Emissions Monitoring Plan Comment and Response Table #2

March 19, 2013

Item #	Comment	Response
1	**Regions and Ministry Fail to Act on Repeated and Additional Requests for Continuous Monitoring of Particulate Matter At Stack.** This further revision of the AEMP again fails to address or honour previous requests from the public representatives on the EFWAC committee (comments submitted August 2011), and the more recent resolution from the WMAC Committee which also requested continuous monitoring of particulate matter at the stack. We find it completely unacceptable that the MOE (and the Regions) would not insist upon continuous monitoring of particulate matter at stack given the following facts: • The Ministry's own Guideline A-7 clearly encourages continuous monitoring of particulate matter at the stack instead of monitoring opacity; It is stated on page 15 of Guideline A-7 that "The Ministry encourages the use of high sensitivity continuous particulate matter monitoring systems over opacity monitoring since particulate emissions have a direct environmental impact." • Ambient PM2.5 Levels Already Exceed Canadian and World Health Organization Guidelines. The Durham/York EA documented that	Installation and operation of continuous monitoring equipment for particulate matter has not been determined to be reliable for demonstrating compliance has not been recommended by the Regions technical advisors, HDR. Guideline A-7 states "…intent of the monitor may be implemented either by installing a device for direct measurement of the parameter or of a suitable surrogate." The continuous opacity monitors required under Section 7 (2) (d) of the CofA will serve as the suitable surrogate to demonstrate the baghouse installed for particulate control is operating properly. Senes Consulting Limited also state in email to the Municipality of Clarington dated June 7, 2011, "Opacity is used as a surrogate for PM emissions and provides qualitative information on the operation and maintenance of particulate control equipment." In a letter addressed to Clarington by the MOE dated July 28, 2011, in response to Clarington Council recommendations, " …there are a number of process parameters which must be continuously monitored which give confidence that the facility is operating appropriately and it meeting all of the regulatory limits." The issue of $PM_{2.5}$ and monitoring has been addressed by several documents throughout the EFW permitting process. Most recently it was responded to in the Comment and Response Table submitted to the MOE on February 11, 2013, and is included as Attachment 1 to this table as Emissions Monitoring Plan Comment and Response Table #1, Item #3. As summarized in a letter from the Ministry of the Environment to the members of the EFWAC dated November 9, 2012, dispersion modelling submitted with the Regions' Certificate of Approval application calculated ambient particulate concentrations according to a more conservative set of assumptions than was used during the Environmental Assessment. The modelling, which was peer reviewed by SENES Consultants Limited in May 2011, concluded that, despite the more conservative assumptions, the facility would contribute less than 1 $\mu g/m^3$ of $PM_{2.5}$ on a 24-hour average basis, which is well within the provincial standard for emissions from a single facility. The Ministry of Environment and the Durham Medical Officer of Health both reviewed the Human Health and Ecological Risk Assessment (HHERA) that was completed during the Environmental Assessment and concluded that the predicted increase to

	the measured ambient baseline concentration of 24-h average PM2.5 at the Courtice site was 28.6 µg/m3 and that concentration already exceeds the recently approved CCME (Canadian Council of Ministers of the Environment) guideline of 25 µg/m3 for 24-h average PM2.5. During the EA, reviewers from Health Canada and the MOE identified the elevated levels of PM2.5 at the site as a concern. Furthermore, the ambient annual average PM2.5 value of 10.2 µg/m3 documented in the EA at the Courtice site also exceeds the World Health Organization benchmark. As levels are elevated and already exceeding guidelines, and given that the incinerator is a significant source of further fine particulate emissions, it would be only be prudent to carefully and continuously monitor particulate matter emissions from the facility; • The Regions, their Project Team, and Durham Region Works Committee have received numerous formal requests/recommendations over the course of the EA, Certificate of Approval phase and planning phase to include ***continuous monitoring of particulate matter*** at the stack in their monitoring plans. Requests for continuous monitoring of particulate matter at the stack have been made by members of the public and by:	ambient concentrations resulting from the more conservative modeling assumptions were not large enough to affect the conclusions of the HHERA.

