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Educating & Informing Stakeholders on Energy, Environment & Thermal Power Plants

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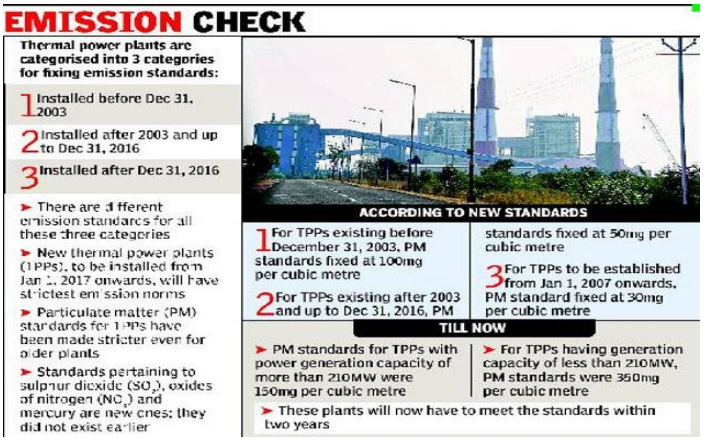
GREEN BID: GOVT ISSUES STRICT NORMS FOR THERMAL PLANTS



Moving towards stricter emission norms to minimise pollution, the Union environment ministry has notified revised norms of emission standards for coal-based thermal power plants in the country and made it mandatory for the existing plants to meet those parameters within two years. Besides tightening the emission norms, the ministry through the notification - issued on December 7 - also fixed water consumption parameters for all the existing and new plants, making it mandatory to use water more efficiently.

Under the revised norms, the new power plants (to be commissioned from January 1, 2017 onwards) will have to achieve "zero waste water discharge" standard through putting up adequate captive infrastructure. All the upcoming power plants will be given environmental clearance only after getting such commitments under the new norms. "The new standards are aimed at reducing emission of PM10 (particulate matter), Sulphur Dioxide, and Oxide of Nitrogen, which will in turn help in bringing about an improvement in the Ambient Air Quality (AAQ) in and around thermal power plants", said the ministry in a statement.

It said, "The technology employed for the control of the proposed limit of Sulphur Dioxide (SO2) and Nitrogen Oxide (NOx) will also help in control of mercury emission (at about 70-90%) as a co-benefit". The notification shows that the newer power plants will eventually be much cleaner as the revised norms will help keep strict tabs on emission of all pollutants. In case of PM10, the new plants will have to restrict the emission to 30 mg per cubic meter as compared to 100 mg per cubic meter in older plants.

Similarly, in case of SO2 and NOx, the new plants will have to restrict the emission at 100 mg per cubic meter as compared to 600 mg per cubic meter of the older plants, irrespective of the installed capacity of the power generating unit.

"Limiting the use of water in thermal power plant will lead to water conservation as thermal power plant is a water-intensive industry. This will also lead to a reduction in energy requirement for drawl of water", said the ministry.

"It is a welcome step. It will make sure that the existing plants are improved and the new plants are to be set up using state-of-the-art (clean) technology", said the Delhi-based think-tank Centre for Science and Environment's (CSE) deputy director general Chandra Bhushan while reacting to the new norms.

The CSE had in February strongly pitched for stricter emission norms for thermal power plants after it analysed the functioning and status of major coal-based power plants across the country. It had found that most of India's thermal power generating units are among the "most inefficient" in the world in terms of compliance of pollution norms, use of resources and overall operational efficiency.

The emission standards have, now, been made stringent for recent plants, compared to earlier ones and most stringent for those plants to be set up in future. These standards are based on the recommendation of the Central Pollution Control Board (CPCB). Before notifying the revised emission standards, the ministry had also held extensive consultations with stakeholders. (Times of India, Dec 23, 2015)

Take advantage of daylight by using light-coloured, loose-weave curtains on your windows to allow daylight to penetrate the room. Also, decorate with lighter colours that reflect daylight.

BADARPUR, RAJGHAT THERMAL POWER STATIONS TO BE SHUT DOWN

The Delhi government Friday decided to shut down the Badarpur and Rajghat thermal power stations after they came under the scanner for emitting particulate matter (PM) above permissible limits. The decision comes in the backdrop of a National Green Tribunal (NGT) directive in August this year. The NGT had ordered both stations to bring PM levels "within permissible limits" after an inspection report highlighted their high content in the ambient air around the projects. According to the report, PM levels in the Badarpur coal based plant's IIA unit exceeded the standard of 150 mg/Nm3 some days of the year.

