

Quality Control & Quality Assurance

There are twenty one Quality Control Divisions under Major & Medium irrigation sector and two QC laboratories under the Minor irrigation sector to look after the QC works. Besides, one Hydraulic research division is under Major & Medium Irrigation sector to take up research activities.

To strengthen the existing Quality Control and Assurance (QC&A) arrangement under DoWR, one State Quality Monitoring Cell (SQMC) has been constituted. The system of Quality Control and Assurance consists of:

- QC & A by the Implementing Agency
- QC & A by the Project Implementation Unit
- QC & A by the State Quality Monitoring Cell.

The Engineer-in-Chief, Planning & Designs is the Chairman of the SQMC. The Chief Engineer, Designs & Research and Chief Engineer, Minor Irrigation are members of the SQMC and Director, Research is the Nodal Officer. The SQMC will contract individual experts in the field of QC&A to serve as State Quality Monitors (SQMs). The PIU will cover the field Executive Engineer, Executive Engineer of the Quality Control Division of the project or CRO of Quality Control Divisions for territorial field works. The Implementing Agency is the Contractor.

The quality and assurance that will be provided by the Implementing Agency (contractor) will consist of measures that include:

- Ensuring the quality of materials to be used, quality of works to be executed as well as the quality of finished products in accordance with specifications.

- Safety in construction, which includes watching, lighting, insurance, health and environmental protection.

- Producing test results or test certificates of the materials used in the works and test results of concrete and of the finished products as specified. The test results or certificates will be reviewed by the Executive Engineer before bills are cleared.

Where test results are absent or questionable, a third party will be contracted to undertake the tests at the expense of the Contractor. When the quality standards are met, the bills will be signed by the Executive Engineer.

The quality control measures that will be provided by the Project Implementation Units include certifying the suitability, quality and availability of all major construction materials prior to commencement of work. , the unit will monitor foundation related activities perform pre-design tests on concrete and filter materials, process and construction control tests and document all the activities in proper manner for future references. Throughout this process, the PIU will be interacting with the SQMC. The SQMC will perform its task through SQMs. The State Quality Monitors will be independent of the Project Implementation Units and will inspect the work on a sample basis to ensure that the Quality Management System is operating satisfactorily in the field.

For onsite determination of compaction parameter of earthworks, nuclear density tester are being used.

PHOTOGRAPH
State Quality Monitors Examining Quality Control Activities



Slab Casting of CD 57 of Kanpur Canal



Gradation Testing of Kanpur Canal



Roof slab casting of Rengali Irrigation Project



Silt content Testing of sand at Champamala Disty.