

**MINUTES OF 3<sup>RD</sup> MEETING OF TECHNICAL EXPERTS COMMITTEE HELD ON 14.07.2014  
IN THE CONFERENCE HALL, O/o ENC, PR DEPARTMENT, AP, 6<sup>TH</sup> FLOOR, HYDERABAD  
TO LOOK INTO VARIOUS ASPECTS OF IMPLEMENTATION OF NTR SUJALA PATHAKAM  
IN RURAL AREAS OF ANDHRA PRADESH**

**Present:**

1. Dr. K.S. Jawahar Reddy, I.A.S., Secretary to the Government, PR&RWS Departments, Hyderabad.
2. Sri R.Kondala Rao, Engineer-in-Chief (Rtd), Panchayati Raj, Chairman, Technical Committee.
3. Sri K.Ravi Babu, Chief Engineer, RWS&S, Convener.
4. Dr.P.PandduRunga Rao, Engineer-in-Chief, PH&MED, AP, Hyderabad.
5. Sri Shaik Pentu Saheb, Chief Scientist & Head, NEERI, Hyderabad.
6. Sri S.R. Nalli, Project officer, UNICEF, Hyderabad.
7. Sri B. Anjaneyulu, Chief Water Analyst, Institute of Preventive Medicine, AP, Hyderabad.
8. Sri J. Viswanath, Chief Engineer (Rtd), RWS&S, Hyderabad.
9. Sri R.P. Nanda Rao, Superintending Engineer, RWS&S, East Godavari.

**Agenda:-      Selection of suitable water treatment technology based on water quality parameters.**

The O/o CE, RWS&S, Hyderabad has identified different water treatment plants and its capacities based on the water quality parameters of sources of PC1 and NSS habitations submitted by the Superintending Engineers, RWS&S and also worked out the cost analysis of borewells, motor, room and approximate costs of different plants based on the quotations obtained from different agencies. The above details were placed before the members of the committee for discussion.

The committee members while discussing on the above details, have arrived the following conclusions:

1. To follow IS standards of Potable water i.e., **IS 10500: 2012.**
2. Types of treatment technologies based on water quality parameters:
  - a. RO (Reverse Osmosis)Technology:  
If TDS > 500 mg/l or Fluoride > 1 mg/l or Nitrate > 45 mg/l or any combination.
  - b. EDF (Electrolytic Defluoridation) Technology:  
If Fluoride > 1 mg/l and all other parameters are within IS Standards.
  - c. Terafil Technology:  
If Iron > 0.3 mg/l and all other parameters are within IS Standards.
  - d. Ultra Filtration Technology:  
If Turbidity > 2 NTU and all other parameters are within IS Standards.

- e. Disinfection shall be integral part in all the above identified treatment units.
  - f. The SEs shall examine the quality parameters of the sources before grounding the work.
  - g. The capacity of water treatment plant shall be limited to a maximum of 1500 lph. For habitations requiring above 1500 lph, multiples of such units shall be proposed at different locations of the habitations to bring down walking distance.
  - h. For thandas of population upto 150, plants of capacity 50 lph shall be proposed. If source is not available in such habitations, a treatment plant in the main village/suitable convenient place shall be proposed and purified water shall be transported to thandas.
- 3. Generally in RO plants reject water will be around 40% to 60%. The reject water of RO plant shall be treated before disposal.
  - 4. However, it is decided to study the treatment of reject water of RO plant in detail and will be finalized based on the findings.
  - 5. Purified water shall be supplied in two sizes of cans 10 litres and 20 litres.
  - 6. Where habitations covered/ being covered by CPWS/ PWS schemes during the current year, few water purification plants can be avoided.

**Sri R.Kondala Rao, Engineer-in-Chief (Rtd),  
Panchayati Raj, Chairman, Technical Committee.**

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