

No. PL-50 (8)/74-A-NH VI

*Dated the 20th April 1983*

To

The Chief Engineers of the State P.W.Ds./Union Territories dealing with National Highways.

Sub : Use of Portland Pozzolana Cement, Ordinary Portland Cement Grade I conforming to IS : 269 and Ordinary Portland Cement Grade II conforming to IS : 8112 in Highway Bridges

Kindly refer to this Ministry's letter of even number dated 9th March 1978 wherein it had been pointed out that in order to utilise the existing production of Portland Pozzolana Cement strictly conforming to IS : 1489, the same may be used in components of bridges where plain concrete work is involved and where reinforcement is not taken into account in the design of the members. It was further pointed out in the aforesaid letter that all such concrete works shall be carried out under the strict control subject to the conditions stipulated in the letter.

2. However, ordinary Portland Cement will have to be used in RCC work and prestressed concrete work where reinforcement is taken into account in the design of members. This cement is generally manufactured in two grades viz. OPC Grade I conforming to IS : 269 and OPC Grade II conforming to IS : 8112. Cement OPC Grade I conforming to IS : 269 should normally be sufficient for making concrete of grades upto M20.

3. During discussions in the meeting of the ISI held on 19th April 1983 in connection with 30th meeting of Cement and Concrete Sectional Committee, BDC 2 in joint session with the 24th meeting of Cement Sub-Committee BDC 2:1, the representatives of the manufacturing firms reported that with proper mix design, it will be possible to obtain concrete of M50 even with OPC Grade II conforming to IS : 8112. It was also informed by the representatives of the manufacturing firms that absolutely limited quantity of cement conforming to IS : 8112 is at present being manufactured in the country.

4. Many bridge works are in progress. For some bridge works tenders for which have been finalised, the work is to be taken up shortly. It is also likely that the estimates of some bridge works are in the advanced stage of processing. Thus large quantity of OPC cement may be required. Since OPC Grade II cement is needed only when the strength of the concrete required is more than M20, it is necessary that its use is limited to such components of the bridge structures where concrete of strength more than M20 is needed. For leaner concrete, OPC Grade I cement may be used. Moreover, in the case of plain cement concrete work, Portland Pozzolana Cement may be used.

5. Secretary, Ministry of Shipping & Transport is very particular about the completion of all bridge works as per the time schedule specified in the sanction letters issued by the Ministry. This Ministry will not tolerate any slip-page in the completion of each of the bridge work in your State. This may kindly be noted