

Proposed emissions limits for incinerator released

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By: By Reka Szekely

DURHAM -- Proposed emission limits for the incinerator slated for Courtice at least meet or are better than European Union (EU) targets in all cases except one.

When Regional Council earlier this year chose a Courtice site as the preferred site for the facility, it also passed a motion requiring that the emissions meet EU standards, which are generally more stringent than Ontario's so-called A-7 limits. After meeting with the Ministry of the Environment, the Region's consultants presented a report detailing proposed operational limits to the Durham-York Joint Waste Management Group on Tuesday.

If Durham approves the business plan for the incinerator later this month or early next month, those limits will have to be met by vendors proposing to build the incinerator.

"The limits that we are proposing are lower than the EU and the A-7 for dioxins, which is the one we've heard the most concern about," said consultant David Merriman of Genivar.

According to Health Canada, the health effects of dioxins and furans include liver problems and certain types of cancer.

Ontario's A-7 limit for dioxins and furans is 0.08 nanograms per cubic metre, the EU's is 0.092. The proposed limit for the incinerator is 0.06 nanograms per cubic metre.

At 20 milligrams per cubic metre, the consultants did, however, propose an operational limit for hydrogen chloride (HCl) that was higher than the EU standard of nine milligrams per cubic metre. The A-7 limit is 27 milligrams per cubic metre.

Mr. Merriman was questioned about that limit by several councillors, including Ajax's Scott Crawford. He said the intent was to give the vendors more flexibility. He said HCl levels can spike depending on the content of the garbage, for example, if there's a large amount of PVC, used in things like plumbing pipes.

"We fully expect that most of the time the HCl will be below the limit," said Mr. Merriman.

"I'm still not sure I'm comfortable with that," Coun. Crawford responded.

Mr. Merriman said it's possible to further filter for HCl, but that would increase the cost of the incinerator for something that happens rarely and said HCl is not a substance that would be persistent in the environment as it washes out when it rains.

Works commissioner Cliff Curtis said the EU limits for HCl are lower because they don't monitor specifically for mercury and HCl is an indicator for the toxic metal.

Unlike the EU, Ontario specifies limits for heavy metals mercury, cadmium and lead. The proposed limits for cadmium and lead are half that of the Ontario standard and the mercury limit is a quarter lower.

The proposed limits for acid-rain causing sulphur dioxide and nitrogen oxides are lower than both the EU and the Ontario standards. The limits for carbon monoxide and particulate matter, which can cause respiratory problems, and hydrogen fluoride meet EU standards.

Mr. Merriman said discussions with the Ministry of the Environment indicated it expected the incinerator to perform better than Ontario limits and more stringent limits would be part of the certificate of approval for the project.

Incinerator emissions limits

Listed, where regulated, are the Ontario limit, the European Union limit and the proposed operational limit for the incinerator.

Particulate (milligrams per cubic metre)

Ontario: 17

EU: 9

Proposed: 9

Carbon Monoxide (milligrams per cubic metre)

EU: 46

Proposed: 45

Sulphur Dioxide (milligrams per cubic metre)

Ontario: 56

EU: 46

Proposed: 45

Hydrogen Chloride (milligrams per cubic metre)

Ontario: 27

EU: 9

Proposed: 20

Hydrogen Fluoride (milligrams per cubic metre)

EU: 1

Proposed: 1

Nitrogen Oxides (milligrams per cubic metre)

Ontario: 207

EU: 183

Proposed: 180

Mercury (micrograms per cubic metre)

Ontario: 20

Proposed: 15

Cadmium (micrograms per cubic metre)

Ontario: 14

Proposed: 7

Lead (micrograms per cubic metre)

Ontario: 142

Proposed: 70

Dioxins/Furans (nanograms per cubic metre)

Ontario: 0.08

EU: 0.092

Proposed: 0.06

Organic Matter (milligrams per cubic metre)

Ontario: 66

Proposed: 49