Syllabus subtopic: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

Prelims and Mains focus: about the move to curb air pollution from thermal power plants; about NGT; CPCB

News: The Central Pollution Control Board (CPCB) has pulled up 14 thermal power plants for not complying with a December 31, 2019 deadline to limit sulphur dioxide emissions.

Where are these plants located?

- These are 5 plants in Haryana, 3 in Punjab, 2 in Uttar Pradesh, 2 in Andhra Pradesh, 2 in Telangana and 1 in Tamil Nadu with a total capacity of approx 15 GW that have missed the deadline.

- The 14 plants have been given until the end of this month to explain to the CPCB why they have not complied with the norms and why action should not be taken.

Background

- Non-compliance by the thermal power plants is an ongoing dispute being contested at the National Green Tribunal through a petition filed in April 2017.

- There is an ongoing case in the Supreme Court regarding the extensions given to these plants.

Can CPCB punish them for violating the guidelines?

The CPCB has the power to impose steep fines or shut a unit under the provisions of the Environment Protection Act, 1986.

Steps taken to limit air pollution
To limit particulate matter, sulphur dioxide and nitrous oxide emission from thermal plants, India put in place a phased-approach that directs 440 coal-fired units — responsible for about 166,000 MW of power — to put in place measures to limit pollution by December 2022.

However 11 plants in a 300 km radius of Delhi were to comply by December 31, 2019 because of the poor air quality in the city as well as the surrounding Gangetic plain.

Some of them claimed to have set in place the process for acquiring flu-gas desulphurisation technology where as others said they were yet to award tenders. Only one of these plants has actually implemented technology to limit emissions.

As per Centre for Science and Environment (CSE) estimates, these norms can help reduce PM emissions by about 35%, NOx emission by about 70%, and SO2 emissions by more than 85% by 2026-27 against a business-as-usual scenario with no pollution control technologies.

**Cost of installing technology to control toxic emissions**

A latest study has estimated that it would cost coal-fired power plants about Rs 730-860 billion to install technology to control toxic emissions of sulphur oxides, nitrogen oxides and particulate matter from them.

On average, this could translate into an increase of about Rs 0.6 per unit of electricity for consumers. However, the cost of not abating pollution from power plants is higher and will impact the health of millions of people across the country, caution the authors.

India’s environment ministry had come out with strict emission norms for coal power plants in December 2015 mandating them to install such technology by December 2017, but later the date was postponed till 2022.

The study recommended to the government to take strict measures in case the power plants fail to adhere to strict emission standards even by 2022.