

**GOVERNMENT OF INDIA  
MINISTRY OF POWER  
LOK SABHA  
UNSTARRED QUESTION NO.4601  
ANSWERED ON 21.08.2025**

**GUIDELINES FOR INSTALLING FGD SYSTEMS**

**4601. SHRI SAPTAGIRI SANKAR ULAKA:**

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

- (a) whether the notification dated July 11, 2025 exempts a majority of coal-fired thermal power plant units from installing Flue Gas Desulphurization (FGD) systems, if so, the details thereof and the reasons therefor;
- (b) the list of total number of units with their capacity and category (A,B,C) along with the criteria and scientific basis for classifying them into said categories, State-wise;
- (c) the list of exempted units with their capacity and category, State-wise including Delhi-NCR along with the specific criteria and rationale used to determine these exemptions including the reasons for adopting location-based emission norms instead of uniform national standards; and
- (d) whether comparative national SO<sub>2</sub> trends and international benchmarks were reviewed before this amendment and if so, the details thereof along with the compliance, review and monitoring roadmap for Categories B and C?

**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 (SO<sub>2</sub>)] for coal / lignite based Thermal Power Plants (TPPs) vide its Notification dated 07.12.2015. Further, MoEF&CC vide Notification dated 31.03.2021 categorized 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***

**State-wise details of number of TPP Units (including 35 Units of Delhi-NCR) along with their capacity under Category A, B and C are given at Annexure-I.**

**To meet the SO<sub>2</sub> emission norms, Flue Gas Desulphurization (FGD) system is being installed in coal/lignite based TPPs.**

**The SO<sub>2</sub> 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<sub>2</sub> 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, now MoEF&CC has issued a Notification on 11.07.2025 regarding applicability of SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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 category wise applicability of SO<sub>2</sub> emission standards in TPPs have been decided based on detailed scientific studies and analysis of ambient SO<sub>2</sub> 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<sub>2</sub> emissions resulting from the installation of FGDs, as well as mining and transportation of limestone required for these measures.**

\*\*\*\*\*

**ANNEXURE****ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 4601 ANSWERED IN THE LOK SABHA ON 21.08.2025**

\*\*\*\*\*

**State-wise details of TPP units under Category A, B and C**

| Sl. No. | State          | No. of TPP Units |            |            |                    | Total Capacity (MW) |
|---------|----------------|------------------|------------|------------|--------------------|---------------------|
|         |                | Category A       | Category B | Category C | Total no. of Units |                     |
| 1       | Andhra Pradesh | 13               | 0          | 18         | 31                 | 11,590              |
| 2       | Assam          | 0                | 0          | 03         | 03                 | 750                 |
| 3       | Bihar          | 0                | 4          | 20         | 24                 | 7,960               |
| 4       | Chhattisgarh   | 0                | 18         | 45         | 63                 | 23,688              |
| 5       | Gujarat        | 03               | 0          | 43         | 46                 | 16,092              |
| 6       | Haryana*       | 08               | 0          | 04         | 12                 | 5,330               |
| 7       | Jharkhand      | 0                | 0          | 13         | 13                 | 4,250               |
| 8       | Karnataka      | 0                | 0          | 22         | 22                 | 9,480               |
| 9       | Madhya Pradesh | 0                | 0          | 50         | 50                 | 21,950              |
| 10      | Maharashtra    | 15               | 11         | 46         | 72                 | 24,966              |
| 11      | Odisha         | 0                | 03         | 17         | 20                 | 10,140              |
| 12      | Punjab*        | 0                | 0          | 15         | 15                 | 5,680               |
| 13      | Rajasthan      | 07               | 0          | 30         | 37                 | 10,480              |
| 14      | Tamil Nadu     | 08               | 17         | 16         | 41                 | 13,685              |
| 15      | Telangana      | 0                | 0          | 19         | 19                 | 7,572.5             |
| 16      | Uttar Pradesh* | 06               | 09         | 62         | 77                 | 23,729              |
| 17      | West Bengal    | 06               | 10         | 39         | 55                 | 14,177              |
|         | Total          | 66               | 72         | 462        | 600                | 2,11,519.5          |

**\* Note: Includes 35 Units of TPPs in Delhi-NCR (Haryana-12 Units, Punjab-13 Units, Uttar Pradesh-10 Units)**

\*\*\*\*\*