

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.4602
ANSWERED ON 21.08.2025**

MITIGATION OF SULPHUR DIOXIDE EMISSIONS

4602. SHRI MADDILA GURUMOORTHY:

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

- (a) whether the Government has accepted the recent recommendation of the committee led by the Principal Scientific Adviser to withdraw the mandatory installation of Flue Gas Desulphurisation (FGD) units in all coal-fired thermal power plants and if so, the reasons for this rollback despite its risks on health and environment;**
- (b) whether any alternative technologies or regulatory frameworks have been proposed to replace FGD systems in controlling SO₂ emissions from thermal power plants and if so, the details thereof; and**
- (c) whether the Government is considering a differential policy for coastal and non-coastal thermal plants based on their access to cheaper alternatives like seawater-based FGD treatment and if so, the details thereof?**

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (c): 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 for categorization of TPPs into the following 03 categories for compliance of emission standards:

(i) Category-A (Within 10 km radius of National Capital Region or cities having million plus population);

(ii) Category-B (Within 10 km radius of Critically Polluted Areas or Non-attainment cities);

(iii) Category- C (Other than those included in Category A and B).

To meet the SO₂ emission norms, Flue Gas Desulphurization (FGD) system is 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 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.

Various Stakeholders' consultation meetings among MoEF&CC, Ministry of Power (MoP), Central Pollution Control Board (CPCB), O/o Principal Scientific Adviser (PSA) to the Government of India, Central Electricity Authority (CEA), Research Institutions were also held in the matter. The recommendations of the stakeholders' consultation meetings, including the meeting chaired by the PSA to Govt. of India, was also taken into consideration by MoEF&CC.

In view of above, MoEF&CC has issued a Notification on 11.07.2025 regarding applicability of SO₂ emission standards along with timelines for compliance by TPPs 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 timeline for compliance of stack height criteria is 31.12.2029.

The 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. 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/CO₂ emissions resulting from the operation of deployed control measures, as well as mining and transportation of limestone required for these measures.

In all cases where SO₂ emission standards are not applicable, all such TPPs (irrespective of location) shall ensure compliance to stack height criteria notified by MoEF&CC on 30.08.1990 governing SO₂ emissions from TPPs to aid proper dispersion of pollutants and mitigate environmental impacts.

Further, TPPs are required to comply with emission standards within the prescribed time limits, failing which environmental compensation will be levied on the non-compliant TPPs.

The selection of technology for FGD installation is decided on the basis of cost benefit analysis by the utility. The policy regarding FGD installation is irrespective of coastal and non-coastal thermal plants.
