

# 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.