

# Long-Term Sampling System Update for Dioxins and Furans at DYEC

Presentation to Clarington Council

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I am here this evening to speak to you about my concerns regarding Durham York Incinerator and its Long-Term Sampling System (AMESA) Update and staff comments on Works Report WR-5.

**2** You've already heard Wendy and Linda speak to this subject and a lot has been covered. As a resident of Clarington, I'd like to focus on the lack of information provided to the public in any meaningful way, and why it makes a difference to the public (and Council's) understanding of the risks incineration poses to our health.

As you know, AMESA is the long term continuous sampling of dioxins and furans. Why is this important? Clarington residents must know the sampling results to be able to understand and assess the potential impacts of the incinerator on our health and natural environment.

**3** Dioxins are highly toxic and can cause **cancer**, reproductive and developmental problems, damage to the **immune system**, and can interfere with hormones. Dioxins accumulate in food chains, concentrating mainly in the fatty tissue of animals. (**Agent Orange** was a herbicide mixture used by the U.S. military during the Vietnam War. Much of it contained a dangerous chemical contaminant called **dioxin**. ... As many U.S. Vietnam-era veterans know, **dioxin** is a highly toxic and persistent organic pollutant linked to cancers, diabetes, birth defects and other disabilities.)

Most people are exposed to **dioxins** throughout their lifetime in small amounts through the foods they eat. **Dioxins** are taken up by fish and other animals, where they get concentrated and stored in fatty tissue. Dioxins travel long distances, are found in the soil, and bioaccumulate there. Food animals eat vegetation and it is stored in their fatty tissue. We eat the meat, fruits and vegetables, eggs, whole milk, cheese and other dairy products.

Children: Dioxins have an impact on the growth and development of children. Most of the new studies on dioxin address its effects on children, notably the effects on the development of the immune, reproductive, and nervous systems, in particular

cognitive and learning abilities. While exposure of the general population occurs through ingestion of many common foods, children exposed in utero (in the womb) during critical periods of development appear to be the most sensitive and vulnerable to the toxic effects of dioxin.

**4** The International Agency for Research on Cancer (IARC) -- part of the World Health Organization published their research into dioxins and furans and announced on February 14, 1997, that the most potent dioxin, was considered a Group 1 carcinogen, meaning that it's a known human carcinogen. EFW incinerators are a known source of dioxins, and levels can change depending on what is being burned on any particular day.

A 2003 re-analysis of the cancer risk from dioxin reaffirmed that there is no known "safe dose" or "threshold" below which dioxin will not cause cancer.

These are just a few reasons why we need to have more complete information on AMESA results and why long term sampling of dioxins and furans was requested by citizens during the Environmental Assessment, so that we would know the level of dioxins emissions between pre-advised Source/Stack tests which are conducted under optimal operating conditions.

We do get some information on levels of dioxins twice a year when source tests are done at the stack. However, that's only a few days out of an entire year, and these two source tests are done after boilers are shut down for maintenance, everything is cleaned and checked so the plant will be operating at its best. Start up and shut down (upset conditions) are not included in results, when we know the dioxins are higher than during normal operation, but those numbers are not included.

**5** Now, with the AMESA Long Term Sampling, we are still not getting sampling results on a monthly/28 day basis – this year, starting with only 2020 results, even though Amesa has been sampling since 2015, it is saved up to the annual report and will be given once a year – not the monthly sampling results, but as a “rolling average”. That defeats the purpose of this type of monitoring.

We need more monitoring, not less. We have not had any results since the Fall of 2015, when AMESA was installed, until the 2020 Annual Report, released last week, with only 1 year of results. The public is paying for this and we should have all the information (lab results) that come from the monthly/28 day results. ***The public is paying for this and we should have all the information that comes from it.***

Clarington Council/Staff and residents MUST have the opportunity to review all the AMESA sampling data after the lab analysis becomes available, monthly, as should Regional Council. These results should be posted to DYEC website routinely after sampling cartridge data is available. Works Staff were claiming until quite recently, that they had not been reviewing the AMESA data. They leave it all to Covanta to do.

Residents of Clarington and Oshawa are most directly impacted by incinerator operations. We deserve better and Durham Region promised Clarington "the best of the best" monitoring - it's past time Durham delivers on that promise. We stand behind our Councillors who are looking out for the well-being and safety of our community and our residents.

**6** This isn't something that will just go away, and for the sake of ourselves and especially the children and the vulnerable, we ask that Clarington Councillors advocate clearly on our behalf to Durham Region, demanding transparency and to deliver on monitoring commitments made to Clarington Council and residents since before EA approval. It seems that's not happening on several levels.

Please pass a motion tonight requesting AMESA sampling results taken monthly/28 days, from incinerator start up in 2015, to the present and that these be posted on the DYEC website.

Thank you.

Questions?