# Sulfur Dioxide Emission Norms delayed

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## In News

- The Supreme Court rejected the request of Association of Power Producers (APP) to extend the 2022 deadline for meeting pollution norms by two years.

## Background

- In 2015, the Ministry of Environment, Forest and Climate Change (MoEF&CC) notified emission norms for particulate matter (PM), sulphur dioxide and oxides of nitrogen.
- Particulate matter is a mixture of solid particles and liquid droplets in the air. Some particles can be seen with the naked eye; others can only be detected under a microscope.
- PM can cause serious respiratory disorders and even damage the lungs.
- It set a 2017 deadline for thermal power plants to comply with emissions standards for installing Flue Gas Desulphurization (FGD) units that cut emissions of toxic sulphur dioxide.
- FGD is a set of technologies used to remove sulfur dioxide from exhaust flue gases of fossil-fuel power plants, and from the emissions of other sulfur dioxide emitting processes such as waste incineration.
- The deadline was later changed to varying deadlines for different regions, ending in 2022.
- More than 50% of the plants have not taken adequate steps to meet these emission norms.
- In February 2020, the Ministry of Power asked the Central Electricity Authority (CEA) to submit a paper to suggest periodicity of pollutant monitoring as well as

emission standards specific to plant locations.

- Accordingly, the CEA prepared a report, which was deemed incomplete and invalid by the Centre for Science and Environment (CSE).

## Flue Gas Desulphurisation (FED)

- Removal of Sulfur Dioxide is called as Flue-gas Desulphurization (FGD).
- It seeks to remove gaseous pollutants viz. SO2 from exhaust flue gases generated in furnaces, boilers, and other industrial processes due to thermal processing, treatment, and combustion.

## Sulfur Dioxide Pollution

- **Source**
  - **The largest source of SO2 :** Burning of fossil fuels by power plants and other industrial facilities.
  - **Smaller sources of SO2 :** Industrial processes such as extracting metal from ore; natural sources such as volcanoes; and locomotives, ships and other vehicles and heavy equipment that burn fuel with a high sulfur content.
- **Impact**
  - Short-term exposures to SO2 can harm the human respiratory system and make breathing difficult.
  - People with asthma, particularly children, are sensitive to these effects of SO2.
  - SO2 emissions that lead to high concentrations of SO2 in the air generally also lead to the formation of other sulfur oxides (SOx). SOx can react with other compounds in the atmosphere to form small particles.
  - These particles contribute to particulate matter (PM) pollution.