

# Did You Know?

## The Facts And Issues

...that Durham and York Regions are moving forward with their plan to build an incinerator in Durham? Halton and Niagara Regions have stopped their plans for incineration, so why haven't we?

### Things You Should Know About Incineration:



**1. Health Effects** – Incinerators, even those with the ‘best’ technologies, emit highly toxic substances including dioxins, furans, and heavy metals (lead, mercury, etc.), as well as large quantities of acid gases, greenhouse gases and particulate matter into the air we breathe. Studies have shown higher rates of cancer and birth defects around municipal waste incinerators. The fetus, infant and child are most at risk from incinerator emissions. Incinerators are a major source of fine and ultra-fine particulate matter. Particulate pollution is associated with worsening lung and cardiovascular disease. Ultra-fine particulates can carry the toxins produced in the process, evade the best filters and travel great distances; once inhaled they can travel deep into the lungs, and pass into the bloodstream, tissues and organs. 43 Durham Region doctors have signed and submitted a petition registering their opposition to the proposed incinerator.

**2. Toxins Accumulate And Enter Food Chain** -Toxins like dioxins and furans are persistent and last for years or even decades before degrading into less dangerous forms. They enter our food chain primarily when animals eat contaminated plants and sediments and then pass them to us in dairy and meat products. We do not want the food that we grow and eat to be contaminated.

**3. Inadequate Emissions Standards & Monitoring** - Many of Ontario’s air emissions standards are outdated and lax. There have also been calls to improve European standards. Europe has more stringent regulations as to what can be burned, so their waste stream is relatively “cleaner” than ours would be. Only a handful of the hundreds of compounds being emitted will be monitored continuously. Stack tests for a wider list of pollutants are often only performed once a year with weeks of advance notice given to operators. In addition, incineration creates emissions containing many other *unidentified* chemical compounds of *unknown* toxicity, which are not monitored or regulated.

**4. What About Europe?** – *The Paris Appeal* is an international scientific declaration on chemical pollution proclaimed in 2004. It was signed by over a thousand international scientists and by all the medical governing bodies and representative medical organizations in the EU gathered in the Standing Committee of European Doctors which represents two million European doctors. In 2006, 68 international health and science experts drew up the *Memorandum of the Paris Appeal* that included a call for a ban on the building of any new incinerators. In June 2008, over 33,000 doctors in the EU and worldwide sent an open letter to the European Parliament with their concerns regarding the health effects from incinerators and that ultra-fine particulate emissions are still not monitored in Europe. They are likewise not monitored or controlled in Canada.

**5. Expensive, Inflexible & Financially Risky** - The incinerator will cost approximately \$200 million dollars to build and \$17 million to run annually with only 33 long term jobs

predicted for the facility. “PUT OR PAY” provisions for these projects require the community to guess the amount of waste that will be generated for the next 25+ years. If they do not “PUT” as much waste as estimated, they are still required to “PAY” for it.

**6. Need To Import Waste** – Incinerators are designed to burn a fixed tonnage 24 hours a day, 7 days a week for the 25 + year life span of the facility. This requirement to supply a continual and minimum waste load becomes a disincentive to the top priorities of waste management - reduction, reuse, recycling, repair and composting. We will be importing waste from York Region and there have been discussions with other municipalities to accept additional waste. The Regions propose a facility with an initial capacity of 140,000 tonnes of garbage per year with the option by Durham (or our 21% partner, York Region) to invest capital to GROW the capacity to 400,000 tonnes annually.

**7. Waste Of Energy & Resources** – Incinerators are being sold as “Energy From Waste” facilities. As an energy producer, incineration contributes more greenhouse gases per kilowatt hour than coal-fired plants which are known for their “dirty energy”. If those items that burn best (i.e., paper, plastics and cardboard) were recycled and removed from the residual waste stream, incinerators would burn less efficiently and might require the addition of fuel. If we incinerate rather than recycle and reuse, we will have to go back to the energy consuming extraction of virgin materials and remanufacture of products, which would deplete more resources and create more pollution.

**8. Safer Alternatives** - The alternatives have been framed as “bury or burn”. In reality, incineration means “burn, then bury”. Approximately one third by weight of the material going to incineration ends up as ash that Durham will send to landfill. The “bottom ash” contains toxic residues and the “fly ash” is classified as hazardous waste.

**There Is A Better Way: “Zero Waste”** – A strategy that avoids incinerators and eventually eliminates landfills. Started as a grassroots movement – like recycling was in the 1970s – it is being adopted by governments around the world. As decisions are made for the next 25 years, alternatives for our residual waste must be chosen that have the lowest impact on the environment and human health. The first steps toward “Zero Waste” are easy and begin to pay off immediately: better recycling and composting, reduced packaging and fewer disposable goods. These strategies also create “green” jobs and business opportunities in healthier workplaces. The good news is the Ontario Ministry of the Environment is already exploring how Ontario can implement “Zero Waste” strategies and is currently seeking input from industry and stakeholders. One example is lifting the burden and costs of dealing with discarded products from consumers and municipalities and placing it instead on manufacturers and importers.