GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA UNSTARRED QUESTION NO.656 TO BE ANSWERED ON 24.07.2023

SO₂ Emissions

656 SHRI FEROZE VARUN GANDHI:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether the Government is aware that India is the world's largest emitter of anthropogenic Sulphur Dioxide, that contributes to air pollution;
- (b) whether flue-gas desulphurization technology has been installed in the coal plants that will help in reduction of air pollution and if so, the details thereof and if not, the reasons therefor; and
- (c) the steps taken by the Government to regulate the SO2 emissions in the country?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

(SHRI ASHWINI KUMAR CHOUBEY)

(a) to (C): Coal based thermal power plants (TPP) are major source of anthropogenic sulphur dioxide (SO₂) which contributes to air pollution. Ministry of Environment, Forest and Climate Change vide notification dated 07.12.2015 stipulated norms for emission of SO₂ from coal-fired TPP apart from other pollutants. There was no SO₂ emission norms for coal based TPPs prior to this notification and SO₂ emission was regulated through stipulating the height of discharge/emittance through fixing height of chimney.

Ministry of Environment, Forest and Climate Change vide notification dated 07.12.2015 stipulated norms for SO₂ emission apart from other pollutants for coal-fired thermal power plants. The implementation of the emission norms, requiring installation of Flue-Gas Desulphurisation (FGD) technology, got delayed due to various techno-economic constraints faced by thermal power plants and further affected by the impact of COVID-19 pandemic. Considering these constraints, the Central Government initially decided for phased implementation of FGDs with maximum timelines up to December 2022, and later vide notifications *vide* dated 31.03.2021 and 05.09.2022 granted further extension of time limit for implementation of the new emission norms for SO₂ parameter up to December 2024, December 2025 and December 2026 for Category A, B and C plants, respectively, based on plant's location.

Two commonly acceptable technologies for flue-gas desulphurization (FGD) installed in coal based TPPs in India are Wet scrubbing (wet FGD) and Dry Sorbent Injection (DSI). As per available information, 18 number of units have installed wet FGD and 4 units have installed DSI technology for desulphurization of flue gas from coal based TPPs. State wise list of these 22 units is enclosed at **Annexure-I.**

Annexure - referred in reply to part (a) to (c) of the Lok Sabha Unstarred Question No. 656 due for answer on 24.07.2023 regarding 'SO2 Emissions' raised by Shri Feroze Varun Gandhi, Hon'ble M. P.

State-wise details of 22 units having installed Wet FGD/DSI systems

Sl.	State	No. of	Name of TPP and	SO ₂ emission control
No.		Units	Unit Nos.	technology
1.	Gujarat	03	Adani Power Mundra TPS (U –	Wet FGD
			7, 8, 9)	
2.	Haryana	02	Mahatma Gandhi TPS, CLP	Wet FGD
			Jhajjar (U – 1 & 2)	
3.	Madhya	01	Vindhyachal STPS, NTPC Ltd.	Wet FGD
	Pradesh		(U-13)	
4.	Maharashtra	04	JSW Ratnagiri TPS (U – 1, 2, 3,	Wet FGD
			4)	
		02	Adani Dahanu TPS (U – 1 & 2)	
		02	Tata Power Trombay TPS (U – 5	
			& 8)	
5.	Tamilnadu	02	IL&FS TNPCL (U – 1 & 2)	Wet FGD
6.	Uttar Pradesh	06	NCTPS Dadri, NTPC Ltd. (U – 1, 2, 3 & 4)	DSI
			NCTPS Dadri, NTPC Ltd. (U – 5)	Wet FGD
			Únchahar TPS, NTPC Ltd. (U-6)	Wet FGD
	Total	22		