HLL LIFECARE LIMITED

(A Government of India Enterprise)

PEROORKADA FACTORY, PEROORKADA

THIRUVANANTHAPURAM-695005

Email:

Website: www.lifecarehll.com

PH: +91 471 2437270



TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

INVITATION FOR BID

FOR

SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION
OF REVERSE OSMOSIS SYSTEM FOR PROCESS WATER RE-CYCLING HAVING
CAPACITY 100 KL/DAY

AT PEROORKADA FACTORY



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

CONTENTS

SECTION NO.	DESCRIPTION	PAGE NO.	
	PART 1		
SECTION I	INVITATION FOR BIDDERS (IFB)	3-6	
SECTION II	INSTRUCTION TO BIDDERS (ITB)	7-19	
SECTION III	GENERAL CONDITIONS OF CONTRACT (GCC)	20-30	
SECTION IV	SPECIAL CONDITIONS OF CONTRACT (SCC)	30-36	
SECTION V	TECHNICAL SPECIFICATIONS	37-59	
SECTION VI	QUALIFICATION CRITERIA	60-61	
SECTION VII	APPLICATION FOR PREQUALIFICATION	62-66	
SECTION VIII	ACCEPTANCE FORM	67	
SECTION IX	INDEMINITY CLAUSE 6		
SECTION X	DECLARATION	69	
SECTION XI	CONTRACT FORM	70-73	
	PART 2		
SECTION XII	PRICE BID FORM & BOQ SUMMARY	74-75	
	ANNEXURE 1 – BOQ	76-78	
	ANNEXURE II & III– DRAWINGS	79-80	



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

PART 1 SECTION I

INVITATION FOR BIDS (IFB)

1. Sealed and super scribed tenders under two bid systems are invited from vendors for Supply, Erection, Installation, commissioning & validation of Reverse Osmosis system for Soap water re cycling at HLL Lifecare Limited, Peroorkada Plant.

Name of work	Tender No	EMD	Date & Time of Opening of Technical bids
Supply, Erection, Installation, commissioning & validation of Reverse Osmosis system	TENDER NO: HLL/PFT/REVERS E OSMOSIS /2018- 19	Rs.60,000/- in the form of a DD drawn in favor of M/s.HLL LIFECARE LIMITED, and payable at Thiruvananthapuram from a nationalized bank	

2. A complete set of bid documents can be had from the office of the SM(Purchase), HLL Lifecare Ltd, Engineering Division, Peroorkada, Thiruvananthapuram – 695 005, Kerala, India during office hours on any working day on submission of written application. and remitting a non-refundable fee of Rs. 525/- (including taxes) [Cost of tender document] by cash at HLL Lifecare Limited, Peroorkada, Thiruvananthapuram or in the form of



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

Demand Draft drawn in favor of "HLL LIFECARE LIMITED" payable at Thiruvananthapuram, Kerala, India.

- 3. The bid documents will be available up to 15.00 Hrs. on the previous day of the Opening of the bids.
 - a) Date of issue of bid document: 29.03.2018
 - b) Pre bid meeting: 04.04.2018 at 10.00 Hrs
 - c) Last date and time for receipt of bids: **18.04.2018** at 15.00 Hrs
 - d) Date and time of opening of bids: **18.04.2018** at 15.30 Hrs
 - e) Address for communication, receipt, Pre bid Venue and Place of opening of bids:

SM(Purchase),

HLL LIFECARE LTD,

(A Government of India undertaking)

Peroorkada

THIRUVANANTHAPURAM – 695 005

KERALA, INDIA

Ph. 0471 2437270

- 4. The completed bid documents and all schedules should be submitted to SM (Purchase), in the above address along with sealed bids and the EMD. Bids received after due date and time will be rejected. Any bid not accompanied by EMD will be rejected.
- 5. a) SSI/MSE units interested in availing exemption from payment of tender fee & EMD should submit a valid copy of their Udyog Aadhar registration certificate issued by the concerned DIC or NSIC on or before due date and time for submission of tender fee and EMD as per the tender.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

- b. 20% of annual procurement value will be sourced from Micro and Small Enterprises (MSE), out of which 4% is earmarked for procurement from MSE's owned by SC or ST entrepreneurs. In the event of failure of SC or ST entrepreneurs to participate in tender or meet tender Requirements / conditions regarding price the same will be sourced from other MSE enterprises.
- c. Start up units interested in availing exemption from payment of tender fee & EMD shall submit a valid copy of Registration Certificate from Department of Industrial Policy & Promotion on or before due date as per tender notice.
- 6. Technical Bid and Price Bid shall be submitted in sealed covers separately. Tender Number shall be super-scribed on Technical Bid and Price Bids both covers in order to clearly identify between the 2 Bids. The two separately marked Bids enclosed in a single cover with the respective Tender Number written thereon, complete in all respect and sealed, addressed to The SM(Purchase), HLL Lifecare Limited, Peroorkada Factory, Trivandrum 695005, Kerala, India should reach us on or before the due date and time mentioned in the Tender Notification. Tender brought to the office after prescribed time will not be accepted. HLL will not be responsible for any delay in transit of tenders sent by post.
- 7. Bids will be opened in the presence of Bidders representative(s) who wishes to attend on the specified date and time, at the office of HLL at the address given in Clause '3' above.
- 8. In the event of the date specified for bid receipt and opening being declared as a closed holiday for HLL's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.
- 9. HLL may, at its discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons, in which case all rights and obligations of HLL and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended. HLL will not be held responsible for the postal delay, if any, in the delivery of the bidding document or the

Page **5** of **80**



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

non-receipt of the same. Bids sent by Telex/Fax/Telegraph will not be accepted. The company reserves the right to club or split the items of works, change the qualifying criteria at their discretion and to reject / cancel the tender without assigning any reason thereof.

10. Amendments:

Any amendments related to the tender shall be published only in HLL web site

www.lifecare<u>hll.com.</u> A pre- bid meeting will be conducted on 04.04.2018, 10.00 hrs at HLL Peroorkada Factory, Trivandrum, Kerala, India.

SM(Purchase)



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

SECTION II INSTRUCTION TO BIDDERS

A. INTRODUCTION

1. Eligible Bidders

The Eligibility criteria for the bidders is as per Qualification Criteria Section VI.

2. Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of its bid and HLL Lifecare Limited, Peroorkada Factory, Thiruvananthapuram hereinafter referred to as "HLL", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

B. BIDDING DOCUMENTS

3. Contents of Bidding Documents

- 3.1 The goods required, bidding procedures and contract terms are prescribed in the Bidding documents. In addition to the Invitation for Bids, the Bidding documents include:
 - a. Instruction to Bidders (ITB);
 - b. General Conditions of Contract (GCC);
 - c. Special Conditions of Contract (SCC);
 - d. Technical Specifications & BOQ
 - e. Qualification criteria
 - f. Bid Form



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

3.2 The Bidder is expected to examine all instructions, forms, terms and specifications in the Bidding Documents. Failure to furnish all information required by the Bidding Documents or submission of a bid not substantially responsive to the Bidding Documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

4. Clarification of Bidding Documents

4.1 A prospective Bidder requiring any clarification of the Bidding Documents may notify HLL in writing at HLL's mailing address indicated in the Invitation for Bids. HLL will respond to any request for clarification of the Bidding Documents which it receives not later than 5 days prior to the deadline for submission of bids prescribed by HLL. HLL's response (including an explanation of the query but without identifying the source of inquiry) will be communicated through our web site / email to all prospective Bidders who have received the bidding documents.

5. Amendment of Bidding Documents

- 5.1 At any time prior to the deadline for submission of bids, HLL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the Bidding Documents by an amendment.
- 5.2 Any subsequent amendments in the bid shall be notified only on HLL website.
- 5.3 In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bid, HLL may, at its discretion, extend the deadline for the submission of bids

C. PREPARATION OF BIDS

6. Language of Bid

The Bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the Bidder and HLL, shall be written in the English language. Supporting documents and printed literature furnished by the Bidder may be written in another language



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

provided, they are accompanied by an accurate translation of the relevant passages in the English language in which case, for purposes of interpretation of the Bid, the English translation shall govern

7. Documents Comprising the Bid

Following documents and forms are to be included in the technical bid and commercial bid respectively.

8.BID

8.1. TECHNICAL

The technical bid shall consist of the following documents.

- a. EMD / Bid Security amount in the form of DD, drawn in favor of HLL Lifecare Limited, payable a Thiruvananthapuram. The EMD / Bid Security shall be refunded to the non-responsive bidders within 60 days from the date of opening of Bid.
- b. The tender document can have remitting a non-refundable fee of Rs. 525/- (including taxes) by cash at HLL Lifecare Limited, Peroorkada, Thiruvananthapuram or in the form of Demand Draft drawn in favor of "HLL LIFECARE LIMITED" payable at Thiruvananthapuram, Kerala, India
- c. The technical specifications enclosed along with the bid document shall be confirmed by signature of the bidder/authorized signatory of the bidding firm, in all pages and authorized by official seal. The information shall be filled in the technical specifications wherever necessary as per the instructions given.
- d. Duly attested copies of factory license/ Industrial license, sales tax registration, and documents to prove the legal status, place of registration and principal place of business of the undertaking.
- e. Duly attested copies of quality certificates for the products, quality system certifications and quality accreditation certificate as specified in technical specification.
- f. Copy of Balance sheet for the past three financial years, duly certified by a chartered Page 9 of 80



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

accountant

- g. Documentary evidence established in accordance with ITB Clause 11 that the Bidder is eligible to bid and is qualified to perform the contract if the bid is accepted;
- h. Documentary evidence established in accordance with ITB Clause 12 that the equipment and ancillary services to be supplied by the Bidder shall conform to the Bidding Documents

8.2. PRICE BID

- a.) Duly filled Bid Form and BOQ.
- b.) All commercial aspects related to items that are mentioned in IFB

9. Bid Prices

- 9.1 The prices shall be quoted for all items and shall be firm. The amount shall include all plant, layout, materials, all temporary works, supervision, taxes, duties, levies, insurance and every incidental and contingent cost and charges whatsoever required to complete the item of work in all respects conforming to related specifications, drawings etc.
- 9.2 The price quoted by the bidder shall remain fixed during the entire period of contract and shall not be subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.
- 9.3 The prices quoted by the bidder shall be in sufficient detail to enable HLL to arrive at the price of equipment/system offered.

