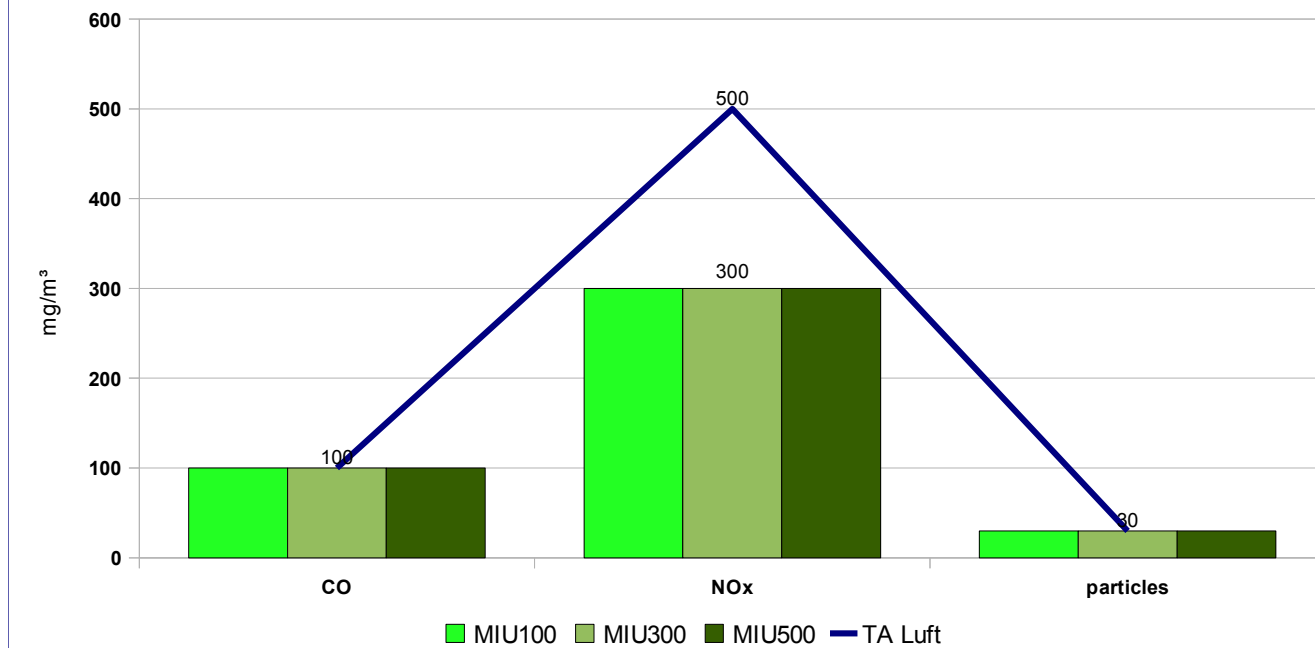


Limit values for Combustion Plants
(in accordance to German TA-Luft regulation)

		Mobile Incinerator Unit Type			TA Luft
		MIU100	MIU300	MIU500	
CO	mg/m ³	100	100	100	100
NOx	mg/m ³	300	300	300	500
particles	mg/m ³	30	30	30	30

Limit values for Combustion Plants
(in accordance to German TA Luft regulation)



Limit values for Combustion Plants
(in accordance to German TA-Luft regulation)

other limit values		Mobile Incinerator Unit Type			TA Luft
		MIU100	MIU300	MIU500	
volatiles (C-abs.)	mg/m ³	*	*	*	20
hydrogen chloride (HCl)	mg/m ³	*	*	*	50
hydrogen fluoride (HF)	mg/m ³	*	*	*	2
sulfur dioxide (SO ₂)	mg/m ³	*	*	*	100

* Depends to the exact composition of waste that is subject to fluctuations and it can not usually be estimated initially but it shows its potential energy as well as its pollutants during the combustion first.

