

Amendment No: 1 Issued on dated 26/09/2014

Ref: Tender Enquiry No: HLL/PCD/IMPCL-09/14-15 dtd.04/09/2014 issued on 05/09/2014

Following amendments are issued to the above Tender Enquiry Document

In Section I: Notice Inviting Tenders(NIT)

For Clause:

1. Tender No.: HLL/PCD/IMPCL-09/14-15

SI No.	Description	Schedule
vi.	Closing date & time for receipt of Tender	08.10.2014, 02.00 PM
vii.	Time and date of opening of Techno-Commercial tenders	08.10.2014, 02.30 PM

Read As:

2. Tender No.: HLL/PCD/IMPCL-09/14-15

SI No.	Description	Schedule
vi.	Closing date & time for receipt of Tender	15.10.2014, 02.00 PM
vii.	Time and date of opening of Techno-Commercial tenders	15.10.2014, 02.30 PM

In Section II: General Instruction to Tenderers (GIT)

For Clause

- 13.4. e) **The prices shall be quoted as per the price schedule format, covering all the items specified in the BoQ of Technical specification at Section-VII. The total bid price shall be inclusive of all the items covered under Part-A, Part-B and Part-C of BoQ.**
- (i) Bidder to note that quantities covered under Part C of referred BoQ are estimated and are subject to variation during the execution of contract. Therefore, bidder shall furnish unit rate as well as total price of all the items covered in Part C of BoQ.
 - (ii) The quantities given in Part-C of BoQ are liable for variation during execution of contract. Such variations in the quantities of items covered under Part-C of BoQ shall not, however, vitiate the contract in any way, what so ever, and all the quoted rates shall remain valid for any such variation in quantities. The payments will made based on the actual executed quantity as measured and accepted by IMPCL
 - (iii) If a bidder does not quote for any of the items covered in the BoQ, the bid will be liable to be rejected.

Read As:

- 13.4. e) **The prices shall be quoted as per the price schedule format, covering all the items specified in the BoQ of Technical specification at Section-VII. The total bid price shall be inclusive of all the items covered under Part-A, Part-B , Part-C and Part-D of BoQ.**
- (i) Bidder to note that quantities covered under **Part D** of referred BoQ are estimated and are subject to variation during the execution of contract. Therefore, bidder shall furnish unit rate as well as total price of all the items covered in **Part D** of BoQ.
 - (ii) The quantities given in **Part-D** of BoQ are liable for variation during execution of contract. Such variations in the quantities of items covered under **Part-D** of BoQ shall not, however, vitiate the contract in any way, what so ever, and all the quoted rates shall remain valid for any such variation in quantities. The payments will made based on the actual executed quantity as measured and accepted by IMPCL
 - (iii) If a bidder does not quote for all the items covered in the BoQ, the bid will be liable to be rejected.

For Clause

40.3 The quantities given in Part-C of Bill of Quantities (BoQ) as per Technical Specification.....

Read As:

40.3 The quantities given in **Part-D** of Bill of Quantities (BoQ) as per Technical Specification.....

In Section IV: General Conditions of Contract (GCC)

For Clause

21.1 b) 50% of contract value will be paid on receipt of equipment and materials (including all items covered under Part-C of BoQ, or revised quantities , if any, due to variation in quantities duly certified by IMPCL) at site in good condition against submission of the following documents:.....

Read As:

21.1 b) 50% of contract value will be paid on receipt of equipment and materials (including all items covered under **Part-D** of BoQ, or revised quantities , if any, due to variation in quantities duly certified by IMPCL) at site in good condition against submission of the following documents:.....

For Clause

21.1 c) On acceptance

Balance 30 % payment would be made against 'Final Acceptance Certificate' as per Section XVIII of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or

otherwise. This 50% payment shall be released based on the final quantities executed as covered under Part-C of BoQ (as per measurement and acceptance of such quantities by IMPCL) after adjustment of payments already made

Read As:

21.1 c) On acceptance

Balance 30 % payment would be made against 'Final Acceptance Certificate' as per Section XVIII of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. This **30%** payment shall be released based on the final quantities executed as covered under **Part-D** of BoQ (as per measurement and acceptance of such quantities by IMPCL) after adjustment of payments already made

In Section VI: LIST OF REQUIREMENTS
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For Clause:

Part IV: Warranty and AMC

The equipment/goods shall be warranted for 24 month from the date of issue of Final Acceptance Certificate.

One-year service (labour only) for maintenance to be provided after the expiry of warranty period without any additional cost to the Purchaser/ Consignee as and when required.

Read As:

Part IV: Warranty and AMC

The equipment/goods shall be warranted for 12 month from the date of issue of Final Acceptance Certificate.