9 Bid Currencies

10.1 Indian Bidders should quote only in INR.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

10 Documents establishing bidder's eligibility and qualifications

- 10.1 Pursuant to ITB Clause 8.1, the bidder shall furnish, as part of its bid, documents establishing the bidder's eligibility to bid and its qualifications, to perform the Contract if its bid is accepted.
- 10.2 The documentary evidence of the Bidder's qualifications to perform the contract if the bid is accepted, shall establish to HLL's satisfactions.
- 10.3 bidder has the financial, technical and production capability necessary to perform the Contract and meets the criteria outlined in the qualification requirements. To this end, all bids submitted shall include the following information:
- (i) The legal status, place of registration and principle place of business of the company or firm or partnership, etc;
- (ii) Details of experience and past performance of the bidder on items offered and on those of similar nature of work as per Clause (1) & (2) of Section VI Qualification Criteria and details of current contracts in hand and other commitments.
- 10.4 Bidders should have BIS certification IS 16240:2014 for participating the tender.

11 Period of Validity of Bids

- 11.1 Technical Bid & Price Bid shall be valid for minimum one year
- 11.2 In exceptional circumstances, HLL may solicit the bidders consent to an extension of the period of validity. The request and the responses thereto shall be made in writing.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

12 Format and Signing of Bid

- 12.1 The bidder shall prepare the bid clearly marking the Bid as appropriate.
- 12.2 The bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. The letter of authorization shall be indicated by written power-of-attorney accompanying the bid. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.
- 12.3 Any interlineations, erasures or overwriting shall be valid only if they are initialed by the person or persons signing the bid.

13 Sealing and Marking of bids

Separate bids shall be submitted for Price Bid and Technical Bids.

- 13.1 The bidders shall seal Technical bid and Price bid in separate inner envelopes, duly marking the envelopes as "TECHNICAL BID" and 'PRICE BID. The Bidders shall then place both the envelopes of Technical and Price bid in an outer envelope. The name of the product for which the bid is made must be written on both the inner envelops and the outer envelope.
- 13.2 The inner and outer envelopes shall be addressed to HLL at the following address:

SM (Purchase)

HLL Lifecare Ltd, Peroorkada Factory,

,Thiruvananthapuram –05

- (a) The outer envelope shall bear the Invitation for bids (IFB) number, and a statement: "DO NOT OPEN BEFORE" 15.30 Hrs. ON 18.04.2018"
- (b) The outer and inner envelope shall also indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "late".



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

- (c) If the inner and outer envelopes are not sealed and marked as required, HLL will assume no responsibility for the bid's misplacement or premature opening.
- (d) Bids must be received by HLL at the address specified not later than the date and time specified in the Invitation For Bid. In the event of the specified date for the submission of bids, being declared a holiday for HLL, the bids will be received up to the appointed time on the next working day.
- (e) HLL may, at its discretion, extend this deadline for the submission of bids by amending the bidding documents in which all case rights and obligations HLL and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

14 LATE BIDS

Any bid received by HLL after the deadline for submission of bids prescribed by the HLL, will be rejected and returned unopened to the bidder.

15 MODIFICATION AND WITHDRAWAL OF BIDS.

- 15.1 The bidder may modify or withdraw its bid after the bid submission, provided that written notice of the modification or withdrawal is received by HLL prior to the deadline prescribed for submission of bids.
- 15.2 The bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of ITB Clause 15. A withdrawal notice may also be sent by fax or email but followed by a signed confirmation copy, post-marked not later than the deadline for submission of bids.
- 15.3 No bid may be modified subsequent to the deadline for submission of bids.
- 15.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the bidder in the Bid Document.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

E. BID OPENING AND EVALUATION

16. Opening of Bids by HLL

16.1 The HLL will open all bids, in the presence of bidder's representatives who choose to attend, at 15.30 Hrs on **18.04.2018** at the following location:

HLL Lifecare ltd

Peroorkada Fctory, Thiruvanthapuram- 695 005.

- 16.2 The bidder's representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of bid opening being declared a holiday for HLL, the bids shall be opened at the appointed time and location on the next working day.
- 16.3 The bidder's names, modifications, bid withdrawals and the presence or absence of the requisite documents and such other details as the HLL, at its discretion, may consider appropriate will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the bidder pursuant to ITB Clause 16.
- 16.4 HLL will record the bid opening.
- 16.5 The "Price Bid" (Cover B) will be opened after evaluation of "Technical bids" (Cover A) and the date and time of opening of Price Bid will be intimated to bidders whose bids are responsive and selected by HLL.
- 16.6 HLL will scrutinize the technical bid for compliance to the specifications and documentation requirement as per the bid document. HLL will depute its competent officers to the premises of the bidder qualified on the basis of technical scrutiny, for on-site evaluation of the claims made in the technical bid, if deemed appropriate on HLL's sole discretion. The bidders will be short-listed on the basis of responsiveness of technical bid as well as report of on-site technical evaluation. The price bid of the bidders who are disqualified at the technical scrutiny and on-site evaluation will be returned un-opened. The on-site evaluation may include the inspection of the specimen model of the equipment. The short listed bidders will be informed about the time, date and venue of the price bid opening. The successful bidder shall be identified on the basis of lowest evaluated substantially responsive bid.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

17. CLARIFICATION OF BIDS

During evaluation of bids, HLL may, at its discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in prices or substance of the bid shall be sought, offered or permitted.

18 PRELIMINARY EXAMINATION

- 18.1 HLL will examine the bids to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed, and whether the bids are generally in order.
- 18.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail. If the bidder does not accept the correction of the errors, its bid will be rejected.
- 18.3 HLL may waive any minor informality or non-conformity or irregularity in a bid, which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any bidder.
- 18.4 Prior to the detailed evaluation pursuant to Clause ITB 21, HLL will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these clauses a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from or objections or reservations to critical provisions such as those concerning Warranty, Force Majeure, Applicable law and Taxes and Duties will be deemed to be material deviation. HLL's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 18.5 If a bid is not substantially responsive, it will be rejected by HLL and may not subsequently be made responsive by the bidder by correction of the non-conformity.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

19. EVALUATION AND COMPARISON OF BIDS

- 19.1 HLL will evaluate and compare bids previously determined to be substantially responsive as follows.
- 19.2 HLL's evaluation of a bid will take into account, in addition to the bid price (exfactory/ex-warehouse/off-the-shelf price of the Supply, erection, Installation, commissioning & validation of Reverse Osmosis system offered from within India, such price to include all costs as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the equipment and its parts and accessories, and excise duty or GST on the equipment, if payable) and price of incidental services, the following factors, in the manner and to the extent indicated in ITB Clause 19.3 and in the technical specifications:
- 19.3 Pursuant to ITB Clause 19.2 the following evaluation methods will be applied:
- (a) Inland transportation, from factory, insurance and incidentals.
- (i) Inland transportation, insurance and other incidentals, for Supply, erection, Installation, commissioning & validation of Reverse Osmosis system costs will also be considered in the bid price.
- (b) Spare parts and after sales service facilities in India:

20. CONTACTING HLL

- 20.1 No bidder shall contact HLL on any matter relating to its bid, from the time of the bid opening to the time the contract is awarded. If the bidder wishes to bring additional information to the notice of HLL it should do so in writing.
- 20.2 Any effort by a bidder to influence HLL in its decisions on bid evaluation, bid comparison, or selection may result in the rejection of the bidders bid.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

F. AWARD OF CONTRACT

21. POST QUALIFICATION

- 21.1 The determination will take into account the bidders financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the bidder's qualifications submitted by the bidder, pursuant to ITB Clause 10 as well as such other information as HLL deems necessary and appropriate.
- 21.2 An affirmative determination will be a prerequisite for award of the contract to the bidder. A negative determination will result in rejection of the bidders bid, in which event HLL will proceed to the next lowest evaluated bid to make a similar determination of that bidder's capabilities to perform satisfactorily.

22. AWARD CRITERIA

Subject to ITB Clause 28, HLL will award the contract to the successful bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the bidder is determined to be qualified to perform the contract satisfactorily.

23. HLL'S RIGHT TO VARY QUANTITIES AT TIME OF AWARD

HLL reserves the right at the time of award of contract to increase or decrease the quantity of equipment and its parts and accessories, wherever applicable, and services originally specified in the bid document without any change in unit price or other terms and conditions.

24. HLL'S RIGHT TO ACCEPT ANY BID AND TO REJECT ALL BIDS

HLL reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

25. NOTIFICATION OF AWARD

- 1 Prior to the expiration of the period of bid validity, HLL will notify the successful bidder in writing by registered letter or by fax or email to be confirmed, that its bid had been accepted.
- 2 The notification of award will constitute the formation of the contract

26 SIGNING OF CONTRACT AGREEMENT

The successful bidder has to submit a contract agreement in their letter head as per the format specified in Section IX.

27. Delays in Supply, erection, Installation, validation & commissioning of Reverse osmosis system

- 1 Delivery, Installation, Validation and Commissioning of the equipment and its parts and accessories shall be made by the Contractor within the stipulated delivery date as specified in the purchase order / work order / contract, from the date of placing the date of Order. If at any time during performance of the Contract, the Contractor should encounter conditions impeding timely Supply, erection, Installation, commissioning & validation of Reverse Osmosis system, the Contractor shall promptly notify HLL in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Contractor's notice, HLL shall evaluate the situation and may at its discretion extend the Contractor's time for performance, with or without penalty.
- 2 A delay by the Contractor in the performance of its Delivery, Installation, Validation and Commissioning obligations shall render the Contractor liable to liquidated damages mentioned in Clause 10 of the SCC, unless an extension of time is agreed upon pursuant to agreement without the application of liquidated damages.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

3 If the Contractor fails to deliver any or all of the equipment or its parts or perform the Services within the time period(s) specified in the Purchase Order, HLL shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty of an amount equivalent to 1% of the Total Contract Value for each week of delay or part thereof subject to a maximum of 5% of the Total Contract Value.

28. Completion period.

The successful bidder has to Supply, erection, Installation, validation & commissioning of Supply, erection, Installation, commissioning & validation of Reverse Osmosis system within 3 **Months** from the date of issue of work order/Letter of Indent

29. Payment Terms

29. A: Payment Terms for Supply

Payment will be made after the supply and acceptance of items.