	- the environmental groups Durham EnvironmentWatch (DEW), ZeroWaste4ZeroBurning (ZW4ZB), and DurhamCLEAR which have public members participating on the EFW Advisory Committee (EFWAC) as mandated by the Minister of the Environment in his EA Conditions of Approval; - the EFW Waste Management Committee (EFW WMAC) which is the other Committee with public members dealing with incinerator issues (their recent resolution recommending that continuous monitoring of particulate matter be undertaken at stack is included as an attachment); • the Ministry of the Environment also received numerous comments and requests in formal submissions from the public, medical associations, individual physicians, scientists and environmental groups during the EA and during the Certificate of Approval application comment period which pointed to the lack of adequate monitoring for the facility and which correctly documented gaps, errors, and omissions in the reporting and assessment of particulate matter; • particulate matter emissions were under reported in the EA and particulate matter emissions in the Certificate of Approval are almost 2.5 times greater than what	

	was assessed for health risk in the EA; this was despite the Municipality of Clarington's submission to the MOE requesting that PM2.5 emissions be held to what was assessed for health risk in the EA; furthermore the MOE has not provided members of the public with detailed calculations and results showing how the health risk calculations were re-evaluated using the increased emissions in the Certificate of Approval; • despite Durham Region's promise to their residents that the facility will have state of the art monitoring, it has recently been brought to the attention of the Project Team and Durham Regional Council that other jurisdictions implement and *require* continuous monitoring of particulate matter at the stack. Continuous particulate monitoring devices are available, encouraged and in use in other jurisdictions. A document produced for Metro Vancouver by Stantec entitled *WASTE TO ENERGY-A Technical Review of Municipal Solid Waste Thermal Treatment Practices (March 2011)* reports (see Table 8-1) that the European Waste Incineration Directive requires continuous emissions monitoring of particulate matter. Furthermore Table 1 of that same document shows proposed revisions for MSW incinerators in British Columbia which include continuous monitoring of particulate matter at stack for all new	

	incinerators.	
2	**Regions and Ministry Fail to Act on Repeated and Additional Requests for Continuous Sampling of Mercury At Stack.** Again, by not including, and not insisting upon continuous mercury sampling in the AEMP, the Regions and the Ministry are not following what is clearly encouraged in the Ministry's own A-7 Guideline. The A-7 Guideline states on page 15 "Proponents for thermal treatment of municipal waste are encouraged to explore technical developments with respect to continuous or long-term sampling/monitoring techniques and consider installation of such devices for measurement of emissions of mercury and dioxins/furans." Furthermore, mercury is a pollutant of great concern and there is no secondary sort planned on the incoming waste to effectively remove items containing mercury. Environmental organizations, medical associations, the Municipality of Clarington, and most recently the Waste Management Advisory Committee have recommended/requested that continuous sampling/monitoring of mercury be included in the Regions' monitoring plan and program. Continuous sampling/monitoring exists, is in use, and is required in other jurisdictions (Germany is one example).	Both Durham and York have drop-off facilities where residents can bring mercury containing and other hazardous waste, as do some retail stores. Additionally, the Regions offer hazardous waste event days to provide additional convenience to residents. Extensive promotion and education by Durham and York is carried out to help educate residents on proper disposal of household hazardous waste. Very little to none of the waste entering the facility will contain mercury. In addition, the Regions will construct a household hazardous waste depot in Clarington as listed in the HCA. This will further remove these items from the waste stream. Our technical advisors, HDR, have reviewed these systems and advised the Regions as follows: Mercury CEMS do exist, however, these systems have challenges to long-term reliability, maintenance and calibration that limit the continuous operation. Continuous sampling for mercury has not been recognized as a standard compliance method used by the USEPA, EU, Environment Canada or the MOE for EFW facilities. Long term accuracy and reliability of the results of these systems has never been demonstrated. Additionally, in a letter dated July 28, 2011, addressed to the Municipality of Clarington from the MOE stated "…the Ministry's preference is to use annual source testing which is more accurate and reliable. Please note that there are a number of process parameters which must be continuously monitored which give confidence that the facility is operating appropriately and is meeting all the regulatory limits, including mercury." This comment was previously considered and responded to in the first Comment and Response Table submitted to the MOE on February 11, 2013, and is included as Attachment 1 to this table as Emissions Monitoring Plan Comment and Response Table #1, Item #4.