One-year service (labour only) for maintenance to be provided after the expiry of warranty period without any additional cost to the Purchaser/ Consignee as and when required.

In Section IX: Qualification Criteria
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For Clause:

- (2) Tenderers must have successfully executed (supplied and commissioned) during last five years prior to the date of bid opening, under their company /firm's own name at least 1 (One) order for same or

higher capacity RO-EDI plant as mentioned in List of Requirement in compliances to cGMP. Documentary evidence (duly signed and stamped) must be enclosed. The performance report from end users/clients in this regard should also be submitted along with the bid, failing which the tender is liable to be ignored.

Read As:

- (2) Tenderers must have successfully executed (supplied and commissioned) during last five years prior to the date of bid opening, under their company /firm's own name at least 1 (One) order for same or higher capacity RO-EDI plant as mentioned in List of Requirement. Documentary evidence (duly signed and stamped) must be enclosed. The performance report from end users/clients in this regard should also be submitted along with the bid, failing which the tender is liable to be ignored.

**In Section VII:
Technical Specification**

The Technical Specification is replaced as below:

RO-EDI, STORAGE AND DISTRIBUTION LINE

- The Purified Water distributions is designed considering peak consumption of 8000 LPH
- Purified Water Plant as per design USP XXXII with amendments/latest version thereto.
- The Plant shall be in compliance to cGMP.
- All the Storage tanks shall be installed in the ground level.
- Water (Portable) test report is enclosed as Annexure-1:

Bill of Quantities(BoQ) and detailed specification

**PART-A:
Generation Plant**

A-1 : SAND FILTER –SOFTNER –HS RO – HS EDI – HI UV .

Flow – 3.5 m³/hr	
Item Description with Technical Specifications	
Pre Treatment: Sodium Hypochlorite Pneumatic Dosing with level switch	
No. Of Unit	1 No.
Type	Positive Displacement Pump
Body	PVC
Flow Range	0-6 LPH
Max. Discharge Pressure	4 bar Back Pressure
Voltage	230 V
Mixing Tank – Size	50 Ltrs.
Mixing Tank MOC	HDPE
Make	E Dose/Equivalent

A-2: RAW WATER FEED PUMP 1 WORKING, 1 STAND BY

DESCREPTION	
Qty.	2 Nos.
Capacity	10 m ³ /hr @ 35m WC
Type	Centrifugal
MOC	SS 304
HP/ RPM	3HP – 2800 RPM
Make by	Nanfang or Willo or Equivalent
Rotameter along with suction & discharge valve, and NRV for feedpump	Qty. 1 set

A-3: MULTIGRADE SAND FILTER WITH MULTIPOINT VALVE.

DESCRIPTION	
Qty.	1 No.
Capacity	10 m ³ /hr.
Max. Flow Rate	10.5 m ³ /hr.
Vessel size dia. X length (TL– TL)	525 mm x 1800 mm. Approx./ Vendor to specify
Vessel MOC.	Fibre Reinforcement Plastic (FRP).
Make	Pantier or Wave Cyber or Equivalent
Max. Working Pressure	3.5 kg/cm
Min. Working Pressure	2 kg/cm
Filter Media Used	Graded SILEX Pure Quartz.
Media Quantity	1 Lot.
Back wash period	20 minutes approx. /Vendor to specify
Frontal piping	1 1/2 UPVC with Multiport valve
MGF	Should filter suspended solids in raw water up to 5 ppm with help of filter media
Make of Pipe & Fittings	Astal or Prince or Equivalent

A-4: SMBS PNEUMATIC DOSING WITH LEVEL SWITCH

DESCRIPTION	
No. Of Unit	1 No.
Type	Positive Displacement Pump
Body	PVC
Flow Range	0-6 LPH
Max. Discharge Pressure	4 bar Back Pressure
Voltage	230 V
Mixing Tank – Size	50 Ltrs.
Mixing Tank MOC	HDPE
Make	E Dose or Neuton or Equivalent

A-5: Softner Unit with Individual valve

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DESCRIPTION	
Capacity	10 m ³ /hr.
Max. Flow Rate	10.5 m ³ /hr.
Vessel size dia. X length (TL – TL)	525 mm x 1800 mm., Fiber Reinforcement Plastic / Vendor to specify
Vessel MOC.	(FRP).
Make	Pantier / Wave Cyber / Equivalent.
Max. Working Pressure	3.5 kg/cm
Min. Working Pressure	2 kg/cm
Resin Make	Auchtel or Thermax or equivalent
Resin Quantity	Vender to specify
Regeneration Time Required	60 to 90 min.
Slow Rinse	10 to 15 min.
Fast Rinse	5 min.
OBR	150 m ³
Frontal piping	11/2 UPVC with individual valve
Make Of Pipe & Fittings	Astal or Prince or Equivalent

