

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.4761
ANSWERED ON 21.08.2025**

MANDATORY INSTALLATION OF FGD SYSTEMS

4761. SHRI SUKHDEO BHAGAT:

**Will the Minister of POWER
be pleased to state:**

- (a) whether only about 5 per cent of India's coal-based thermal power capacity had Flue Gas Desulphurisation (FGD) systems installed as on 2023 according to recent date of the Government and if so, the details thereof;
- (b) whether Eastern India had zero compliant plants despite norms set years ago and if so, the details thereof;
- (c) the reasons for which the Government is still delaying mandatory Sulphur Dioxide (SO₂) control in the majority of Thermal Power Plants thereby putting public health at risk; and
- (d) the time by which the enforcement is likely to be made universal rather than postponing deadlines with minimal penalty structures?

A N S W E R

**THE MINISTER OF STATE IN THE MINISTRY OF POWER
(SHRI SHRIPAD NAIK)**

(a) to (d): Ministry of Environment, Forest and Climate Change (MoEF&CC) notified emission standards [including Sulphur Dioxide (SO₂)] 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 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:

Sl. 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

To meet the SO₂ emission norms, Flue Gas Desulphurization (FGDs) systems are being installed in coal/lignite based TPPs.

The SO₂ 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 SO₂ concentration in ambient air and heavy burden on consumers due to increase in electricity price etc.

Besides the above, 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 applicability of SO₂ emission standards for TPPs along with timelines and its details are given below:

- (i) TPPs declared to retire before 31.12.2030 shall not be required to meet specified standards for SO₂ emissions in case such plants submit an undertaking to Central Pollution Control Board (CPCB) and Central Electricity Authority (CEA) for exemption on ground of retirement of such plant;**
- (ii) the existing and under commissioning Category A TPPs shall comply with SO₂ emission standards by 31.12.2027. Other Category A plants to be commissioned after 31.12.2027 will operate only after ensuring compliance of these standards;**
- (iii) for all Category B Plants or Units, whether existing or upcoming, the applicability of SO₂ emission standards, shall be decided by the Central Government based upon recommendations of the Expert Appraisal Committee in charge of thermal Power Projects as per the procedure laid in the notification dated 11.07.2025;**
- (iv) the SO₂ emission standards shall not be applicable to all Category-C TPPs subject to compliance of stack height criteria notified by MoEF&CC on 30.08.1990 and the timeline for compliance of stack height criteria is 31.12.2029.**

The above category wise applicability of SO₂ emission standards in TPPs have been decided based on detailed scientific studies and analysis of ambient SO₂ concentrations across the country, including areas near TPPs.

Further, in case of non-compliance beyond the specified timelines, MoEF&CC has prescribed the following Environmental Compensation on non-retiring 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

Till 31.12.2023, FGDs could be installed in 24 Units (10,600 MW).

As of now, FGDs have been installed in 57 Units of various TPPs across the country. Out of these, 11 FGDs (in the States: Jharkhand-03, Odisha-02 and West Bengal-06) have been installed in the TPPs located in Eastern region of India.
