

To: Toronto City Councillors and members of the Infrastructure and Environment Committee

Re: [IE 21.5 - Authority to Negotiate and Enter into Regional Waste Management Co-operation and Contingency Agreements](#)

April 27, 2021

Dear Councillors,

On behalf of the Toronto Environmental Alliance (TEA) I am writing to you in response to item IE 21.5 *Authority to Negotiate and Enter into Regional Waste Management Co-operation and Contingency Agreements* to urge you to focus on waste diversion, and **reject the option to send Toronto's waste for incineration or 'thermal treatment' in another community.**

The "thermal treatment" of waste - including incineration with some energy recovery or creation of refuse-derived-fuel - is an expensive and toxic form of disposal that works directly against Toronto Council's environmental commitments. It is inconsistent with Toronto's zero waste commitments, a circular economy, and it seriously undermines Toronto's climate change goals. Further, sending Toronto's waste to incinerators in other municipalities directly contributes to the air pollution and toxic burden facing those communities.

**1. Thermal treatment of waste is in direct opposition to a circular economy and a goal of zero waste.**

Zero Waste is about working to eliminate waste entirely, and it requires shifting to a circular economy. A circular economy is one that ensures resources and materials are reduced, reused, repaired, recycled and recirculated, eliminating the need for raw-materials extraction, and eliminating the need for disposal in landfill or incinerator. **Toronto has committed to be a leader in the Circular Economy.** Toronto is a proud member of the international Circular Economy CE100 Network, and our city has signed onto the C40 Cities Zero Waste Declaration that commits to reducing waste and diverting 70% of waste from landfill *and incineration* by 2030.

**2. Thermal treatment of waste contributes to climate change.**

**In 2019, Toronto Council declared a climate emergency and committed to net zero GHG emissions by 2050.** Incineration is a very inefficient source of *non-renewable* energy: only a small amount of energy is collected by burning mixed garbage, and most of that energy comes from burning plastics, a fossil fuel product. From a climate perspective, it is undisputed that diverting waste by increasing efforts to reduce, recycle and compost as much as possible conserves more energy than any form of disposal.

### 3. Energy from waste and incineration creates extremely toxic air emissions and residual ash.

The combustion of mixed garbage creates a mix of toxic air pollutants. This includes pollutants such as particulate matter, sulphur dioxide and nitrogen oxides, and the burning of plastics and other combustible materials also creates very toxic dioxins and furans. These are extremely toxic substances that accumulate in the soil and in our bodies. Even the most sophisticated filtration systems cannot remove all of these substances.

- Emissions levels are based on ideal computer modelling. Real world emissions testing is very limited and in many cases, happens at only a few points per year. This is concerning and shows that theoretical modelling may not be giving us the full picture of actual emissions.
- For example, one of two incinerators near Toronto is the Durham York Energy Centre, which was built in the last decade. However, since the incinerator began operation, dioxins have been released by the facility and there have been a number of events when dioxin limits were exceeded, including one with dioxin levels at nearly 14 times the allowable limit.

After the incineration process, approximately **one third** of the waste remains as bottom ash and fly ash with toxic substances in it. From Durham in 2020 over 41,000 tonnes of this ash was trucked to a landfill in Niagara Falls, and some went across the border to New York. This effectively spreads the waste and the potential toxic ash to even more communities.

### 4. Energy from waste emissions and ash burdens other communities.

There are two operating energy from waste facilities near Toronto: one in Durham and one in Peel. The Durham York Energy Centre was built in the last ten years. However, despite the pollution controls the community surrounding this facility is still subjected to a steady flow of nitrogen oxide, sulphur dioxide, particulate matter, dioxins and a host of other toxic substances that are all known to cause significant harm.

It's also worth noting that in addition to the Durham incinerator, the community faces emissions from one of the biggest polluters in Canada, the St. Mary's cement facility. Currently, the local council and community is appealing St. Mary's plans to burn 400 tonnes of garbage per day in that cement facility. This raises questions about the cumulative impact of incineration, and the communities that are bearing the brunt of industrial pollution for our lifestyle.

The second facility is the privately owned Emerald Energy From Waste incinerator in Brampton. This facility is more than 20 years old and it takes waste from anywhere in Ontario including commercial and industrial waste. Air monitoring at this site for the most toxic substances including dioxins and furans happens only once per year.

Considering the proximity to multiple highways and the airport, once again we're looking at sending Toronto's waste to a community that is already facing a number of industrial emission sources.

**5. The majority of what is in Toronto's 'garbage' isn't garbage and could have been recycled or composted in existing City curbside programs, or should be eliminated.**

City audits over many years and the recent Mixed Waste Processing Study results confirm that there is still a lot of room for improvement in recycling and organics diversion in Toronto.

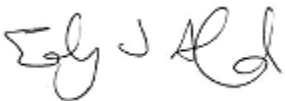
- On average, 25% of the garbage bag is recyclable materials, including single use packaging and plastics, that should be collected in the Blue Bin, and approximately 30% was food and organic waste that should be composted to recycle nutrients in the green bin.
- Additional analysis of City audits shows another 10 to 15% of the rest is reusable materials like textiles and household goods, or hazardous and special waste like batteries and electronics.

The fact is that these materials are not garbage and they should not be burned. The combination of plastics, household goods and special and hazardous waste creates a complex and unpredictable combination of materials that can result in different levels of toxic emissions. This material has no place in an incinerator.

Toronto needs to focus its efforts into improving diversion and striving for a goal of zero waste.

We urge you to reject 'thermal treatment' disposal for Toronto's waste and follow through on Council's commitments to create a circular economy and to take action on the climate crisis. Toronto must invest in waste diversion programs and policies that create a circular economy, reduce waste, and reduce greenhouse gas emissions.

Sincerely,



Emily J. Alfred  
Waste Campaigner, Toronto Environmental Alliance

**Additional information:**

- *Global Alliance for Incinerator Alternatives, 2019 - Fact Sheet: Pollution and Health Impacts of Waste-to-Energy Incineration*  
[https://www.no-burn.org/wp-content/uploads/Pollution-Health\\_final-Nov-14-2019.pdf](https://www.no-burn.org/wp-content/uploads/Pollution-Health_final-Nov-14-2019.pdf)
- *Durham York Energy Centre, 2020 - ECA Annual Facility Operations Report*  
[https://www.durhamyorkwaste.ca/en/operations-documents/resources/2020/20210330\\_RPT\\_2020\\_DYEC\\_ECA\\_Annual\\_ACC.pdf](https://www.durhamyorkwaste.ca/en/operations-documents/resources/2020/20210330_RPT_2020_DYEC_ECA_Annual_ACC.pdf)
- *Ministry of Environment, Conservation and Parks, 2021 - Environmental Compliance Approval: St. Marys Cement Inc. (Canada)* <https://ero.ontario.ca/notice/019-2055>
- *City of Toronto, 2020 - Mixed Waste Processing Study Update*  
<https://www.toronto.ca/legdocs/mmis/2020/ie/bqrd/backgroundfile-146477.pdf>