

Comments Regarding the Certificate of Approval Applications

Durham and York Regions have applied for Certificates of Approval (C of A) that would allow the proposed incinerator in Courtice to be built and operated. In effect, the C of A can be considered a "license to pollute" issued by the Ministry of the Environment, specifying how much of what pollutants can be released, and how the incinerator is to be operated. This is a legally enforceable document therefore it is important that it be correct and protective of human health and the natural environment.

In our opinion, there are serious inconsistencies between the air emissions upon which EA approval was based and what is proposed in the C of A applications. For this and other reasons cited below, we will be asking the Ministry of the Environment to reject the applications.

We have identified some major concerns to date, shown below, which we will be submitting to the Ministry. The MOE needs to hear from as many concerned citizens as possible. **We urge everyone to submit their own comments to the Ministry of the Environment.** Your comments matter.

Submit your comments as shown below to the Ministry's Environmental Bill of Rights (EBR) registry site. Be sure to state the EBR Registry Number: 011-2709. The letter should not be a form letter - it is going to Ministry officials, not the Minister himself.

Submit comments by email by Sunday, June 5, 11:59 p.m. to **DYECComment@ontario.ca**

The link for the EBR posting is: <http://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTEyNDI2&statusId=MTY4NjIz>

Identified Problems

1. Certificate of Approval Application Materially Different than Environmental Assessment

- Durham and York Regions have submitted an application which has emissions rates higher than what was assessed for health risk in the Environmental Assessment (EA).
- **The PM2.5 emission rate in the C of A application is almost 2.5 times the PM2.5 emission rate used in the EA;** the EA study reported a measured baseline PM2.5 concentration that exceeds the World Health Organization benchmark.
- Ammonia emissions in the C of A are almost double what was assessed in the EA.
- **There has been no risk assessment and no medical review of the health impact of these increased emissions.**

2. Additional Burden of Incinerator Emissions To Existing Pollution Problem Is Unacceptable

- Current levels of respiratory irritants measured at the site approach and/or exceed Ontario air criteria and World Health Organization benchmarks. Levels of PM2.5 (fine particulate matter), NO2 (nitrogen dioxide), and ozone are of high concern.
- After reviewing current pollutant levels and the impact of the incinerator emissions, Health Canada advised that the EA discuss mitigation measures for respiratory irritants but no action was taken.
- The proposed incinerator will add hundreds of tonnes of respiratory irritants to this burden every year, further increasing risk to public health.

3. No Pre-sort of Waste Is Proposed in the Applications

- The Minister's Conditions of EA Approval states that only non-hazardous municipal waste will be received at the site, however there is no pre-sort to ensure that only non-hazardous waste is being incinerated and that it does not contain any hazardous or unacceptable items.
- Durham and York Regions have not maximized their diversion programs.
- There are very limited enforcement mechanisms in place to help ensure that hazardous and unacceptable items are removed.
- Durham Region does not have a clear bag collection policy.
- Durham Region does not have a curb side program to collect hazardous items such as batteries, compact fluorescent bulbs, electronic waste, etc. which contain mercury, cadmium, lead and other toxic chemicals.
- The C of A application is contradictory as the application identifies dry cells, mercury batteries and vehicle batteries as unacceptable waste, yet proposes no pre-sort to capture them prior to incineration.

4. Inadequate Monitoring

- The C of A application proposes continuous emissions monitoring for only a small number of combustion gases. **The application contains NO plans to continuously monitor most of the pollutants of high concern such as heavy metals (including mercury), particulate matter, volatile organic compounds and others, even though the Ministry's A-7 Guideline for municipal solid waste incinerators DOES include particulate matter and organic matter as parameters to be considered for continuous monitoring. It also encourages continuous measurement of mercury.** (Section 3.2)
- Furthermore, the guideline states "The Ministry encourages the use of high sensitivity continuous particulate matter monitoring systems over opacity monitoring since

particulate emissions have a direct environmental impact.” The C of A application, however, only proposes opacity monitoring.

- What is proposed in the C of A application is not consistent with Durham Region’s commitment to state of the art monitoring as promised in Durham Council resolutions of Jan.23.2008.
- As the application stands, mercury (and other heavy metals), particulate matter, and other pollutants might only be monitored once a year during a stack test. Given the potential health risks and the EA study results for particulate matter, mercury, and organic carcinogens, it is our strong opinion that the application should have included a commitment to continuously monitor mercury, particulate matter and organic matter.
- While the C of A application states that the facility will have a continuous dioxin sampling device, the application does not indicate that the data collected will be used for compliance verification. Instead it proposes a stack test of dioxins/furans (which would likely be done once a year) for compliance verification. The sampling device, in our opinion, should be used for operational monitoring and compliance verification. It is unclear whether the sampling would occur on a permanent and continuous basis and whether the frequency of result analysis would be sufficient for operational purposes and health protection. Furthermore, we cannot find any commitment that dioxin sampling results would be reported publicly.

5. Unresolved Issues From the EA Remain Unaddressed in the C of A Application

In his EA approval to proceed, the Minister of the Environment indicated that concerns that were submitted which were not resolved in the EA process or through his conditions of EA approval, would be addressed through future approvals. Some of these issues have become more serious with the increased emissions proposed in the C of A application.

Unresolved issues include:

- Risk characterization done in the EA for some key pollutants was done using standards that are NOT health based.
- There was significant uncertainty regarding the emissions inventory used in the EA and this remains in the C of A application. We have now learned that the emissions inventory with respect to PM2.5 in the EA was incomplete.
- Current risk assessment methods cannot adequately assess risk for ultrafine particulates - the fraction of the PM2.5 emissions which are so fine they can penetrate deep into the lungs, and transfer to blood and tissues. Ultrafine particulates emitted from incinerators are of great concern since toxins emitted from these facilities (heavy metals, dioxins and furans, etc.) adsorb onto them.
- Baseline concentrations for some key pollutants of concern were not measured at the site and were not included for assessment of cumulative impact in the health risk assessment and are not included in the Certificate of Approval application.

- Questions remain regarding the risks which were identified in the EA for infants and toddlers with respect to exposure to baseline (existing) concentrations of dioxins/furans, PCBs and other pollutants and how increased risk of further exposures can be acceptable.

6. Questions Regarding Data Reporting in the EA Remain Unaddressed in C of A Application

- Amendments to baseline PM2.5 and other baseline respiratory irritant pollutant concentrations documented in the *Final Report on Ambient Air Monitoring at the Courtice Road Monitoring Station (December 2009)* were not carried forward as input into the EA Final Human Health and Ecological Risk Assessment. These amendments affect risk calculations. The C of A application also did not use the amended values for the baseline concentrations.

7. Important Related Monitoring Plans Not Yet Available

- An Emissions Monitoring Plan (EA Condition 12) and an Ambient Air Monitoring Plan (EA condition 11) have not yet been finalized or released to the public. In our opinion, these plans should have been available for review together with the C of A applications so that sufficiently protective conditions could be included in the C of A permits, should approval be granted. If included in the C of A conditions, these would be legally binding and enforceable.