3	**Revisions Fail to Address other Comments Previously Submitted; Monitoring Frequency Inadequate and Less Frequent Than What is Done at Other Facilities.** This revisions also fails to address the other concerns we submitted on August 11, 2011. **Most of the pollutants of greatest concern** (PM2.5, mercury, cadmium, lead, VOCs, PAHs) will only be source tested **once a year** during an annual stack test. This frequency of testing is NOT acceptable. What will the emission levels be for these pollutants the other 364 days of the year? There is no way for the public and other parties to know what the actual emissions from this facility will be for these pollutants and whether or not the annual stack test data is representative of all other days in the year.` Furthermore, since submitting our August 2011 comments, we have, as members of the EFWAC Committee and as members of the public, brought attention to the Project Team and Durham Regional Council that other jurisdictions have more frequent stack monitoring. A web site for **Metro Vancouver** posts Metro Vancouver's solid waste fact sheet (August 2011) which states that the Burnaby incinerator operated by Covanta does stack testing THREE times per year for heavy metals and particulate matter. It states "Independent stack tests are performed on each processing line **three**	This comment was previously considered and responded to in the first Comment and Response Table submitted to the MOE on February 11, 2013, and is included as Attachment 1 to this table as Emissions Monitoring Plan Comment and Response Table #1, Item #2. It should be noted that the European Community Waste Incineration Directive referred to in the comments allows for the frequency of stack testing to be reduced from twice per year to once per year for heavy metals after the first year of operation, and once every two years for dioxins and furans. British Columbia proposes to increase the frequency of stack testing to address concerns about the consistency of operation over time. To address these same concerns, the Ontario regulatory framework, as embodied in Guideline A-7 and the approved Durham-York Energy Centre Environmental Approval, has increased the number and stringency of continuous monitoring standards, making the current Ontario standards the most stringent anywhere in the world. Continuous monitoring of key parameters will give confidence that the facility is operating consistently and is meeting all of the regulatory limits throughout the year. In addition, ground-truthing of the model will occur through the ambient air monitoring which also includes the continuous monitoring of various performance parameters.

	times a year to test for acid gases, total hydrocarbons, metals and particulate matter." Another document produced for Metro Vancouver by Stantec entitled *WASTE TO ENERGY-A Technical Review of Municipal Solid Waste Thermal Treatment Practices (March 2011)* states that the European Union Waste Incineration Directive "WID also requires at least two measurements per year of heavy metals" and Table 8-1 of that document also shows that the European Waste Incineration Directive requires continuous emissions monitoring of particulate matter. Again, the once a year testing frequency for particulate matter and mercury proposed in the AEMP falls far short of what is being done elsewhere and is not consistent with the Regions' commitment to provide state of the art monitoring.	
4	**Comment/Concern Regarding Change to 1.0 of AEMP**. The change above anticipates that there may be revisions to AEMP stemming from changes in the DYEC operations. It further states "Where such changes may occur, **a process must be followed** to consider them within the context of the Minister approved EA, the approved ECA and the approved Source Testing Protocol to determine if an amendment to the EA and/or ECA is required." (emphasis added) It is not apparent *what* process would be followed and that is a great concern. How	Included in each of the monitoring plans for the Durham York Energy Centre is a section which describes the actions of the Regions should they consider any changes to the plans. The next line in the plan after the quote in the comment states: "Consultation undertaken in support of amendments will be determined in consultation with the MOE-EAB." This is standard protocol for any proposed changes to an ECA, whereby the MOE requires formal consultation to determine what process will be required of the proponent. No specific process is currently defined because the process will vary as legislation and MOE protocols change in the future. No changes to any plan can occur without first consulting with the MOE. Further no change will be carried out unless approved by the MOE.