At the Rajghat plant, all units exceeded the standard of 150 mg/Nm3 most of the time. The report was collated by a team comprising officials from the Central Pollution Control Board (CPCB), the Delhi Pollution Control Committee (DPCC) and a representative from the environment ministry. The two power plants came under the scanner after two stakeholders — the Delhi Power Procurement Group (DPPG) and the state-run State Load Dispatch Centre (SLDC) — had recommended phasing out of the two plants.

"Environmental issues are being encountered in running the units at the Rajghat plant. The units have also outlived their usual life due to ageing and the efficiency of the plant has reduced. Last summer, the plant could not deliver 60 per cent of its capacity," the forum had said. On the 40-year old Badarpur plant, the discoms had stated that the plant should be shut down as it has already completed its "useful life". Meanwhile, the Delhi government is planning to move a proposal before the NGT to shut down the NTPC Dadri station. This station is newer — with its coal-fired and gas-based units of 1,820 MW and 829 MW capacities — offering a degree of flexibility for the operator in terms of deploying the coal and gas units in tandem.

For Delhi, which has a peak load of around 6,000 MW, it is important to have a base-load thermal capacity/capacities of at least 3,000MW in its geographical proximity to ensure the possibility of islanding in the event of a crisis in the national grid. The Dadri station is also important as its gas-based unit is equipped with quick-start gas turbines. (Indian Express, Dec 5, 2015)

NGT PULLS UP NEPA OVER SALE OF COAL ASH

The National Green Tribunal (NGT) in Madhya Pradesh has allowed thermal power plants to sell fly ash/bottom ash/pond ash in open markets but has held that fly ash containing less than 17% of carbon content should be given free of cost to construction industries engaged in brick making or allied activities.

The orders dated December 10, 2015, a copy of which was made available on Wednesday, was pronounced by the principal bench of NGT in a petition filed against NEPA Mills Limited, Burhanpur. While pronouncing judgment, the bench comprising NGT chairperson and Justice Swatanter Kumar, Justice MS Nambiar and expert member DK Agarwal ordered NEPA Mills Limited to upgrade their thermal power plant within six months, so that it can utilize maximum carbon content in coal.

The central government, with its gazette notification dated September 14, 1999, has restricted sale of fly ash to ensure its optimum utilization and protect environment by conserving top soil used for making bricks.

"If the company fails to technologically upgrade its thermal power plant within six months, the company's CEO/managing director shall be personally responsible for consequences in accordance with law and the plant shall also be liable to be closed," the bench observed. The company shall also be liable to deposit a sum of Rs 85 crore with MP Pollution Control Board, which shall be used for prevention and control of pollution of environment, the bench added.

NEPA Mills Limited is said to have sold fly ash generated from its thermal power plant at exorbitant prices, although sale of fly ash was prohibited by the Ministry of Environment, Forest and Climate Change through the notification of 1999.

The notification was also aimed at promoting manufacture of construction material like bricks and tiles near thermal power plants, and made it compulsory for such units to mix at least 25 per cent of fly ash in making bricks.

"But the notification has been widely ignored by many thermal power plants across the country," said petitioner's counsel Manoj Kumar Agarwal, adding that NEPA Mills has earned over Rs 60 crore by selling fly ash.

(Hindustan Times, Dec 30, 2015)

COP21: Can India reconcile growth and environment? (Part 1)

Already one of the most disaster-prone nations in the world, India is also likely to be hit hard by the effects of global warming.

The South Asian country has very dense coastal populations vulnerable to rising sea levels. And the freak weather patterns which are already taking place - such as extreme heat, drought, and the record-breaking floods in Chennai - will not only affect agricultural and food security, but also cause water shortages and disease outbreaks.

The Indian government has reacted to the growing threat by rolling out an ambitious clean energy plan.

New Delhi has pledged to invest $100 billion in clean energy investments over the next five years as well as to source 40 percent of its electricity from renewable and other low-carbon sources by 2030.

Although it hasn't specified a cap on its emissions, the South Asian giant wants to reach 175 gigawatts (GW) of renewable energy capacity by 2022 - up from currently 38 GW - of which 100 GW will be from solar energy.

