

If this information is required in an alternate format, please contact the Accessibility Coordinator at 905-623-3379 ext. 2131.

**To:** Mayor and members of Council

**From:** Ryan Windle, Director of Planning and Development Services

**Date:** April 12, 2021

**File No.:** PLN 33.3.10

**Re: Item 14.2, Unfinished Business on Council Agenda for April 12 with regard to Report 2021-WR-5 DYEC Operations, Long-term Sampling System Update for Dioxins & Furans**

On April 6, 2021, at the Planning and Development Committee there were four delegations by Durham residents and a presentation by Durham Region Staff regarding the above noted Regional Report. One of the delegations did not specifically address the Region's Report, speaking instead in opposition to any expansion of the Region's Energy from Waste facility and proposed Pre-Sort and Anaerobic Digester planned by the Region to be sited next to the Durham York Energy Centre.

Council requested that Staff prepare a draft letter (Attachment 1) to Durham Region to address the request outlined in the delegates communications and PowerPoint presentations. The letter is to "demand" the requested actions identified by the delegates be taken in Resolution PD106-21.

In the final paragraph of the draft letter Staff have included a request that the minutes and resolutions from EFW-WMAC go to Regional Council. This request was previously made by Clarington Council and the Region denied the request; as noted in March 29 GGC agenda - <https://pub-clarington.escrimemeetings.com/filestream.ashx?DocumentId=22189>.

If the requests in the draft letter to the Region are denied again, Council may then wish to trigger the remedies set out in the Host Community Agreement to address disputes between the Region and Clarington.

As background to the draft letter Staff are providing two additional attachments to this memo. Attachment 2 provides relevant sections of the Host Community Agreement between the Region and Clarington. Attachment 3 is an excerpt from [PSD-064-16](#) as it outlines the monitoring by the Region and Ministry of Environment, which has since been renamed.

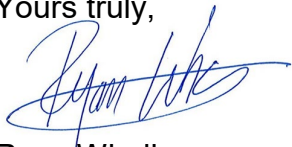
Ministry of Environment, Conservation and Parks. The report was requested to determine whether and how an independent air quality expert could be retained by Clarington; Council did not retain a consultant at that time. The reason for including the Report excerpt, being Section 1.2 and 1.3 is to provide background on the air emissions monitoring that happens at the Durham York Energy Centre.

**Suggested Recommendation:**

Clarington Council endorse the Letter to the Region by Resolution.

The resolution would then become an attachment to the letter.

Yours truly,



Ryan Windle  
Director, Planning and Development Services Department

cc. June Gallagher, Municipal Clerk  
Andy Allison, CAO

Attachment 1 – Draft Letter to the Region

Attachment 2 - Excerpts from the HCA

Attachment 3 – Section 1.2 and 1.3, Excerpt of PSD-064-16



April XX, 2021

Regional Chair John Henry and Councillors  
The Regional Municipality of Durham Headquarters  
605 Rossland Road East  
Whitby, Ontario L1N 6A3

Dear Chair Henry and Regional Councillors

**Re: Report 2021-WR-5 DYEC Operations, Long-term Sampling System Update  
for Dioxins & Furans**

On Tuesday, April 6, 2021, Clarington's Planning and Development Committee heard three delegations by Durham residents with regard to the above noted item. In addition, Regional Staff, Commissioner Siopis and Mr. Anello, provided a presentation addressing the same issue. While Clarington Council appreciated hearing the delegations and having Regional Staff address the comments of the delegates, this was a discussion that should have been occurring at the Regional Council table. In the delegates letter to Chair and Regional Councillors regarding this matter, dated March 17, 2021, and their subsequent delegation to Regional Council on March 24, a request was made for Regional staff to be directed "to respond in writing to the concerns raised." Report 2021-WR-5 was received for information by Regional Council on March 24, 2021.

The partnership outlined in the Host Community Agreement (HCA) for the Durham York Energy Centre (DYEC) was between the Region of Durham and Clarington and included obligations for both parties. Amongst the obligations, and in particular Section 3 are the operational requirements for emissions control and ongoing monitoring.

Regional Council is well aware of the importance of air quality and the emissions to all of Durham's residents. Clarington relies on the competency and professionalism of Durham Staff, their consultants, the peer review consultants, and the operator, as well as the assurance of the Ministry of Environment, Conservation and Parks oversight regarding the performance requirements set out in the Environmental Compliance Approval (ECA). The ECA requirements were built off of the Ontario Guideline A7 requirements for the control, monitoring and performance testing of incineration systems, European Union standards outlined in the HCA and the approved Environmental Assessment for the Energy from Waste Facility.

The long-term partnership outlined in the HCA is for the operational lifespan of the DYEC. It has taken some five years for the calibration between the stack tests and AMESA cartridge to render reliable monthly data regarding dioxins and furans. As such, Clarington is formally requesting that the AMESA data, which we understand is housed at the DYEC, be made available to the public. This would include, at no cost to the requestor, release of:

- all AMESA data from installation to present and include underlying reports (if requested); and
- in future AMESA results as they become available (typically on a 28-day basis).

