

Government of Andhra Pradesh
Abstract

PR&RD Department – Reforms in P.R. Engineering Department – Strengthening of Quality Control Wing – Guidelines carrying out quality control by the field staff in the execution of works and further checks by the vigilance wing – Orders – Issued.

PANCHAYAT RAJ AND RURAL DEVELOPMENT (ESTT.I) DEPARTMENT

G.O. Ms. No. 101

Date. 21-3-2000.

1. G.O. Ms. No. 23, I&CAD (PW COD) Dept., dt. 5-3-1999.
2. G.O. Ms. No. 195, PR&RD (Programme.II) Dept., dt. 10-5-1999.
3. Govt. Memo. No. 42243/Estt.I(1)99-1, dt. 3-12-1999.
4. Govt. memo. No. 42243/Estt.I(1)/99-2, dt. 9-2-2000.
5. From the Engineer-in-Chief (PR) Hyd. Lr. No. T1/25561/99, dt. 14-02-2000.

ORDER:-

The Government have observed that the field staff incharge of implementation of works have been carrying out quality control checkson P.R. works such as roads, buildings M.T. works and employment schemes etc., based on the age-old practices which have become obsolete.

2. A centralized system of Quality Control has been in existence for material testing of Rural Water Supply works and the experiences have shown that such centralized system of quality control has not been effective and it provided a scope for the field staff to shift their responsibility on the staff of quality control of the centralized system.
3. In the G.O., 1st cited, the Government issued orders to create one post of Chief Engineer (Vigilance) in each Engineering Department as a policy to do the quality audit periodically and also to evolve suitable punitive action against contractors as well as Engineers in charge of the works who violated proper quality standards.
4. Accordingly, the Government have created the post of Chief Engineer (PR) Vigilance, Hyderabad by redistributing the subjects among the other Chief Engineers, (PR).
5. In the review meeting held by the Chief Secretary on 9-2-2000 on NABARD works, the Chief Secretary opined that the field staff in charge of implementation should exercise quality control by arranging proper tests which can be carried out in Private Laboratories, existing Department Laboratories, Engineering Colleges, etc., he has also opined that this should be included in tender documents and the contractors have to carry out the tests in Laboratories approved by the Engineering wing since the vigilance is not substitute for quality control.

6. The objective of Vigilance Wing is conduct checks over the quality control measures adopted by the existing the staff. Therefore the vigilance wing of Panchayat Raj Engineering Department shall organize random and independent checks both during execution and after completion of works to assess whether the field staff incharge of implementation of works that maintained the quality as per standards. In order to achieve the above said objective the following detailed guidelines are issued on quality control by the field staff and checks by the Vigilance Wing of P.R. Engineering Department.

I. QUALITY CONTROL MEASURES FOR P.R. WORKS.

The Chief Engineers (PR) shall ensure that proper tests are carried out by the executive staff during the execution of the works. The tests that to be conducted on materials and finished items of works on roads, bridges and projects shall be as given below.

Coarse Aggregate	1	Impact Value
	2	Flakiness Index
	3	Grading Test
Fine Aggregate	1	Fineness Modules
	2	Silt Content
Bitumen	1	Standard Penetration
	2	Ductility
Soils	1	Dry Density/Procter Compaction
	2	CBR Value
BT Surface	1	Camber
	2	Thickness
	3	Width of BT layer
	4	Bitumen content (Bitumen Extraction Test)
	5	Stripping Value
Concrete	1	Grading of Aggregate
	2	Impact value of Aggregate
	3	Flakiness Index of Aggregate
	4	Fineness Modules of sand
	5	Silt content of sand
	6	Suitability of the water for concrete
	7	Steel Tensile Strength
	8	Cement Initial and Final setting time compressive strength
	9	Cube strength of concrete
	10	Slump test

The contractor shall carry out all the above tests by drawing the samples in presence of executing staff and get the tests conducted in the Laboratories approved by the Executive Engineer. A provision shall also be made in the tender documents to carry out these test. In case, where such provisions have not been made in the tender documents, the execution staff shall draw the samples and carry out the tests in the laboratories with the Departments/Private/Engineering Colleges.

The Chief Engineers (PR) in-charge of programmes shall under take a critical analysis of quality control test results. The Chief Engineer (PR) shall ensure that the work performed and the materials used in the work confine to the Specification requirements.

II. QUALITY CONTROL MEASURES FOR RURAL WATER SUPPLY WORKS:

(a) *Quality Control for material testing:*

One testing laboratory for each district under the control of Superintending Engineer (RWS) will be established. It will be manned by one Deputy Executive Engineer, three Assistant Executive Engineer from circle two assistant Executive

Engineers from each division will also work in this laboratory for testing the samples collected in their respective divisions.

---para not typed---

Vigilance staff shall draw random samples from the collected materials and also from the finished works and carry out the following tests to assess whether the quality is achieved as per specifications.

1. Grading Test
2. Impact Value
3. Flakiness Index
4. Cube Strength of concrete

The vigilance staff shall check up whether the execution staff are carrying out all the prescribed quality control tests as per the required norms and shall verify the quality control records maintained by them both in office and at field level.

IV. FOLLOW UP ACTION ON VIGILANCE CHECKS.

The Chief Engineers in-charge of the works/programmes shall immediately respond to the observations made the Vigilance reports of panchayat raj Engineering Department, vigilance and enforcement Department and advisor of quality control, General Administration Department, Press reports, representations from public representatives, references from Lokayukta etc., on the implementation of works. The Chief Engineers in-charge of works/programmes shall correlate the quality control registers maintained by the execution staff with the above reports. The Superintending Engineers/Executive Engineers in-charge of the works/programmes shall critically scrutinize all the relevant records of both work and quality control. If any additional tests are to be carried, the officers concerned shall draw the samples and get the tests conducted in the departmental/private/engineering colleges laboratories. When an allegation is made against an officer, the officer of one rank above him shall carry out these tests.

The Chief Engineers in-charge of the work/programmes, after detailed examination of the records and test results shall initiate necessary corrective actions to rectify the defects and recover the costs wherever needed.

However the disciplinary action is to be initiated against the erring officer, the Engineer-in-Chief shall get the draft articles of charge prepared by the Chief Engineers in-charge of the works/programmes and take necessary action thereon and his level or send the same to the Government, of it is the disciplinary authority along with a comprehensive report for taking further action at Government level.

7. The Engineer-in-Chief (PR), Hyderabad is directed to ensure that the instructions are taken to the notice of all Engineering personnel in P.R., Engineering Department and ensure proper and strict implementation of the said instructions, in order to maintain quality of works.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA
PRADESH)

C. Arjuna Rao,
Special Chief Secretary to Government.

To
The Engineer-in-Chief (PR) Hyd.
All the Chief Engineers in P.R., Engineering Department.