A-6: SOFT WATER STORAGE TANK (10,000 LTR. HDPE) SYNTEX MAKE OR EQUIVALENT

- With 1 port to boiler feed & 1 port to RO feed
- Level Controller, Float Type with Level Sensor for Soft Water Tank

Description of Level controller	
Type	Float.
MOC	SS 316 s
Process Connection	50 mm TC End Connection.
Mounting	Top Dish of storage tank.
Input Supply	AC 230V + 10% /50Hz.
Output	4-20 mA
Make	Impulse or Equivalent.

A-7: RO Feed Pump / CIP Pump For RO

DESCRIPTION	
No. Of Unit.	One No.
Type	Horizontal Centrifugal.
Capacity	7 m ³ /hr.
Head	30 MWC.
Make	Grundfoss or Nanfang or Equivalent
MOC	SS 304

A-8: ORP ANALYZER / TRANSMITTER METER WITH AUTO DUMP VALVE.

DESCRIPTION	
No. Of Unit	1 No.
Type	ON line.
Body	PVC.

Make	Aster or Welltronics or Equivalent
Auto Dump Valve	To Provide.
Mounted	Online Mounted Sensor
End Connection	TC End

A-9: ANTISCALENT PNEUMATIC DOSING WITH LEVEL SWITCH

DESCRIPTION	
No. Of Unit	1 No.
Type	Positive Displacement Pump
Body	PVC
Flow Range	0-6 LPH
Max. Discharge Pressure	4 bar Back Pressure
Voltage	230 V
Mixing Tank – Size	50 Ltrs.
Mixing Tank MOC	HDPE
Make	E Dose or Neuton or Equivalent

A-10: 16 MICRON CARTRIDGE FILTER HOUSING

DESCRIPTION	
Flow Rate	7 m ³ /hr
Type Of Cartridge	PP Wound Type
Number Of Cartridges	1. X 20" 3 nos
Housing MOC	SS 316

A-11: 1ST PASS RO HIGH PRESSURE PUMP.

DESCRIPTION	
Qty.	1 No.
Cap. / Head	6.5 m ³ /hr @ 120 MWC. / Vendor to specify
Type	Multistage Centrifugal
MOC	SS 316.
Make	Grundfos/ Nanfang / Equivalent
High Pressure Switch	Indfos or equivalent
Low Pressure Switch	Indfos or equivalent

A-12: PNEUMATIC PH CORRECTION DOSING WITH LEVEL SWITCH

DESCRIPTION	
No. Of Unit	1 No.
Type	Positive Displacement Pump
Body	PVC
Flow Range	0-6 LPH
Max. Discharge Pressure	4 bar Back Pressure
Voltage	230 V

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Mixing Tank – Size	50 Ltrs.
Mixing Tank MOC	HDPE
Make	E Dose or Neuton or Equivalent
Pressure Gauge	2.5” Dial Size To Provide
MOC	SS 316 Glycerin Filled

A-13: HOT WATER SANITISABLE REVERSE OSMOSIS SYSTEM. (HS RO)

DESCRIPTION	
Feed Flow Rate	6.5 m3/hr.
Recovery	70 – 65 %.
Permeate Flow Rate	4300 Ltr.
Pressure Vessel RO Housing	SS 316.
Membrane type	Hot Water sanitisable
RO Membrane	As required based on water test report
Make	Dow or Hydraunautics or GE USA or Equivalent
Interconnected Piping with valves	SS 316 with EP. Size- 1.5”

A-14: SS 316 L RO WATER STORAGE TANK . (CIP CUM BREAK TANK)

DESCRIPTION	
Qty.	1 No.
Capacity	750 Ltrs.
MOC/ Contact Part	SS 316 L
Main Shell Dia	Dia 800 x 1000 HT 3 mm thickness/ Vendor to specify
Electrical Heater	To Provide 8kw 2nos
MOC	SS 316
Internal Finish	Mechanical polish Up To 0.5 RA
Tank Type	Vertical Dish End 100% Drainable
Man Hole	400 dia To Provide

Note :- CIP Cum Break Tank Will be Used as a CIP For Cleaning of RO & EDI UNIT

A-15: FLOAT TYPE LEVEL CONTROLLER FOR ABOVE TANK LEVEL PROBE.

