

MINUTES OF MEETING HELD ON 20TH Dec 2002 REGARDING

Improving Flyash portion in PPC

Members Present

MC Agrawal - Jt. Executive President
Sanjay Agrawal - Vice President

SUB : Improving Fly Ash %age in PPC

Disposal of flyash from the coal based thermal power plant is a major global concern as it causes a major environmental nuisances due to disposal problems. In order to overcome from this global issue, Research is going on for adopting stringent steps world wide to have a useful application of the flyash. Being an environmental conscious organization, we shall contribute in this endeavour by manufacturing flyash based blended cement. There is a possibility of increasing flyash component in PPC from present 20 % to 30 %, although BIS permits use upto 35%. By encouraging increased flyash content in the cement, we can expect the following benefits:-

- 1) Less quantity of clinker is used in the PPC manufacturing as compared to OPC and this reduction of clinker would conserve natural resources like limestone and coal fuel.
- 2) Direct and indirect reduction in specific Green House Gas emission.
- 3) Utilisation of a waste material in a proper way and reduces the disposal problems and handling of waste at power plant.
- 4) Reduces the Land degradation and water contamination
- 5) Conservation of electrical / thermal energy in production of Cement.
- 6) Meet our obligations to the Kyoto Protocol.

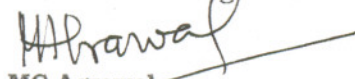
We will have to follow different approaches for improving flyash % age in PPC and will require different type of schemes for various plants on case to case basis.

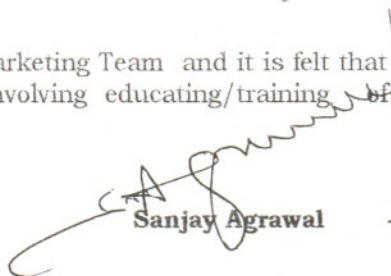
We intend to apply one or more than one of the following approaches.

1. Sourcing good quality of dry flyash with low LOI.
2. Manufacturing High C3S Clinker.
3. Using performance improver, grinding aid in Cement grinding.
4. Finer Grinding
5. Mechanical / Chemical activation of flyash

Each of the scheme will require a significant capital expenditure , which will be worked out on plant to plant basis.

This matter was also discussed with Marketing Team and it is felt that extra effort in promotion of PPC will be required involving educating/training of the Masons, Architects and Engineers.


MC Agrawal -


Sanjay Agrawal -