

**87. EMISSION REGULATIONS FOR RAYON INDUSTRY**

- A. Existing Plants  
 Estimation of Uncontrolled Emission Quantity (EQ) of CS<sub>2</sub> :  
 For VSF,  
 EQ = 125 kg of CS<sub>2</sub>/t of fibre  
 For VFY,  
 EQ = 225 kg of CS<sub>2</sub>/t of fibre

Stack Height (H) requirement, m	Remarks
11 Q 0.41-3Vs D/u	A minimum of 80% of total emission shall pass through stack. If the calculated stack height is less than 30m, a minimum of height 30 m shall be provided

Where Q ---CS<sub>2</sub> emission rate, kg/hr

VS---stack exit velocity, m/sec.

D ---diameter of stack, m.

U ----annual average wind speed at top of stack, m/sec.

**Multiple Stacks**

1. If there are more than one stack existing in the plant, the required height of all stacks shall be based on the maximum emission rate in any of the stacks. In other words, all the stacks carrying CS<sub>2</sub> emission shall be of same heights (based on the maximum emission rate).
2. Number of stacks shall not be increased from the existing number. However, the number of stacks may be reduced. The existing stacks may be rebuilt and if stacks are to be relocated condition 3 below applies.
3. Spacing among the stacks (x) at the minimum shall be 3.0 H (in m). If distance, x, between two stacks is less than 3.0 H (in m), emission shall be considered as single point source and height of both the stacks shall be calculated considering all emission is going through one stack.

## B. Ambient Air Quality Monitoring

The industry shall install three air quality monitoring stations for CS<sub>2</sub> and H<sub>2</sub>S measurements in consultation with State Pollution Control Board (SPCB) to ensure attainment of WHO recommended ambient air quality norms (CS<sub>2</sub> = 100 ug/m<sup>3</sup> and H<sub>2</sub>S = 150 ug/m<sup>3</sup>, 24 = hr. average).

<sup>1</sup>[C. For new plants/expansion projects being commissioned on or after 1.6.1999

For new plants or expansion projects, the emission standards for existing plants covered in (a) above shall apply subject to compliance of the ambient air quality norms for CS<sub>2</sub> and H<sub>2</sub>S indicated in (b) above. The new plants or expansion projects shall provide adequate space for undertaking retrofittings.

(Note : a and b above also apply to new plants or expansion projects.)]

## <sup>2</sup>[88. EMISSION STANDARDS FOR NEW GENERATOR SETS (UPTO 19 KILOWATT) RUN ON PETROL AND KEROSENE WITH IMPLEMENTATION SCHEDULE.

The emission standards for portable generator sets run on petrol and kerosene shall be follows :-

### A. From June 1,2000

Class	Displacement (CC)	CO(g/kw-hr)		HC+NO <sub>x</sub> (g/kw-hr)	
		2-stroke engine	4-stroke engine	2-stroke engine	4-stroke engine
1.	≤65	603	623	166	65
2.	>65 ≤ 99	-	623	-	36
3.	>99 ≤225	-	623	-	19.3
4.	>225	-	623	-	16.1

<sup>1</sup> Substituted by Rule 2(i) of the Environment (Protection) Second Amendment Rules, 2006 notified by G.S.R.640(E), dated 16.10.2006.

<sup>2</sup> Sl. No. 88 and 89 and entries relating thereto inserted by the Environment (Protection) (Second Amendment) Rules, 1999 vide G.S.R. 682 (E), dated 5.10.1999.