



# BENGAL CHEMICALS & PHARMACEUTICALS LTD

(A Govt. of India Enterprise)

Bengal Chemicals & Pharmaceuticals Limited  
168 Manicktala Main Road, Kolkata-700054  
West Bengal, India.

## SUPPLY, ERRECTION, INSTALLATION, TESTING, COMMISSIONING & VALIDATION OF EXISTING INCOMPLETE RO PLANT AT NEW OINTMENT SECTION

|                                    |   |
|------------------------------------|---|
| Tender No                          | BCPL/LT/P&HW/RO/01/14-15  |
| Tender Date                        | 5 <sup>th</sup> Feb, 2015   |
| Pre-Bid Meeting Date & Time        | <b>12<sup>th</sup> Feb, 2015 @10:30am</b>   |
| Pre-Bid Meeting Venue              | Board Room, Ground Floor, Bengal Chemicals & Pharmaceuticals Manicktala Works, Manicktala Main Road, Kolkata – 54.                  |
| Last date & Time of Bid Submission | <b>20<sup>th</sup> Feb, 2015 up to 3:00Pm</b>   |
| Opening of Bid                     | 20 <sup>th</sup> Feb, 2015 up to 3:30Pm   |
| Venue for Bid submission & Opening | Purchase Department, Bengal Chemicals & Pharmaceuticals Ground Floor of Manicktala Main Office, Manicktala Main Road, Kolkata – 54. |

### 1. SCOPE OF WORK

The scope of work covers design, supply, erection/ & commissioning, all documentation & testing for cGMP compliance and providing performance guarantee on Supply, Errection, Installation, Testing, Commissioning & Validation of Existing incomplete RO Plant at New Ointment Section for Schedule-M / WHO-GMP (DQ, IQ, OQ, PQ documents to be submitted and total water system validation to be done). The offer is assumed that water purification plant will be as per standards of purified water as per IP/USP specification & aerobic microbial count must be less than 50cfu/ml. Supply from RO Plant @ 3KL/hr for Ointment Block & Liquid External Preparation Section at Bengal Chemicals & Pharmaceuticals Ltd., Maniktala Plant (Kolkata).

- Supply & installation of HMI (as per system requirement).
- Supply & installation of 4" Length 240V 40watt UV Lamp.



- Supply & installation of 0.1 Micron Cartilage Filter.
- Supply & installation of 1/2 inch sampling Cock.
- Supply & installation of ¼ inch BSP Pressure Gauge Side Mounted.
- Supply & installation of 40 MM Triclover solenoid valve.
- Supply & installation of flow meter.
- Supply & installation of LPS & HPS with TC connector.
- Supply & installation of Pressure Gauge with TC connector.
- Supply & installation of CI sensor with TC fitting.
- Supply & installation of Level sensor.
- Supply & installation of some optional items i.e Membrane, Mno2, Filter Media, Resin that may only be required after investigation of previous supplied items.
- Modifications of Control Panel including rectifications of existing PLC Module, Cabling & wiring of Panel, Software development etc.
- Supply & installation of New Dosing System including Chlorination & De-chlorination including Dosing Tank, Pump, ORP Meter.
- Complete Commissioning & Validation of the System.

#### **ELIGIBILITY CRITERIA FOR THE TENDERER**

- Bidder shall completed at least two Water treatment plants in cGMP complied Chemical/Pharmaceutical manufacturing Company within last 3 (Three) years with project value not less than Rs. 10.00 lakh.
- Bidder must have PF/ sale tax registration certificate & income tax return certificate (Documentation evidence to be furnished).
- Bidder shall have average annual turnover of Rs. 10.00 lakh in last 3 financial year.

#### **2. COMPLETION PERIOD**

For supply:

the time schedule for delivery of all the items according to the contract shall be one month from the of LOI/ Placement of order.

Errection, Testing & Commissioning with Documentation within 45 days of the placement of order.

#### **3. TENDER SUBMISSION**

Tender to be submitted under two separate sealed covers, one cover containing Part 1 (Un-priced Bid) & the other cover containing Part 2 (Priced Bid). Indicating Tender No:BCPL/LT/P&HW/RO/01/14-15 Item as 'supply, erection, installation, testing, commissioning & validation of existing incomplete RO plant at new ointment section' with tender due date in order to clearly identify between the two Bids.