70% on Supply, 20% on installation an commissioning, 10% after PBG for 1 year.

29. B Defect liability period:

- i) Defect liability period will be 12 months from the date of Completion as certified by the authorized Official(s) of HLL.
- ii) The contractor shall stand guarantee for materials and workmanship as per Clause No. Section V Annexure-2 of the Technical Specification given in the Tender Notification and Clause No. Section III of the General Conditions of Contract. During the defect liability period, if any defect is observed due to workmanship or from any act or omission of the contractor, the contractor shall execute all such work of rectification and making good of defects, as may be required of him by the authorized Official(s) of HLL, at his own cost and within the time stipulated by the Official concerned. The contractor shall indemnify the Employer against any loss/liability that may be incurred by him on account of any failure on the part of the contractor for timely rectification of the defects pointed out within the defect liability period.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

SECTION III

GENERAL CONDITIONS OF CONTRACT

1. DEFINITIONS

- 1.1 In this contract the following terms shall be interpreted as indicated:
- (a) "The Contract" means the agreement entered into between HLL and the Contractor as recorded in the Contract Form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein;
- (b) "The Contract Price" means the price payable to the Contractor under the Contract for the full and proper performance of its contractual obligations;
- (c) "The Goods" means all the products, equipment, machinery, and/or other materials which the Supplier is required to supply to HLL in accordance with the technical specifications mentioned under **section V** of the Contract;
- (d) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Contractor covered under the contract;
- (e) "GCC" means the General Conditions of Contract contained in this section.
- (f) "SCC" means the Special Conditions of Contract.
- (g) "HLL" means the Organization purchasing the Goods, as named in SCC;
- (h) "The Contractor" means the individual or firm supplying the Goods under this Contract;
- (i) "Day" means calendar day.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

(j) "Delivery period" means the period applicable upto completion of supply; installation and testing by the contractor at the required location mentioned in purchase order and accepted by HLL.

2. APPLICATION

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

3. STANDARDS

3.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

4. USE OF CONTRACT DOCUMENTS AND INFORMATION

- 4.1 The Contractor shall not, without HLL's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of HLL in connection therewith, to any person other than a person employed by the Contractor in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 4.2 The Contractor shall not, without HLL's prior written consent, make use of any document or information enumerated in GCC Clause 4.1 except for purposes of performing the Contract.
- 4.3 Any document, other than the Contract itself, enumerated in GCC clause 4.1 shall remain the property of HLL and shall be returned (in all copies) to HLL on completion of the contractor's performance under the Contract if so required by HLL.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

5. PATENT RIGHTS

5.1 The Contractor shall indemnify HLL against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

6. INSPECTION AND TESTS

- 6.1 HLL or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract at no extra cost of HLL. The Special conditions of Contract and/or the Technical Specifications shall specify what inspections and tests HLL requires and where they are to be conducted. HLL shall notify the Contractor in writing of the identity of any representatives retained for these purposes.
- 6.2 The inspections and test may be conducted on the premises of the Contractor or its subcontractor(s), at point of delivery and/or at the Goods final destination. Where conducted on the premises of the Contractor or its subcontractor(s), all reasonable facilities and assistance including access to drawings and production data shall be furnished to the inspectors at no charge to HLL.
- 6.3 Should any inspected or tested Goods fail to conform to the specifications, HLL may reject them and the Contractor shall either replace the rejected Goods or make all alternations necessary to meet specification requirements free of cost to HLL.
- 6.4 HLLs right to inspect, test and, where necessary, reject the Goods' arrival in at site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by HLL or its representative prior to the Goods dispatched.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

7. PACKING

7.1 The Contractor shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods final destination and the absence of heavy handling facilities at all points in transit.

7.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided in the agreement / purchase order including additional requirements, if any, specified in SCC and in any subsequent instructions ordered by HLL.

8 DELIVERY AND DOCUMENTS

8.1 Supply, erection, Installation, commissioning & validation of Reverse Osmosis system shall be made by the Contractor in accordance with the terms specified in the purchase order by HLL. The details of dispatching and/or other documents to be furnished by the contractor are specified in the purchase order, if any.

9. INSURANCE

9.1 The Goods Supplied under the Contract shall be fully insured in Indian Rupees (as specified in work order / purchase order / contract) against the loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the Special Conditions of Contract.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

10. INCIDENTAL SERVICES

- 10.1 The contractor may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
- (a) Performance or supervision of the on-site assembly and/or start-up of the supplied goods
- (b) Furnishing of tools required for assembly and/or maintenance of the supplied goods;
- (c) Furnishing of detailed operations and maintenance manual
- (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Contractor of any warranty obligations under this Contract; and
- (e) Training of HLL's Personnel, at the Contractor's plant and/or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied Goods.

11 SPARE PARTS

- 1.1 As specified in the Special Conditions of Contract, the Contractor may be required to provide the information pertaining to spare parts (specifications and supplier details)manufactured or distributed by the Contractor and also provide the list of spares. The party will provide the filtration membranes during the period of warranty at free of cost
- (a) Such spare parts as HLL may select to purchase from the Contractor, providing that this selection shall not relieve the Contractor of any warranty obligations under the Contract; and
- (b)In the event of termination of production of the spare parts:



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

- (i) Advance notification to HLL of the pending termination, in sufficient time to permit the HLL to procure needed requirements; and
- (ii) Following such termination, furnishing at no cost to HLL, the blueprints, drawings and specifications of the spare parts, if and when requested.

12. WARRANTY

- 12.1 The Contractor shall warrant that the Goods supplied under this Contract are of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The contractor further shall warrant that the Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the HLL's specifications) or from any act or omission of the Contractor, that may develop under normal use of the supplied Goods in conditions obtaining in the country of final destination
- 12.2 This warranty shall remain valid for minimum one year from the date of installation or commissioning.
- 12.3 HLL shall promptly notify the contractor in writing of any claims arising under this warranty.
- 12.4 Upon receipt of such notice, the Contractor shall, within the period specified in SCC, and with all reasonable speed, shall indemnify HLL.
- 12.5 If the Contractor, having been notified, fails to remedy the defect(s) within the period specified in SCC, within a reasonable period, HLL may proceed to take such remedial action as may be necessary, at the Contractor's risk and expense and without prejudice to any other rights which HLL may have against the Contractor under the contract.
- 12.6 Bidder has to quote charges for Annual Maintenance service for two years to cover post



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

warranty period.

13. PRICES

13.1 Prices charged by the Contractor for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Contractor in its bid, with the exception of any prices adjustments authorized in the special Conditions of Contract or in HLL's request for bid validity extensions, as the case may be.

14. CHANGE ORDERS

- 14.1 HLL may at any time by written order given to the Contractor, make changes within the general scope of the Contract in any one or more of the following:
 - (a) drawings, designs or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for HLL;
 - (b) services to be provided by the Contractor.
- 14.2 If any such changes cause an increase or decrease in the cost of, or the time required for, the Contractor's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or contract schedule, or both, and the Contract shall accordingly be amended. Any claims by the Contractor for adjustment under this clause must be asserted within thirty (30) days from the date of the Contractor's receipt of HLL's change order.

15. CONTRACT AMENDMENTS

15.1 Subject to GCC Clause 17, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

16. ASSIGNMENT

16.1 The Contractor shall not assign, in whole or in part, its obligations to perform under the contract, except with HLL's prior written consent.

17. SUBCONTRACTS

17.1 The contractor shall notify HLL in writing of all subcontracts awarded under the contract if not already specified in his bid. Such notification, in his original bid or later, shall not relieve the Contractor from any liability or obligation under the contract.

18. LIQUIDATED DAMAGES

18.1 If the Contractor fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, HLL shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, the liquidated damages specified in Clause 10 of the SCC, up to a maximum deduction of the percentage specified in the SCC if any. Once the maximum is reached, HLL may consider termination of the Contract.

TERMINATION BY DEFAULT

- 19.1 HLL may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the contractor, terminate the Contract in whole or part;
 - a) if the Contractor fails to deliver any or all of the goods within the time period(s) specified in the Contract, or within any extension thereof granted by HLL, or
 - b) If the Contractor fails to perform any other obligation(s) under the contract.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

19.2 In the event HLL terminates the Contract in whole or in part, HLL may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Contractor shall be liable to HLL for any excess costs for such similar Goods. However, the Contractor shall continue the performance of the Contract to the extent not terminated.

20. FORCE MAJEURE

20.1 For purposes of this Clause "Force Majeure" means an event beyond the control of the Contractor and not involving the Contractor's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of HLL either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

20.2 If a Force Majeure situation arises, the Contractor shall promptly notify HLL in writing of such conditions and the cause thereof. Unless otherwise directed by HLL in writing, the Contractor shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

21. TERMINATION FOR INSOLVENCY

21.1 HLL may at any time terminate the Contract by giving written notice to the Contractor, if the Contractor becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Contractor, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to HLL.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

22. RESOLUTION OF DISPUTES

22.1 HLL and the contractor shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

If, after thirty (30) days from the commencement of such informal negotiations, HLL and the Contractor have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in the Special Conditions of Contract. These mechanisms may include, but or not limited to, conciliation mediated by a third Party, adjudication in an agreed national forum, and national arbitration.

22.3 The jurisdiction of any disputes, suits and proceeding arising out of the tender shall be only in the court of Thiruvananthapuram

23. GOVERNING LANGUAGE

23.1 The contract shall be written in English language. English language version of the Contract shall govern its interpretation. All correspondence and documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

24. APPLICABLE LAW

24.1 The Contract shall be interpreted in accordance with the laws of the Union of India.

25. NOTICES

25.1 Any notice given by one party to the other pursuant to this Contract shall be sent to other party in writing or by fax or email and confirmed in writing to the other Party's address specified in Special Conditions of Contract



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

25.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

26. TAXES AND DUTIES

26.1 Contractors shall be entirely responsible for all taxes, duties, license fees, octroi etc., incurred until Supply, erection, Installation, commissioning & validation of Reverse Osmosis system to the HLL.

SECTION IV

SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of contract. The Corresponding clause number of the General Conditions is indicated in parentheses.