DESCRIPTION	
Type	Float
MOC	SS 316 L.
Process Connection	50 mm Triclover
Mounting	Top Dish.
Input Supply	AC 230V+10% / 50Hz.
Output	4 – 20mA.
Make	Impulse or Pune Techtrol or Equivalent

A-16: EDI FEED PUMP.

DESCRIPTION	
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No. Of Unit.	1 nos
Type	Horizontal Centrifugal.
Capacity	4 m ³ /hr. / Vendor to specify
Head	40 MWC. / Vendor to specify
Make	Groundfoss or Nanfang or Equivalent .
Contact Part MOC	SS 316.

A-17: HOT WATER SANITISABLE ELECTRO-DEIONISATION SYSTEM (HS-EDI)

Qty.	1 No.
Feed Flow	3.8 m ³ /hr.
Normal Flow Rate	3.5 m ³ /hr.
Fluid	Reverse OSMOSIS System Permaete Having conductivity 10 – 15. Ppm
Operating Temperature	30 Degree C.
Type	Hot water Sanatisable.
Recovery	90%.
Make	Ionpure (USA) / Equivalent
End connection	1.5" TRICLOVER
Operating Voltage DC	100-250 V DC
Maximum voltage	300 V
Operating Current	2-3 Amps.
Maximum Current	5-6 Amps.
Concentrate Flowrate	200 ltrs/hr
Inter Connected Piping	RO & EDI.
MOC	SS 316 L Internally Electropolished upto 300 grid & TC Sanitary fittings.

- HS RO System shall have provision of AUTOFLUSHING so as to avoid microbial growth during stagnancy of system.
- Auto Flush will take place after every 60 min. & for 20 – 30 Sec.

A-18: METAL TUBE ROTA METERS

DESCRIPTION	
No. Of Units	03 Nos.
Location	HSRO Reject & Permit / Inlet of EDI
Make	Chemtrol or Khrono Marshall or Equivalent
Temperature range	Upto 107 deg. C.
End Connection	2" TC End Connection
Pressure Gauge	2.5" Dial Size To Provide
MOC	SS 316 Glycerin Filled

A-19: Conductivity Transmitter.

DESCRIPTION	QUANTITY
No. Of Units.	Two.

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Range	0 – 100 us /cm.
Location – 1	Outlet of 1 st Pass RO Unit.
Range	0 – 100 us /cm.
Location - 2	Outlet of EDI Unit
Make	Megh Elect. Or Aster orEquivalent
Output	4 – 20 mA.
Range	0 – 10 us /cm.
Sensor moc	SS316 with sanitary fittings
Protection	IP-65
Temperature	Upto 121deg C
Pressure	6 Bar
Mounted Model	Online Mounted Sensor

A-20: FLOW DIVERSION VALVE

DESCRIPTION	
No. Of Units	1 Quantity.
Location	After conductivity of HS EDI
Sensor MOC	SS 316 L.
End Connection	Sanitary Triclover Fittings.
Make	Metalab or Equivalent

A-21: PRESSURE GAUGES

DESCRIPTION	
Qty	8 nos
Make	Forbes or Equivalent.
Dial Size	2.5" with Glycerin Filled.
Contact Part MOC	SS 316
Qty.	8 Nos.

A-22: pH INDICATOR CUM CONTROLLER.

DESCRIPTION	
Type	Online
Location	Outlet of EDI
Make	Aster / Welltronics /Equivalent
Output	4 – 20 mA
Range	0 – 14
Protection	IP- 65
Mounted	Online Sensor Mounted

A-23: HIGH INTENSITY ULTRA-VIOLET DISINFECTION UNIT

DESCRIPTION	
No. Of Unit	One.
Maximum Flow Rate	5 m3/hr.

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Watts of UV each Source element	100 W
Power requirement	230 V / 200 W / 1 Phase.
Make of UV Source Element	Alfa UV System / Equivalent
Hour Meter	To be supplied
MOC of Vessel	SS 316 with Internally EP
End Connections	Sanitary Triclover fittings.
Location	After EDI.
Intensity Meter	To be supplied

PLC Control Panel both for RO EDI & Distribution Line.

AUTOMATION & CONTROLS

Electrical & Automation Package Common PLC based control panel HMI – color touch screen online monitoring of conductivity, temperature of HS RO auto flushing & also HS EDI in recirculation mode at the time when plant is idle.

Control Panel Cabinet MOC SS 304 double door compactable panel (Make of PLC - DELTA Techniques / ABB / Equivalent.

