GOVERNMENT OF INDIA MINISTRY OF POWER

LOK SABHA UNSTARRED QUESTION NO.2017 ANSWERED ON 11.12.2025

EMISSION FROM THERMAL POWER PLANTS

†2017. SHRI RAKESH RATHOR: SHRI GAURAV GOGOI: SHRI PRADYUT BORDOLOI:

Will the Minister of POWER be pleased to state:

- (a) whether the Government has conducted any assessment to study the extent by which the emissions from Thermal Power Plants (TPPs) in neighbouring States are contributing to the air pollution in Delhi and if so, the details thereof;
- (b) whether the Government has given exemption from installing pollution control systems like Flue Gas Desulfurization (FGD) to many coal-based power plants and if so, the number and details of such exempted units;
- (c) whether it is a fact that such exemption are causing high emissions from neighbouring areas and thus the burden of pollution is being shifted, if so, the details thereof; and
- (d) the measures being taken by the Government to ensure strict compliance with emission norms / standards to ensure that the pollution control systems remain fully operational and prevent inter-state displacement of air pollution?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (c): No such assessment / study has been conducted by the Ministry of Power to evaluate the extent to which emissions from Thermal Power Plants (TPPs) located in neighbouring states contribute to air pollution in Delhi.

Ministry of Environment, Forest and Climate Change (MoEF&CC) notified emission standards [including Sulphur Dioxide (SO_2)] for coal / lignite based Thermal Power Plants (TPPs) vide its Notification dated 07.12.2015. Further, MoEF&CC vide Notification dated 31.03.2021 prescribed for categorization of TPPs into three categories i.e. Category A, B and C for compliance of the emission standards. Accordingly, TPPs were classified as follows:

SI. No.	Category	Location / Area	No. of TPPs	No. of Units	Capacity (MW)
1	Category A	Within 10 km radius of National Capital Region or cities having million plus population	17	66	20,577
2	Category B	Within 10 km radius of Critically Polluted Areas or Non-attainment cities	25	72	24,057
3	Category C	Other than those included in category A and B	149	462	1,66,885.5
Total			191	600	2,11,519.5

Note: As per 2011 census of India

The SO_2 emission standards prescribed in MoEF&CC Notification dated 07.12.2015 have been reviewed by the Central Government taking into consideration the various representations received regarding exemption or relaxation in timelines of these standards due to limited availability of technology providers, its techno-economic feasibility, negative impact of COVID-19 pandemic on supply chain, price escalation due to high demand and low supplies, low SO_2 concentration in ambient air and heavy burden on consumers due to increase in electricity price etc.

Besides, the scientific studies conducted by independent research institutions regarding effectiveness & rationale behind these standards and its role in overall ambient air pollution of the region were also considered to evaluate the need of universal applicability and enforcement of these standards.

In view of above, MoEF&CC has issued a Notification on 11.07.2025 regarding the applicability of SO_2 emission standards notified vide Notification dated 07.12.2015. Accordingly, the applicability and timelines for compliance of SO_2 emission standards by TPPs are tabulated below:

Category	Applicability of SO₂ emission standards	Timelines for Complianc e (Non- retiring units)	Last date for retirement of units for exemption from compliance
Category A	Mandatory	31.12.2027	31.12.2030
Category B	To be decided on a case-to-case basis by the Central Government based upon	31.12.2028	

	the recommendations of the Expert Appraisal Committee (Thermal Projects).		
	In case any TPP is considered for exemption from SO ₂ emission standards, such TPP shall ensure meeting of stack height as per Notification no. G.S.R. 742 (E) dated 30.08.1990.		
Category C Not applicable subject to condition of meeting stack height as per Notification no. G.S.R. 742 (E) dated 30.08.1990.		31.12.2029	

The category wise applicability of SO_2 emission standards in TPPs have been decided based on detailed scientific studies and analysis of ambient SO_2 concentrations across the country, including areas near TPPs. This approach applies the precautionary principle for controlling and abating air pollution in densely populated and other air pollution sensitive areas, while also emphasizing on resource conservation by avoiding additional consumption of water, auxiliary power, and limestone, and avoiding the increase in carbon footprint/ CO_2 emissions resulting from the operation of deployed control measures, as well as mining and transportation of limestone required for these measures.

(d): The thermal power plants are mandated to install Online Continuous Emission & Effluent Monitoring System (OCEMS) for continuous emission and effluent monitoring.

Further, in case of non-compliance beyond the prescribed timelines, the following Environmental Compensation will be levied on non-compliant TPPs:

Non-Compliant operation beyond the Timeline	Environmental Compensations (Rs. Per unit electricity generated)		
0-180 days	0.20		
181-365 days	0.30		
366 days and beyond	0.40		
