NRRDA-Q017 (22)/38/2021-Dir(FA):376312 National Rural Infrastructure Development Agency Ministry of Rural Development, Government of India

UGF, 15 NBCC Tower, Bhikaji Cama Place, New Delhi

12th Jan, 2024

Circular

Subject: General observations on scrutiny of NQM/SQM inspection reports.

One of the most important features of PMGSY programme is the robust three tier quality monitoring mechanism. Roads constructed under PMGSY are monitored from the beginning till their maintenance period. Under II and III tier of quality monitoring, inspections of the road works are being done by State Quality Monitors & National Quality Monitors respectively at regular intervals.

It has been observed during scrutiny of reports by technical experts that some of the inspection reports of Quality monitors have some deficiencies/errors in reporting or mismatches with their own observations and grading, thereby affecting the very purpose of quality control mechanism. Some common deficiencies observed in the NQM/SQM inspection reports are listed below:

- i Substantial testing is not done by monitors with respect to physical works shown as completed in Part-I by PIU.
- ii Either test pit of size of 50cm X 50 cm is not excavated or complete material is not taken out for checking thickness, density and grading of material. In some cases, sample size of very less amount has been taken for gradation of sub-base, base layers.
- iii Thickness of BT layers are being checked keeping excavated piece of bituminous material in hand instead from the pit.
- iv In most of the cases Quality Monitors take only 3 observations of geometric such as camber, carriageway width, roadway width etc. As per format minimum 2 observations per km should be reported and additional observations should be made on curves/bends and slopes etc.
- v Sub item of super elevation and extra widening is being kept blank by many monitors without any explanation. If there is no curve available in the inspected reach, the same should be clearly written in the inspection report.
- vi Tin boxes should be avoided for calculation for volumetric analysis.
- vii Field labs are not fully equipped or mobile field labs are being reported. However, quality arrangement is being graded satisfactory. Labs should be fully equipped as per specifications.
- viii CD/Protection works are not being checked by monitors stating that CDs are not in the inspected reach. This is not realistic that a 3 km stretch is without CD.

- ix In most of the cases, Hume pipe culverts are half buried below ground but no observation is being recorded. Weep holes are not being provided in protection works but not being reported by NQMs/SQMs.
- x Compaction of Subgrade & GSB reported less than 100%, still work is being graded satisfactory considering the MoRTH specifications not MoRD specification. This should be reported following MoRD specifications of 2014.
 - xi In case of CC pavements, work is being graded satisfactory without testing it from rebound hammer/checking the joints. Also, cutting of joints should be given special attention in case of Panelled Cement Concrete pavements as per NRIDA circular dated 11th April, 2023 (available on https://pmgsy.nic.in → circular section).
- **xii** Readings measured in Rapid moisture meter are being directly recorded as moisture content. Similarly, Rebound Hammer number is being taken as strength of concrete. These should be used as per the relevant specification.
- xiii Shoulders are not being inspected even when the work has been completed to BT layer. Monitors needs to advise PIU to compact shoulder simultaneously along with structural layers. It should be reported in inspection report too.
- xiv Due care is needed while doing calculations for ascertaining the quality of various layers. Densities achieved in structural layers at different pit locations have been reported identical in some cases which is generally not possible.
- xv PMGSY information boards are not as per MoRD specifications/rusted boards are found in photographs uploaded by NQMs/SQMs, but work is being graded satisfactory.
- **xvi** Either same photo is being uploaded multiple times or same descriptions on the photos are entered on OMMAS. Inspections under headlight of vehicles are being conducted by monitors in some cases, which is against guidelines.
- **xvii** In some cases, 2 completed works; 2 in progress + 1 completed work; 2 in progress work (which are completed to BT level) are being inspected by NQMs/SQMs in a single day which is not possible practically.
- xviii Monitors should point out any deficiency in DPR during inspection at ongoing stage to avoid any bottlenecks in project at early stage.
- **xix** Various advisories of NRIDA, though provided to NQMs/SQMs, are not being followed and references of some old documents are being made by monitors. This should be avoided.
- In some cases monitors are making recommendations to correct some unsatisfactory works in a stretch of 50m on either side without any justifications. Such recommendations without justifications should not be made.

In light of above, it is requested to ensure that inspection reports are prepared with due care & such errors / deficiencies should be avoided.

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Distribution:

All NQMs & SQMs working for PMGSY.

Copy to: CEs & SQCs of All States /UTs dealing PMGSY works with a request to circulate the letter among their SQMs.