

Risk Exposure is Reduced Through Improved Emissions

		Energy From Waste Stack Emissions				
		Ontario		United States		European Union
		Input to 1999 MOE Landfill / Incineration Risk Assessment	Guideline A-7 ^b	2006 Brampton EFW ^c	EPA 40 CFR Part 60	EU Directive 2000/76/EC
Parameter	Units	Measured Emissions ^a	Limits	Measured Emissions	Limits	Limits
Mercury	µg/Rm ³	340	(57) 20	5.75	35	45.8
Dioxins and furans	pg/Rm ³ as ITEQ	464	(140) 80	6.41	NC	92
Lead	µg/Rm ³	43.7	142	29.5	98	ND
Cadmium	µg/Rm ³	4.04	14	4.85	7	ND
Nitrogen oxides	mg/Rm ³	412	207	186*	197.5	183.2
Particulate matter	mg/Rm ³	10	17	13.1	14	9.2
Hydrochloric acid	mg/Rm ³	31.9	27	21.5*	26.1	9.2
Sulphur dioxide	mg/Rm ³	39.2	56	14.5	55	45.8
Organic matter (as methane)	mg/Rm ³	4.6	65.6	2.2*	NA	NA

Notes:

- a. Maximum concentrations from 1994 Brampton EFW facility emission tests as referenced in the MOE 1999 Landfill / Incinerator Risk Assessment Report.
- b. A-7 updated in 2004. Original values of revised parameters are indicated in ().
- c. Following upgrade of air pollution control system.

mg/Rm³ - milligrams per reference cubic metre

µg/Rm³ - micrograms per reference cubic metre

pg/Rm³ - picograms per reference cubic metre

ITEQ - international toxicity equivalents to 2,3,7,8 tetrachloro dibenzo-p-dioxin (calculated using the toxicity equivalence factors recommended by the NATO CCMS in 1989 and adopted by Canada in 1990)

NC - established limit is not comparable to Ontario A-7 limits

ND - limit not defined

NA - data not available

* - Data converted to consistent units.