meeting Facilitators International

Attendees: Please see page 8 of 8

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 2017 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.

The Ministry of Environment, Conservation and Parks (MECP) acknowledged receipt of the Report and no amendments were requested.

2. There was a question regarding the completeness of Section 11; Operational Issues and Mitigation Measures and whether all outages are listed. This section meets the Environmental Compliance Approval (ECA) reporting requirement:

...a summary of dates, duration and reasons for any environmental and operational problems, Boilers downtime, APC Equipment and CEM System malfunctions that may have negatively impacted the quality of the environment or any incidents triggered by the Emergency Response and Contingency Plan and corrective measures taken to eliminate the environmental impacts of the incidents;...

Only those outages that may have negatively impacted the environment were listed. The operational reports list all feed-stops and maintenance outages. This permits the Owners to track the DYEC facility availability. It was noted that failure to meet the availability is not tied to Liquidated Damages.

To enhance transparency, a more comprehensive list of outages will be suggested for the next annual report.

3. There was discussion over the lateness of the meeting in relation to the annual report submission to the MECP by March 31, 2018.

Staff committed to scheduling the 2019 meeting as soon as practicable.

4. The Central Lake Ontario Conservation Authority (CLOCA) expressed the Authority's interests with the monitoring at the DYEC site, and in particular the stormwater management facility.

It was related that the site has two stormwater management ponds that are oversized to accommodate the full site capacity. The discharge from the ponds is released into the swale that follows the CN railway after which it proceeds through a recently constructed tunnel into the creek.

The surface water monitoring requirement within the ECA has been put on hold due to amount of construction in that area and the disruption to the surface water. The surface water monitoring will be re-introduced into that area once the construction has been completed.

5. There were further questions with regards to the site design and any mitigation of liquids spilling from the transportation vehicles. It was stated that all vehicles are covered and monitored by staff at the scale house and within the tipping floor. If the vehicles are identified as requiring a cleanup, there is a cleanup station within the receiving building. There was also discussion with reference to water from the DYEC facility reaching the Stormwater Pond. The DYEC is a zero-water discharge facility in that all process water is utilized within the plant.

6. An update on the recommendations within Section 17 was requested. The recommendations are as follows:

- 1) Achieve ISO14001:2015 Environmental Management System certification.
- 2) Develop a new AMESA Work Plan that incorporates additional long-term sampling to complete the AMESA performance evaluation.
- 3) Continue to optimize facility operations to achieve reductions in site power usage and decrease reagent consumption while maintaining full compliance with all regulatory limits.

Covanta has received their ISO certification. The AMESA work plan has been discussed with the MECP and a work plan will be implemented accordingly. It is

anticipated that once a correlation between the AMESA and the Source Test has been achieved then reporting can be provided.

7. There was a question with regards to how unacceptable and non-bulky items are treated once received at the DYEC. It was also questioned how a hot tub could slip through the screening process at the waste management facilities and the transfer stations.

Staff reaffirmed that there is screening prior to receipt at the DYEC but occasionally, very few items such as large timbers or hot tubs will be received. If these items cannot be processed they are sent off-site for disposal.

8. The long-term Dioxins and Furans sampling system (AMESA) reporting is included in page 43. It was questioned as to why staff focus on the need for a correlation of the AMESA data to the Source Test data.

In accordance with the ECA requirement under Section 7:

(3) (a) The Owner shall develop, install, maintain and update as necessary a long-term sampling system, with a minimum monthly sampling frequency, to measure the concentration of Dioxins and Furans in the Undiluted Gases leaving the APC Equipment associated with each Boiler. The performance of this sampling system will be evaluated during the annual Source Testing programs in accordance with the principles outlined by 40 CFR 60, Appendix B, Specification 4.

Staff indicated that moving forward, they will need confidence in the AMESA data so that this information can be used to meet the ECA requirement which states:

(b) The Owner shall evaluate the performance of the long-term sampling system in determining Dioxins and Furans emission trends and/or fluctuations as well as demonstrating the ongoing performance of the APC Equipment associated with the Boilers.

The AMESA is a continuous sampling system and collects a sample over a 28-day period. The AMESA cartridge is then sent to a laboratory. The dioxin and furan results are a daily average over the operating time and is not concise data related to an event.