Accessories & Electrical Components of Control Panel (Siemens / L&T Make /Equivalent)

General Notes:-

- Pre Treatment, R.O Unit and EDI: Skid mounted. (Skid MoC SS 304, Matt finish or Mirror polished)
- EDI Unit /Feed Pump & Inter-Connecting Piping SS316 L with internally electro polished
- All weld joints will be Orbital Welding.
- Output parameters of water shall be guaranteed as follows

SL no.	Parameter	Water as per USP standards Purified Water	Design Limits
1	Appearance	Clear	Clear
2	Colour , Hazen unit	Colorless	Colorless
3	Odour	Odourless	Odourless
4	PH	5.0 – 7.0	5.0 – 7.0
5	Conductivity @25oc	<1.30 uS/cm	As per <1.25 Target level : 0.5 Alert Level : 0.8 Action level : 1.0
6	Total aerobic microbial count (cfu/ml)	<100	As per:100 Target level : 50 Alert Level : 75 Action level : 100
7	Hardness	Nil	Nil

PART-B:
PW Distribution Storage Tank With Accessories

B	Description	QTY.	MAKE
1	5 KL Storage tank SS 316L Jacketed Storage Tank. a) All contact parts : MoC SS 316 L b) Non contact parts SS304 c) Steam point. d) Tank shall be insulated with 50mm Rock wool e) Tank will be internally Electro- Polished <0.5 Ra. f) The Tank shall be 100% drainable and fabricated as per cCGMP standard. g) Working pressure: 2kg/ cm ² h) Jacket pressure 3 kg / cm ² i) Test pressure 4kg. / cm ² j) Design temperature main shell & jacket 140 ^o .C	1	Komal Industries, Induionpure, Doshion Veolia, Christ Nishotec water system or equivalent
2	SS316 Centrifugal Pump 13-16m³/hr @80 mwc (peak load 8m ³ /hr & to maintain 1.2m/sec velocity in return line with drain valve facility with internally electro-polished (1 working & 1 stand by)	2	Alfa Laval / Ionxpa Italy / equivalent
3	Jacketed Vent Filter Housing SS 316 L with Sanitary Fittings & Electrical Heating Arrangement	1	
4	Hydrophobic Vent Filter Catridge PTFE 10"x 0.22 Micron	1	Gravers or Pall or equivalent
5	Spray Ball Assembly revolving type with TC fitting 360 ^o MOC -SS 316 L	1	Metalab or equivalent
6	Diaphragm Pressure Gauge after pump(0 to 10kg/cm ²) Dial-4"	1	Forbes or Warre or Equivalent
7	Compound Pressure Gauge for Tank : 4" Dial with TC MoC-SS316	1	Forbes/ Warre/ Equivalent
8	Skid for UV, pump & Instruments along with PU Tubbling & Conduite , MoC- SS 304	1	
9	Interconnecting piping for pump suction/ discharge , bends/ tees, reducers etc. : MOC-SS 316 L	1	
10	UV Sterlisation System flow 12m ³ /hr with hour meter monitor housing with internally electro polish MoC SS 316L	1	Alfa UV System/ Equivalent
11	Intensity Meter with Sensor for above UV system MoC SS 316	1	Alfa UV System/ Equivalent
12	Pressure Regulating Valve size 2" TC end connection MoC SS 316 L	1	Nirmal/ Equivalent

PART-C:
RO/ PW Instrumentation etc.

C	Description	QTY	MAKE
1	Conductivity Sensor cum Analyzer (Transmitter) with temp. Condensate, T Block fittings & Sensor (Return Loop) MoC SS	1	Megh/ Aster/ Equivalent

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	316 L		
2	Temperature Sensor Cum Controller (Transmitter) Sensor MOC 316 L	1	Radix/ Equivalent
3	Steam trap assembly with Ball valve Assembly Size- 1" , MoC SS 304	1	Uniklinger/ Ahira/equivalent
4	Float type level sensor cum controller (Transmitter) Sensor with sanitary fittings. MOC SS316 L	1	Impulse/ Equivalent
5	Auto Steam Control ON/OFF Valve Size: 1" with PU Fittings & by pass line. MoC-SS 304	1	Ahire systems/ Equivalent
6	Vortex Type Flow sensor & Transmitter on Line, Mounted Line Size-1",End Conn.with TC arrangement MOC SS 316 L	1	KhroneMarshall/ Brucket /Equivalent
7	Steam Release safety valve with siphon type pressure gauge & vent . MoC SS 304	1	
8	Variable Frequency Drive control 15 HP with PID loop (for centrifugal pump Sl.No.A2 above)	1	Delta/ ABB/ Equivalent
9	Relay based control panel system for RO/ PW Distribution System comprising of Logic control online monitoring levels, conductivity, temp., etc. with auto dumping system. Cabinet MoC SS 304	1	

PART-D:

