

Delegation to Clarington Council
April 12, 2021

Item 14.1 Unfinished Business

Item 14.1, St. Marys Cement – Bowmanville Site,
Environmental Compliance Approval Amendment for
the Expanded Use of Alternative Low Carbon Fuels

Clarington In A Unique Situation And Must Take Action On Behalf of Residents

- ***Two major facilities with significant dioxin and furan emissions, in close proximity on our waterfront***
- *St Marys application significant and major change from 96 tonnes/day of LCF to 400 tonnes/day of ALCF*
- *No limits on waste service area/sources; wide ranging list of potential waste materials including plastics, paper fibres, films*
- *Each would be permitted to burn about 400 tonnes of garbage per day*
- *Urge Clarington Council to seek leave to appeal*

A reasonable person would have considered the following facts:

- This is a major long-term change to cement operations
- Capacity increasing more than four-fold
- Waste sources not limited by location or sector (can include industrial/commercial)
- Vastly expanded list of acceptable wastes including plastics, papers, biomass, etc and infinite combinations thereof
- Scope of SMC study however limited to two blends from few sources with only one achieving maximum feed rate
- **They have been given approval to burn what they have not tested**

A reasonable person would have considered the following facts:

- Both incinerator and St Marys would/will be burning garbage and emissions contain the same chemicals of potential concern (COPCs), including dioxins/furans, heavy metals
- 30% of the COPCs increased with ALCF
- Significant variability in emissions with LCF and ALCF
- Dioxin/furan emissions increased with LCF
- Significant variability within samples of same blend
- Halogen content in fuel exceeded St Marys criterion
- Other jurisdictions only grant burning waste permits limited to a particular fuel blend from a particular source

A reasonable person would have considered the following facts:

- Both incinerator and St Marys would/will be burning garbage and emissions contain the same chemicals of potential concern (COPCs), including dioxins/furans, heavy metals
- SMC emission limits are inconsistent and more lax than those the emission limits for the incinerator
- Emission limits for SMC compare very poorly with other jurisdictions

A reasonable person would have considered the following facts:

- U.S. Federal requirements are much more stringent:

Below find the U.S. 40CFR Subpart DDDD (NSPS-Table 8) emission limits, converted to same basis as Ontario ($\frac{mass}{Rm^3}$), compared against the Ontario and St Marys (SMC) emission limits.

- U.S. Total Suspended Particulate Matter limit of $9.4 \frac{mg}{Rm^3}$ is much lower than Ontario (SMC) limit **50 $\frac{mg}{Rm^3}$**
- U.S. **dioxins/furans** limit of $53 \frac{pg}{Rm^3}$ is much lower than Ontario (SMC) limit **80 $\frac{pg}{m^3} TEQ$**
- U.S. **mercury** limit of $7.7 \frac{\mu g}{Rm^3}$ is much lower than Ontario (SMC) limit of **20 $\frac{\mu g}{Rm^3}$**
- U.S. **cadmium** limit of $1 \frac{\mu g}{Rm^3}$ is much lower than Ontario (SMC) limit of **7 $\frac{\mu g}{Rm^3}$**
- Note the above U.S. emission limits have been converted to Ontario reference conditions (25°C and 11% oxygen by volume).

A reasonable person would have considered the following facts:

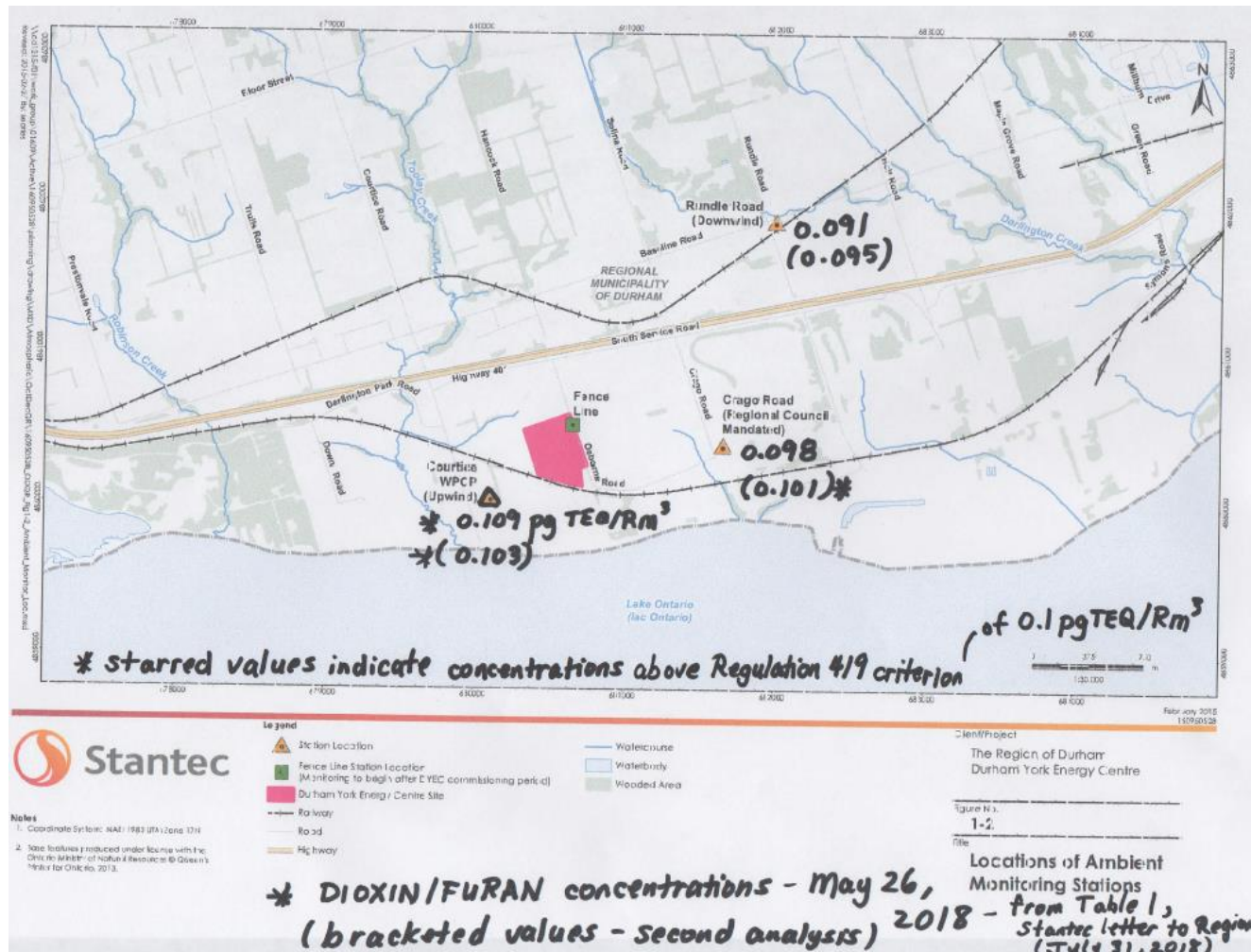
- SMC monitoring requirements are inconsistent and more lax than those for the incinerator in most cases
- SMC only does ambient air monitoring for PM; Durham incinerator ambient air monitoring done for dioxins/furans, range of heavy metals, PAHs, PM2.5, SO2, NOx, TSP
- Clarington and Durham Region requested monitoring and emission limits consistent with the incinerator
- Without SMC being monitored on similar basis, it is difficult to assess, there will be no clear answers and no accountability