Emissions

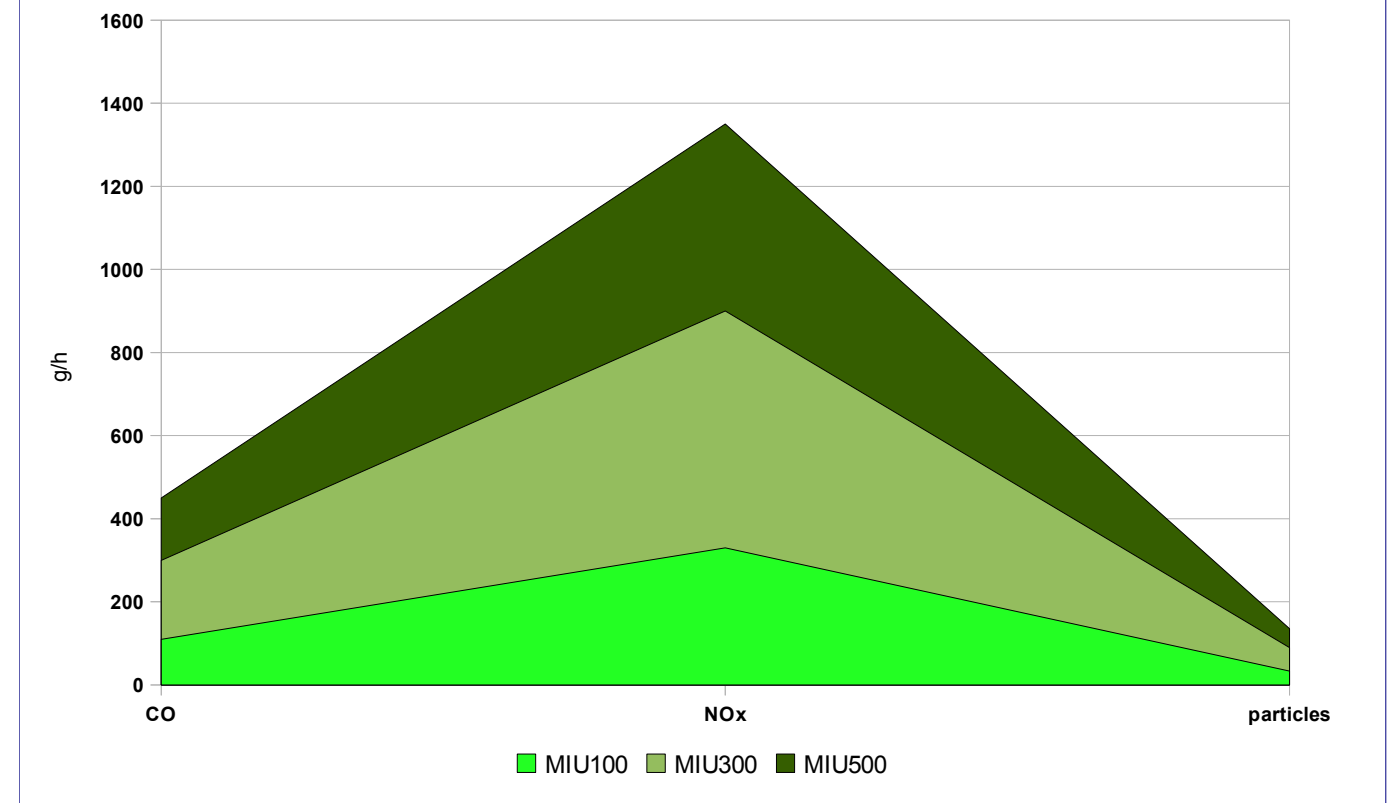
Under the normal operation conditions the facilities are consistently able to keep emissions well below the respective limits. Often, the emissions are so low that they are below the limits. This applies especially to the polychlorinated dibenzodioxins and furans (Dioxins and Furans) also. Despite of sophisticated technology, it may occur that higher emission values can be reached due to the inhomogeneous fuel (waste composition). Especially in the phases of start up, shut down and malfunction of the plant. The legally permitted emission levels usually are far above the actual emissions of pollutants if the emissions over a period of one year considered. It should be emphasized however that these isolated exceedences of limits has no effect on public health since even these higher values are usually still within the limits permitted for other technical or chemical plants.

Emissions of Mobile Incinerator Units
(in accordance to German TA-Luft regulation)

		Mobile Incinerator Unit Type			TA Luft **
		MIU100	MIU300	MIU500	
Flue gas volume	Nm ³ /h	1100	3000	4500	-
at	DegC	850	1000	1000	-
CO	g/h	110	300	450	110 / 300 / 450
NOx	g/h	330	900	1350	550 / 1500 / 2250
particles	g/h	33	90	135	33 / 90 / 135

** MIU100 / MIU300 / MIU500

Emissions of Mobile Incinerator Units
(in accordance to German TA-Luft regulation)



The impact of the fuel on emissions

Home waste as a fuel has a calorific value of approx. from 5,000 kJ/kg to approx 12,500 kJ/kg. Industrial waste shows much higher fluctuation. This inhomogeneity lets us face with the problem of the thermal treatment of the waste. The exact composition of the waste that is subject to fluctuation can not usually be estimated initially but it shows its potential energy as well as its pollutants during the combustion first.

Significant influences on the composition of waste are the measures of sorting the waste, recycling and composting. The waste composition points out a tendency to increase the heating value.

The large fluctuation of the calorific value and the common substantial composition of the waste require a highly complex automatic control that must take into account the reliability on one hand and the requirements of environmental protection on the other hand. Since the requirements of environmental protection and the reliability are contradictory to each other there must be compromising solutions that are mutually acceptable for both sides.

Therefore, the parameters of O₂, CO and the fire room temperature are used mainly as basic variables for the firing.