	will any requested changes be re-evaluated, re-assessed to determine if amendments will be necessary and if they are, how would health risks and ecological risks be re-evaluated? How would the public be notified of any proposed changes or amendments? Given that health risks and threshold levels were identified in the EA for certain pollutants (for example respiratory irritants, PM2.5, etc) and that unacceptable human health risks might indeed result from changes/amendments, especially for these sensitive pollutants, exactly what process would be followed? We have submitted formal comments that we are not satisfied with how the Regions applied for and the Minister permitted increased emissions in the Certificate of Approval above what was assessed for health risk in the EA and what was set as a Condition of Approval in the EA. The lack of a transparent process to disclose whether and how detailed risk calculations were re-evaluated was unacceptable. Please modify this section to clearly identify WHAT process would be followed and WHEN and HOW interested parties would be informed of any proposed changes or amendments to the AEMP. We request that those details be part of this plan.	

5	**Comment Re: Additional Paragraph Added to 4.2** Again, we object that continuous monitoring of organic matter is not used for compliance in addition to stack testing. This appears to be less stringent than what is being done and proposed at other facilities. Proposed revisions in B.C. include continuous monitoring of total organic carbon with an emissions limit based on the CEM monitoring results.	This comment was previously considered and responded to in the first Comment and Response Table submitted to the MOE on February 11, 2013, and is included as Attachment 1 to this table as Emissions Monitoring Plan Comment and Response Table #1, Item #5. A CEMS for Organic matter was stipultated in the CofA and will be installed on each unit at the facility. The CEMS for Organic matter will be used for operational monitoring and control. Demonstration of compliance with the performance standard for organic matter will be demonstrated through the annual stack test as specified in Schedule C of the approved Certificate of Approval. CEMS for organic matter have not been proven reliable for compliance through the USEPA Environmental Technology Verification Program. The facility will also be equipped with a CEMS for carbon monoxide which will provide a reliable, continuous indicator of complete combustion.
6	**Continued Concerns Regarding Reporting and Validation of Data.** Table 4 and 5 of the AEMP give lists of contaminants that will be source tested, however this list does not match the list of contaminants in Tables 8 and 9 for which source test results will be included in the annual reports. **We firmly request that all source testing results for ALL contaminants be included in the annual reports, in addition to the continuous monitoring results for all pollutants which are continuously monitored**. Concerns identified in the following comment we submitted in in August 2011 also remain. Concerns With Emission Monitoring Recordkeeping and Reporting Section 4.4 states that time-averaged values calculated from CEMs data used	Tables 4 and 5 are not intended to match Tables 8 and 9. • Tables 4 and 5 are the lists of contaminants to be tested during annual Source Testing. • Tables 8 and 9 are continuously monitored parameters and not the same as Source Testing. The results of all parameters listed in Tables 4, 5, 8 and 9 will be included in the annual reports as required by the Certificate of Approval and stated in Section 4.4.1 of the Plan. As noted in the same section of the plan, Relative Accuracy Test Audits (RATA) used to calibrate the CEMS will also be included in the annual reports." The start-up and shut-down procedures will allow for the introduction of natural gas to the process to ensure that the time/temperature requirements are maintained. This will also ensure the adherence to the performance limits. The requirement to shut down after an exceedance of a Schedule C parameter for more than three hours was introduced by the MOE in CofA Condition 6 (4). Shut down procedures will be in place which will ensure the facility is shut down safely.