1. DEFINITIONS (GCC Clause 1)

(a) The Purchaser is HLL Lifecare Limited, Peroorkada Factory, Thiruvananthapuram

2. INSPECTION AND TESTS (GCC Clause 6)

2.1 The following inspection procedures and tests are required by HLL; the contractor shall get inspected in manufacturer's works and submit a test certificate and also guarantee/warranty certificate that the equipment conforms to laid

Page 30 of 80



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

down specifications.

- 2.2 HLL or its representative shall inspect and/or test any or all the equipment to confirm their conformity to the Contract specifications, prior to dispatch from the manufacturer's premises. Such inspection and clearance will not prejudice the right of the consignee to inspect and test the equipment on receipt at destination.
- 2.3 If the equipment fails to meet the laid down specifications the contractor shall take immediate steps to remedy the deficiency or replace the defective equipment/it parts to the satisfaction of HLL.

3. INSURANCE (GCC Clause 9)

3.1 For delivery of Equipments at site, the insurance shall be obtained by the Contractor in an amount equal to 110% of the value of the equipment from "Warehouse to Warehouse" (Final destinations) on "All Risks" basis including War Risks and Strike if applicable.

4. INCIDENTAL SERVICE (GCC Clause 10)

- 4.1 The following services covered under GCC Clause 10 shall be furnished and the cost shall be included in the contract price:
- (a) Transportation, safe storage and handling of consignment off site.
- (b)On site assembly if any of the supplied equipment, installation, testing and commissioning of the equipment.
- (c)Furnishing of detailed operations and maintenance manual for each appropriate unit of supplied equipment;



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

5 .SPARE PARTS (GCC Clause 11)

Add as Clause 11. to the GCC the following:

5.1 Contractor shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods. Other main spare parts and components shall be supplied as promptly as possible but in any case within one week of placement of order.

6. WARRANTY (GCC Clause 12)

Substitute GCC Clause 12.2 by the following:-

- 6.1 This warranty shall remain valid for minimum one year after Installation, Validation and Commissioning and handing over of the clean room any portion thereof as the case may be, have been accepted by HLL Lifecare Limited as indicated in the contract.
- 6.2 Any major repair pointed out by HLL within the warranty period shall be rectified by the Contractor from the date of intimation within a period of 3 calendar days and commission the equipment to the satisfaction of HLL. Failing which HLL has the right to levy penalty on the Contractor @ Rs. 1000 per day or part thereof for the equipment until the equipment are repaired and commissioned to the satisfaction of HLL.
- 6.3 The Contractor shall, in addition, comply with the performance and/ or consumption guarantees specified under the contract. If for reasons attributable to the Contractor, these guarantees are not attained in whole or in part, the Contractor shall at its discretion.
- (a) Make such changes, modifications, and/or additions to the equipment or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests in accordance with SCC 2:



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

7. Earnest Money deposit (EMD)

Technical Bid should accompany a DD drawn in favour of M/s.HLL LIFECARE LIMITED, and payable at Thiruvananthapuram for a sum of **Rs.60,000/-** towards Earnest Money Deposit. Failing which the Tender is likely to be summarily rejected. In case of notified MSMEs, EMD need not be paid provided such bidders submit proof of status as MSME.

8. PRICES (GCC Clause 13)

Substitute Clause 13.1 of the GCC with the following:

8.1 Prices payable to the Contractor as stated in the Contract shall not be subject to adjustment during performance of the Contract.

9. SUB CONTRACT (GCC Clause 17)

Add at the end of sub-clause 17.1 the following:

9.1 Sub-contract shall be only for bought-out items and sub-assemblies.

10. LIQUIDATED DAMAGES (GCC Clause 18)

For delays: Substitute GCC Clause 18.1 by the following:

10.1 If the Contractor fails to deliver any or all of the equipment or perform of services within the time period(s) specified in the Contract, HLL shall without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to 0.5 percent of the value of order per week of delay subject to a maximum deduction of 7.5%. Once the maximum is reached, HLL may consider termination of the Contract.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

11. RESOLUTION OF DISPUTES (GCC Clause 22)

Add as GCC Clauses 22.3 and 23.4 the following:

- 11.1 The dispute resolution mechanism to be applied pursuant to GCC Clause 22 shall be as follows:
 - (a) In the case of dispute or difference arising between HLL a and a Contractor relating to any matter arising out of or connected with this agreement, such dispute or difference shall be settled in accordance with the Arbitration and Conciliation Act 1996.
- 11.2 The venue of arbitration shall be the place from where the Contract is issued (i.e.) Thiruvananthapuram

12. INSTALLATION, VALIDATION & COMMISSIONING

Supply, erection, Installation, commissioning & validation of Reverse Osmosis system shall be completed by the contractor in accordance with the terms and technical specifications made by HLL.

13. Operational Acceptance:

(a) **Performance Test:** The performance test shall be conducted by the contractor during the commissioning of the facilities to ascertain whether the facilities can attain the functional guarantees.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

(b) **Operational Acceptance**: Operational Acceptance shall occur in respect of the facilities when the performance test has been successfully completed and the functional performances are met.

14. TRAINING

The bidder shall provide training for maintenance staff of HLL free of cost where required.

The bidder shall provide all training material and documents and other kits.

Conduct of training of HLL's personnel shall be on-site.

15. ENCLOSURES TO BID:

15.1 Technical bid (Cover A)

Technical Bid shall include duly filled up Tender documents along with

- a) Tender document fee in the form of DD, drawn in favor of HLL Lifecare Limited, payable at Thiruvananthapuram, in case the document is downloaded from website.
- b) Bid Security / EMD amount in form of DD, drawn in favor of HLL Lifecare Limited, payable at Thiruvananthapuram.
- c) Duly attested copy of License, approved by the concerned Licensing Authority.
- d) Documentary evidence of constitution of firm such as Memorandum of Articles, Partnership Deed, etc., with details of Name, Address, Tel. No., Fax No., E-mail Address of firm and the Managing Director / Partner / Proprietor.
- e) Authorization of senior responsible officer of the Company to transact business.
- f) Annual turnover statement for last three years certified by the Auditor.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

- g) Copies of Balance Sheet and Profit & Loss Account for three years certified by the Auditors.
- h) Self certified statement of the Installed manufacturing capacity of the Items quoted.
- i) Qualification Criteria
- j) Technical literature and other documents in support of the goods / services including operation manuals of equipments.
- k) List of items quoted (without prices)
- L)Commissioning certificate of the installations duly approved by the stake holders
- M,Copies of environment clearance certificate and energy efficient certificate t

15.2 Price Bid (Cover B):

Price bid shall include

- a) Duly filled in Price Schedule (BOQ)
- b) Bid Form
- c) Price List of critical essential spares valid for 2 years

16. VALIDATION

It covers the installation, validation and commissioning and taking over of the equipment as per standards specified in technical specifications. After installation qualification and operation qualification the supplier has to conduct the performance qualification validation for a period of 15 days to establish the validity of the RO system .during the period of PQ validation the supplier has to supply the chemical and other materials for operation of plant at free of cost. Technical representative of the supplier have to be made available during the PQ validation. Based on this validation report has to be prepared and submitted by the suppliers part of qualification of the system by HLL.

Party should provide certificates of the test parameters after RO treatment as per the Annexure after commissioning of the RO plant as part of the validation of the system



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

SECTION V

TECHNICAL SPECIFICATION

ANNEXURE -1: DESCRIPTION OF PROPOSAL

a) Scope of work:

The nature and extend of work to be carried out is generally described herein. The work to be carried out covers Supply, erection, Installation, commissioning & validation of Reverse Osmosis system at HLL Lifecare Limited, Peroorkada Factory, Thiruvananthapuram

b) Description of work for Tenderers

1.0 Description

HLL Lifecare limited, formerly Hindustan latex limited (HLL) is a public sector undertaking under the Ministry of health and family welfare. It was incorporated in 1966 with the primary goal of producing quality condoms for the national family planning program. HLL continues to be a leader in manufacturing condoms and contraceptives in India. HLL had since diversified into the manufacturing of other health care products such as blood bags, surgical sutures etc.

2.0 Process water recycling and its importance

Reclaimed process water is ideal for many industrial purposes, which do not require water of high quality. Presently the reclaimed water can be utilized for cooling water make-up, boiler



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

feed water, process water (Hot water) etc. Hot water rinsing for mould washing represent the single largest water usage in HLL. Compared to other purposes such as boiler feed and process water, the water quality requirements for rinsing is not generally high. Consequently, Hot water rinsing presents a single largest opportunity for reuse.

The scope of the work involves turnkey job for supply erection commissioning and validation of Reverse Osmosis water system as per the latest standards of GMP. The treatment scheme is detailed in the subsequent sections of this document.

The system components supplied by the vendor shall be as per the approved schematic and drawings.

The quality of water required will vary based on the quality requirement and the product being manufactured in the manufacturing block. Hence, it calls for a comprehensive approach towards defining the quality standards for various requirements. At HLL Peroorkada Condom Factory for the glass mould preparation we are using process water and the sequence of operation as follows,

The glass moulds after stripping of the condoms are washed using water jets. Then dipping in soap solutions and brushing with the help of a set of rotating brushes further clean them. The glass formers are rinsed with hot water at 85 deg. Celsius to remove the soap. This hot water containing soap is feding to the existing Effluent treatment plant.

Hence, the **soap water** is to be treated to produce the right quality water in compliance to the regulatory requirements pertaining to end-use.

The treatment scheme proposed for treatment will be as per the enclosed schematic.

The brief description of the scheme is as follows:



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

3.0 Pre-treatment scheme

The soap water @ 40-60 Deg C shall be collected in the Concrete tank of capacity 30 Kl tank, located in the technical area of the ETP block. The water then pumped to the lamila clarifier where clarifier will provide retention time for chemical reaction & to settle the flocs at bottom. Clarifier has mechanical agitator and sloping bottom for sludge removal. Sludge will be settled by gravity to the bottom of the tank. the sludge accumulated in the sludge cone shall be thickened further before letting out. opening of the blow-off valve allows the sludge to flow out of the clarifier by gravity in sludge pit. Then The water is treated through total suspended solid removal filter and subsequently through ultra filtration. The water collected post ultra filtration is termed as Pre-treated water.

4.0 Proposed Final Treatment scheme (RO)

The pre-treated water from pre-treatment plant is fed to the RO in the water system area. The loop shall have all required instruments with control elements as per the enclosed

The vendor shall give a complete system to operate as per the capacity and specifications given.

