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Policy Letter No 15/2012

Directorate General Married
Accommodation Project (DG MAP)
Engineer-in-Chief's Branch,
Integrated HQ of MoD (Army)
Kashmir House, Rajaji Marg,
DHQ PO, New Delhi-110011

21379/Spec Ph-III/P&S/14/MAP

11 Jul 2012

(All PMs & DEPMCs)

SPECIFICATIONS: CEMENT

1. Refer this Headquarters letter No 21378/Vendor PH-III/P&S/03/MAP dt 29 Jun 2012.
2. Given in the succeeding sub paragraphs are the specifications for Cement for the future projects of MAP Phase-II & Phase-III:-

(a) The following types of cement can be used in structural / Non structural works of MAP:

- i) Ordinary Portland Cement grade 43 (IS: 8112-1989)
- ii) Ordinary Portland Cement grade 53 (IS: 12269-1987)
- iii) Portland Pozzolana Cement (IS: 1489-1991 Part I) with fly ash content of grade 43 and 53).

Structural Work – Only one type of cement will be used in one building. Mixing of various types of cement will not be allowed in one building. However, different type of cement can be used in different buildings.

Non Structural Work – As far as possible only one type of cement will be used in one building, for Structural Work. However in exceptional cases different types of cement can be used in same building for non structural work such as plaster, flooring, PCC etc, with prior permission of PM (MAP).

In case more than one type of cement is used in any work, a record shall be kept showing the locations and the type and cement used.

Use of PPC – While using PPC, the following conditions will generally be met:

- iv) Strength criteria for PPC cement will be as per IS: 8112-1989.
- v) Stripping time shall be minimum 14 days.
- vi) Mandatory certificate of testing and quality assurance will continue to be submitted as hither-to-fore, with fly ash content as per IS: 1489-1991 Part I.

(bi) **PROCUREMENT** Cement shall be procured by the contractor from the main producers of cement enumerated as per list of approved makes / agencies.

The particulars of the manufacturer/supplier of cement alongwith the date of manufacture shall be produced by the contractor for every lot of cement separately. The original documents in support of the purchases of cement shall be produced before the Project Manager for verification.

(c) **TESTING** The contractor shall submit the manufacturer's test certificate in original alongwith the Test Sheet giving the result of each physical test as applicable and the chemical composition of the cement or authenticated copy thereof, duly signed by the manufacturer with each consignment clearly bringing out lot No. The Project Manager shall record these details in the cement acceptance register (Appx 'B') after due verification. The PM shall also organize independent testing of random samples of cement drawn from various lots from the National Test House, SEMT, Regional Research Laboratories, Government approved laboratories as per IS: 3535 - 1986 (Method of sampling Hydraulic cement), IS: 4031 (Method of Physical test for Hydraulic Cement) and IS: 4032-1985 (Method of chemical analysis of Hydraulic cement).

(d) Following mandatory tests shall be carried out for cement procured by the contractor: -

- (i) Initial and final setting time.
- (ii) Soundness test.
- (iii) Compressive strength test at 3, 7 & 28 days as specified in relevant IS code.

(e) The cement shall conform to chemical requirements and physical requirements as specified in relevant IS. The test carried out as per provisions of IS codes specified herein before shall be the criteria for acceptance of cement by Project Manager. If samples from a lot/lots are not within the acceptance limits of Indian Standard the lot/lots shall be rejected without any claims or compensation to the contractor for the lot/lots purchased. The contractor shall replace the lot/lots with the fresh one, which shall be tested again for acceptance. The cost of all tests carried out on cement before acceptance for incorporation in the work shall be borne by the Contractor whether the results are acceptable or not.

(f) **STORAGE**

- (i) Refer clause 4.3.1 on page-51 of SSR Part-I.
- (ii) Cement shall be stored in leak proof godown over dry platform at least 20 cm high in such a manner as to prevent deterioration due to moisture or intrusion of foreign matter. In case of store rooms, the stock should be at least 20 cm above from floors and away from walls. Inspections shall be carried out once a day by the DEPMC every week by the PM. It shall be ensured by the Project Manager that tested and untested cement are segregated and stored separately with distinct identification. The cement godown shall be provided with two locks on each door. The key of one lock at each door shall remain with the Project Manager or his representative and that of the other lock with the contractor's authorised representative at site of works so that cement is removed from the godown only according to daily requirements with the knowledge of both the parties.
- (iii) OPC grade 43 and PPC (Fly ash based) shall be stored in different storage rooms for structural and non structural work. A record shall be kept showing the location and type of cement used. Different type of cement shall not be mixed together. Maximum storage period for cement to be used for structural work shall be two months and for all other/non structural work shall be 3 months.

(g) **DOCUMENTATION** The contractor shall submit original vouchers purchase from the manufacturer for the total quantity of cement supplied under each consignment to be incorporated in the work. All consignments received at the work site shall be inspected by PM alongwith the relevant documents before acceptance. The original vouchers and the Test Certificate shall be defaced by the Project Manager and kept on record in the office of PM duly authenticated and with cross reference to the control number in the cement Acceptance Register. The cement Acceptance Register will be signed by representative of Project Manager. The acceptance officer may order Board of Officers for random check of cement and verification of connected documents. The entire quantity of all types of cement shall also be suitably recorded in the Measurement Book for record purpose before incorporation in the work and shall be signed by the DEPMC Project Manager and the contractor.

(h) **SCHEDULING OF SUPPLY** Schedule of procurement of cement shall be finalised by the contractor with PM and shall be incorporated in the CPM chart so that procurement is in accordance with the progress contemplated in the CPM chart. The complete requirement of cement shall be worked out before making any RAR payment and procurement of cement by the contractor shall be completed sufficiently in advance of the execution of work.

(JS Sodhi)
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SO 1 (P&S)
for DG MAP

Internal

Team 'A'	-	for necessary action please
Team 'B'	-	-do-
Contract Section Team 'A'	-	-do-
Contract Section Team 'B'	-	-do-
Arch Section	-	-do-