In fact, at the outset of the UN climate summit taking place in Paris from November 30 to December 11 (COP21), Indian PM Narendra Modi and French President Francois Hollande launched an alliance of 121 countries to dramatically boost the use of solar power.

'We still need conventional energy':

But will this be enough? Analysts point out that while New Delhi is well aware of the dangers posed by global warming, it also wants to make sure that any deal in Paris doesn't restrict the country's ability to expand its economy, with PM Modi saying that rich countries should not force the developing world

to abandon fossil fuels completely.

"We still need conventional energy. We need to make it clean, not impose an end to its use," said Modi at the start of the Paris talks, calling on developed nations to meet their commitment to muster $100 billion a year from 2020 to help poor countries cope with climate change.

Moreover, India sees itself as one of the most vocal proponents of "climate justice" - the notion that historical responsibilities as well as present-day capabilities matter greatly in shaping the climate governance regime.

"From the perspective of New Delhi, it bears little responsibility for the exponential increase in greenhouse gas emissions since the industrial revolution, and also has very little capacity to address the problem when much of the country still lives in abject poverty and hundreds of millions of Indians still lack access to electricity," David Livingston, an associate at the Energy and Climate Program at the Carnegie Endowment for International Peace, told DW.

It is precisely this balancing act between boosting economic growth and reaching environmental goals that poses the greatest political challenge to leaders of developing nations such as India - which is already the world's fourth-largest emitter of carbon dioxide after China, the US and the EU, according to the International Energy Agency (IEA).

Hard to abandon coal

India is home to one-sixth of the world's population, and its third-largest economy in purchasing power parity (PPP) terms, but accounts for only six percent of global energy use, with one in five Indians - 240 million people - still lacking access to electricity, according to the IEA.

But the government's plans to lift millions out of poverty will likely to change this, as efforts to modernize and industrialize

India will trigger dramatic increase in energy demand. In fact, the IEA estimates that the country's energy demand will account for roughly a quarter of the global increase in consumption by 2040.

The problem is that coal - the key source of power in the country, accounting for around 60 percent of total electricity generation - is also a key source of carbon emissions.

And due to the relatively low cost and large reserves of domestic thermal coal, it remains the key fuel source in India's long-term energy strategy, as Rajiv Biswas, Asia-Pacific Chief Economist at the analytics firm IHS, told DW. (DW, Dec 4, 2015)

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30 years of CAG
Citizen consumer and civic Action Group

Citizen consumer and civic Action Group (CAG) is a non-profit, non-political and professional organization that works towards protecting citizens' rights in consumer and environmental issues and promoting good governance processes including transparency, accountability and participatory decision making.

ANNUAL FLY ASH GENERATION AT COAL/ LIGNITE—TPPS & UTILIZATION (2014-15)

SUMMARY OF FLY ASH GENERATION AND UTILIZATION DURING THE YEAR 2014-15

Description		Year 2014-15
• Nos. of Thermal Power Stations from which data was received	:	145
• Installed capacity (MW)	:	1,38,915.80
• Coal consumed (Million tons)	:	549.72
• Fly Ash Generation (Million tons)	:	184.14
• Fly Ash Utilization (Million tons)	:	102.54
• Percentage Utilization	:	55.69
• Percentage Average Ash Content (%)	:	33.50

Power Station wise fly ash generation & its utilization status including modes of utilization for the 2014-15 for all the 145 thermal power stations is given in the statement

REGULATIONS AND CASES

- Ministry of Environment, Forest and Climate Change, Compendium of Gazette Notifications, Office Memoranda Under Environment Impact Assessment Notification, 2006. click here
- Ministry of Environment, Forest and Climate Change, Invitation of Comments and Suggestions on the Draft notification on Standards. Click here

PUBLICATIONS

- EURELECTRIC, 2030 climate and energy toolkit: EURELECTRIC's priorities and policy recommendations, 2015. Click here
- Greenpeace, End Of An Era: Why Every European Country Needs A Coal Phase-Out Plan, 2015. click here

MISCELLANEOUS

- Yale University, Environmental Performance Index (EPI), click here
- Elsevier, Journal of Applied Thermal Engineering, Design. Processes. Equipment. Economics. click here