The vendor shall define the battery limits, termination points, utilities required, etc., in the detailed offer. The vendor should strictly follow the characteristics of final treated water for reuse and the water for reuse has to be tested once in a week in an KSPCB approved testing lab at free of cost and provide the test certificate to HLL during the period of trial.(operation and performance qualification validation time)

5.0 Scope of supply

The system is to be designed, supplied, installed and commissioned on a turnkey basis. The vendor should accordingly consider all necessary items required for effective installation and performance of the system, whether mentioned or not in the specifications.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

6.0 Bill of Quantities

- All items relevant to the scope will generally be as per the Battery Limits defined in the schematic drawings.
- The selected vendor shall visit the site to estimate the Bill of Quantities as per the requirement. If there is any variation in the quantity of pipes, valves, fittings, etc., from the specified quantities, the same will be considered as per unit rates given by the vendor.
- Any item that is not specified herein and that might be required for the system installation / performance should be highlighted by the vendor. The rates for such items shall also be separately indicated by the vendor in his price schedule.
- Vendor shall supply pipes, valves, fittings, etc., from time to time, as per site conditions, after getting prior approval from the owner / consultant.
- Frequency of replacement of membrane shall invariably be mentioned in the offer. The minimum guaranteed period of membrane should not be less than 3 years.

7.0 Receipt / Storage / Handling

All material received at site will be subjected to thorough inspection for quality and quantity. Vendor to make own arrangements for transportation, unloading, storing, shifting, handling, etc., for all the materials supplied by him. All equipment meant for this purpose will be arranged by the vendor.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

Any item found less in quantity (or) damaged, while receipt / handling / shifting / etc., will be replaced by the vendor at his own cost.

All tools and tackles, material handling equipment, welding equipment, fasteners, testing equipment, inspection equipment, etc., intended for carrying out this job, and essentially required will be arranged by the vendor. The responsibility of safety and proper storage of all these equipments lies with the vendor.

8.0 Workmanship / Supervision

The vendor is expected to deliver high quality of workmanship throughout the execution of the job. Highly qualified, experienced, skilled and competent technicians / supervisory staff / engineers must be deputed on full time basis through out the execution of the job. Vendor must inform in advance the personnel to be deployed at site to carry out the execution.

It is equally more important to co-ordinate with other agencies (like Civil, Electrical) at site. Vendor must co-operate with other agencies and ensure that the work of other agencies is not disturbed at any time. Any assistance required from other agencies shall be communicated from the vendor in writing well in advance, so that necessary co-ordination can be taken care by the Owner / Consultant from time to time.

c. General specifications – pre treatment system

• Specifications for Pre - Treatment System

1. Chlorine dioxide charging System

The water from process area shall be collected in the Concrete tank of 30 m³ capacity as indicated in the schematic drawing. Chlorine is charged automatically using flow sensors in the water line at the inlet of the feed water storage tank. Necessary dosing pump, connecting tubes



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

& fittings, dosing tanks, etc., are to be included in the scope by the vendor. Chlorine dioxide or Sodium hypo chlorite (NaOcl) solution shall be used for chlorination. The recommended chlorine concentration shall be between 0.2 and 2.0 ppm (Vendor to confirm the same based on the raw water analysis report). The dosing system should be designed accordingly.

2.0 Soap water collection tank

This tank shall be of 30 m³ capacity and is made of concrete (HLL Scope). The tank shall be placed on the technical floor and shall have level switches interlocked with necessary pumps/instruments as per the treatment schematic. The tank is provided with necessary drains and instruments.

3.0 Lamella Clarifier

Clarifier will provide retention time for chemical reaction & to settle the flocs at bottom. Clarifier has Mechanical Agitator and sloping bottom for sludge removal. Sludge will be settled by gravity to the bottom of the tank. The sludge accumulated in the sludge cone shall be thickened further before letting out. Opening of the Blow-off valve allows the sludge to flow out of the Clarifier by gravity in Sludge Pit. (Vendor to confirm the capacity based on the raw water analysis report).

Materials of Construction

- 3.1 Clarifier and mix tank wetted areas are welded carbon steel, white sand blasted, primed, and epoxy finished. Optional stainless steel or PE construction.
- 3.2 Clarifier and mix tank support structures are welded carbon steel, white sand blasted, primed, and coated with industrial enamel. Optional stainless steel construction.
- 3.3 Clarifier plates are constructed of a special high density, flat polished finish fiberglass, stainless steel is an option.
- 3.4 Clarifier plate spacers are constructed of PVC plastic angle secured with nylon bolts, optional is stainless steel angle with stainless steel bolts.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

- 3.5 Mixer blades and shafts are stainless steel.
- 3.6 Standard flow rate at 150 m3/Day, other flow rates used based on laboratory determination of settling rate.
- 3.7 Inclined plates set at 60 degree angle.
- 3.8 Maximum inclined plate length, direction of flow, is three feet (36 inches).
- 3.9 Plate spacing set at 2.00 inch(50mm), other spacing optional based on Treatability testing.
- 3.10 Sludge hopper side walls at 45 degree angle, pyramid shape.
- 3.11 Equipment of welded construction, bolt and gasket assembly of multiple units or Special constructed units (optional).
- 3.12 Dual sludge draw ports at bottom of sludge hopper.
- 3.13 Valve drain ports on all chambers.
- 3.14 Plate assemblies are single units capable of being removed by one person.
- 3.15 Flow through unit is by gravity only. Ladders, and stairs for access.
- 3.16 Complete system control panel, various stages of control from manual to fully automatic. 3. Sludge holding tanks and dewatering devices.

4.0 Continuous TSS removal Filter

The water from underground tank shall be fed to the continuous self-cleaning type filter meant for removal of suspended solids. The filtration equipment shall be a fabricated pressure vessel with suitable filtration media like coarse and fine screens. The vessel shall consist of all necessary valves and piping for regular flow, back wash flow, etc. Valves used shall be butterfly valves with PTFE lining. Necessary sampling points at the entry and exit of the equipments shall be provided.

The filtration equipment shall have following features:

System shall be online self cleaning type

There shall be auto-back flushing with provision for manual back-flushing also

There shall be minimum wastage of water during back-flushing with minimum no. of back-flushing cycles



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

The coarse and fine screens must have adequate support plates for un-interrupted operation and must be in SS construction

The vessel/equipment shall be sand blasted for proper finish with internal coating of epoxy and external coating of peel-free polymer

The vessel shall be fabricated as per ASME Sec VIII to suit the operational pressure temperature conditions. The vessel shall be vertically positioned with hydraulic system at the top. To charge the filter media, a suitable provision shall be made in the vessel. The welded joints on the vessels are thoroughly tested by suitable non-destructive test methods. All weld joints are ground to give a smooth finish. After the vessel is pressure tested for leakages, the vessel is epoxy lined from inside (including the nozzles). The vessel is tested for any defect in monolithic food grade epoxy lining using a non-destructive method. Any defect found must be rectified. Vessel shall not be despatched unless the test reports are satisfactory. **The capacity of filtration equipment shall be for permeate flow of 150 m3/day.**

5.0 TSS filter feed pumps of 7.5 m3/hr normal flow rate shall be provided with required fittings, valves, NRV, Pressure gauge etc. The pump head shall be based on the vertical lift as well as the pressure drop across TSS filter equipment and piping. The pump shall be interlocked with necessary instruments as per the pre-treatment schematic.

All gaskets shall be encapsulated with PTFE / Viton / EPDM / silicon rubber only (Asbestos is prohibited). The interconnecting piping and recycled water distribution up to Overhead storage tanks are in vendor's scope.

Post -treatment

1.0 Ultra-filtration unit

UF system should have membrane filters of suitable material and adequate capacity to meet the desired output (quantity & quality). Since the water has high potential of SDI and colloidal silica, and subsequently the water shall be fed to RO system, vendor shall ensure consistent required quality at the outlet. **The output quality shall at least meet the following:**



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

SDI: < 1

Colloidal Silica: Nil

Removal of microbial load

The membranes selected will be decided as per the input / output specifications. Hollow fibre, polysulfone membranes with rating of '100 kd' shall be provided(The specification is indicative only, bidders can suggest based on the water quality). The filtration housing should be in SS 316. The system will be complete with necessary / appropriate pre-filters, filter media, housing, instruments, piping and valves, pumps and drives, sampling points, control panel, monitoring & controlling instruments, etc. The entire system should be skid mounted, with necessary anchor fasteners, anti-vibration pads, etc.

Vendor to provide the interlock and instruments and those indicated in the schematic are only the minimum requirements. However, if any changes are proposed by the vendor the same shall be subject to the approval of P & I Ds submitted by the vendor.

The UF module shall produce water at Min 7.5 M3/hr (permeate flow).

The UF unit shall have two feed pumps (1W + 1 S), with removable couplings / fittings. The piping shall be SS 316. The unit shall be provided with adequate number of sampling valves at various points. The gaskets / O-rings wherever used shall be of PTFE / Viton. The gasket material selected shall be suitable to withstand the operating temperature and shall not get deformed during cleaning / sanitization. The entire system shall have adequate monitoring and controlling instruments for normal working.

The unit shall be provided with a electrical and instrument control unit with all necessary starters, fuses, switch gears, power and instrument cables, indicators, alarm display units, etc. The unit operation shall be controlled by a PLC with programming facility such as start up, operation, shut down etc.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

Following instruments and interlocks are the minimum requirements that shall be supplied by the vendor. All instruments and fittings shall be with tri-clover joints. System ON / OFF / TRIP indications shall be a standard part of the equipment. Pressure gauge at pump inlet and outlet

pH indicator at the unit outlet

Flow totaliser at the unit outlet

Sanitisation temperature control with heating

Low / high pressure pump protection of the pumps and the system

The module shall be assembled on a SS 304 skid frame. Pumps, piping and valves, field instruments, control panel, etc., all shall be mounted on the same skid. The entire skid unit shall be vibration free while operating. Necessary anti-vibration pads shall be provided.

Instrumentation and Interlocks:

Vendor to provide the interlock and instruments as per the requirement and those indicated in the schematic are only the minimum requirements. However, if any addition / deletion is required, while actual execution subject to the approval of P & I Ds submitted by the vendor.

The system shall be provided with necessary controllers for proper automatic operation and control.