	for comparison to prescribed emission limits will not include data collected during start-up, shut-down or malfunctions. The language in Section 4.4 of this report does not clearly define start-up, shut-down and malfunctions and this is needed to ensure that data reporting is in accordance with all Ministry guidelines and public expectations. For instance, while data collected during malfunctions of monitoring equipment might be excluded, it is absolutely NOT acceptable that data collected during malfunction of other equipment (such as air pollution control equipment) could be excluded from the time-averaged values used for compliance determination. Section 3.4.2 of Guideline A-7 states that data for transitional periods of start ups and shut downs must be included in the monthly and annual reports. We request that the Plan explicitly state that all raw data, including that collected during start-up, shut-down and malfunctions will be publicly available. We also request that emissions during start-up, shut-down and malfunctions be included in the total annual emissions and we request that this be included in the Final Emissions Report. We firmly request that the Plan contains a provision that any data collected which is not used for compliance reporting and /or public reporting be identified to the public and clear and detailed rationale publicly provided for any data exclusion. Furthermore, the Plan should include	Condition 15(1)(h) of the Certificate of Approval requires the Regions to include in the annual report "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." The annual reports are required to be posted on the project website and provided to Advisory Committee. Further, Condition 13(2) requires immediate notification of the District Manager of any CEMS readings that indicate that the boilers or air pollution control equipment are out of compliance, or any failure of the air pollution control equipment or boilers. The initial notification is required to be followed by a written report on the incident and corrective actions. The District Manager will therefore be aware of any equipment malfunctions and the reasons for any data excluded from the time-averaged emissions data. The District manager will not allow the Regions to exclude data from the time-averaged emissions calculations unless it can be demonstrated that the data is incorrect for some reason, such as a malfunction in the monitoring equipment itself. The Certificate of Approval requires the Regions to maintain a record of the raw data output from the CEMS, which is an important check for audit purposes. The Regions will provide time-averaged data to the MOE and to the public, as specified in Certificate of Approval Condition 16 (Public Access to Documentation).

	provisions for a back up CEM system when the in-service system is not available.	
7	**Numerous Test Procedures Revised However Project Team Does Not Provide Rationale For Changes And Underlying Documents.** Again, we must state that we have not been provided with the rationale/documentation explaining what prompted these changes to the testing procedures. Until we receive this information we are unable to determine what other questions and comments we have regarding these changes. We are concerned that there is a possibility that the new proposed procedures may be less conservative, less stringent, or less appropriate.	All clarifications or changes to testing procedures from the Regions original submission were made at the request of the Ministry of Environment. Provincial standards frequently offer a choice of testing methods. In the case of the testing procedures that were changed, the Ministry expressed a preference for one of the other methods listed in the regulations. The Regions clarified or revised testing procedures in compliance with provincial standards based on technical consultation with MOE staff and as directed by the MOE.
8	**No Rationale Provided for Deletion of Paragraph Regarding Particulate Testing.** In the "Summary of Changes" provided to the EFWAC members shown above, the Project Team provides only the original text and the revised text, but does not provide any rationale as to why this paragraph was deleted. We are not certain why this was necessary and need to know why the Ministry or Project Team decided it was necessary to do so. Until we receive this information, we are unable to determine what other questions and comments we have regarding this change. In addition, we wonder whether it would be prudent to also include stack testing of TSP with condensable and to include	The Regions clarified or revised testing procedures (and text referring to) in compliance with provincial standards based on technical consultation with MOE staff and as directed by the MOE. The Summary of Changes document was prepared at the request of the Ministry to allow for the changes in the Plan to be followed more easily by MOE technical reviewers. The deleted paragraph included references to two different standards, which was confusing and unnecessary given that only the more stringent standard applies. This change was made at the request of the MOE. Under the Certificate of Approval, the Regions are required to perform stack testing of Total Suspended Particulate (filterable only) and PM_{10} and $PM_{2.5}$ (filterable and condensable). The test method specified for PM_{10} and $PM_{2.5}$ (EPA Methods 201A/202) already measures filterable and condensable fractions separately.

	testing for PM10 and PM2.5 without condensables, IN ADDITION to the stack testing for TSP without condensables and PM10 and PM2.5 including condensables which is already proposed in Tables 4 and 5. It would seem such testing would give a clearer picture of the particulate emissions and their condensable and filterable fractions.	