These two bids should be submitted in a single sealed cover with the respective Tender No & Item. Mentioned thereon, complete in all respect, addressed to the DM (Purchase), BENGAL CHEMICALS & PHARMACEUTICALS LTD, 168, MANIKTALA, KOLKATA-700 054.



### **EARNEST MONEY DEPOSIT**

A Demand Draft of Rs. 24,000/- to be deposited along with the tender in favor of BENGAL CHEMICALS & PHARMACEUTICALS Ltd., payable at Kolkata issued by any nationalized bank.

The EMD is refundable to unsuccessful bidder. For successful bidder the EMD may be converted as part of security deposit with proper extended validity/ DD en-cashed to fulfill the requirement.

### **4. VALIDITY**

Tenderers shall keep their offer valid for a period of 90 days from the due date of the tender.

### **5. TERMS OF PAYMENT**

1. 20% advance along with Purchase Order against Bank Guarantee from nationalized bank valid for minimum 90Days.
2. 60% against supply/installation of materials.
3. 10% against testing/ commissioning & validation.
4. Rest 10% after warranty period i.e. 1 year from the date of commissioning & handover or against performance Bank Guarantee from nationalized bank.

### **6. NOTE**

The Bidder shall also give their acceptance in technical bid for the scope of job as per tender terms & condition. The bidder not fulfilling the minimum eligibility criteria and non acceptance of any of the tender term will be disqualified in technical bid evaluation. Commercial bid will be opened only for technically qualified bid.

### **8. BASIS OF DESIGN**

Our Design and system manufacturing/ assembling is entirely based on the following Raw/feed water quality.

RAW/FEED WATER PARAMETERS (Furnished by you)

| Parameter                            | Result  | Parameter                  | Result   |
|--------------------------------------|---------|----------------------------|----------|
| Turbidity                            | 9.0 NTU | Total Dissolved Solids     | 990 ppm  |
| pH                                   | 7.5     | Total Suspended Solids     | 25 ppm   |
| Iron as Fe                           | 2.3 ppm | Sulphur as SO <sub>4</sub> | 587 ppm  |
| Total Hardness as CaCO <sub>3</sub>  | 740 ppm | Chlorides as CL            | 587 ppm  |
| COD, Heavy Metal, Microbiological Sp | BDL     | Nitrates                   | 41.5 ppm |



Tender for SUPPLY, ERRECTION, INSTALLATION, TESTING, COMMISSIONING & VALIDATION OF EXISTING  
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**N.B.:** Any other value not mentioned above will be considered as NILL. Any Variation in raw water quality will affect the treated water quality and quantity.

TREATED WATER QUALITY AND QUANTITY

| Parameter                        | Result                                  |
|----------------------------------|---|
| Nature                           | Clear, Colourless, Odourless, Tasteless |
| Conductivity @ 25 <sup>o</sup> C | 1.3 $\mu$ s/cm (USP)                    |
| Conductivity @ 20 <sup>o</sup> C | 1.1 $\mu$ s/cm (USP)                    |
| Nitrates                         | < 0.2 ppm                               |
| Heavy Metals                     | <0.1 ppm                                |
| Total Organic Compound           | <500 ppb                                |
| Microbial Count                  | <100 cfu/ml                             |
| Endo Toxins                      | Not Defined                             |



**PART - II**

**PRICE SCHEDULE**

**SUPPLY, ERRECTION, INSTALLATION, TESTING, COMMISSIONING & VALIDATION OF EXISTING  
INCOMPLETE RO PLANT AT NEW OINTMENT SECTION**

(The tendered shall fill in the given format the price quote by legible hand writing with ball pen only, both by figure and words failing which the tender may be rejected without notice in this regard)

TENDER No. ....

