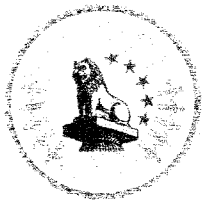


East Central Railway



Office of the
General Manger (Engg)
Hajipur

PCE's CIRCULAR No- 16/2007/WORKS

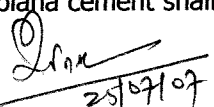
Sub- Use of Portland Pozzolana Cement in new works

It is noted that availability of OPC (Ordinary Portland Cement) has reduced significantly in the market. Recently ministry of Environment has also issued directive to use fly ash product in construction activities. Due to this PPC (Portland Pozzolana Cement) is now readily available in local market. Due to non availability of OPC various maintenance & constructional activities going on in Railways are getting badly affected, as earlier Railway codes did not provide for use of PPC. Now the codes have also been liberalised on this issue by issuing ACS No-9 of Concrete Bridge Code and the use of Portland Pozzolana Cement (PPC) conforming to IS: 1489 in place of Ordinary Portland Cement (OPC) has been allowed with following stipulations: -

- (i) Portland Pozzolana cement shall not be used for PSC works. When Portland Pozzolana cement (PPC) is used in plain and reinforced concrete, it is to be ensured that proper damp curing of concrete at least for 14 days and supporting formwork shall not be removed till concrete attains at least 75% of the design strength.
- (ii) Compatibility of chemical admixtures and super plasticizers with Portland Pozzolana cement shall be ensured by trials before use.
- (iii) Some other properties of concrete such as modulus of elasticity, tensile strength, creep and shrinkage are not likely to be significantly different. For design purposes, it will be sufficiently accurate to take the same value as those used for concrete made with OPC.

Therefore provision of PPC can also be made in the tender schedule for all new works in case of non availability of OPC in the market with the following stipulations except for PSC works:

- (i) When Portland Pozzolana cement (PPC) is used, it is to be ensured that proper damp curing of concrete at least for 14 days is done and supporting formwork shall not be removed till concrete attains at least 75% of the design strength.
- (ii) Compatibility of chemical admixtures and super plasticizers with Portland Pozzolana cement shall be ensured by trials before use.


25/07/07
(A.K.DUBEY)

Chief Engineer/Works
Date- 25.07.07

Docket No- W-2/118/09/Works Policy | 219

Copy-

1. DRM/DNR, DHN, MGS, SPJ & SEE for information pl.
2. Sr.DEN/ (Co-ord)/DNR, DHN, MGS, SPJ & SEE for information and necessary action.
3. All HOD/Engg Deptt/ECR