

Delegation to Joint Committee
Planning, Health &SS, Works, Finance & Administration
May 25th, 2010
By Wendy Bracken

As I have closely followed this EA, there have been two sets of expressions repeatedly used to sell incineration by both the incinerator industry and by the Regions' consultants.

The first expression used repeatedly is "continuous monitoring" and even sometimes "ROBUST continuous monitoring".

Hopefully everyone in this room now understands the real details regarding what is actually the LACK of continuous monitoring for most of the pollutants emitted and know that, of the hundreds and hundreds of pollutants emitted, only a handful (5 or 6) pollutants will be monitored continuously. You should also understand that almost all of the pollutants of greatest concern such as lead, mercury, cadmium, PM2.5, volatile organic compounds, to name a few, will NOT be monitored continuously. They will likely be tested only ONCE A YEAR in a pre-arranged stack test. The other 364 days a year, the quantity of these pollutants emitted is really not known and that is very concerning, especially when there is no pre-sort of the waste and emissions can change with a variable wastestream.

The second expression routinely used by those promoting incineration is "state-of-the-art" and this will be the main focus of my delegation today. What universally and quantitatively defines a "state-of-the-art" incinerator? There has been no such definition provided. It is easy to say "state-of-the-art", but I ask you this morning what proof do you have that the incinerator being proposed for Durham and York is "state-of-the-art"?

Politicians and the public are constantly told that "modern" incinerators are much better and safer than "older" incinerators. In my opinion, there has been a complete failure to provide quantitative data to demonstrate how much better "modern" incinerators are. Recall that Dr. Pengelly, in his review of the Halton Business Case, remarked about the many claims being made that "modern" incinerators were better, but insufficient evidence was provided to determine how much better and to determine if they were safe.

In the spring of 2008 when the Emissions Criteria was being set, I repeatedly asked the Project Team for emissions data from other operating incinerators (some of which were visited by the Regional Councillors on their Europe trip), and particularly for those which were supposed to represent "state-of-the-art" facilities, however I was told that I would have to find the data on my own.. I attempted to find emissions data, however my finding was that the industry is not transparent about emissions - I could not find the data I needed. I was able to find, however, emissions criteria from a number of countries such as Switzerland, Germany and the Netherlands where they had much stricter emissions criteria than the Durham criteria for some of the key pollutants in our study. I brought this information to you at that time.

I would now like to draw your attention to a memorandum sent to Dr. Kyle from Dr. Ollson on **November 4, 2008**. This memorandum gave some emissions data from the Algonquin incinerator in Brampton. I had forgotten about this memo, but found and read it again when I was preparing for my April 2nd submission.

This memorandum states that:

"Maximum emissions rate data presented on a gram/sec (g/s) basis in the report "Report on Air Dispersion Modelling (Appendix I to Energy-From-Waste Generic Risk Assessment Feasibility Study) June 14, 2007", were converted to annual average emissions (in tonnes/year) assuming continuous operation of the facility over the entire year".

The memo also states that:

The annual emissions for the pollutants of concern for the equivalent of the Algonquin Power Facility at 133,333 tonnes/year or the Ontario Guideline A-7 equivalent were calculated.

Further, in the memorandum, it is also written:

The data presented is based on historical stack testing records for the Algonquin Power Facility and Ontario Guideline A-7 limits. The facility proposed by Durham and York Regions will be operating under more stringent emissions limits incorporating the most modern emission control technologies that meet or exceed European Union (EU) and Ontario Guideline A-7 limits and will therefore have lower emissions than those cited above.

I took this data and compared it against the Facility Emissions of the proposed Covanta incinerator which were provided in Table 4.5 of the Air Quality Assessment Technical Study Report, December 4, 2009. While Dr. Ollson in the memorandum had indicated that the Durham/York facility would have lower emissions, comparing the emissions data from both the proposed Durham/York facility and the Brampton facility appears to show the contrary for many of the pollutants listed. This is very concerning. The Algonquin incinerator is about twenty years old. The following table compares the Algonquin emissions submitted by Dr. Ollson to the Facility Emissions for the proposed Durham/York incinerator as they appear in Table 4-5 of the AQATSR. Again, it appears that, for a number of key pollutants, the emissions would be worse for the Durham/York incinerator, even when you adjust for the slight difference in facility sizes. (The Durham facility emissions are for 140,000 tpy; the Algonquin facility is 133,333 tpy

Algonquin Incinerator (Brampton) vs Proposed Durham Incinerator

Contaminants of Potential Concern	Units	1 Algonquin Incinerator (Brampton) 133,000 TPY	2 Durham Incinerator (Courtice) 140,000 TPY
Particulate Matter PM 2.5	tonnes/year	9	11
Carbon Monoxide	tonnes/year	12	56
Nitrogen Oxides ¹	tonnes/year	110	151
Sulphur Oxides	tonnes/year	30	44
Cadmium*	kg/year	7.5	8.7
Mercury*	kg/year	11	18.7
Dioxins & Furans***	grams/year	0.043	0.075

¹ **Algonquin Incinerator (Brampton):** Memo from Chris Ollson/David Payne (Jacques Whitford) to Dr. Robert Kyle, Durham Region Medical Officer of Health, dated Nov. 4, 2008

² **Durham Incinerator (Courtice):** Table 4-5, Air Quality Assessment Technical Study Report July 31, 2009

It should also be noted that Dr. Ollson in his memorandum also provided emissions of dioxins/furans from another facility with lower dioxin/furan emissions of 0.005 g/year. The Durham incinerator dioxin/furan emissions are 15 times higher than that.

I have attached a copy of the Memorandum to Dr. Kyle with the original tables and complete footer notes and I have also attached a copy of Table 4-5 from the Air Quality Technical Study Report, July 31, 2009. Please note that the Facility Emissions column for the 140,000 tpy facility in the July 31st Table 4-5 are the same as in the later December 4th version.

I urge this Committee to take action. I would like the members to ask Dr. Kyle if he has reviewed the memorandum and compared the emissions for the two facilities and to provide comment.

Emissions are obviously an extremely critical issue. Health is at risk and we know the EA study shows that the Courtice air shed is already over burdened. That being the primary concern, there should also be a huge financial concern regarding the costs of future upgrading if Durham builds a low-end facility. I urge this Committee and Council to thoroughly investigate this matter.