A reasonable person would have considered the following facts:

- There have been stack emission exceedances at the incinerator for dioxins and furans and other pollutants;
- St Marys dioxin/furan emission rate exceeds incinerator sometimes
- There have been frequent and major ambient air exceedances at the incinerator monitors for benzo(a)pyrene.
- There have been exceedances in ambient air for total particulate matter.
- Deficiencies with the application were identified by the public, Region and Clarington.
- Local ambient monitoring shows elevated PM_{2.5}, SO₂, NO_x
- There was an AMBIENT AIR EXCEEDANCE FOR DIOXINS AND FURANS and results that were roughly 30% of criteria even prior to incinerator.

Dioxin/Furan Ambient Air Exceedance May 26, 2018 Questions and Concerns Still Remain; Very Calm Day

(note: handwriting in marker is my own)



Ministry Review Was Limited

Did Not Review AMESA Data, nor Profiles

Below are the responses I received to questions I submitted to the MECP for the June 7, 2019 MECP session at the DYEC

Did the MECP look at the dioxin/furan congener profiles and, if so, what did they show?

No, the ministry has not reviewed the dioxin/furan congener profiles.

Did the MECP review the AMESA cartridge results to see how the sample for that month compared and, if so, what was found?

The AMESA data collected during the month of May 2018 was not reviewed and assessed by the ministry as part of the review of the May 26 elevated concentration.

Clarington's Comments/Concerns Unaddressed in ECA Approval

- *“...we do not support Clarington becoming a location of convenience for waste diversion of Ontario’s Industrial, Commercial and Institutional sectors.”*
- *“We request that air quality and the cumulative effects of the proposal on the community be a key consideration as part of a thorough and comprehensive assessment by the MECP. Is the advancement of greenhouse gas reduction being achieved at the cost of impacted air quality or community health?”*
- *“the Municipality expects SMC will ensure the facility incorporates and utilizes modern, state of the art, emissions control technologies that meet or exceed provincial standards for the protection of human health and the environment. The Site should be required to meet the most current and stringent air emissions levels, and not be grandfathered as “existing.”*
- *“The generation of PM2.5 by SMC and the DYEC has been an on-going concern of Council. While previous presentations by SMC to Council have indicated that the contribution of PM2.5 to the community by the Site is low, the Emission Summary and Dispersion Modelling Report (BCX Environmental Consulting, March 2020) identifies PM2.5 as a primary emission from the facility. As stated, the Municipality requests that ambient air monitoring for the Site be consistent with that of the DYEC, including PM2.5.”*

A reasonable person would have considered the following facts

- All of the above and that a jurisdictional review and expanded literature review would help to determine BACT and appropriate waste fuels, emissions limits and operating procedures and address community and lower government concerns

2. Could the decision the appellant wishes to appeal result in significant harm to the environment?

- No shortage of expert opinion on non-threshold pollutants like PM_{2.5} and dioxins and furans and mercury
- Ministry Review is just one source

Dillon's Limited Scope

- November 5, 2020 Letter from Clarington to MECP Reviewer regarding Dillon's review:
- *"Their scope did not comprise a detailed peer review of the air quality and cumulative emissions aspects of SMC's proposal. A detailed technical review of all aspects of SMCs proposal is the responsibility of the MECP as a component of their consideration of SMC's Environmental Compliance Approval Amendment application."*

Requested Action

- Stand up for Clarington – cannot be silent
- Urge you to seek a leave to appeal tonight