2.0 Reverse Osmosis System

There shall be Duplex softener upstream of RO. The RO unit shall consist of Spiral Wound Membrane (TFC) housed in SS 316 casing of appropriate size. The membrane shall be able to operate on a wide range of pH.. The unit shall consist of adequate number of membranes to achieve the desired output water quality. The length, diameter and quantity of membranes shall



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

be decided by the membrane supplier to suit the feed water and output water quality requirements.

The RO module shall produce potable water at 5 m3/hr (permeate flow).

The unit shall have two high pressure feed pumps (1W + 1 S), with removable sanitary triclover couplings / fittings. All the valves shall be sanitary type diaphragm valves suitable for steam application. The unit shall be provided with adequate number of sampling valves at various points. The gaskets / O-rings wherever used shall be of PTFE / Viton. The entire system shall have adequate monitoring and controlling instruments for normal working and for cleaning.

The unit shall be provided with a electrical and instrument control unit with all necessary starters, fuses, switch gears, power and instrument cables, indicators, recorders, alarm display units, etc. The unit operation shall be controlled by a PLC with programming facility such as start up, operation, shut down.

Following instruments and interlocks are the minimum requirements that shall be supplied by the vendor. All instruments and fittings shall be sanitary type with tri-clover joints. System ON / OFF / TRIP indications shall be a standard part of the equipment.

Pressure gauge at High Pressure pump inlet and outlet

ORP indicator (for chlorine indication) and dump valve at the unit inlet

High low level control of the feed water tank with interlock to the pumps

Conductivity indicator at RO outlet

pH indicator at the unit outlet

Flow totaliser at the unit outlet

The above instrumentation is the minimum requirement. However, other functions as required and necessary as per the equipment supplier shall also be included in the scope.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

All optional instruments and controls shall be mentioned separately. The chemicals and their compositions used for regeneration, backwash and treatment of RO system have to be mentioned separately and submitted as part of technical documentation for client's/consultant's verification. The supplier should provide the list of chemicals and its consumption requirement on a daily basis and to provide the list of suppliers for each of the chemicals and to provide MSDS of chemicals before the trail.

RO shall be assembled together on a SS 304 skid frame. Pumps, piping and valves, field instruments, control panel, etc., all shall be mounted on the same skid. The entire skid unit shall be vibration free while operating. Necessary anti-vibration pads shall be supplied in adequate quantities. System for diverting the RO reject in to the system and its disposal has to be provided by the vendor along with the tender document. The vendor has to ensure that the quality of the treatment process is not affected due to RO reject stream.

Instrumentation and Interlocks:

Vendor to provide the interlock and instruments as per the requirement and those indicated in the schematic are only the minimum requirements. However, if any addition / deletion is required, while actual execution subject to the approval of P & I Ds submitted by the vendor.

The system shall be provided with necessary controllers for proper automatic operation and control.

Since the water used is for process application, the vendor should guarantee the output quality to meet the potable specifications. The membrane filter should be designed to meet the potable water specifications.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

3.0 Design limit for following parameters should be as follows:

Test parameters	Potable water for
	Process
	RO permeate (ppm)
рН	6.5-7.5
Chloride	<5
TDS(PPM)	<10
Suspended Solids(PPM)	NIL
Oil and grease	
	NIL
Turbidity	NIL
Total Hardness(PPM)	26
BOD(27 degree,3 days	<3
COD	<20
TSS	NIL
Total Ammonical Nitrogen	,<1
Sulphide	2



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

ANNEXURE II - SUPPLY OF ITEMS AND ITS SPECIFICATIONS

Sr. No	Item	Qty & Specifications	Remarks
1	NaOCI DOSING SYSTEM	Qty 1	Optional
	Dosing tank	100 Ltrs, HDPE	-
	Dosing Pump	PVC, Electronic Diaphragm, 0 to 6.3 lph, @ 3.5 bar	
	Accessories		
	Pump Suction & discharge Assembly	PP	
	Pump Suction and discharge tubing	PU	
	Tank low level switch	Magnetic type	
2	COAGULATION DOSING SYSTEM	Qty 1	
•	Dosing tank	100 Ltrs, HDPE	
	Dosing Pump	PVC, Electronic Diaphragm, 0 to 25 lph, @ 3.5 bar	
	Accessories		_
	Pump Suction & discharge Assembly	PP	
	Pump Suction and discharge tubing	PU	
	Tank low level switch	Magnetic type	
3	POLYELETROLITE DOSING SYSTEM	Qty 1	
	Dosing tank	100 Ltrs, HDPE	



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

	Dosing Pump	PVC, Electronic Diaphragm, 0 to 20 lph, @ 3.5 bar	
	Accessories		
	Pump Suction & discharge Assembly	PP	
	Pump Suction and discharge tubing	PU	
	Tank low level switch	Magnetic type	
4	LAMELLA CLARIFIER WITH FLASH MIXER	1 No. Lamella Body Epoxy Coated Carbon Steel with Floac mix tank, Variable speed mixer, Flash Mixer, Access plat form and ladder with sludge pump	Detailed specification mentioned above
5	pH DOSING SYSTEM	1 No.	Optional
	Dosing tank	100 Ltrs, HDPE	
	Dosing Pump	PVC, Electronic Diaphragm, 0 – 6.3 LPH @ 3.5 bar	
	Accessories		
	MOC of Housing	Noryl Plastic	
	MOC of Liquid End	PP	
	Pump Suction and discharge tubing	PU	
	Tank low level switch	Magnetic type, ABS	
6	MGF FEED PUMP	1 No.	Reputed make
	Flow rate	7.5 m ³ /hr	-
	Head	40 mWC	-
	Pump type	Horizontal Centrifugal Pump	-
	Housing	Cast Iron	-
	Impeller	SS 304	
7	MULTI GRADE FILTER	1 No.	
	Flow rate	7.5 m ³ /hr	
	Diameter	As per requirement	

W.

HLL LIFECARE LIMITED, PEROORKADA PLANT, THIRUVANANTHAPURAM

SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

	Height	As per requirement	
	Material of Construction	FRP or equivalent	
	Frontal piping/valves	UPVC, Manual Butterfly Valves	
	Media	Gravel and Graded sand	
8	ACTIVATED CARBON FILTER	1 No.	Optional
	Flow rate	$7.5 \text{ m}^3/\text{hr}$	
	Diameter	As per requirement	
	Height	As per requirement	
	Material of Construction	FRP	
	Frontal piping/valves	UPVC, Manual Butterfly Valves	
	Media	Activated Carbon	
9	CARTRIDGE FILTER	1 No.	
	Flow rate	7.5 m ³ /hr	
	Filter type	Cartridge	
	Filter rating	150 Micron	
	Filter housing MOC	PP	
10	UF BLOCK CHEMICAL	1 No.	
	Permeate Flow rate	7.5 m ³ /hr	
	Feed Flow rate	7.5 m ³ /hr	
	Nominal Pore Diameter	0.03 μm	
	Ngp@6Mpptrltion	De MorsEnd	
	UF membrane	PVDF, out-to-in	
	Model No.	SFP series , DOW or Equivalent	



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

Dosing tank 100 Ltrs, HDPE	
Dosing Pump Electronic Diaphragm, 0 – 6.3 LPH @ 3.5 bar	
Accessories	
MOC of Housing Noryl Plastic	
MOC of Liquid End PP	
Pump Suction and discharge tubing PU	
Tank low level switch Magnetic type, ABS	
12 MICRON CARTRIDGE 1 No.	
Flow rate 7.5 m ³ /hr	
Filter type Cartridge, PP	
Filter rating 10 & 5 Micron	
Filter housing MOC SS 316L	
13 SMBS DOSING SYSTEM 1 No.	
Dosing Tank 100 Ltrs., HDPE	
Dosing Pump PP/PVC, Electronic Diaphragm, 0 – 6.3 LPH bar	@ 3.5
Accessories	
MOC of Housing Noryl	
MOC of Dosing Head PVC	
MOC of Pump suction & discharge tubing PVC	
Tank Low level Switch Immersible hanging level switch	
14 RO HIGH PRESSURE PUMP 1 No.	
Flow rate 7.5 m ³ /hr	
Head 90 mWC	
Pump type Vertical Centrifugal Pump	



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

	Housing	SS 316	
	Impeller	SS 316	
15	RO BLOCK	1 No.	
	Permeate Flow rate	5 m ³ /hr	
	Recovery	76%	
	Membrane Type	Polyamide Thin Film-Composite	
	Feed Flow rate	7.5 m ³ /hr	
	Type of sanitization	Hot/Chemical Sanitisable separate quote	
	Array	As per the requirement	
	RO Membranes	As per the requirement	

Annexure III

a. Electrical installation

1.0 Scope

The scope of this section comprises supply of electrical wiring drawing lay out

2.0 General

Work shall be carried out in accordance with the specifications, local rules I.E. Act 1910 as amended up to date and rules issued there under, regulations of the Local Fire Insurance Association and Indian Standards code of practice No. IS: 732-1963 and CPWD General specifications for Electrical Work(Internal) -1977 and Kerala State Electrical Inspectorate standards.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

The Bidder has to provide the equipment individual electrical requirement with detailed specifications. The entire wiring will be made by HLL under the Bidder's supervision.

Four sets of drawings giving single line diagram run of cables location along with of detail panels, indication/interlocking circuits cable with sizes within the building/underground cables showing the location of straight through joint boxes, location of main earthing stations shall be furnished before submitting to the Client.

3.0 Equipment Wiring

Final connections to the Equipment shall be through flexible wiring particularly for equipment mounted on guide rails and which are liable to be moved.

4.0 Testing

Before the commissioning of the plant, the entire installation shall be tested in accordance with Code of Practice IS No: 732 - 1963 and the test report furnished by the qualified and authorized person. The electrical installation shall be got passed from local electrical inspector. The first inspection fee shall be paid by the Owner.

b. Civil work

1.0 Scope

The scope of this section comprises supply of Building Drawing with Equipment general arrangement layout.

