## Term of Reference (ToR)

- 01. **Site Selection:** Visit the prospective tube well site/place to find suitable for installation of the Water Treatment Plant.
- 02. **Boring of Tube Well for Submersible Pump:** Vendor will bore 150 feet 4" tube well for installation of submersible pump and establish raw water System from underground to overhead water tank including pipes & fittings.
- 03. **Site Development:** Vendor will develop the site with Bricks and cement platform size 10'-7" X 9'- 1" (Inside), 11'- 6" X 10' (Outside), with 5" X 1'-8" Height brick wall & 6" brick base floor.
- 04. Steel Structure with Plastic Roof and steel base plates for overhead & Reserve Tank: Steel Structure will be fabricated out of M.S. angles. Cross balancing of same angle will be provided at the top and middle for installation of 1,000-Liter capacity Stainless steel Tank upon it. An intermediate platform will also be provided inside the structure. One Super Structure with corrugated transparent 10 pcs PVC sheets (05 pcs are of 6'-0" X 2'-6" & 05 pcs of 7'-0" X 2'- 6" sized). Steel structure roof size 10'X12'X14'-6" & base size 52"X52".
- 05. **Stainless Steel Overhead Water Tank:** Vendor will provide stainless steel overhead water tank Capacity 1,000-liters water with Liquid Level Control Switch (LLCS) and all necessary pipe connection to Iron Removal Filter.
- 06. **Stainless Steel Reserve Water Tank:** Vendor shall provide stainless steel reserve water tank (Filtered water tank) Capacity 1,000 Liters with all necessary pipe connection to six delivery taps.
- 07. **Stainless Steel Iron Removal Filter:** The filter body will be fabricated out of stainless steel sheet, grade 304, provided with two stainless steel flanges and top bolted together. It will be flat bottom. Gravel, Sand will be filled in.
- 08. **Stainless Steel Arsenic Removal Filter:** The filter body will be fabricated out of stain less steel sheet, grade 304, provided with two stainless steel flanges and top of bolted together. It will be flat bottom. Vendor will provide filter body (cylinder) with filters (strainer) fitted with plate in the inside and also Water Meter.
- 09. G. I. Pipes Fittings & Ball Valves: Vendor will supply all necessary G.I. pipes, G.I. fittings & ball valves.
- 10. **Submersible Pump:** Vendor will provide 1.5 H.P Submersible Pump (China origin) with non-return valve and all 1" G.I Pipes and fittings.
- 11. M.S. Grill: M.S Grill with 9mm rod (±1mm tolerance) to protect the installed plant size 11'X9'-6"X8'.
- 12. Media (GFH): Vendor will supply 20 kgs of Media origin Federal Republic of Germany.
- 13. Transportation: For carrying plant from Dhaka to the site at the vendor own cost.
- 14. **Drawings & Manual:** The contractor will install the plant in accordance with the drawings to be prepared by Contractor that are to be approved by the PROCURING ENTITY. The CONTRACTOR will submit the final drawing within 05 (five) Days after signing the agreement.
- 15. Plant installation: Awarded vendor will start installation work upon receipt of approved work order.
- 16. **Training:** Awarded vendor will provide necessary operation & maintenance (O & M) training to SCI nominated/selected persons to run the plant smoothly.
- 17. **Testing of Water:** Vendor shall get the water samples tested from BUET or any other testing institution, which SCI may refer for ascertaining level of Arsenic, Iron, Phosphate & Manganese in order to select the site.

- 18. **Soak Pit:** Ring well for soaking Backwash Sludge: To dug a ring well in a nearby place of the Water Treatment Plant to facilitate safe disposal & soaking of backwash & reservoir sludge.
- 19. **Payment:** Payment will be made in account payee cheque/EFT within maximum two (3) weeks in favor of the firm/company after satisfactory completion of the work and upon receipt of invoice, Declaration of satisfactory installation by Meherpur Team especially Officer (Infrastructure)/SC-Meherpur, Delivery challan, Training completion certificate and Water testing report. Partial payment is allowed subject to completion of full installation of single site. VAT & Income Tax will be deducted at source as per GoB rules.
- 20. **Delivery & Installation:** Within 45 days after receiving the order confirmation.
- 21. Erection and Commission: Vendor will install the Equipment (Water Treatment Plant) at site.
- 22. Vendor will keep sufficient stock of Granular Ferric Hydroxide (AdsorpAs®) ready stock for delivery on payment as and when required.
- 23. Warranty: Vendor shall provide warranty for equipments as follows: -
  - (a). Five years warranty for
    - I. Steel Structure.
    - 2. Stainless Steel Tanks.
    - 3. Stainless Steel Filters.
- (b). One-year warranty for
  - I. Water Meter.
  - 2. Submersible pump.
  - 3. All non-return valve.
  - 4. Ball valves.

(Warranties do not cover any damage/loss of any parts due to mishandling, improper use, theft and natural calamity.

- 24. **Post Installation Service:** The contractor shall provide a free maintenance service for a period of 18 (Eighteen) months from the date of handing over the successfully completed work.
- **25. Response time:** The concerned engineers/technician of vendor should response to any kind of complain with the supplied items within 72 (Seventy Two) hours of informing the breakdown call in writing the email as well as by phone call.
- 26. Force Majeure Clause: Force Majeure clause will be applied as per Bangladesh Law.
- 27. Offer Validity: This offer shall be valid for 180 days.
- 28. **Performance Guaranty:** Awarded vendor to be submitted to SCI as Performance security in the form of Pay order/Bank Guarantee amounting the equivalent value of 10% of the contract or purchase order value which shall be retained for 06 months of the completion of work.
- 29. **Quality Control, Test and Inspection:** The supplier must maintain the quality of goods and works as per our required specifications. Required test (Arsenic, Iron, Phosphate, Manganese or others) report of water must be conducted from ICDDRB/BUET. The Cost of treated water quality test will bear by the contractor.
- 30. SCI has right to reserve to terminate the Contract in whole or in part if the contractor causes a fundamental breach of contract.