RO/ PW Distribution Piping and Fittings

D	Description	Unit	QTY	MAKE
1	Tubes 50.8 OD x 16 Swg, Bead Removed Internally Electro-polished upto 300 grit Tubes Externally Pharma Finish. Size :- 2" , MoC : SS ASTM A 270 TP 316 L (Excluding Orbital welding)	Mtr.	700	
2	90 Deg., Long Radius Bend Plain. Size:- 2" OD (ID Electro polished) MoC SS 316 L	No.	148	Parent tube/ Equivalent
3	2"OD, Flow Diversion Valve with TC End-connection Sanitary Design with 5/2 double acting solenoid valve. MoC-SS 316 L	No.	1	Metalab/ Equivalent
4	For Sampling, Diaphragm valve MoC - SS 316	No.	3	Metalab/ Equivalent
5	TC Liner Size:- 2" OD (Orbital weld) MoC SS 316 L	No.	300	
6	TC Gasket food Grade Silicon Size:- 2" OD	No.	250	
7	TC Clamp (Investment Casting) Size:- 2" OD. Heavy Duty MoC SS 316	No.	250	
8	Pipe holding assembly with anchor fastner/base plate/ ½" barallel nipple. Complete set. Size:-2" OD.	Set	300	
9	MoC SS 316 L Loop line (Zero Dead Log Valve) with SS Bonnet & Diaphragm food grade EPDM rubber Size:- 2" OD and Triclor End connection	No	40	Metalb/ Equivalent
10	Plain Tee Size:- 2" OD , MoC SS 316 L	No.	4	Parent tube/ equivalent
11	TC Horphouse Nozzle at users point MoC SS 316 L	No.	40	
12	SS 316 Diaphragm Valve with MS Powder Coated Bonnet,	No.	1	Radiant/ Equivalent

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	end connection with TC end. Diaphragm food grade EPDM rubber, Size:- 3" OD			
13	SS 316 Diaphragm Valve with SS 304 bonnet with end connection TC-end. Diaphragm food grade EPDM rubber size:- 2" OD tubes	No.	3	Metalab/ Equivalent
	Orbital welding 2". Tube joint		360	
	Engineering Design & Documentation DQ, IQ, OQ and validation.			

All the unit rates above shall be inclusive of installation/erection, inspection, testing, commissioning etc.

- NOTE : 1) Where ever specific make (s)/ equivalent is specified, and in case supplier is supplying equivalent make, he shall obtain prior approval from the purchaser for such equivalent make.
- 2) Supplier Scope includes complete erection, Installation and commissioning and trial run at client site
- 3) The Trial Run shall be carried out for a period of 10 days
- 4) All electrical wiring, connection and trial run are in scope of supplier.
- 5) Scope of Standard Documentation for RO-EDI Storage and distribution pipeline by the supplier:
- Validation documents DQ, OQ, IQ, PQ etc.
 - Material Test certificate for contact parts
 - Installation & Maintenance Manual
 - Spare Part List
 - Certificates, Manual for Bought out items
 - Electrical Diagram
 - Schematic Diagram and GA Drawings of all machines showing dimensions should be approved from the purchaser before manufacturing.
 - Validation with documents to be provided by supplier.
- 6) Inspection- By Client/Purchaser or by their nominated agency.
- 7) Quarterly routine inspection of equipment, storage and distribution system in the defect liability period has to be done by the supplier that without any additional charge to purchaser.
- 8) Packing- Wrapped in Plastic/ wooden box with Net wt and gross Wt –vendor to specify

In Section XI: PRICE SCHEDULE

The Price Schedule is replaced as below:

SECTION – XI PRICE SCHEDULE

PRICE SCHEDULE FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN LOCATED WITHIN INDIA

Sl. No.	1	2	3	4	5					6
	Item Sl. No.	Brief Description of Goods	Country of Origin	Quantity (Nos.)	Price per unit (Rs.)					Total Price (at Consignee Site) basis (Rs.) 4 x 5(g)
					Ex-factory/ Ex-warehouse/ Ex-showroom/ Off-the-shelf (a)	Excise Duty (if any) [%age & value] (b)	Sales Tax/ VAT (if any) [%age & value] (c)	Transportation charges (d)	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site (e)	
1	(As per Part A+B+C of BoQ*)									
2	(As per Part D of BoQ*)									
Total Price										

(* BoQ as covered in the Technical Specification ; Section VII of Tender Enquiry Document)

- i. Price of Part A+ Part B + Part C of BoQ in Rupees _____ (in Words)
- ii. Price of Part D of BoQ in Rupees _____ (in Words)
- Total Tender price (i + ii) in Rupees: _____ (in Words)

Note: -

- Against Sl.No.2 above, Tenderer shall quote for all the items (along with unit rates and total price for each item) covered under Part-D of Bill of Quantities (BoQ). If a tenderer does not quote for all the items under the referred BoQ, the bid will be liable to be rejected
- Total tender price shall be deemed to be inclusive of entire scope of work (supplies and services) as covered in the TED.
- If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.