2.0 General

Bidder has to provide the following details in the layout

- Type of building recommended, considering the system requirement Whether Concrete or pre-engineering, Type of roof etc.
- Built-up area
- Usable area
- Document/Literature showing the estimation and schedule of items



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

c. Documents for Approvals

- All fabrication & supply to commence after review and approval of the following documents to be submitted by the vendor
- P & ID with relevant capacities, tag number, battery limits, etc.
- Equipment General Arrangement drawings showing respective tag numbers
- Necessary civil drawings showing supports / foundation details / drain arrangement, etc.

d. Documents before dispatch

- Material test certificate of major components
- Type Test / routine test certificate for motors and instruments
- Welding test reports
- Leakage test reports
- Mechanical operational test reports (for noise, vibration, current drawn, rpm,
- Electrical & instrument operational test reports for (controls, interlocks, safeties, etc.)
- Warranty / guarantee certificate of various major bought out items
- Operation and maintenance manuals of own and bought out items

e. DQ - Design qualification

The documents related to this shall generally be in-line with the specifications. The user data specified will be thoroughly studied by the vendor before selecting the right type of equipment. The equipment proposed by the vendor shall specify all the utility requirements meant for regular operation, cleaning and maintenance of the equipment along with necessary consumption data for each such utility. The vendor shall design the equipment that is safe in starting, operation and shut down. All necessary electrical interlocks, mechanical stoppers, safety guards, etc., shall be suitably provided in the equipment design. **Necessary audio / visual alarm system is also provided in the system in line with any operational malfunctioning of the system.** The



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

electrical system shall be weatherproof /flameproof as per mentioned in the relevant specifications.

f. IQ - Installation qualification

The vendor shall provide necessary document support to carry out the installation of the equipment. All necessary layout drawings, erection drawings, installation manuals, safety instructions, etc., shall be supplied before the delivery of the system. The vendor shall also clearly indicate the connection details for all the utility and other ancillary systems required for the operation and maintenance of the system. The system shall be duly installed as per the relevant documents and it is the responsibility of the vendor to ensure all such information is supplied in advance and the equipment / system is installed as per the documents supplied. The client is not responsible for any wrong information supplied by the vendor and the vendor at his cost would rectify such defects.

g. OQ - Operation qualification

The vendor must provide necessary operating instructions like warm-up, start-up, safeties (during starting, operation and shut-down), procedure for shut down and emergency stop, necessary interlocks, etc. The system supplied shall deliver the desired quantity and quality of the product as per the design conditions. Any shortfall in performance shall be rectified by the vendor and if need be the equipment shall be replaced at the vendors cost. A display chart showing "WARNING SIGNS, DO's and DON'Ts" shall be supplied with the system and it has to be displayed at the operator station.

h. Inspection and testing

The user will inspect the equipment at various stages at the designated works of the vendor. The vendor will submit necessary test certificates at the time of inspection. Any part(s) found defective or not meeting the specifications will be rejected and the vendor will replace the same. The necessary testing and trial of the system (wherever applicable as a wholly assembled unit) will be witnessed. The vendor will arrange for all necessary measuring instruments required for the testing and trial runs. Each instrument used will have necessary valid calibration certificates.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

If the equipment fails to meet the desired performance, the vendor will rectify accordingly. Equipment will not be packed / despatched unless it complies with the specifications.

I Guarantee

The system supplied will be guaranteed for a period of 12 months of commissioning and taking over by the user. Any failure to meet the quality and quantity designed during the guarantee period will be rectified by the vendor. The equipment shall be easy to operate and trouble free.

Any leakage, over heating, excessive vibration, noise, failure of parts, etc., during the guarantee period will be rectified by the vendor free of cost, including the replacement of damaged / worn out parts.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

Final Treated water Quality requirement

Test Parameters	Unit	Acceptance Limit
рН		6.5-8.5
TDS	Mg/L	<50
Total Hardness (as CaCo3)	Mg/L	200 (Max)
Suspended Solids	Mg/L	<5
BOD (27 degree,3 days)	Mg/L	<3
Total Alkanity	Mg/L	< 25
Oil & Grease	Mg/L	1



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

SECTION VI

QUALIFICATION CRITERIA

- 1. The tenderer should have minimum 3 years of experience in the relevant field. (Documentary evidence should be submitted)
 - 2. The BIDDER should have supplied, erected & commissioned at least FIVE numbers of RO system plant of capacity ≥ 8 m3/hr in the past three years. For which supply orders, completion certificate proofs, performance certificate with water parameters of the previously commissioned RO system duly approved by the concerned authority of the clients.
 - 3. List customers with contact nos. to whom you have supplied the water treatment plants with RO systems and can directly confirm.
 - 4. Party should have a turnover of Rs. 100 Lacs. (minimum) for each of the past consecutive three years. (Balance sheet certified by charted accountant)
 - 5. The tenderer should submit Earnest Money Deposit in the manner specified along with the tender document.
 - 6. The duly signed acceptance form conforming that All terms & conditions, technical specifications, volume of supply are understood by the bidder .Certificate that bid is in total conformity with the specifications and terms and conditions mentioned in the bid document and certificate on period of validity (sheet enclosed)



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

7. Deviation if any, giving reasons for the deviation.

Note

- 1. The bidder should furnish Registration Certificate and Certificate of Incorporation.
- 2. Bidders shall invariably furnish documentary evidence (Client's Certificate/installation report) in support of the satisfactory operation of the equipment as specified above.
 - 3. The bidder should furnish the copy of Audited balance sheet in proof of financial strength.
 - 4. Conditional Bid will be summarily rejected



A. Name of Firm/Company

1. Postal address

SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

Page 62 of 80

SECTION VII

APPLICATION FOR PREQUALIFICATION

(General information of the contractor)

SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION OF REVERSE OSMOSIS SYSTEM.

2. Telephone No	:
FAX	:
E-Mail	:
3. Year of commencement of Contract/	
Year of establishment of firm/Company:	
B. In the case of Firm	
1. Whether proprietary of partnership firm:	
2. Name of Managing partner	:
3. Name of other partners :	
Note: Attested copy of partnership deed to be en	closed
C. In the case of Company	
1. Whether Private Limited or Public Limite	d
Company :	
2. Name of Managing Director :	



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

3. Name of other Directors :
Note: Attested copy of Company Registration need to be enclosed.
D. Are you a manufacturer, authorized Dealer or any :
other? If authorized agent,
A copy of the original letter from the
Manufacturer / Principal, duly attested,
Should be furnished conforming the agency
E. How many years have you been in the business :
Of Supply, erection, Installation, commissioning & validation
of Reverse Osmosis system as per HLL specification enclosed
F. What would be the minimum period required to : deliver from the date of confirmed Purchase order?
G. Have you been a contractor / manufacturer, :
No. of major supplies of similar item supplied
successfully in India, specify. Enclose two
completion certificates from the client
certified that the similar item supplied
successfully. The client list shall be enclosed.
H. What is your :-
a) GST No :
c) Central Excise Registration No: :
d) PAN No
I. Name & Address of your Banker(s) :



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

J.	Has the	Contractor/Fi	rm/Company	y ever	been black	:

listed by the Govt./or the registering authority.

- i) if so, give the period and details.
- K. Average annual financial turn over of the bidder during the last 2 years, ending 31st March of the previous financial year.
- a. Annualized turnover of the Contractor/Firm/Company in the last 2 years ending 31.03.2016
 - 1. 2015-2016: Rs
 - 2. 2016-2017: Rs
 - 3. 2017-2018: Rs

(Bio data with willingness letters to be enclosed)

L. Acceptance Form

M. CERTIFICATE

I/We hereby certify that the details given in the application form is correct to the best of my/our knowledge. I/We have no objection in contacting any of our clients for reference.

Signature:

Place:

Date: Name and address of the bidder with seal:



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

Sl. No.	Name of Client with full address, telephone numbers and nature of item supplied	Details of item supplied	Value of Contract (in lakhs)	Period of Completion with dates (in months)

SIGNATURE OF BIDDER WITH SEAL



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

DETAILS OF ONGOING PURCHASE ORDERS OF SIMILAR NATURE Sl. No. Description of work Value of purchase order Name of Client with full address, telephone (in lakhs) numbers and nature of item

SIGNATURE OF BIDDER WITH SEAL



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

SECTION VIII

ACCEPTANCE FORM

(To be submitted in the letter head of the firm indicating full name and address, telephone & fax numbers etc.)

From

To

Senior Manager (Purchase)

HLL Lifecare Limited

(A Government of India Enterprise),

PEROORKADA FACTORY, Thiruvananthapuram – 695 005,

Ph: (++91 471) 2437270

E-mail:

Dear Sir,

I / We, hereby offer to supply as detailed in schedule hereto or such portion thereof as you may specify in the acceptance of Bid at the price given in the price bid and agree to hold this offer open for one year from the date of bid opening prescribed by HLL. I/We have understood the terms and conditions mentioned in the invitation for bid and Conditions of Contract furnished by you and have thoroughly examined the specifications quoted in the bid document hereto and are fully aware of the nature of the scope of supply of item required and my/our offer is to comply strictly in accordance with the requirement and the terms and conditions mentioned above.

The following pages have been added to and form part of this bid.

Yours faithfully,

SIGNATURE OF THE BIDDERWITH SEAL



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

SECTION IX

INDEMNITY CLAUSE:

If the supplier fails to execute the order within the time prescribed for the delivery of goods ordered or violates or infringes the existing rates as agreed to as mentioned in the supply order, the supplier shall and will indemnify the company against all loses or damages whatsoever to be incurred or sustained including the legal cost or expenses incurred by the company by reason of non-delivery of goods at agreed quantity and rate within the time specified in the supply order. The company will initiate legal action if the supplier fails to execute the supply order as per the schedule in the supply order for the actual loss suffered. No quantity tolerance will be permitted in this regard unless otherwise prior approval is taken by the company before dispatching any excess quantity supplied which shall be returned back on freight to pay basis at the risk of the supplier. Responsiveness of the Bid shall be at the discretion of HLL.

The supplier shall have no right to change the quantity stipulated in the supply order.

Bid pronounced Non Responsive by HLL shall be summarily rejected.

The decision of HLL will be final and no correspondence of this shall be entertained.

We have read and understood the above conditions and agree to abide by the same.

PLACE: NAME AND SIGNATURE OF THE BIDDER

DATE: (WITH OFFICE SEAL)



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

SECTION X

DECLARATION

We confirm having read and understood all the specifications, instructions, forms, terms and conditions and other requirements of the above tender (both expressed and implied) in full and that we agree to abide by all without any deviation.

