

GOVERNMENT OF ANDHRA PRADESH
RURAL WATER SUPPLY&SANITATION DEPARTMENT
OFFICE OF CHIEF ENGINEER, RWS&S, V&QC, GOLLAPUDI, VIJAYAWADA,
Cir Memo. No. AE2/DEE1/1966/Inspections/2018, Dt: 10.08.2018

Sub:- RWS&S – V&QC –Circular Memo – General Instructions issued- Reg.

Ref: - T/o Cir. Memo. No. AE/DEE1/1966/Inspections/2015-16, Dt.

19.01.2016


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The attention of all the Superintending Engineers, Executive Engineers, RWS&S & Deputy Executive Engineers, V&QC, RWS&S in the state are invited to the reference cited above, wherein instructions were issued given below to follow while conducting Quality control tests of the materials:

- 1) The Manufacturers BIS Certificate and calibration certificates of machinery should be verified for the specified materials before initiating the pre delivery quality control inspection at the factory site.
- 2) The Dy. Executive Engineer, V&QC, RWS&S shall verify the indented quantities of the materials by the Superintending Engineer before inspection of the materials.
- 3) The sampling should be done as per code and the samples should be drawn from different batches/ lots and these batch numbers should be mentioned in the Quality control Inspection report.
- 4) All the physical parameters of pipes should be mentioned in the quality control report.
- 5) The average thickness should be maintained for all pipe materials and pipes which are near to minimum thickness as per relevant IS Code should be rejected.
- 6) The quality control stamp should be affixed by Quality control officials on the pipes and mark should be verified by the field engineers while taking delivery at the site.
- 7) The pre delivery quality control joint inspection report of materials along with the test reports should be signed by the Superintending Engineer also in case if any Field Engineers are deputed for quality control inspection of the works on the behalf of the Superintending Engineer.
- 8) The Field Engineers & Quality Control Engineers are instructed not to procure materials/ pipes from the producers supplying sub standard pipes/materials, instructed to communicate the default producers list to all districts.

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- 9) Executive Engineer should get Sand sieve analysis test results with graph for acceptance of the filter media for slow sand filters. The Executive Engineer should check measure the sand item duly verifying the Uniformity coefficient of sand & effective size of sand for slow sand filters before making payment. Sand must be washed thoroughly before filling.
- 10) Quality Control DEEs must inspect all MVS and SVS Schemes at key stages for the following structures listed below are as follows:
- a. OHSRS, OHBRS, Infiltration Wells, Intake wells & Sumps: Raft Foundation & Bottom slab.
 - b. Galleries: Inspect the construction of galleries at regular intervals..
 - c. Pipelines: Hydraulic testing for pipeline (DEE, VQC must check measure.)
 - d. RSF: Tiles & V-Notch must be provided.
 - e. SS tank: Inspect SS Tanks at every one meter depth of consolidation and obtain the test results of Optimum Moisture Content (O.M.C), Dry density of soil at each stage.
- 11) Pipeline alignment should be provided along the roads only and should not pass through private lands & fields.
- 12) Provide demarcation stones for every 100mts duly embedded in concrete over pipe Line trenches only.
- 13) Final Bills shall be allowed after commissioning the Scheme and completing the gaps in pipeline duly conducting Hydraulic testing of all structures and pipe lines. After successful completion of Hydraulic testing of all structures, then only emulsion paint must be painted with proper base coat.
- 14) All section officers should record hydraulic pressure test for all pipes and record reach by reach and DEE should check measure all reaches and Dy.EE, VQC & Executive Engineer should check measure at least one reach per every 10 KM of pipe line. The Superintending Engineer also should check measure hydraulic testing at least one reach per every 20 KM of pipe line. Documentation must be maintained. The Superintending Engineer is requested to submit the documentation (Photos/Videos) along with completion report. Concerned Executive Engineer's, Superintending Engineer's & Chief Engineer's are instructed not to approve completion report without Hydraulic pressure test documentation.
- 15) All filter beds in Rapid Sand Filters & Slow sand filters must be hydraulically tested before filling with sand.


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- 16) Slow sand filters - Minimum of 2 Slow sand filters must be constructed.
Minimum 5 valve system is maintained for interconnection of slow sand filter.
- 17) Pump house bottom should be on par with bottom of sump in order to develop Net Positive Suction head.
- 18) Special marking on pipes for all projects during the pre delivery quality control Inspection and firm should be instructed that special embossing marking (i.e Name of the project) should be on each & every pipe during manufacturing of pipes only.
- 19) Before submitting the indent of pipes the Superintending Engineer should verify Head to tail approach and ascertain the yield of source scrupulously.
- 20) The Superintending Engineers, Executive Engineers & Deputy Executive Engineers (V&QC) are instructed to verify the lab establishment registers, technical personnel and invariably should record his remarks in site order books during inspection of work.
- 21) The Superintending Engineers are instructed to take all permissions i.e Railway, Forest, Land, Irrigation, R&B before starting of execution of any project.
- 22) Epoxy painting for steel must be provided for all structures which are constructed within 10 Km from sea.
- 23) DI Valves must be fixed in vertical only for all OHSR's & OHBR's.
- 24) Lightning Arrester must be embedded as per specification in the centre of circular column of spiral stair case.
- 25) Room must be provided for all 4 columns of OHSR at 1st brace level.
- 26) Provide concrete at ground level brace level for all OHSR's
- 27) Jala Devalayam i.e architectural compound wall (3ft height), benches, plants, path, tiles & slogans must be provided for all schemes to maintain good environment with esthetic sense.
- 28) Provide sustainable structure i.e check dam, sub surface dyke, percolated Tank, Rain water harvesting structure & Infiltration wells etc. for all ground water sources.
- 29) Instructed to provide web based monitoring for all schemes including online monitoring of chlorination along with power saving devices.
- 30) Instructed to provide 100% house connections along with proper control valves so as to avoid public tap system.

Hence, all the Superintending Engineers, Executive Engineers, RWS&S & Deputy Executive Engineers, V&QC, RWS&S & in the state are once again instructed to follow the above instructions scrupulously at factory and field engineers should verify all the materials at work site before recording and check measurement of the materials in the M-Book.

**Sd/-(T.Prabhakara Rao),
Chief Engineer,
Vigilance & Quality Control,
RWS&S,Gollapudi,
Vijayawada.**

To

All the Superintending Engineers, RWS&S in the State.

All the Executive Engineers, RWS&S in the state.

All the Deputy Executive Engineers, V&QC, RWS&S in the state

Copy submitted to the Engineer- In -Chief, RWS&S, Gollapudi, Vijayawada for favour of information.

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 30/8/2018

Deputy Executive Engineer,
RWS&S, V&QC,
Gollapudi, Vijayawada


30/08/18