Place: _____
Date: _____

Name _____
Business Address _____
Signature of Tenderer _____
Seal of the Tenderer _____

In Section XIV

For:

Deleted

Read as:

MANUFACTURER'S AUTHORISATION FORM

**To,
Head (P & CD),
HLL Lifecare Limited,
Procurement and Consultancy Division,
B-14 A, Sector -62, Noida -201307, Uttar Pradesh**

Dear Sirs,

Ref. Your TE document No _____, dated _____

We, _____ who are proven and reputable manufacturers of _____
(*name and description of the goods offered in the tender*) having factories at _____,
hereby authorise Messrs _____ (*name and address of the agent*) to submit a tender,
process the same further and enter into a contract with you against your requirement as contained in
the above referred TE documents for the above goods manufactured by us.

We further confirm that no supplier or firm or individual other than Messrs.
_____ (*name and address of the above agent*) is authorised to submit a tender,
process the same further and enter into a contract with you against your requirement as contained in
the above referred TE documents for the above goods manufactured by us. Agency agreement with
them giving details of agency commission shall be provided.

We also hereby extend our full warranty, CMC as applicable as per clause 15 of the General
Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the
goods and services offered for supply by the above firm against this TE document.

We also hereby confirm that we would be responsible for the satisfactory execution of contract
placed on the authorised agent.

We also confirm that the price quoted by our agent shall not exceed than that which we would have
quoted directly.

Yours faithfully,

[Signature with date, name and designation]

for and on behalf of Messrs _____

[Name & address of the manufacturers]

*Note : 1. This letter of authorisation should be on the letter head of the manufacturing firm and
should be signed by a person competent and having the power of attorney to legally bind
the manufacturer.*

2. Original letter may be sent.

Others:

All other contents of the Tender Enquiry Document including terms and conditions of the tender enquiry remain unchanged.

.....The End.....

DELHI TEST HOUSE[®]

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ESTD. 1975

Issued to:
The Manager QA/QC
Indian Medicines Pharmaceutical Corpora
Mohan Dist. Almora
Via Ramanagar-244715

QR-0302
Report No. : 2219140225IM39005
Date : 07-03-2014
Date of Receipt : 25-02-2014
Party Ref No : Nil

Sample Description:-Potable Water Collected From IMPCL (On 25/02/2014)
(as per 10500/2012 and API)

Test Report

S.No.	Test	Requirements Desirable limit IS: 10500/2012	Results	Permissible Limit/IS:10500/ 2012	Test Method
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Table-6 Bacteriological Test as per Clause 4.1 Table b

1.	Coliform Organisms/100ml	Absent	Absent	-	IS: 1622-1981
2.	E.Coli/100 ml	Absent	Absent	-	IS: 1622-1981

Table-1 Organoleptic and Physical parameter (Clause 3.1 and clause 4)

1.	Colour, Hazen unit, Max.	5	<5	15	IS: 3025(P-4)1983
2.	Odour	Agreeable	Agreeable	Agreeable	IS: 3025(P-5)1983
3.	Taste	Agreeable	Agreeable	Agreeable	IS: 3025(P-7)1984
4.	Turbidity NTU, Max	1	1	5	IS: 3025(P-10)1984
5.	pH value	6.5 to 8.5	7.61	No Relaxation	IS: 3025(P-11)1984
6.	Total Hardness (as CaCO ₃ , mg/l, Max.	200	47	600	IS: 3025 (P-21)
7.	Iron (as Fe) mg/l, Max.	0.3	Not Detected(0.01)	No Relaxation	IS: 3025(P-53)2003
8.	Chlorides (as Cl) mg/l, Max.	250	22.8	1000	IS: 3025(P-32)1988
9.	Residual free chlorine mg/l, Min.	0.2*	Not Detected (0.1)	1.0	IS: 3025(P-26)1986
10.	Fluoride (as F) mg/l, Max.	1.0	0.2	1.5	IS: 3025 (P-60)2008

Table-2 General Parameters Concerning Substances undesirable in excessive amounts (Clause 3.1 and 4)