**A. Required Material & Installation for RO Plant of Ointment Section**

| SL. No. | Item                                   | Quantity       | Rate   |          | Amount |          |
|---------|--|----------------|--------|----------|--------|----------|
|         |  |                | Supply | Erection | Supply | Erection |
| 1       | 4" Length 240V 40watt UV Lamp          | 4 Nos.         |        |          |        |          |
| 2       | 0.1 Micron Cartilage Filter            | 5 Nos.         |        |          |        |          |
| 3       | 1/2 inch sampling Cock                 | 7Nos.          |        |          |        |          |
| 4       | ¼ inch BSP Pressure Gauge Side Mounted | 8 Nos.         |        |          |        |          |
| 5       | 40 MM Triclover solenoid valve         | 1 No.          |        |          |        |          |
| 6       | RO flow meter                          | 2 Nos.         |        |          |        |          |
| 7       | LPS & HPS with TC connector            | 1 No. for each |        |          |        |          |
| 8       | Pressure Gauge with TC connector       | 3 Nos.         |        |          |        |          |
| 9       | Cl sensor with TC fitting              | 1 NO.          |        |          |        |          |
| 10      | Level sensor                           | 1 NO.          |        |          |        |          |
|         | Total                                  |                |        |          |        |          |

**B. Materials may be Required (Optional)**



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| SL. No. | Item                              | Quantity  | Rate   |           | Amount |           |
|---------|-----------------------------------|-----------|--------|-----------|--------|-----------|
|         |                                   |           | Supply | Errection | Supply | Errection |
| 1       | MnO2 for Oxidation Chamber        | 60 Kgs.   |        |           |        |           |
| 2       | Birm Media for Dual Media filter  | 400 Kgs.  |        |           |        |           |
| 3       | Media for Multigrade Sand Filter  | 1600 Kgs. |        |           |        |           |
| 4       | Media for Activated Carbon Filter | 300 Kgs.  |        |           |        |           |
| 5       | Resin                             | 500 Lit.  |        |           |        |           |
| 6       | First stage RO Membrane           | 5 Nos.    |        |           |        |           |
| 7       | Second stage RO Membrane          | 3 Nos.    |        |           |        |           |
|         | Total                             |           |        |           |        |           |

**C. Control Panel Modification**

| SL. No. | Item   | Quantity | Rate   |           | Amount |           |
|---------|--|----------|--------|-----------|--------|-----------|
|         |  |          | Supply | Errection | Supply | Errection |
| 1.      | Rectifications of existing PLC Extension module          | 1 No.    |        |           |        |           |
| 2       | Supply & installation of HMI (as per system requirement) | 1 No.    |        |           |        |           |
| 3       | Software development according to the logic              | 1 No.    |        |           |        |           |
| 4       | Cable and wire connection to the panel & Motor           | 1 No.    |        |           |        |           |
|         | Total  |          |        |           |        |           |



**D. New Dosing System for Chlorination & De-chlorination**

| SL. No. | Item   | Quantity | Rate   |           | Amount |           |
|---------|--|----------|--------|-----------|--------|-----------|
|         |  |          | Supply | Errection | Supply | Errection |
| 1       | Supply & installation of 100 Lit. Dosing Tank            | 2 Nos.   |        |           |        |           |
| 2       | Supply & installation of 0-6Lit/hr. capacity Dosing Pump | 2 Nos.   |        |           |        |           |
| 3       | Supply & installation of ORP Meter                       | 1 No.    |        |           |        |           |
| 4       | Supply & installation of Pipeline & Fittings             | LS       |        |           |        |           |
|         | Total  |          |        |           |        |           |

**Complete Commissioning & Validation of the System**

**TOTAL= A+B+C+D+E**

**[N.B. – (i) Interested bidders should visit & understanding the whole job before submit their offer.**

**(ii) System layout will be provided to the bidders at the time of inspection.**

**(iii)The Statutory documents in respect of PAN/VAT/Service Tax Registration No, Latest ESI, PF etc should also be provided inside the Part-1 un-priced Bid while submitting the quotation.**

**Bengal Chemicals & Pharmaceuticals Ltd reserves the right to reject or accept or withdraw the tender enquiry in part or in full without assigning any reasons whatsoever. Quantity mentioned may vary subject to our actual requirement. BCPL also reserves the right to terminate the contract at any time during the contract period, if the services rendered by the firm are found to be unsatisfactory.**