

**Name of work:- Operation, Running and Maintenance of Sub Divisional Water Sample Testing Laboratory at Majra in District Sirmour (HP).**

**Annexure-A**

**Special terms and conditions:-**

1. In order to give true picture of water tests and considering the importance of drinking water quality, the Contractor/ Firm is expected to do entire job very carefully.
2. The Contractor/Firm bidding for the job must have previous experience of Operation and maintenance of the water testing laboratory (Not less than 500 water samples tests/month).
3. The Contractor/Firm shall has to employ qualified and well experienced Chemist/Assistant Chemist. The desirable qualification for laboratory staff shall be as per Uniform Drinking Water Quality Monitoring Prptpcpl-2013 i.e.  
Assistant Chemist-Graduation in Science with Chemistry  
Microbiologist/Bacteriologist-Graduation in Science with Biology  
Data Entry Operator:- Class XII with skills in MS Office and internet operation.
4. Before award of work, the Name, Qualification details, correspondence address, complete (also originals to be returned) of qualification documents/certificates from recognized institutes shall be submitted to departmental screening Committee, the work will be awarded. In case candidate is not found suitable then the Contractor/Firm shall produce other candidates for interview. However candidates can be sponsored maximum three times failing which the work will not be awarded to the firm & earnest money shall be forfeited.
5. The person employed by the Firm shall be his establishment only and DWSM/Department shall not be bound to regularize their services.
6. The candidate to be deployed should be free from any kind of communicable disease and before joining, the candidate shall submit the Certificate of Medical fitness issued by the authorized Medical Attendant/Medical Officer.
7. The Contractor/Firm shall follow relevant BIS codes for the testing of water samples for Physical, Chemical and Bacteriological tests in all respect.
8. The Contractor/Firm shall be responsible for payment of minimum wages & monthly payments, insurance, agreement, medicare cover, accident cover EPF Deduction/Deposit to the employed staff as per prevailing labour law and latest instructions of Government/ Department.
9. During working hours proper dress code shall be maintained in the laboratory. The lab staff shall attach batch/ identity cards displaying the name & designation.
10. The Contractor/Firm shall be responsible for proper handling of Lab equipments, reagents & chemicals etc.

11. The Contractor/Firm shall be responsible for any accident/ losses caused due to negligence & a First Aid Box shall also be provided by the Contractor/Firm in the laboratory.
12. The Contractor/Firm shall be panelized for any breakage or any damage of the equipments of the lab and shall replace the same with new one and decision of the Engineer-in-charge shall be final in this regard.
13. The necessary materials and chemicals required for the testing of samples shall be provided by the Contractor/Firm at his cost.
14. The Chemicals to be used for water quality testing should be Laboratory Reagent (LR) or Analytical Reagent (AR) grade. Contractor/Firm shall keep the inventory of all the used material and chemicals. The inventory shall be maintained in registers.
15. The Contractor/Firm shall keep the proper record of all tested water sample and shall submit the consolidated report to the Assistant Engineer, in-charge of the laboratory monthly. The firm shall also bring to the notice of the Engineer-in-charge the details of failed samples daily.
16. The Contractor/firm shall report and suggest the measures to be taken for the disinfection of the water, as found anything unhygienic for human consumption.
17. The inventory of all the glass ware shall be maintained by the Contractor/firm.
18. All sample collecting material including those which are to be returned and reused should be fit for sampling. Cleaning and sterilization of sample collecting material shall be as per standard procedure.
19. The Electricity charges will be borne by the department.
20. The payment shall be made on Quarterly basis in equal installments.
21. All the water sample reached in the lab have to be tested. Minimum 3000 samples out of which minimum 2/3<sup>rd</sup> i.e. 2000 sample shall be for Bacteriological analysis have to be tested in a year and monthly report along with photocopy of register shall be submitted through Assistant Engineer to Divisional office.
22. If more than 3000 samples are tested in the lab the Contractor/Firm shall be paid extra for excess sample at the approved rate. A penalty of double the rate awarded shall be levied if samples are not tested in spite of its receipt in lab.
23. Each source shall be tested twice a year i.e pre monsoon and post monsoon for bacteriological analysis and once a year for chemical analysis. Therefore contractor/ firm shall be responsible for ensuring the sampling schedule of sources and if any, shortcoming is noticed in above mentioned schedule by the contractor/ firm, it should be brought to the notice of concerned Executive Engineer. Also ensure that sources from every habitation falling under jurisdiction of lab shall be tested.
24. The list of parameter to be tested at sub divisional level lab is as under:
  - i. Temperature
  - ii. Colour
  - iii. Odour

- iv. Taste
  - v. Turbidity
  - vi. pH
  - vii. TDS/Elect. Conductivity
  - viii. Total Alkalinity
  - ix. Chloride
  - x. Fluoride
  - xi. Nitrate
  - xii. Sulphate
  - xiii. Iron
  - xiv. Manganese
  - xv. Total Hardness
  - xvi. Total Arsenic\*-Discrete testing shall be done.
  - xvii. Free Residual Chlorine
  - xviii. Total Coliform
  - xix. E.coli/Thermo tolerant Coliform
25. The contractor/firm shall be responsible for cleaning of Laboratory during working hours.
26. The contractor/Firm shall keep the lab operational on all working days. If any person from lab staff goes on leave, the alternate staff shall be provided in lab by the contractor/Firm for the respective job. Even if it remains non-operational a penalty of Rs. 500/- per day shall be levied.
27. Online entry of the samples tested on a particular day shall be made within next 24 hours on the format available on web site i.e. [www.indiawater.gov.in](http://www.indiawater.gov.in) after getting the test report signed from either consultant (chemist) or concerned JE in charge or concerned AE in charge of the laboratory.
28. The firm shall hand over the laboratory including all equipments, glass wares, chemicals, reagents to the department after expiry of the contract in good conditions.
29. Disposal of all the waste generated in the lab and washing of glassware, breakage & discard materials will be done by the firm at their own cost at appropriate place marked in the area and as per the standard procedure for waste water disposal.
30. Firm will also be responsible for functioning of all light switch fittings, fixtures and accessories in the lab building at their own cost.
31. The period of contract will be for three years beginning after 15 days for the date of award.
32. The contractor/firm should provide Filter Paper of 47mm dia of Merck Make only for the bacteriological parameters.

Executive Engineer,  
I&PH, Division,  
Paonta Sahib (HP)