

INCINERATION – Not Safe, Not Sensible



The Facts And Issues

Increasingly there are plans by municipalities to expand to incineration as their preferred waste disposal option. Incinerators are now being pitched as “energy from waste” plants (EFWs), but they have many critical drawbacks that are described below. This sheet focuses on Mass-Burn Incinerators.

1. TOXIC AIR EMISSIONS - All thermal treatment/incineration facilities, even those with the “best available technology”, produce and discharge toxic emissions. Approximately 70% of waste burned is released as emissions into the air. This includes dioxins, furans, heavy metals (cadmium, lead, mercury) and others. Health studies link incineration with increased risks for cancer, respiratory and heart diseases, birth defects, reproductive and other disorders.

2. INADEQUATE EMISSION STANDARDS - Emission standards vary and not all are health-based standards. If not required by law, there is no guarantee that the best available (very expensive) pollution controls and sampling and monitoring protocols, would be utilized.

3. FURTHER DEGRADATION OF OUR AIR QUALITY - An incinerator would also emit particulate matter and a number of smog forming pollutants to our already burdened air sheds – e.g. carbon monoxide, sulfur dioxide, nitrogen oxides.

4. TAINING OUR LOCAL FOOD SUPPLY – Dioxins and other persistent organic pollutants accumulate on our land and in our water and then enter the food chain. Approximately 90% of human exposure to dioxins is via food consumption. How would this effect consumers of locally produced food in your farming community? In Europe, meat, dairy and eggs must be regularly tested for dioxins and dioxin-like PCBs, but not this is always required in Canada.

5. LANDFILL/HAZARDOUS WASTE STORAGE REQ'D FOR ASH – By mass, approximately 25–40% of the garbage burned in a mass-burn incinerator results in ash: highly toxic fly ash as well as bottom ash containing harmful residues. Both go to landfills. The more effective the air pollution controls, the more the toxic load is transferred to the ash.

6. VERY COSTLY & POOR USE OF TAX DOLLARS
It can cost upwards of \$200 per tonne to incinerate waste with very few jobs created in what might be an unhealthy workplace. Durham Region, in Southern Ontario, plans to use the Federal Gas Tax rebate to pay for their incinerator, thus starving public transit and other sustainability projects. Decreased property values in the vicinity of an incinerator would likely be affected thus further impacting residents and municipal revenues.

7. CONTINUOUS WASTE LOAD REQUIREMENT DISCOURAGES SUSTAINABLE PRACTICES
Incinerators are designed to burn a fixed tonnage 24 hours a day, 7 days a week for optimal operation over their 25-35-year lifespan. No matter how successful citizens would be at reducing, reusing, & recycling, the incinerator would still demand the same fixed amount to burn.

8. NEED TO IMPORT WASTE?
As citizens and municipalities reduce the waste they generate, they might have to import waste from jurisdiction to keep the incinerator operating efficiently.

9. A WASTE OF ENERGY AND CONTRIBUTOR TO GREENHOUSE GAS EMISSIONS
Incinerators are often pitched as a way to solve two problems at once: reducing waste volumes while producing energy. Studies show that reusing products and recycling materials in the waste stream saves much more energy. As an energy producer, mass burn incineration contributes more greenhouse gases per kwh than coal-fired power plants. **It is inconsistent to express concern about climate change while at the same time recommending the burning of waste.**

10. MORE INFORMATION
Review our list of Information Resources, Incineration and Cancer Links Fact Sheet and a List of Groups working on incineration and Zero Waste in Canada.

ARE THERE BETTER ALTERNATIVES TO DEAL WITH OUR RESIDUAL WASTE?

YES! We must reduce excessive consumption and the waste we generate. Clear national and provincial policies, extended producer responsibility, better industrial design, clean production, more stringent packaging laws and public education are all components of a sustainable waste strategy. There are more flexible and safer ways to manage our residual waste that also have a smaller impact on climate change. Often municipalities decide to move to thermal treatment/incineration without fully exploring all of the alternatives, including Zero Waste.

This fact sheet is adapted from one produced by several Durham Region (Southern Ontario) residents. Groups and individuals opposing incineration have adapted the original document as the project evolves. (Smokestack photo: dolanh flickr.com/photos/reneeanddolan/44325190/)