



Compliance Deadline for Category-C Coal Plants

For Prelims: Coal-plant Categories, Flue Gas Desulfurisation, Central Pollution Control Board

For Mains: Energy Resources, Conservation, Environmental Pollution & Degradation

Why in News?

The Ministry of Power (MoP) has sought a **blanket extension of 20 years again for 398 thermal Category C coal power plants to comply with the emission norms.**

- The **Union Ministry of Environment, Forest and Climate Change (MoEF&CC)** set-up the **original deadline of 2017** for the units accounting for 78% coal-fired thermal power capacity of the nation. In 2021, this **deadline was revised to 2024.**
- Currently, just **5% capacity in Category-C plants complies with the emission norms.**

What are the Reasons for the Extension?

- **Background:**
 - India had **initially set a 2017 deadline for thermal powerplants to install Flue Gas Desulphurization (FGD) units** that cut emissions of sulphur dioxides.
 - In 2021, the **Ministry of Power requested the Environment Ministry** to extend the deadline for meeting emission norms for all thermal plants from 2022 to 2024, citing delay due to various reasons, including the coronavirus pandemic and import restrictions.
 - In April 2021, the Environment Ministry **extended timelines for coal-based power plants to comply with emission norms by three to five years.**
 - The amended norms stagger the timeline for compliance based on location of a power plant.
 - All the thermal power plants were categorised into three groups- Category A, B and C.
- **Emissions from Coal-fired Power Plants:**
 - Thermal power companies, which produce three-fourths of the country's electricity, account for some **80% of its industrial emissions of particulate matter, sulphur and nitrous-oxides, which cause lung diseases, acid rain and smog.**
 - These are also responsible for **70% of the total freshwater withdrawal by all industries.**
- **Reasons for Extension:**
 - Phased manufacturing programme for **Flue Gas Desulfurisation (FGD)** to encourage **'Atmanirbhar Bharat'.**
 - **FGD** is the process of **elimination of sulphur-dioxide viz. SO₂** from exhaust flue gases produced due to thermal processing, treatment, and combustion furnaces, boilers, and other industrial processes.
 - **High cost of FGD due to demand-supply gap** and escalated prices of FGD to Rs 1.14 crore from 0.39 crore per unit of generation.
 - The planning, tendering and implementation of FGD was **disrupted on account of the**

[Covid-19 pandemic.](#)

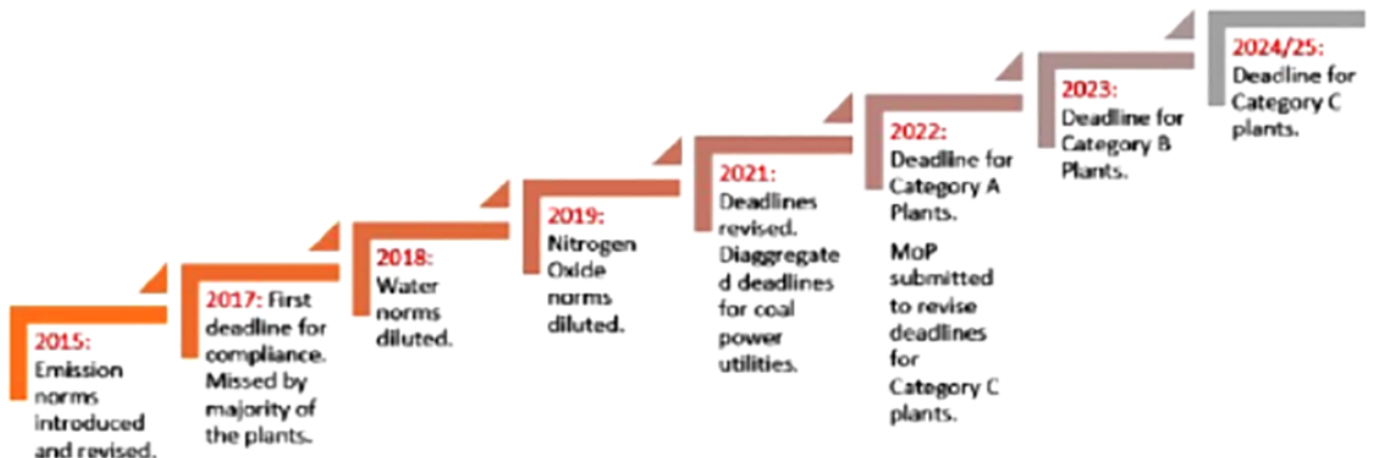
- Further, there exist **import constraints for the components of FGD like absorber lining and borosilicates** owing to the geopolitical conditions.

