

Expressions of Interest (EoI) for the sale of fly ash by NTPC

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In news

Recently, NTPC invited EOI for the sale of fly ash in Middle East and other regions

Key updates

- It has invited EOI in its endeavour towards 100% utilization of fly ash.
- Sustainable Ash utilization is one of the key concern areas at NTPC and the Company is ensuring sustainable solutions for complete utilisation for it.

What is Fly Ash?

- Fly Ash is a by-product of power generation with coal.
- Fly ash is the finely divided residue that results from the combustion of pulverized coal and is transported from the combustion chamber by exhaust gases
- It is used as a supplementary cementitious material (SCM) in the production of portland cement concrete.

Usage of NTPCs fly Ash

The Fly Ash generated at NTPC stations is ideal for use in the manufacture of Cement, Concrete, Concrete Products, Cellular Concrete products and for Bricks / Blocks / Tiles.

Though fly ash utilisation in India has increased from nearly 10% in 1996-97 to the highest level of over 83% during 2019-20, unutilised ash gets dumped in an environmentally hazardous manner, polluting air, water and soil.

Promotion of Fly Ash by NTPC

- To promote the use of Fly Ash bricks in building construction, **NTPC has set up Fly Ash brick manufacturing Plants at its Coal based Thermal Power Plants.**
- These bricks are being **utilized in Plants as well as township construction activities** exclusively.
- On average, 60 million Fly Ash bricks are being manufactured annually by NTPCs own Fly Ash brick Plants.
- As per the MoEF&CC directives, **NTPC stations are keeping at least 20% of total Fly Ash produced in reserve for the issue to Fly Ash brick/ blocks/ tiles** manufacturers and issuing Fly Ash free of cost to them.
- **About 9% of the total Fly Ash produced in NTPCs stations, is being utilized by Fly Ash bricks/ blocks** and tiles manufacturing units annually.
- NTPC Ltd, has collaborated with Cement manufacturers around the country to supply Fly Ash.
- The power producer is leveraging Indian Railways' sprawling network to transport Fly Ash in an economical and environment-friendly manner.
- Further, during the year 2020-21, almost 15 NTPC stations supplied Fly Ash to various Road projects and Ash utilization crossed by nearly 20 million tonnes.

New Fly Ash rules for thermal power plants-2021

In order to deal with environmentally hazardous fly ash generated from coal and lignite based thermal power plants (TPPs) centre has issued following rules:

- The Centre has made it mandatory for such plants to ensure **100% utilisation of fly ash within three to five years.**
- It also, for the first time, introduced **finest on non-compliant plants** under the '**polluter pays principle**',

taking into account utilisation targets from April 1 next year.

- Under the draft plan, notified by the environment ministry in April 2021, non-compliant TPPs will have to **pay a fine of Rs 1,000 per tonne on unutilised ash** which is to be accounted at the end of every financial year based on annual reports.
- Existing provisions allow TPPs to fully utilise fly ash in a four-year cycle in a staggered manner.
- The new plan will, however, **follow a three-year cycle for 100% utilisation of fly ash with a grace period of a year** in the 'first compliance' cycle if the percentage of ash utilisation is between 60-80% and two years if it is below 60% as accounted during 2021-22.
- From the 'second compliance' cycle, all TPPs will have to stick to average ash utilisation of 100% in a three-year cycle.
- The ministry's draft plan also deals with **unutilised accumulated ash (legacy ash) where TPPs will have to utilise it within 10 years** from the date of publication of final notification in a staggered manner.
- If the utilization of legacy ash is not completed at the end of 10 years, a fine of Rs 1000 per tonne will be imposed on the remaining unutilised quantity which has not been fined earlier.
- The collected fines will be deposited in the designated account of the Central Pollution Control Board (CPCB). It shall be used towards the safe disposal of the unutilised ash.
- The draft enlists several eco-friendly ways to utilise fly ash so that it does not pollute air and water.
- It includes use of fly ash in manufacturing of bricks/tiles, cement, ready-mix concrete; constructing roads, dams and embankment, and filling of low-lying areas and mines.

Benefits of Fly Ash

Fly ash utilization, especially in concrete, has significant environmental benefits including:

- Increasing the life of concrete roads and structures by improving concrete durability.
- Net reduction in energy use and greenhouse gas and other adverse air emissions when fly ash is used to replace or displace manufactured cement.
- Reduction in the amount of coal combustion products that must be disposed of in landfills.
- Conservation of other natural resources and materials.