

**BALUCHISTAN ENVIRONMENTAL QUALITY STANDARDS FOR INDUSTRIAL GASEOUS EMISSION (mg/Nm<sup>3</sup>, UNLESS OTHERWISE DEFINED)**

No.	Partner	Source of Emissions	Standard
1.	Smoke	Smoke opacity not to exceed	40% or 2 Randleman Scale or equivalent smoke number
2.	Particulate matter <sup>(1)</sup>	(a) Boilers and furnaces	
		(i) Oil fired	300
		(ii) Coal fired	500
		(iii) Cement Kilns	300
		(b) Grinding, crushing, clinker coolers and related processes, metallurgical processes, converters, blast furnaces and cupolas.	500
3.	Hydrogen Chloride (HCl)	Any	400
4.	Chlorine (Cl <sub>2</sub> )	Any	150
5.	Hydrogen Fluoride (HF)	Any	150
6.	Hydrogen Sulphide (H <sub>2</sub> S)	Any	10
7.	Sulphur Oxides (2x3)	Sulfuric acid / Sulfonic acid plants	5000
		Other plants except power plants operating on oil and coal	1700
8.	Carbon Monoxide (CO)	Any	800
9.	Lead (Pb)	Any	50
10.	Mercury (Hg)	Any	10
11.	Cadmium (Cd)	Any	20
12.	Arsenic (Ar)	Any	20
13.	Copper (Cu)	Any	50
14.	Antimony (Sb)	Any	20
15.	Zinc (Zn)	Any	200
16.		Nitric acid manufacturing unit	3000
		Other plants except power plants operating on oil or coal;	
		Gas fired	400
		Oil fired	600
		Coal fired	1200

**Explanations;**

- Based on the assumption that the size of the particulate is, 10 micron or more.
- Based on 1 percent sulfur content is fuel oil. Higher content of sulfur will cause standards to be pro-rated.
- In respect of emissions of sulfur dioxide and nitrogen oxides, the power plants operating on oil and coal as fuel shall in addition to the Punjab Environmental Quality Standards (PEQS) specified above, comply with the following standards;

**A. Sulfur Dioxide**

Sulfur Dioxide Background level is Microgram per cubic meter (ug/m <sup>3</sup> ) Standards				
Background Air Quality (SO <sub>2</sub> Basis)	Annual Average	Max. 24 hours interval	Criterion 1 Max. SO <sub>2</sub> Emission (Tons per	Criterion II Max. Allowable ground level

			Day per plant)	increment to ambient (ug/m <sup>3</sup> ) (One Year Average)
Unpolluted Moderately Polluted*	< 50	< 200	500	50

Sulfur Dioxide Background levels Microgram per cubic meter (ug/m <sup>3</sup> ) Standards				
Background Air Quality (SO <sub>2</sub> Basis)	Annual Average	Max 24 hours Interval	Criterion 1 Max SO <sub>2</sub> Emission (Tons per Day per plant)	Criterion II Max Allowable ground level increment to ambient (ug / m <sup>3</sup> ) (One Year Average)
Low	50	200	500	50
High	100	400	100	10
Very Polluted**	> 100	> 400	100	10

\* For intermediate values between 50 and 100 ug / m<sup>3</sup> linear interpolations should be used.

\*\* No projects with Sulfur dioxide emissions will be recommended.

### B. Nitrogen Oxide

Ambient air concentrations of Nitrogen Oxides, expressed as NO<sub>x</sub> should not exceed the following

Annual Arithmetic Mean 100ug/m<sup>3</sup> (0.05 ppm)

Emission level for stationery source discharges before mixing with the atmosphere, should be maintained as follows;

For fuel fired steam generations as Nano-gram per joule (10<sup>-9</sup> g/J) of hear input:

Liquid fossil fuel	130
Solid fossil fuel	300
Lignite fossil fuel	260

**Note:** Dilution of gaseous emissions to bring them to the NEQS limiting value is not permissible through excess air mixing blowing before emitting into the environment.