What are the Different Categories of Coal Plants?

- Based on their aerial distance from the million-plus population cities, critically polluted areas, non-attainment cities, and Delhi-National Capital Region region, coal plants are categorized into **Category-A, Category-B and Category-C plants.**
 - **Category-A:**
 - The power plants **within the radius of 10 km of the National Capital Region (NCR) or cities having million-plus population** have to meet the **December 2022 deadline.**
 - As per the list prepared by the **Central Pollution Control Board (CPCB)**, there are **79 such coal-based power plants.**
 - **Category-B and -C:**
 - The power plants **within the radius of 10 km of critically polluted areas or non-attainment cities** have to meet the **December 2023 deadline.** There are **68 Category-B plants.**
 - The **remaining plants comprising 75% of total** fall under **Category-C** those were expected to meet the December 2024 deadline. There are **449 Category-C plants.**
- The **2021 amendment** for the first time introduced a **penalty mechanism.** The **maximum fine** upon deadline breach for **non-retiring plants in Category-A is 20 paisa per unit, 15 paisa per unit for plants in Category-B, and 10 paisa per unit for those in Category-C.** The penalty for **retiring plants** is set at **20 paisa per unit.**

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Chain of events for implementation



What is the compliance status of Category-A and Category-B plants?

- Around half of the **Category-A plants (54%) may not comply with the December 2022 deadline.** Till date, just **13%** of plants have **met the emission norms.**
- **Only 8% Category-B plants claim to be compliant and 30% are likely to meet the deadline.** **61%** are expected to **miss the deadline.**

Way Forward

- **Safeguarding the interest of the environment** must be on the priority and the **polluters and continuous violators shouldn't be favoured**.
- **New technologies such as like** [Coal gasification](#), [Coal beneficiation](#) must be readily employed to make the power plants more efficient and compatible with the environment.
- Also, there is a **need to focus on renewable energy** more in order to be a game changer in the Indian energy transition space.

UPSC Civil Services Examination, Previous Year Question

Q. How is the National Green Tribunal (NGT) different from the Central Pollution Control Board (CPCB)? (2018)

1. The NGT has been established by an Act whereas the CPCB has been created by an executive order of the Government.
2. The NGT provides environmental justice and helps reduce the burden of litigation in the higher courts whereas the CPCB promotes cleanliness of streams and wells, and aims to improve the quality of air in the country.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (b)

Exp:

- **Central Pollution Control Board (CPCB)** is a **statutory organisation** which was constituted in **September, 1974** under the **Water (Prevention and Control of Pollution) Act, 1974**. It was entrusted with the powers and functions under the **Air (Prevention and Control of Pollution) Act, 1981**. [National Green Tribunal \(NGT\)](#) is a **specialised body set up** under the **National Green Tribunal Act (2010)**. Hence, **statement 1 is not correct**.
- The **functions of CPCB** are:
 - **Monitoring the water quality** by promoting the cleanliness of streams and wells across different areas of the States through prevention, control and abatement of water pollution.
 - **Monitoring the air quality** by improving air quality through prevention, control and abatement of air pollution in the country.
- **NGT** provides for **effective and expeditious disposal of cases relating to environmental protection** and conservation of forests and other natural resources. Hence, **statement 2 is correct**.

Source: DTE