Circular

Subject: Increasing Utilisation of Fly Ash in CPWD

Govt. of India, M/o Environment and Forests issued Gazette Notification through S.O. no. 763(E) dtd. 14th Sept. 1999 regarding use of Fly ash, bottom ash or Pond ash in manufacture of bricks and other construction activities. Copies of this notification were circulated by SE(S&S) through his circular no. CSQ/SE(S&S)/EE-III/Circular –File/99-2000/05 dtd. 7th Jan. 2000 with instructions that all the Chief Engineer (Civil ) to ensure that use of fly ash bricks is made mandatory at least to the extent of 10% of the total use of bricks used. Thrust areas for increasing utilization of fly ash in CPWD were also circulated vide no. 297/PS/98-CDO/1941 dtd. 7/10/98 for using fly ash bricks, hollow bricks, solid blocks, cellular light weight concrete and use of fly ash in roads embankments etc. Based on the PIL’s filed for protection of environment, Delhi High Court has been issuing directions from time to time and M/o Environment and Forests has been issuing directions for implementation of the directions given by Delhi High Court. Secretary(E&F) convened a meeting on 18/6/2002 during which following decisions have been taken.

Point 1 : Use of Fly Ash (Pond Ash) for construction of Road and fly over/ Embankments.

i. All roads/fly over embankments for construction within 100 kms distance of Thermal Power Plant for which the tenders shall be issued after 27/2/2002 shall be constructed by use of Pond ash (technical specifications/ guidelines duly approved by IRC are available.....IRC specifications no. 58 of 2001.

Soil required for top/side covers of embankments shall be excavated from the embankment site. If not possible, only the minimum quantity of soil required be excavated from soil borrow area, and this soil borrow area be
filled up with pond ash with proper compaction as required for a structural fill. This would be done as an integral part of the embankment project and within the project time schedule.

Point 2 Use of fly ash-Lime-Gypsum, Fly Ash-Cement, Autoclaved or Air/Water cured bricks, blocks, Tiles, Pavement blocks, Cellular/Aerated Concrete Blocks etc.

i) Chief Engineers are advised to maximize the use of fly ash bricks/blocks and/or clay-fly ash bricks/blocks in their projects, particularly for construction site is located within 100 Km distance of Thermal Power Plant as per the following minimum specified percentage of the total bricks/blocks used in each construction project:

- 25% by December 2002
- 50% by December 2003
- 75% by December 2004
- 100% by December 2005

Point 3 Use of Fly ash (Pond Ash) for reclamation of low lying areas.

Reclamation of low lying areas within 100 km of TPPs shall be carried out only by use of pond ash. Soil required for top cover of the fill area should be excavated from the fill site itself and stored nearby. If not possible, the minimum quantity of soil required be excavated from soil borrow area and this soil borrow area as well as the fill area be filled up with pond ash and proper compaction as required for a structural fill be done. However, all precautions need to be taken to ensure that ground water is not polluted.

All the Chief Engineers may ensure that the targets fixed by the M/o Environment and Forests based on the directions given by Hon'ble High Court, Delhi are implemented.

(R.Subramaniam )
Chief Engineer (D)

Copy to:
All ADGs/CEs/CAs

Superintending Engineer (RR)