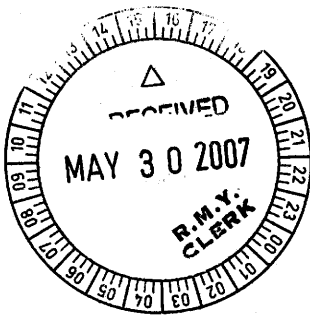




May 30, 2007, Letter of Concern to be entered into the agenda for the June 6 Solid Waste Committee Meeting regarding proposed Thermal Waste Treatment Facility

Dear Committee Members,

I want to thank you for all the work that you do to manage our region's solid waste. As a Newmarket resident of York Region I have concerns about the proposed energy-from-waste thermal treatment facility and believe that it is not the right solution for local waste management. That being said, I applaud your decision to stick with a full environmental assessment for this project, rather than using the environmental screening shortcut offered by the Ontario Government. This letter contains some of my concerns as well as some suggestions.

I oppose the construction of an energy-from-waste thermal treatment facility, for the following reasons:

• **Thermal Waste Treatment Discourages Waste Diversion and other Solid Waste Management Innovations: It is too Restrictive to Accommodate Change**

This facility will cost approximately 250 million dollars. For most incinerators, it can take up to 40 years to get the investment back. Do we still want to be creating enough garbage to feed this facility even 20 years from now?

In order to operate the facility without substantial loss, most facilities must incorporate a "put or pay" clause that will last the life of the facility (in our case 50,000 tonnes each year for 20-35 years). In order to feed this facility, there will be little incentive to divert more waste or to adopt "cleaner" technologies that may develop over the years.

For highly relevant information on the costs of incineration, see "*Incineration of Municipal Solid Waste: Understanding the Costs and Financial Risks: Fact Sheet 4*" issued by the Pembina Institute and five other environmental organizations at the following link: [http://pubs.pembina.org/reports/Incineration FS Costs.pdf](http://pubs.pembina.org/reports/Incineration_FS_Costs.pdf)

• **Thermal Waste Treatment Creates Toxic Emissions and Toxic Waste**

Thermal treatment of waste creates harmful emissions in the form of gases and ash including fine and ultra-fine particulates, heavy metals, nitrogen oxides (which can convert to smog and ozone), and a wide range of organic pollutants including dioxins and furans. The thermal process actually creates many of these pollutants and toxins from garbage that could have been safely landfilled such as PVC. Despite increases in pollution control technology, emissions like dioxin persist and accumulate in our environment and in our bodies. Current emission control technologies cannot anticipate

the effects of burning new synthetic materials that enter our waste stream. Please see "Fact Sheet 2" produced by a coalition of six Canadian environmental organizations, entitled "*Incineration of Municipal Solid Waste: An Update on Pollution*" for current information at the following link:

http://pubs.pembina.org/reports/Incineration_FS_Pollution.pdf

• **Thermal Waste Treatment Affects Our Health and our Environment**

Studies have revealed increased cancer rates, respiratory ailments, reproductive abnormalities and other health effects among people living near waste-burning facilities. Heavy metals and combustion products of man-made chemicals (ex. Dioxins, PAH's, VOC's) can adhere to ultra-fine particulates, making them even more hazardous as they are small enough to escape pollution control features and small enough to enter the bloodstream directly from the lungs. I don't have space here to discuss at length the health effects of incinerator emissions, but for more detailed study and information please read "*Health Effects of Waste Incinerators*," a 2005 report from the British Society of Ecological Medicine available at the following link:

<http://www.ozonatorindustries.ca/resources/Incineration.pdf>

As airborne pollutants these emissions could affect air, soil and water quality. Although such a facility would have graver health and environmental effects close to residential and farmland areas (such as the East Guillimbury site) in the end any site chosen would eventually impact the health of humans and wildlife as all sites exist close to human workplaces as well as waterways. Disposal of the toxic fly ash poses the health risks of spills/accidents en route to the toxic waste dump (if untreated) as well as possible leeching of contaminants into the soil and water table in the years following disposal even if the ash is pre-treated.

• **Thermal Treatment Creates Toxic Waste and all of its Implications for Disposal**

Pollution control devices reduce emissions by trapping those toxic substances within the chimney as fly ash. The fly ash must be disposed of as toxic waste in a "secured landfill" (which is costly) or can be treated prior to conventional landfilling. The latter process most commonly means stabilization of the ash in cement. Secured landfills are not fool-proof and could leach in the long-term. Erosion and weathering of stabilized fly ash could also lead to leaching of toxins from conventional landfill sites into the environment. For more information see section 5.4 'Disposal of Ashes' of the 2001 UK study "*Incineration and Human Health*" produced by the Greenpeace Laboratories at the University of Exeter at this link:

<http://www.greenpeace.org/raw/content/international/press/reports/incineration-and-human-health.pdf>

• **Thermal Waste Treatment Is not the Solution to CO2 Emissions**

Thermal waste facilities are second only to coal-fired generators in their emissions of carbon dioxide. The Residual Waste Study web site says that this will be less than what is created by the current trucking of landfill to Michigan. However, although there will be fewer trucks going directly to a landfill site from transfer stations, we will still have trucks bringing garbage to the incinerator, and then trucks taking away the ash waste to be landfilled (potentially at two different sites—one conventional and one "secured" landfill).

This should all be added into the equation. **More importantly**, if we continue to reduce and divert more and more of our waste, the CO₂ from transporting our waste to landfill as currently done will continue to decrease; however, CO₂ emitted from the incinerator (and the trucks transporting its “fuel” and its waste) will remain a constant throughout the 20-35 year life of the facility, if it is to work safely and efficiently (i.e. necessitating a quota of garbage).

I would recommend the following:

- **Revisit and explore further other options for waste management besides thermal energy-from-waste facilities of which these are just a few:**
 - Investigate/revisit alternative treatments such as the stabilized landfill process while implementing more aggressive diversion measures and developing a zero waste strategy to reduce the need for landfill in future. In a stabilized landfill an initial screening of waste diverts more from landfill and biogas from anaerobic digestion of diverted waste can be recovered and used for energy.

Regarding stabilized landfill see ‘*Landfill Technology: Stabilized Landfill*’ from “Solid Waste and Recycling” magazine:

http://solidwastemag.com/Issues/ISarticle.asp?id=186230&story_id=18869111046&issue=04012007&PC) and “*Incineration of Municipal Solid Waste: Impact on global Warming: Fact Sheet 1*” (page 2):

http://pubs.pembina.org/reports/Incineration_FS_Pollution.pdf.

- Continue efforts to make manufacturers responsible for their packaging and their products’ end-of-life recycling or disposal. Many goods are designed to have a short life cycle and made such that it is cheaper to buy new than to repair and materials are usually not recyclable or biodegradable.
- A strategy to educate the public on the life cycle and environmental impact of their purchases and on buying products with the least toxic waste impact (eg. less toxic types of electronics). The public needs to learn that affordability is not the only criteria for choosing between products; they can vote with their dollars for quality, long-lasting items that are built so all parts can be reused or recycled.
- To discourage waste, residents and businesses should have to pay for pick-up of waste above a certain amount each week (eg. one green garbage bag) and that limit can be decreased over time as more diversion methods are used.
- In areas where green bin programs exist, fast food restaurants can adopt wet/dry waste and recycling programs so that more of their waste is diverted. I have seen a restaurant participating in this type of program—I believe it was in Nova Scotia.

Thank you for your time and for giving my comments consideration.

Sincerely,

Laura Higgins
449 Millard Ave.
Newmarket, ON 905-895-9040