Comments on Monitoring For the Proposed Facility By Wendy Bracken

There is NO CONTINUOUS EMISSIONS MONITORING planned FOR Heavy Metals, Particulate Matter, and Organics(carcinogens).

One might call those the BIG 3.

Heavy Metals – On June 16, 2009 I was appalled week when I heard the response of a Covanta official to a question posed by Regional Councillor Emm on what was really coming out of the stack. The official replied it was water vapour, some nitrogen and CO2. Heavy metals, he said, are left in the ash. That is simply not true, it is misleading and their own emission data shows that large quantities, measured in the tonnes, of heavy metals, LEAD, MERCURY, CADMIUM and others that will be emitted to the air over the life of the facility. Large quantities of metals would be added to our environment via air and water(through the ash) and in a dangerous form, adsorbed onto the surface of ultrafine particulates making them more bioavailable.

Particulate Matter – this is a big one. Doctors, scientists all agree that PM and especially the fine PM2.5 and the ultrafines cause increases in cardio - heart and lung disease. Our air shed already is at the air quality criteria for PM2.5

Organics include toxins which are carcinogens.

It is my opinion that many of the Regional councillors and members of the public are confused by statements and presentations made by the consultants and by Covanta in their June 16th delegation regarding continuous monitoring (to Committee of the Whole).

Note that Covanta's slide on environmental performance in their power point given on June 16, 2009 simply had the bullet "Continuous emissions monitoring". They never qualified it to say they are only planning to have continuous monitoring for a handful of combustion gases, but have NONE for the hundreds of other pollutants which include heavy metals, particulate matter, and organic pollutants

Table 4-1 HHERA, June 11th report shows the the Test Methods and Operating Limits for a number of parameters specified by the Regions in the RFP. **Note that continuous monitoring is only indicated for Hydrogen Chloride, Sulfur Dioxide, Hydrogen Fluoride, Nitrogen Oxides and Carbon Monoxide.**

There is NO continuous monitoring for heavy metals and that includes LEAD, MERCURY, CADMIUM, and there is NO continuous monitoring shown for PARTICULATE MATTER nor for OTHER ORGANIC TOXINS (such as Poly Aromatic Hydrocarbons (PAHS),

Volatile Organic Compounds (like benzene) etc.). These compounds will only be tested one day a year during the pre-arranged stack test.

So how do you really know exactly what is happening for the other 364 days with these chemicals of such great concern, especially when the waste stream is not homogenous and ever changing and when there is no pre-sort of waste planned to screen for hazardous waste?

Without continuous monitoring of the heavy metals, particulate matter and organic pollutants you do not really know exactly how much of these pollutants the facility will be emitting.

This is a MAJOR PROBLEM and it alone is reason enough to say NO to incineration.

What protects the public from major abuse and from hazardous waste being improperly and illegally dumped (which could include heavy metals) in the black garbage bag which could have the potential to drastically affect emissions totals? When you burn it, it is gone, dispersed into the atmosphere – you cannot clean it up or contain it. Does the MOE feel this type of scenario has been adequately discussed and addressed?

What if there are equipment failures and/or emissions violations for some of the chemicals which are not monitored continuously and they go undetected for a long time, potentially a whole year, before realizing during the stack test that there is a problem? In their slide Covanta claims they are 99.9% compliant, with only 16 events in 3,500 stack tests. This says to me that they have been 99% compliant at the time of the stack test, but what about all the other 364 days in the year?

There are OUTSTANDING OUESTIONS:

- Exactly how was Covanta's emissions data determined? Page 44 says the estimates were made on "the basis of engineering design data from Covanta". Under Sources of Emissions, p. 42 of the SSRA says that "It should be noted that as per RFP Addendum #21 (November 20, 2008) any hazardous or radioactive waste found within the in waste stream would be removed and *not* processed at the Facility." So were the emissions based on this assumption that *all* household hazardous waste was removed Addendum 21 indicates this will be the case, YET we were told that there was no SORTING/PROCESSING done before the burn
- How sensitive are the radiation sensors and exactly how will the waste be screened?

There are many important questions regarding monitoring and I urge the MOE to investigate this monitoring issue thoroughly.