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24006/DGBR/Policy/ 61 /EPC Cell

05 Jul 2021

HQ ADGBR (North-West)  
C/o 56 APO

HQ ADGBR (East)  
C/o 99 APO

All Projects  
C/o 56 APO/99 APO

**ENFORCEMENT OF QUALITY ASSURANCE AND QUALITY CONTROL MEASURES IN CONSTRUCTION OF ROAD & BRIDGE WORKS ON NATIONAL HIGHWAYS AND CENTRALLY SPONSORED SCHEMES BY AUTHORITY'S REPRESENTATIVE**

1. There are numbers of guidelines for strict Quality Assurance and Quality Control in Road & Bridge Works. IRC SP:112 "Manual for Quality Control in Road & Bridge works" gives details of guidelines for Quality Assurance and Quality Control on Road & Bridge works starting from project preparation to construction including acceptance thereof. These guidelines clearly define the roles and responsibilities of Concessionaire/Contractor, Authority's Engineer/Independent Engineer/Supervision Consultant and Authority/Employer in achieving desired quality of works. Each item of work has several quality characteristics of input materials, mixes, processes and final product. Specification limits and applicable testing methods of different quality characteristics are given in "MoRTH specifications for Road & Bridge works" and applicable IRC standards/guidelines. Necessary laboratory/onsite testing has to be done as per said standard/guidelines and test results compared with specification limits and further statistical analysis done wherever specified to determine acceptance of particular item of work.

2. Lapses on the part of Concessionaire/ Contractor and Authority's Engineer/Independent Engineer/Supervision consultant to follow standard guidelines may lead to failure during construction or acceptance of sub-standard works leading to premature distress.

3. Standard EPC Contract document also provides for inspection and technical audit by Authority under Article 11.4 which relates as follows:

*"The Authority or any representative authorized by the Authority in his behalf may inspect and review the progress and quality of the construction of Project Highway and issue appropriate directions to the Authority's Engineer and the Contractor for taking remedial action in the event the works are not in accordance with the provisions of this Agreement".*

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4. Further Article 11.6 of EPC Contract provides for inspection of construction records which reads as follows:

*"The Authority shall have the right to inspect the records of the Contractor relating to the works"*

5. Further under Article 18.1 of EPC Contract, the concerned contract management authority have been made responsible for overall supervision, monitoring and execution of projects as the representative of the owner of the Project. The Article 18.1(II) reads as follows :

*"The officer in-charge of the Authority (eg. Project Director or any other appointed representative) is responsible for the overall supervision and monitoring of the execution of project as the representative of the owner of the project. The Authority's Engineer is appointed to assist the Authority for carrying out the functions as detailed under clause 18.2. As such, an officer of the Authority is vested with all such powers and responsibilities as are enjoined upon the Authority's Engineer and is fully competent to issue any instructions for proper monitoring and supervision of the project, either by himself or through the Authority's Engineer. Instructions issued by the concerned officer of the Authority shall have the same effect as that of the Authority's Engineer in terms of this Agreement. Wherever such concerned officer issues any instructions or notice to the Contractor, he shall endorse a copy thereof to the Authority's Engineer".*

6. From above provisions in the Contract, it may be seen that enabling provision have been made in the Contract for the Authority/Authority's Representative to carry out inspection and issue instruction for non-compliance in Quality and Specifications.

7. In order to prevent such violations of contract requirements, Competent authority has decided that the officer in-charge of the Authority at site i.e. Project Director /TF Commander (as the case may be) shall inspect the projects to ensure that (i) approved construction methodology of the works is being followed, (ii) approved quality assurance plan is being diligently followed by Concessionaire/ Contractor and Authority's Engineer/Independent Engineer/Supervision consultant and to see that Authority's Engineer performs his duties in accordance with contract and his TOR and invariably notifies Non compliance Report (NCR) to the Contractor in monthly progress report, and inform to higher authorities upto HQ DGBR and closes the same before accepting the work and recommending same for payment. The officer in-charge of the Authority may also carry out sample laboratory/on site test on important quality characteristics of materials/mixes/process/final product and observations would be notified through inspection Note under Article 18.1(II) or any other relevant Article. While carrying out the inspections, the officer in-charge of the Authority shall invariably follow the guidelines and Standard Operating Procedure for Quality Control/Assurance in construction of National Highways and other centrally sponsored projects issued vide letter No.RW/NH-34066/01/2020-QCZ dated 1<sup>st</sup> October 2020 .

8. The Minimum inspection frequency shall be as under:

| S/No. | Designation of officer                                    | Frequency of inspection |
|-------|---|-------------------------|
| a)    | Project Director /TF Cdr                                  | Monthly                 |
| b)    | Authority/CE (Project) himself or officer detailed by him | Quarterly               |

9. In case of proven negligence on the part of above officers in carrying out inspection as detailed in Para-8 above, following penal action will be taken against the officer concerned:

| S/No. | Penal Action   |                                    |
|-------|--|------------------------------------|
| a)    | Number of instances of failure   | Action proposed                    |
|       | i) 1 <sup>st</sup> instance  | Advice                             |
|       | ii) 2 <sup>nd</sup> instance   | Non-recordable warning             |
|       | iii) 3 <sup>rd</sup> instance  | Recordable warning                 |
| b)    | iv) Instances exceeding 3 times and/or failure of structure during construction or operation | Penalty Major/Minor as deemed fit. |

10. In case the outcome of investigation is unclear or on the basis of conjectures, no action on penalty (Major/Minor) shall be taken and only suitable warning shall be issued which may be included in the ACR of the concerned Officer. Representation may be submitted if , any to the "Reviewing Authority" against action/ penalty imposed.

11. This has approval of DGBR.

  
(BP Misra)  
CE (Civ)  
DDG (C & EPC)  
For Dir Gen Border Roads

**Copy to:**

- Joint Secretary (BR)**  
4<sup>th</sup>Floor,'B' Wing  
Sena Bhawan  
New Delhi-01 : for info please.
- MoRT&H, S&R (P&B) Section**  
Ministry of Road Transport & Highway  
Parivahan Bhawan,  
1, Parliament Street  
New Delhi-110001 : for info w.r.t. MoRT&H letter No.  
RW/NH-34066/01/2020-QCZ dated  
14 Jun 2021.