Further, currently the minutes and resolutions of the EFW-WMAC Committee go to the Works Committee. Therefore, it is difficult for Regional Council members to be aware, especially when requests and resolutions from the EFW-WMAC committee are only received for information, if and when there maybe ongoing monitoring issues at DYEC. Clarington Council is requesting that the minutes and resolutions of EFW-WMAC go to Regional Council along with the actions taken by Works Committee. In this way, much like the ongoing peer review of the emissions monitoring at the DYEC there can be ongoing knowledge and monitoring by Regional Council members.

The above noted letter was endorsed by Resolution number XX-21.

Yours truly

Mayor and Members of Council  
Municipality of Clarington

- 3.1 Durham shall ensure that the EFW Facility incorporates and utilizes modern, state of the art, emission control technologies that meet or exceed the Ontario A7 air emission guidelines and European Union standards as identified below:
- 3.2 Durham shall ensure that the EFW Facility utilizes maximum achievable control technology (MACT) for emissions control and monitoring systems. Durham and the operator shall seek to achieve normal operating levels significantly better than the emission limits identified in Section 3.1.
- 3.3 Durham shall ensure that, where technically possible, the EFW Facility utilizes 24/7 monitoring systems for such parameters as are deemed appropriate by the Ministry of the Environment. The results of such monitoring systems shall be made accessible to the public on a website or programmable display board designed for such purpose. In addition, Durham shall ensure that the operator monitors the ambient air in the immediate vicinity of the EFW Facility for a three year term commencing upon the commencement of operations.
- 10.8 In addition to all public information, the Operator shall on or before March 31<sup>st</sup> in each calendar year provide the Clerk of Clarington with a report related to the emissions output from the EFW Facility for the previous calendar year.

**15. Further Assurances**

The parties hereby covenant and agree, after a request in writing by one party to the other parties, to forthwith execute and provide all further documents, instruments and assurances as may be necessary or required in order to carry out (and give effect to) the true intent of this Agreement, and to effect the registration against and release from title to the lands subject to this Agreement of such notices or other instruments in accordance with the provision of this Agreement.

## 1.2 DYEC Facility Air Emissions Monitoring Program

Separate from the DYEC Ambient Air Quality Monitoring Plan, the Air Emissions Monitoring Plan has been prepared to satisfy Conditions 12 and 13 of the EA Notice of Approval and Conditions 7(1), 7(2) and 7(3) of the ECA. Air emissions monitoring started when the first discharges were emitted from the facility. The monitoring program includes:

- a) Continuous emissions monitoring systems (CEMS);

Continuous emissions monitoring (CEM) began with the commencement of boiler operations (each boiler has its own monitoring equipment). A list of CEMS monitoring parameters is provided as part of Attachment 1. Live CEM data is posted to the DYEC website and the external facility display board.

- b) Stack testing (also known as source testing);

In addition to CEM, air emissions from the facility are tested twice per year by a stack (source) test. The parameter categories tested during the stack (source) test are also listed in Attachment 1. The stack tests are carried out by a qualified air specialist team under the scrutiny of an independent (third party) consultant. The labs that analyze the samples collected are selected by Durham Region and results are submitted to the MOECC.

- c) Long term sampling for dioxins and furans;

Long-term sampling for dioxins and furans is performed by the AMESA sampler. Through continuous monitoring, the sampling is intended to determine long-term variations of dioxin and furan emissions levels over time. The system is evaluated as part of the stack testing program. When Boiler #2 failed the stack test in May 2016, the Region retained experts to ensure that the AMESA sampler was performing as anticipated.

## 1.3 DYEC Facility Air Pollution Control Equipment

Each boiler has its own dedicated Air Pollution Control system consisting of:

- Selective non-catalytic reduction system for control of nitrogen oxides (NO<sub>x</sub>);
- Patented Very Low NO<sub>x</sub><sup>TM</sup> system for additional NO<sub>x</sub> control;
- Evaporative cooling tower with dry lime reactor for acid gas control;
- Activated carbon injection system for mercury and dioxin control;
- Minimum temperature of 1,000°C for VOC and dioxin and furan control; and
- Fabric filter baghouse system for particulate matter control.

CEM devices monitor stack emissions on a continuous basis to ensure compliance. The DYEC is required to meet the air emissions standards set out in Ontario Regulation 419/05 Air Pollution – Local Air Quality (O.Reg. 419/05) and the MOECC Guideline A-7 Combustion and Air Pollution Control Requirements for New Municipal Waste Incinerators (A7 Guideline). One exception to this is the stack emission limit for dioxins and furans at the DYEC, which is more stringent than the A7 Guideline limit (60 pg/Rm<sup>3</sup> for the DYEC compared to the A7 Guideline value of 80 pg/Rm<sup>3</sup>).