Emissions Monitoring Plan Comment and Response Table #1 Submitted to the MOE on February 11, 2013		
1	The stack emission limit of 9mg/Rm3 for PM 2.5 should include filterable and condensable. This is a difference of what was approved in the EA. The CofA did not stipulate filterable only.	Air Pollution Source Control staff at the Standards Development Branch, MOE indicated that the particulate limits in A-7 are specifically for filterable particulate as is consistent with the Ontario Source Testing Code (OSTC). OSTC, version 3 (Method ON-5) defines particulate matter as: "Particulate matter refers to any filterable material, with an aerodynamic diameter between 44 um and 0.3um, that maintains its solid state properties at 120 degrees C, under atmospheric pressure." A letter to Clarington, dated July 28, 2011, from the MOE on the Clarington Council recommendation states "The Ministry has required that the condensable portion of particulates will be monitored as part of the annual source testing.
2	There is no way to monitor the pollutants from the facility on the days that stack testing is not performed. The frequency is not acceptable.	The waste coming into the facility is fairly consistent throughout the year. Both Durham and York have programs in place to remove unacceptable material. Continuous monitoring of key parameters will give confidence that the facility is operating appropriately and is meeting all of the regulatory limits. In addition, the ground-truthing of the model will occur through the ambient air monitoring which also includes the continuous monitoring of various performance parameters.
3	There is no continuous monitoring of particulate matter. Opacity monitoring is an unacceptable substitute.	Installation and operation of equipment that has not been determined to be reliable for demonstrating compliance has not been recommended by the Regions technical advisors, HDR. A-7 states "…intent of the monitor may be implemented either by installing a device for direct measurement of the parameter or of a suitable surrogate." The continuous opacity monitors required under Section 7 (2) (d) of the CofA will serve as the suitable surrogate to demonstrate the baghouse installed for particulate control is operating properly. Senes also state in email to Clarington dated June 7, 2011, "Opacity is used as a surrogate for PM emissions and provides qualitative information on the operation and maintenance of particulate control equipment." In a letter addressed to Clarington by the MOE dated July 28, 2011, in response to Clarington Council recommendations, " …there are a number of process parameters which must be continuously monitored which give confidence that the facility is operating appropriately and it meeting all of the regulatory limits."

4	The plan has no continuous monitoring of mercury.	Both Durham and York have facilities in which residents can take to dispose of mercury containing and other hazardous waste, as do some large box stores. Additionally hazardous waste event days are held each year to provide a more convenient drop off location for residents. Extensive promotion and education by Durham and York is carried out to help educate residents on proper disposal of household hazardous waste. Very little to none of the waste entering the facility will contain mercury. In addition, the Regions will construct a household hazardous waste depot in Clarington as listed in the HCA. This will further remove these items from the waste stream. The final revisions to the Ontario A-7 Guidelines also state mercury may be considered for continuous monitoring. Our technical advisors, HDR, have reviewed these systems and advised the Regions as follows: Mercury CEMS do exist, however, these systems have challenges to long-term reliability, maintenance and calibration that limit the continuous operation. Continuous sampling for mercury has not been recognized as a standard compliance method used by the USEPA, EU, Environment Canada or the MOE for EFW facilities. Long term accuracy and reliability of the results of these systems has never been demonstrated. Additionally, in a letter dated July 28, 2011, addressed to Clarington from the MOE stated "…the Ministry's preference is to use annual source testing which is more accurate and reliable. Please note that there are a number of process parameters which must be continuously monitored which give confidence that the facility is operating appropriately and is meeting all the regulatory limits, including mercury."
5	Will continuous monitoring of organic matter be used for compliance?	A CEMS for Organic matter was stipultated in the CofA and will be installed on each unit at the facility. The CEMs for Organic matter will not be compliance based as they have not been proven reliable for compliance through USEPA Environmental Technology Verification Program. Additionally Senes in a letter to Clarington dated June 7, 2011, stated "since the facility will be equipped with a CO monitor a CEM for organic matter is not necessary, nor warranted." Organic matter will be continuously monitored and used as a performance indicator of the combustion process.
6	Will start-up and shut down and malfunction from CEMS data be made publicly available and included in the annual emissions?	This data will be recorded, but will not be made publicly available. Start-up and shut-down CEM data will not be included. Reports which will be made publicly available are included in the CofA Condition 16. Public Access to Documentation.