There was further questioning regarding the long-term benefits of the AMESA data in relation to the limited time the Source Test is conducted. It is understood that through the AMESA, staff are collecting data over the longer term and capturing data for various operating conditions. However, staff reiterated that the AMESA data needs to be correlated to the Source Test so that staff understand the operations in relation to the compliance limits.

The purpose of the AMESA system is to provide sampling over a long period and the value of the data for Dioxins and Furans is meant for information to identify trends and inform the operators if adjustments to the process are needed. The AMESA data is not to be used for compliance purposes. It was requested that the Owners provide a formal response as to why the AMESA data is not reported as required under the ECA section 14:

(4) The Owner shall maintain an on-Site written or digital record of activities undertaken at the Site. All measurements shall be recorded in consistent metric units of measurement. As a minimum, the record shall include the following:

(g) all records produced by the long-term sampling program for Dioxins and Furans required by this Certificate;

The Owners have engaged the manufacturer and subject matter experts who have come to the DYEC and provided input into the AMESA work plan.

9. It was further clarified that there have been modifications to the AMESA system over the last two years to further improve the correlation. There were different probe materials used, procedures were modified, and cleaning increased. There was a question as to who authorized the changes and were they certified.

All modifications were suggested by the manufacturer and the subject matter expert worked with the Owners to monitor the AMESA performance.

10. There was discussion regarding the ambient air exceedance of Dioxins and Furans at the DYEC which occurred just a week prior to the Source Test. This incident has been reported to the MECP, Durham Council and the Public.

The MECP has responded to the event in their letter dated October 31, 2018 (posted on project website) and stated that:

The ministry completed a data validation review and toxicological assessment of the dioxin and furan results. The dioxin and furan results are deemed to be valid based on a review of the laboratory analysis and the recorded air flows. The toxicological review concluded no adverse effects would be expected based on the reported concentrations.

During the monitoring period the predominant winds were blowing from the southwest and west which places the Courtice station upwind of the Durham York Energy Centre. A potential source of the elevated dioxin and furan concentrations could not be determined due to light winds and low mixing/dispersion conditions.

The AMESA system was collecting a sample over this period of time. There was no indication of an exceedance at the DYEC, but due to a lack of correlation with the Source Test, the Owners cannot place any confidence in the AMESA data at this time.

11. Clarification was requested concerning section 10.5 of the report Sewage Works:

In accordance with ECA Condition 5, Inspections and Maintenance of the Works, (7), the Owner shall inspect the Works at least once a year and, if necessary, clean and maintain the Works to prevent the excessive build-up of sediments and/or vegetation. The annual sewage works inspection was performed in October 2017. No deficiencies were found.

The stormwater management ponds were cleaned out once, the monitoring of the surface water previously questioned refers to the creeks and along the swales. The sewage works also speaks to an on-site inground tank that is used to collect the process water that is recycled through the DYEC facility for further use. The DYEC is a zero-water discharge plant.

12. There was a question regarding the DYEC capacity of 140,000 tonnes per year and Durham's allocation of 110,000 tonnes per year. Staff have reported that Durham Region generated approximately 118,000 tonnes of waste for disposal yet only 105,000 tonnes of Durham Region's waste was processed at the DYEC.

Durham Region's allocation at the DYEC is 110,000 tonnes. Due to the variable waste generation throughout the year and the extended outage periods, Durham Region had to bypass waste during peak generation periods and approximately 13,000 tonnes of waste were bypassed to other disposal sites such as Covanta NF, Walker Brother landfills in Thorold, and Metro landfill in NY. Durham Region found themselves in a position during the last several months of not having waste for processing at the DYEC. Fortunately, York Region was able to use the surplus capacity and the DYEC processed 140,000 tonnes in 2017. The overall spilt was approximately 35,000 tonnes for York Region and 105,000 tonnes for Durham Region.

The 2017 reconciliation of costs has not yet been completed and will be reported at a later date. It was noted that the Owners have recovered lost electricity revenues.

13. The Source Test report describes the sampling and analysis procedures for Dioxins and Furans. It was suggested that the sampling method was changed since 2015 testing. The ECA does not stipulate which methods are to be used but indicates that the Owners shall finalize the test protocol in consultation with the MECP and that the Owners shall not commence the Source Testing until the MECP has accepted the test protocol. This process is followed for each Source Test.

