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**GOVERNMENT OF THE PUNJAB  
LAW AND PARLIAMENTARY AFFAIRS DEPARTMENT**

**NOTIFICATION  
(118 of 2016)**

12<sup>th</sup> August 2016

The following Notification No. SO(G)/EPD/7-26/2013, dated 05.08.2016 regarding the Punjab Environmental Quality Standards for Industrial Gaseous Emissions is published for general information:

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**DR SYED ABUL HASSAN NAJMEE**  
Secretary  
Government of the Punjab  
Law and Parliamentary Affairs  
Department

**Government of the Punjab  
Environment Protection Department**

**NOTIFICATION: No. SO(G)/EPD/7-26/2013.** – In exercise of the powers conferred under clause (c) of sub-section (1) of section 4 of the Punjab Environmental Protection Act, 1997 (XXXIV of 1997), the Environmental Protection Council has approved the following as the Punjab Environmental Quality Standards for Industrial Gaseous Emissions:

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

No.	Parameter	Source of Emission	Standard
1	2	3	4
1	Smoke	Smoke opacity not to exceed	40% or 2 Ringlemann 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 <sup>a</sup>
7	Sulphur Oxides <sup>(2)(3)</sup>	Sulfuric acid / Sulfonic acid plants	5000
		Other plants except power plants operating on oil and coal	1700
8	Carbon Monoxide (CO)	Any	800

No.	Parameter	Source of Emission	Standard
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	Oxides of Nitrogen	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:**

1. Based on the assumption that the size of the particulate is 10 micron or more.
2. Based on 1 percent sulfur content in fuel oil. Higher content of sulfur will cause standards to be pro-rated.
3. 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**

Background Air Quality ( $\text{SO}_2$ Basis)	Annual Average	Max. 24 hours Interval	Criterion I	Criterion II
			Max. $\text{SO}_2$ Emission (Tons per Day per plant)	Max. Allowable ground level increment to ambient ( $\mu\text{g}/\text{m}^3$ ) (One Year Average)
Unpolluted				
Moderately Polluted*	< 50	< 200	500	50

Sulfur Dioxide Background levels Microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ) Standards				
Background Air Quality ( $\text{SO}_2$ Basis)	Annual Average	Max. 24 hours Interval	Criterion I Max. $\text{SO}_2$ Emission (Tons per Day per plant)	Criterion II Max. Allowable ground level increment to ambient ( $\mu\text{g}/\text{m}^3$ ) (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  $\mu\text{g}/\text{m}^3$  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  $\text{NO}_x$  should not exceed the following:

Annual Arithmetic Mean 100 $\mu\text{g}/\text{m}^3$  (0.05 ppm)

Emission levels for stationary source discharges before mixing with the atmosphere, should be maintained as follows:

For fuel fired steam generators, as Nano-gram per joule ( $10^{-9}$  g/J) of heat 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.

  
(IQBAL MOHAMMED CHAUHAN)  
Secretary, Government of the Punjab  
Environment Protection Department