

# **Mounting Fly Ash Problems in Growing Coal Based Power Stations - Few Pragmatic Approaches Towards a Solution**

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THEME:

The Paper intends to deal with the current scenario of Ash Utilization, the steps being taken and statutes formulated along with future growth potential of Ash Utilization in India, with special emphasis on CESC's future plans in this particular field.

KEYWORDS : Ash Management, Mandatory use, Bulk Utilization, Environmental Hazards.

ABSTRACT

Historically, Indian Power Utility Sector has been mostly dependent on High Ash Run of Mine (ROM) Coal for Power Generation. With increasing demand of Thermal Power, coal consumption has been rising at a steady rate with consequential deterioration in coal quality. The current coal consumption being slated to increase more than two fold by 2006 AD (from 215mt to 500mt) and is likely to escalate the current coal ash generation from 80mt to a staggering figure of 200mt by 2006 AD, endangering sterilization of huge tracts of scarce Agri-Land.

To address this challenging situation, MOE&F, GOI, has issued Gazette Notification for mandatory utilization of coal ash by Power Utilities over a specified time span, ensuring future bulk coal ash utilization or face the consequences.

The current coal ash utilization in India is a meager 5 % only in the truest sense, for the manufacture of construction materials, as compared to near complete utilization in the Western World.

The potential bulk utilization areas earmarked in Indian context are in Cement Replacement, Construction of Road Sub-base, Airport Tarmac, Embankments, Structural Fill, Manufacture of Light Weight Aggregates and other Building Materials.

CESC Limited, a century old Public Utility Company in the business of Power Generation and Distribution, has taken pioneering steps in drawing up of a full fledged Ash Management Plan to tackle the issue of coal ash utilization in the form of a series of ambitious projects like : Sintered Light Weight Aggregates, Building Materials, Road Sub-base, Cement Replacement, Agro-Application, Asbestos & Quality Concrete Admixtures, Embankments, Structural & Land Fill, Ready Mix etc. Besides, entrepreneurial development in small & medium sector in the field of ash utilization is constantly encouraged by CESC.