		The start-up and shut-down procedures include the introduction of natural gas to the process to ensure that the time/temperature requirements are maintained. This will also ensure the adherence to the performance limits.
7	Continuous sampling for Dioxins and Furans should be used to determine compliance.	In a letter addressed to Clarington, dated July 28, 2011, by the MOE, in response to a Council recommendation states, "The Ministry considered the request to increase this to a biweekly frequency, however, chose to retain the monthly frequency. The purpose of this monitoring program is to gather information on dioxin and furan emissions over a long period of time, as opposed to being used for process control…Please note that there are a number of process parameters which must be continuously monitored which give confidence that the facility is operating appropriately and is meeting all of the regulatory limits, including dioxins and furans."
8	Table 4 and table 5 from the plan list the contaminants for compliance and source testing. If the contaminants in Table 5 are not compliance based then what is the standard to which they will be measured against?	The parameters for the contaminants not included in the CofA performance requirements and included in Table 5 will be modelled and compared against the limits contained in O.Reg 419/05 Air Pollution –Local Air Quality.
9	We do not think the choice of consultant used to prepare both the Certificate of Approval and the Emissions Plan is appropriate and an independent consultant should have been chosen.	All consultants were selected in accordance with the Region's finance and purchasing by-laws and have the skills, experience and qualifications to carry out the tasks required in an objective fashion. The membership of one consulting firm or another with a larger group or association is not a factor in the exercise of professional skills of its employees. Regardless of which consultant worked where, licensed and certified professionals must uphold their code of ethics first and foremost – and the Region has no reason to believe that this has not been the case for any consultant retained for this project.
10	We do not feel the EFWAC meetings count towards public consultation on this plan.	The public can always ask any member of the committee, or any local or regional councillor, to forward their concerns and they are invited to attend the public EFWAC meetings and council meetings.
11	We do not find it acceptable that the Facility could continue operation for 3 hours without shutting down, even if monitoring is showing major deviations from performance requirements. We find both the provision in the Certificate of Approval and this Plan, in failing to	This requirement was introduced by the MOE in CofA Condition 6 (4). Shut down procedures and will be in place which will ensure the facility is shut down in the safest manor possible. In the case of minor process upsets, shutting down the facility is not always the best available response from a human health and safety perspective. Whether or not the facility shuts down, the Regions and Covanta remain legally responsible for emissions from the facility and could be subject to enforcement action if judged by the Ministry of the Environment to have endangered

	address these inadequacies, unacceptable and failing to protect human health.	human health through improper management of the situation. The wording of Condition 6 (4) provides the operator with the flexibility needed to make the best possible decision to protect human health.
12	There is no continuous monitoring of carbon dioxide at the stack provided for in the Plan, though Guideline A-7 does list carbon dioxide as a parameter that may be considered for continuous or long-term monitoring. As the facility is expected to emit large quantities of carbon dioxide and its equivalents, and given the established high concern regarding their contribution to global warming, and that this is the first new incinerator facility in about 20 years in Ontario, continuous monitoring of carbon dioxide would be much better in establishing the actual annual carbon dioxide emissions from this incinerator than a once a year stack test.	Carbon dioxide is not a contaminant of concern but a GhG which will be estimated from combustion related parameters such as O_2 which will be continuously monitored. As listed on Table 5 of the Emissions Plan, carbon dioxide emissions testing wil be undertaken during source testing. The operation of the Facility will result in an overall reduction in GHGs when compared to the current practice of land filling waste. The Facility will directly emit fossil or "anthropogenic" CO_2 from the combustion of plastics, however, as noted in the Life Cycle Assessment report (Appendix C-3 of the EA), the amount of avoided GHGs associated with electrical energy/materials recovery and avoided landfill methane emissions is more than the direct fossil CO_2 emissions from the Facility. The net result is a reduction in GHG emissions.
13	While carbon monoxide will be monitored continuously at the economizer outlet, since there is no source testing proposed for carbon monoxide, that there will be no monitoring of carbon monoxide leaving the baghouse outlet. We request that carbon monoxide be included in the stack testing done.	CO is an operational parameter and utilized as a performance indicator of the for complete combustion efficiency. It is measured continuously at one location – economizer outlet – and is not affected by processes beyond that point so there is no need to source test when the CEM covers this more fully.