April 2, 2010

To: Gavin Battarino, Project Officer gavin.battarino@ontario.ca
cc: Agatha Garcia Wright, Director EA & Approvals Branch, MOE.CCUENE@ontario.ca

RE: An invitation to comment on the Environmental Assessment for the Durham and York residual waste study to construct and operate a ‘thermal treatment waste management facility’ in the Municipality of Clarington in Durham Region

Please accept this letter as the Toronto Environmental Alliance’s formal response to the public comment period for the Environmental Assessment for the Durham and York residual waste study. A signed PDF version of this letter will follow on Tuesday April 6th for your records.

The Toronto Environmental Alliance (TEA) is completely opposed to building and operating the proposed ‘thermal treatment waste management’ facility. We recognize the need for long-term sustainable and local capacity to manage municipal wastes in York and Durham – the City of Toronto is faced with the same challenge. For this reason, and many more which are outlined below, we strongly recommend that the Minister does not approve this Environmental Assessment. Based on what we have reviewed and the significant unresolved concerns and public outcry around this proposal, TEA urges the Ministry of Environment to defer the entire EA to the Environmental Review Tribunal.

Managing resources not waste
Our focus should be conserving and recovering resources, not destroying them. We are shocked that this proposal would be referred to as a "long term sustainable solution" to manage solid waste.
Municipalities are setting their sights at 70% waste diversion and beyond in order to value these materials and improve our health and the environment. Ontario residents are committed to further waste diversion and will continue to put pressure on government to increase recycling and composting efforts and encourage industry to switch to reusable, recyclable, compostable and non-toxic forms of packaging and products.

The waste diversion assumptions made in the EA assume that Durham and York regions will only maintain the status quo with reduction, reuse, and recycling efforts. No municipality in Ontario should settle for 60% waste diversion when there is such untapped potential to divert more. The terms of reference for this facility include no detailed description of the methods for recovery. Recovering charred metals from the bottom ash can never achieve the same level of scrap metal diversion as a mechanical sorting process, and the value of the scrap metal would likely be much lower. These examples should be taken as warning signs. This incineration facility would only divert valuable materials such as metals as an afterthought and would still result in 30% of what goes into the facility being disposed of in a landfill anyway.

The EA also does not reflect the ongoing efforts at the provincial and federal level to introduce Extended Producer Responsibility legislation that would require producers to take a life cycle approach to their products and packaging, including their management and costs of at the end of its useful life (post-consumer). The Ministry of Environment has made significant in-roads in the last two years to set our sights towards zero waste and legislating extended producer responsibility. These efforts will be swiftly undermined if energy from waste facilities, especially combustion facilities, are approved as a form of municipal waste management.
Incineration of municipal waste burns the evidence of bad product and packaging design. Extended Producer Responsibility is meant to put the responsibility for products and packaging back into the hands of those who made them at the end of their useful life. This results in a feedback loop that encourages industries to design for the environment by reducing the use of resources, reusing materials, and designing items that are easy to recycle or compost. In all of these situations, the resources and energy used to produce the items are valued and the cost of managing the products and packaging are factored into the costs of production.

In addition to EPR legislation, TEA strongly supports the use of phased-in disposal bans for designated wastes as a policy tool suggested by the Ministry of Environment during the Waste Diversion Act Review. Thermal treatment, including combustion, are forms of waste disposal. It is important to recognize that EFW facilities like the one proposed will be forced to face the reality of dwindling 'resources' to burn and legislative barriers to doing so.

**Energy conservation and production**

All of these innovative and environmentally responsible efforts reduce the amount of residual waste we need to manage and they also conserve incredible amounts of resources and energy. We have all heard of examples that attest to this, for example how recycled aluminum saves 95% of the energy that would be required to acquire virgin aluminum. Typically, 3 to 5 times more energy is saved when resources are recycled as when they are burned to create electricity.

Recovering energy from the municipal waste stream was one of three goals the EA proponents wished to achieve. It is important to recognize that mechanical treatment is a form of energy recovery – not because it can be converted directly into fuel or electricity – but because the embodied energy and materials used in the production of these resources can be given a second life rather than relying on virgin materials.

By diverting more and more materials, combustion facilities will not only face a dwindling supply of waste to burn they will also face a lower net caloric value per tonne. When the caloric value of waste is reduced, less energy will be produced by the incinerator. This will likely necessitate the additional import of energy (natural gas) or waste from other jurisdictions to maintain thermal heat within the combustion chamber. This is especially concerning because combustion facilities require a guaranteed feedstock and must run continuously and never below 75% capacity.

In addition to these energy production concerns the EFW plant would produce 1.38 tonnes of CO2 per tonne of waste burned, emitting more CO2 per MWh of electricity than coal, our dirtiest energy source. Combustion or 'mass-burn' technology contributes about 33% more GHGs per kwh of electricity produced compared to coal fired technology. It is unacceptable for the Province of Ontario to announce aggressive plans to replace coal-fired generation with cleaner sources of energy and conservation only to turn around and condone a dirtier form of energy. If approved, garbage will be burned 24-7 and displace other base load energy sources such as nuclear and hydro that have considerably lower GHG emissions and CO2 production.

Not only does the EA ignore these facts, it also assumes that the electrical energy sources feeding into the grid will remain constant over the lifespan of the EFW facility, which is impossible. The electrical energy grid mix is going to change. The Ontario government has committed to phasing out coal power generation before 2015, replacing it with gas, cogeneration and renewable energy sources such as solar, wind and geothermal. In addition, the EA ignores the potential for energy conservation in Ontario to
significantly reduce energy demand and result in changes to the energy mix as indicated in the Ontario Power Authority's IPSP.

When comparing 'alternatives to' combustion, the EA even goes so far as to ignore commonly used landfill technologies and assumes that the landfill alternative would collect methane gas and flare it. As the City of Toronto can attest to with their Green Lane landfill it only makes sense to invest in methane capture for energy production in new landfill sites, which in addition can significantly reduce GHG emissions. According to the ICF report, landfills can be considered a net carbon sink for some materials when you account for the carbon storage and have methane gas recovery. This is yet another example in the EA where the proponents have failed to be impartial, calling into question the credibility of the entire EA.

**Air quality and health impacts**
The EA study data shows that the Courtice airshed is already overburdened. Air quality issues and their impact on human health have not been adequately addressed in this EA.

**Summary**
In summary, TEA recommends that this proposal not be approved. This facility is not sustainable and undermines the progress the Ministry of Environment has made to protect human health, preserve the environment; and conserve resources and energy. Beyond this, the Environmental Assessment itself is flawed and biased, lending credibility where none is due and ignoring facts and recent technologies for alternatives to incineration. If the Ministry of Environment is not prepared to take responsibility for this important decision, we strongly recommend that the Minister defer the entire EA to the Environmental Review Tribunal.

Please feel free to contact us if you have any questions or comments regarding our response. We would be more than happy to meet with your staff to provide more in-depth information on the resource, energy and climate change impacts of incineration.

Regards,

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