

Environment Protection And Energy Production In The Municipality Of Bolzano's New Refuse Incineration Plant

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Abstract

The municipal solid waste incinerator of Bolzano is owned by Commune di Bolzano, Italy, and operated by a private organization (association of 50 communities) named Ecocenter SPA. The paper gives a broad perspective on the history and performance of the incineration plant. Six years of operation experience with Line 1 has influenced the design of the newly built line, which was commissioned in January 1995. Each line is designed for the combustion of 5 to 8 tons of municipal waste

per hour. The combustion capacity of the plant is defined by the calorific value of the waste (LHV 1500 to 2500 kcal/kg) and the thermal capacity of the boiler (12,500,000 kcal/h). Regardless of the EEC-legislation for environmental protection, which possibly will come into force in Italy in 1996, the Authorities of the Provincia di Bolzano decided to upgrade Line 1 and to design the new line to follow the regulations of the German 17. BImSchV (Federal Immission Control Act).

Pollutant [mg/m ³]	Italy 203/88	Germany/ EEC Draft	City of Bolzano	
			old	new
PM	30	10	10	5
org. C	20	10	20	10
HCl	50	10	50	50
HF	2	1	2	1
SO _x	300	50	100	50
NO _x	500	200	300	100
CO	100	50	100	50
Heavy metals [μg/m ³]				
Cd		50		
Tl		50		
Hg		50		
Hg+Tl+Cd	200		200	200
other heavy metals	500	500		500
D/F [ng/m ³ ITEF]	0,5	0,1	0,3	0,1

Table 1: Waste Incineration - Regulatory Status