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A/37696/Gen/Pol/E2W (PPC)

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List 'A' and 'B'

## **ADVISORY: QUALITY ASSURANCE IN MES WORKS**

- 1. Works services by MES primarily involve creation as well as maintenance of sustainable contemporary infrastructure for Defence Services as per laid down scales and specifications, within available resources and policy framework set by the Government, ensuring quality of specified standards, time bound delivery and cost effectiveness. Quality Assurance (QA) and Quality Control (QC) along with Quality Audit are important aspects/ tools for monitoring and measurement of desired efficiency towards realising the tangible deliverables. While QA and QC is the responsibility of MES, Quality Audit is done by ADG TE. A large number of instructions/ policies/ SOPs/ Standing Orders/ Manuals etc have been issued by this HQ on various aspects of planning, technical and financial control of works. Manuals and instructions have also been issued by ADG TE on quality aspects, audit and technical examination of works.
- 2. The QA and QC aspects start from the stage of preliminary planning itself, which takes into account all factors including functional, operational, administrative, technical, feasibility, economy etc, before finalising the site selection, layout, design, specifications and other relevant aspects pertaining to projects. The detailed designs, drawings and specifications, conditions etc included in the tenders/ contracts shall be aligned towards realisation of the desired product at specified quality and within the available funds, while adhering to the laid down scales and specifications, manuals, guidelines, IS codes, Government/ local bye-laws etc. Adoption of contemporary technological advances like machinery, construction equipment, smart periodicals to include mechanical scraping, mixing and roller painting for smooth / uniform finish etc which result in better quality of work, save time as well as lead to overall economy may be considered and made part of tender documents. Planning of works shall have functional and operational requirements as main criteria eg avoiding jaffrey work in external boundary walls/ security walls etc.
- 3. Recent instances of inadequate supervision of works on ground leading to distress in buildings/ runways etc within five year of construction have been reported. Such unwarranted situations point to non-compliance of existing instructions, orders and policy



on various aspects of quality control. Certain cases have also come to the fore wherein completion certificates were issued to contractors without conduct of necessary checks, tests etc leading to situation where no action could be initiated against the contractor but departmental officials get embroiled in long stretched disciplinary cases.

- 4. QC at site is of paramount importance and due emphasis shall be given on this aspect by the site executives during execution and during site visits/ inspection by senior officers, STE inspections and/ or other administrative/ technical inspections. In case of major/ important/ prestigious projects, a team may be detailed by CEs Command/ ADG and/ or CEs Zone to carry out quality checks on ground in accordance to Para 367 of RMES and submit report to the CE/ ADG.
- 5. The site executive team deployed for execution of works ie GE, AGE and JE need to be fully aware of the specifications, drawings, conditions, tests to be carried out including non-destructive tests etc during the construction as well before issue of completion certificates. Instructions on quality control aspects as given in TI 07 of 2002, ADG TE Manual, instructions issued vide this HQ letters No 22749/Misc/166/E2 (Design-3) dated 16 Oct 18 and No 62888/Gen-Misc/E4 (U1) dated 04 Sep 18 as well as all other existing instructions on the subject will be followed in letter and spirit by all site executives up to JE level. Special care shall be given to foundations, structural member, services, finishes, doors and windows (especially thickness and quality of aluminium members including its fabrication etc) and all other important constituents of the buildings/ runways etc. Appendix F (Parts I, II & III with Annexures I to IV) to Quality Assurance Manual will also be made part of Contract Agreements.
- 6. The STE observations and serious cases of ADG TE reflect undesirable quality of work on ground. These need to be addressed immediately and observations settled during the currency of work ensuring structural soundness and durability of the project. The duties, accountability and responsibility of the staff officers/ site executives have been clearly laid down in Paras 31 to 64 and Tables D, E, F, M & N of RMES, E-in-C's Branch letters No 41917/E2 (WPC) dated 14 Nov 77, 26 Oct 92, 97508/Pol/E2 (WPC) dated 17 Dec 93, E-in-C's Standing Orders as well as TI 07 of 2002. In case of large and important complex works like airfield works, hospital projects, large KLP /MAP/ technical accommodation projects, etc, it is desirable that these are clearly spelt out specific to the subject project as part of instructions to the staff officers/ executives.
- 7. It is reiterated that strict implementation of QA and QC aspects in accordance with instructions/ policies/ SOPs/ Standing Orders/ Manuals etc, will be ensured by the respective staff/ site executives in all MES formations/ units with a collective endeavour to deliver quality infrastructure in a time bound manner. CE Commands/ ADGs to ensure that these issues are highlighted and emphasized during their visit and render report in monthly DO letter to E-in-C as well bring out serious issues, if any.



8. These instructions shall be disseminated up to JE level.

(Mohit Nautiyal)

Brig

DDGW (PPC & Est)

For E-in-C

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