1.	Total Dissolved Solids, mg/l, Max.	500	92	2000	IS: 3025 (P-16)1984
2.	Calcium (as Ca) mg/l, Max.	75	10.5	200	IS: 3025 (P-40)1991
3.	Magnesium (as Mg) mg/l, Max.	30	5.0	100	IS: 3025 (P-46)1994
4.	Copper (as Cu) mg/l, Max.	0.05	Not Detected(0.01)	1.5	IS: 3025 (P-42)1992
5.	Manganese (as Mn) mg/l, Max.	0.1	Not Detected(0.1)	0.3	IS: 3025 (P-59)2006
6.	Sulphate (as SO ₄) mg/l, Max.	200	Not Detected(1.0)	400	IS: 3025 (P-34)1988
7.	Nitrate (as NO ₃), mg/l, Max.	45	Not Detected(0.5)	No Relaxation	IS: 3025 (P-34)1988

Cont., 2

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Director



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S. No.	Test	Requirements Desirable limit IS: 10500/2012	Results	Permissible Limit/IS:10500/ 2012	Test Method
8.	Ammonia (as Total ammonia-N), mg/l Max.	0.5	Not Detected(0.5)	No Relaxation	IS: 3025 (P-34)1988
9.	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max.	0.001	Not Detected(0.001)	0.002	IS: 3025 (P-43)1992
10.	Zinc (as Zn), mg/l, Max.	5	Not Detected(0.1)	15	IS:3025(P-49)1986
11.	Aluminum (as Al), mg/l Max.	0.03	Not Detected(0.03)	0.2	IS:3025(P-55)2003
12.	Anionic deter gents (as MBAS), mg/l Max.	0.2	Not Detected(0.05)	1.0	Annex. K of IS:13428
13.	Barium (as Ba), mg/l, Max.	0.7	Not Detected(0.5)	No Relaxation	IS:15302
14.	Boron (as B), mg/l Max.	0.5	Not Detected(0.2)	1.0	IS:3025(P-57)2005
15.	Chloramines (as Cl ₂), mg/l, Max.	4.0	Not Detected(0.5)	No Relaxation	IS:3025(P-26)1986
16.	Mineral Oil, mg/l, Max.	0.5	Not Detected (0.01)	No Relaxation	Cl.6 of IS:3025 (P-39)
17.	Selenium (as Se), mg/l Max.	0.01	Not Detected (0.01)	No Relaxation	IS: 3025 (P-56)2003
18.	Silver (As Ag), mg/l, Max.	0.1	Not Detected (0.01)	No Relaxation	Annex J of IS:13428
19.	Sulphide (as H ₂ S), mg/l, Max.	0.05	Not Detected (0.05)	No Relaxation	IS:3025(P-29)
20.	Total Alkalinity (as CaCO ₃), mg/l, Max.	200	26.3	600	IS:3025(P-23)1986

Table-3 Parameters Concerning Toxic Substances (Clause 3.1 and 4)

1.	Cadmium (as cd), mg/l Max.	0.003	Not Detected(0.001)	No Relaxation	IS:3025(P-41)
2.	Cyanide (as CN), mg/l Max.	0.05	Not Detected(0.01)	No Relaxation	IS:3025(P-27)1986
3.	Lead (as Pb), mg/l, Max.	0.01	Not Detected (0.01)	No Relaxation	IS:3025(P-47)
4.	Mercury (as Hg), mg/l Max.	0.001	Not Detected (0.001)	No Relaxation	IS:3025(P-48)
5.	Molybdenum (as Mo), mg/l Max.	0.07	Not Detected (0.01)	No Relaxation	IS:3025(P-2)

Cont. 3

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QR-0302

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6.	Nickel (as Ni), mg/l Max.	0.02	Not Detected(0.01)	No Relaxation	IS:3025(P-54)
7.	Total Arsenic (as As), mg/l Max.	0.01	Not Detected(0.01)	0.05	IS:3025(P-37)
8.	Total Chromium (as Cr), mg/l Max.	0.05	Not Detected(0.05)	No Relaxation	IS:3025(P-52)
9.	Poly chlorinated biphenyls, mg/l Max.	0.0005	Not Detected(0.0001)	No Relaxation	ASTM 5175
10.	Poly nuclear aromatic hydrocarbons (as PAH), mg/l, Max.	0.0001	Not Detected(0.0001)	No Relaxation	APHA 6440
11.	Trihalomethanes:				ASTM D 3973-
	a) Bromoform, mg/l Max.	0.1	Not Detected (0.001)	No Relaxation	85/APHA 6232
	b) Dibromochloromethane mg/l Max	0.1	Not Detected (0.001)	No Relaxation	
	c) Bromochloromethane mg/l Max.	0.06	Not Detected (0.001)	No Relaxation	
	d) Chloroform, mg/l, