

# Waste to Energy Plant Emissions

Advanced Waste Incineration technology planned for Mustapha Energy complies with the worlds strictest standards.



Table 1, Current EU and World Bank Emission limits

	Raw Gas	World bank			EU	Units
		Basic*	Medium*	Advanced*	Daily**	
Total dust	2000	30	30	10	10	mg/m <sup>3</sup>
Total organic carbon (TOC)		-	-	10	10	mg/m <sup>3</sup>
Hydrogen chloride (HCl)	600	-	50	10	10	mg/m <sup>3</sup>
Hydrogen fluoride (HF)	5	-	2	1	1	mg/m <sup>3</sup>
Sulphur dioxide (SO <sub>2</sub> )	250	-	300	50	50	mg/m <sup>3</sup>
Nitrous oxide (NO <sub>x</sub> )	350	-	-	200	200	mg/m <sup>3</sup>
Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V	60	-	-	0.5	0.5	mg/m <sup>3</sup>
Hg + Cd	1.8	-	0.2	-		mg/m <sup>3</sup>
Ni + As	1.3	-	1	-		mg/m <sup>3</sup>
Pb + Cr + Cu + Mn	50	-	5	-		mg/m <sup>3</sup>
Hg	0.3	-	-	0.05	0.05	mg/m <sup>3</sup>
CD and Tl	1.6	-	-	0.05	0.05	mg/m <sup>3</sup>
Dioxins and Furans	3	-		0.1	0.1	ng/m <sup>3</sup>

\*Source: <http://siteresources.worldbank.org/INTUSWM/Resources/463617-1202332338898/incineration-dmg.pdf>

\*\*Source: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32000L0076&from=EN>

Emissions are controlled by injection of Urea, Lime powder and specialised Activated Carbon for ensuring maximum pollutant absorption.

Special temperature control in the furnace also ensures that the highest European as well as local South African air emissions standards are met.

Typical veld fires generate more pollutants than this type of facility.