SEAL OF THE BIDDER

SIGNATURE

NAME AND ADDRESS OF BIDDER



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

SECTION XI CONTRACT AGREEMENT

(DRAFT)

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

CONTRACT AGREEMENT FOR THE WORD DATED Between M/s the contractor (which term shall unless excluded by include its successors and permitted assigns) of the contractor (which term shall unless excluded by include its successors and permitted assigns)	y or repugnant to be subject or context
AND	
HLL Lifecare Limited hereinafter called HLL (w	
repugnant to the subject or context include its succe	esses and assigns) of the other part.
WHEREAS	
a. HLL is desirous that the Supply,	erection,Installation,commissioning and
validation of	at should be
executed as mentioned, enumerated or refer	red to in the tender document vide tender
no including:	
i. Notice Inviting Tender,	
ii. General Conditions of the Contract	
iii. Special Conditions of the Contract,	
iv. Schedule of Quantities and Rates	
v. Agreed Variations	



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

- vi. Tender Form, Manufacturer's Authorization Form/s (if any)
- vii. other documents, as called for in the Tender.
- b. The contractor has inspected the site and surroundings of the work specified in the tender documents and has satisfied himself by carefully examination before submitting his tender as to the form and nature of the site and local conditions the quantities, nature and magnitude of the work the availability of labour and materials necessary for the execution of work, the means of access to site, the supply of power and water thereto and the accommodation he may require and has made local and independent enquiries and obtained complete information as to the matters and things referred to or implied in the tender documents or having any connection therewith, and has considered the nature and extent of all the probable and possible situations, delays, hindrances or interferences to or with the execution and completion of the work to be carried out under the contract, and has examined and considered all other matters, conditions and things and probable and possible contingencies, and generally all matters incidental thereto and ancillary thereof affecting the execution and completion of the work and which might have influenced him in making his tender.

AND WHEREAS

HLL accepted the offer of M/s (Contractor) for the
Supply, erection, Installation, commissioning and validation of
atand conveyed vide letter Noat the
rates stated in the Bill of quantities for the work and accepted by HLL (hereinafter called the
Schedule of Rates) upon the terms and subject to the conditions of the contract.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

NOW THIS AGREEMENT WITNESSTH & IT IS HEREBY AGREED AND DECLARED AS FOLLOWS.

- In consideration of the payment to be made to the contract for the work to be executed by him, the contractor hereby covenant with HLL that the contractor shall and will duly provide, execute, complete and maintain the said work and shall do and perform all other acts and things in the contract mentioned or described or which are to be implied and there-from or may be reasonably necessary for the completion of the said works and at the said times and in the manner and subject to the terms and conditions or stipulations mentioned in the contract, AND
- 2. In consideration of the due provisions execution, completion and maintenance of the said work, HLL does hereby agree with the contractor that HLL will pay to contractor the respective amounts for the work actually done by him and approved by HLL at the Schedule or Rates and such other sum payable to the contractor under provision of the contract, such payment to be made at such time in such manner as prescribed for in the contract.

It is specifically and distinctly understood and agreed between HLL and the contractor that the contractor shall have no right, title or interest in the site made available by HLL for execution of the works or in the building, structures or works executed on the said site by the contractor or in the goods, articles, materials, etc. brought on the said site (unless the same specifically belongs to the contractor) and the contractor shall not have or deemed to have any lien whatsoever charge for unpaid bills will not be entitled to assume or retain possession or control of the site or structures and HLL shall have an absolute and unfettered right to take full possession of site and to remove the contractor, their servants, agents and materials belonging to the contractor and lying on the site.



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

In Witness whereof the parties hereto have here-into set their respective hands and seals in the day and the year first above written.

Signed and delivered for and	Signature and delivered for		
on behalf of HLL	and on behalf of the contractor		
(HLL LIFECARE LIMITED)	(Contractor)		
OFFICIAL ADDRESS			
Date	Date		
Place	Place		
IN PRESENCE OF TWO WITNESSES			
SIGNATURE	SIGNATURE		
NAME	NAME		
SIGNATURE	SIGNATURE		
NAME	NAME		



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

PART 2

SECTION XII

PRICE BID FORM

To:

HLL Lifecare Limited,

Peroorkada Factory,

Thiruvananthapuram – 695 005

Dear Sir

Having examined the Bidding Documents including Addenda Nos....., the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply, erect, install, commission and validate Reverse Osmosis System at HLL Lifecare Ltd., Peroorkada, Thiruvananthapuram in conformity with the said Bidding Documents for the sum of................................... (Total Bid amount in Words and Figures) or such other sums as may be ascertained in accordance with the BOQ with prices attached herewith and made part of this bid.

We agree to abide by price per unit mentioned in price schedule, for the bid validity period specified in the bid document and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

Until a formal final contract is prepared and executed between us, this bid, together with your written acceptance of the bid and your notification of award, shall constitute a binding Contract



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

between us. We understand that you are not bor receive.	and to accept the lowest or any bid you ma	y
We confirm that we comply with the eligibility redocuments.	quirements as per ITB Clause 1 of the biddin	ıg
	Dated this day of 20.	

(in the capacity of) _____

Duly authorized to sign Bid for and on behalf of _____

(signature)

BILL OF QUANTITY

Annexure- I

Sr. No	Item	Qty	BASIC PRICE (INR)	GST	Total Amount (INR)
A	Supply of Items			1	1
1	NaOCI DOSING SYSTEM	1 No.			
2	COAGULATION DOSING SYSTEM	1 No.			
3	POLY ELECTROLITE DOSING SYSTEM	1 No.			
4	LAMELLA CLARIFIER	1 No.			
5	pH DOSING SYSTEM	1 No.			
6	MGF FEED PUMP	1 No.			
7	MULTI GRADE FILTER	1 No.			
8	ACTIVATED CARBON FILTER (OPTIONAL)	1 No.			
9	CARTRIDGE FILTER	1 No.			
10	UF BLOCK CHEMICAL	1 No.			
11	ANTISCALENT DOSING SYSTEM	1 No.			
12	MICRON CARTRIDGE	1 No.			
13	SMBS DOSING SYSTEM	1 No.			
14	RO HIGH PRESSURE PUMP	1 No.			
15	RO BLOCK	1 No.			
16	System with PLC Auto mode (optional)	1 set			



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

17	System with PLC Manual Mode	1 set		
В	Engineering Installation & Commissioning	1 Set		
С	Annual Maintenance Contract for Five Years (Optional)			
С	Grand Total			

VALIDITY: ONE YEAR FROM THE DATE OF OPENING OF PRICE BID

Conditions:

- 1) The party has to quote as per schedule.
- 2) Before quoting, the party has to visit the site and clear all doubts with the officials of Project Department.
- 3) After work, the party has to clean all the debris and waste materials and transfer the same to scrap yard.
- 4) After completion of the work bill to be submitted in duplicate based on the joint measurement.
- 5) Safety work permit has to be taken before starting the work.

The proof of remittance of PF & ESI charges to be submitted to HLL, otherwise statutory levies such as ESI, PFetc will be deducted from contractor's bill as per rules.

Bidders shall have registration under GST and shall produce necessary certificate from IT for deduction at specified rate/non deduction of WCT, if any applicable under GST.



Statutory levies if any:

SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

Bidder shall provide Excise Invoice (manufacturer invoice / dealer invoice) for excisable goods under supply schedule

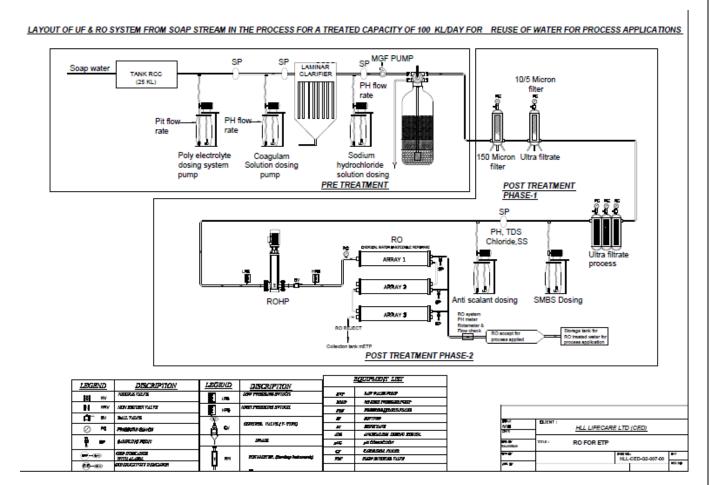
Any other Remark (s):	
NAME OF TENDERER:	
Place: Date:	ADDRESS AND SIGNATURE OF THE TENDERER (WITH OFFICE SEAL)



SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM

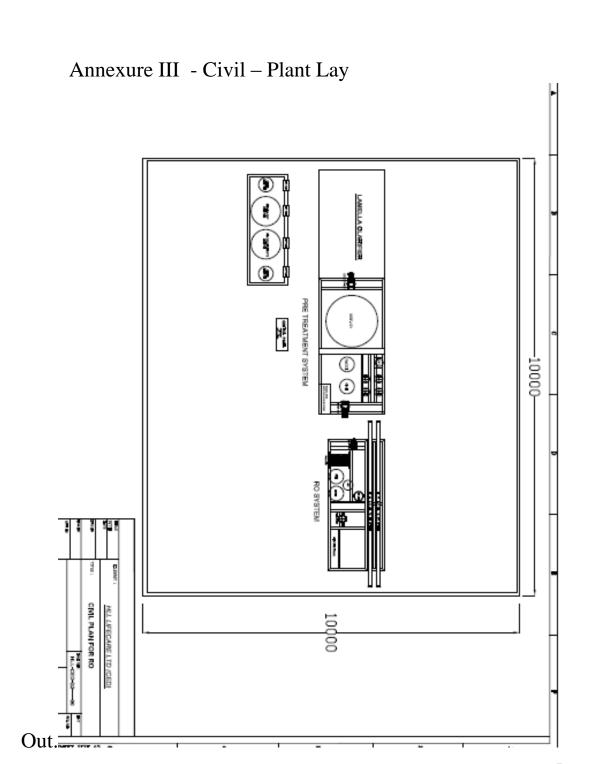
TENDER NO: HLL/PFT/REVERSE OSMOSIS /2018-19 dated 29/03/2018

Annexure- II Proposed Plant Flow Chart





SUPPLY, ERECTION, INSTALLATION, COMMISSIONING & VALIDATION & OF REVERSE OSMOSIS SYSTEM



Page **80** of **80**