The subsequent question was asked regarding the statement in the report:

Semi-volatile organic compounds (SVOC), including dioxins and furans, polychlorinated biphenyls (PCBs), chlorobenzenes (CBs), chlorophenols (CPs) and polycyclic aromatic hydrocarbons (PAHs) were sampled at the BH Outlet of each Boiler using the sampling train and sampling procedures outlined in Environment Canada Report EPS 1/RM/2.

And the AirZone third party peer review stated that

SVOC samples were collected following the procedures in EPS 1/RM/3 and US EPA Method 23

Staff will reconcile these two statements and email the committee members

14. The subsequent question was asked concerning the modification of the sampling process as detailed in the AirZone report. The modification of the sampling was proposed by the third-party independent sampling consultant and approved by the MECP. The AirZone report states that “This change does not compromise the performance of the method for collection of SVOCs.”

Ortech’s sampling train differs from that shown in Figure 1 from Environment Canada Report EPS 1/RM/2, since the condenser and XAD tube are fused into one continuous piece to minimize leaks. Therefore, the condenser could not be soaked for five minutes with acetone and hexane, as recommended in the method. The condenser/XAD trap instead had both ends capped and wrapped in tin foil and the soaking and sample recovery was conducted by the laboratory. This change does not compromise the performance of the method for collection of SVOCs.

15. As requested, staff will ensure that future reports will have a figure with the environmental sampling location identified.
16. There was discussion with regards to the 2017 annual waste diversion which has plateaued at 55%. The question was asked as to why there has not been an increase in diversion. In fact, the pre-adjustment rate for diversion in 2017 was 51%, and the 2016 pre-adjustment diversion rate was 53%. There appears to be a decrease in waste diversion.

The trend noted in this report is common to all municipalities, Durham Region collects more volume, but diversion is calculated by tonne, staff have reported to Durham Council that plastics are creating a lot of volume in the Material Recovery Facility (MRF), and this lighter packaging is the drop in the recycling numbers.

York Region reports that pending verification they will have a 68% diversion rate. Staff will investigate what programs York Region is using to allow them to increase their numbers.

Staff will also investigate creating diversion reports that have consistent variables and reported rates.

17. There were questions regarding why Boiler 2 was currently off line. Boiler 2 is undergoing regular maintenance to address the buildup of soot.
18. How does the projected 2018 availability compare to 2017? So far in 2018, it is higher; last year the availability was 85% and it looks like 2018 will be 90%.
19. The results of the 2018 fall Source Test were posted to the project website on December 7.
20. What are the next steps for the DYEC capacity? Staff is still planning on bypassing waste up to 10,000 tonnes in 2019.
21. In 2018, it is expected that Durham Region will deliver 110,000 tonnes of waste to the DYEC. Staff anticipate bypassing up to 10,000 tonnes of waste of which 3,500 tonnes went to Canada Fibres for mixed-waste pre-sort for use in the development of a composition report.
22. Were there any exceedances at the DYEC in 2018? There was one carbon monoxide exceedance on March 2 that resulted in a four-hour rolling average concentration of 48 mg/Rm³, as compared to the in-stack emission limit of 40 mg/Rm³.
23. There was a question regarding the frequency of laboratory auditing by AirZone. The need for laboratory audit(s) is an extraordinary request and is implemented when a need arises. Laboratories are certified agencies and are audited by their respective regulator. A laboratory audit will be conducted if recommended by AirZone or if there is an event that raises an issue with the laboratory results. It is beyond the industry standard to have customers audit laboratories.

Meeting adjourned at 4:23 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)

N. Colucci, Director, Public Works, Township of Brock (member)

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)

L. Gasser, Zero Waste 4 Zero Burning (member)

W. Bracken, Durham Environment Watch (alternate)

K. Meydam, Durham Environment Watch (member – attended in audience)

B. Withrow, Facilitator, Meeting Facilitators International

G. Anello, Manager, Waste Planning and Technical Services, The Regional Municipality of Durham

L. Waller, Works Technician, Waste Management Services, The Regional Municipality of Durham

D. Luciano, Works Technician, Waste Management Services, The Regional Municipality of Durham

M. Smart, Administrative Assistant, Works Department, The Regional Municipality of Durham

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 have not been finalized and therefore are not available for inclusion in the 2019 Annual Compliance Report.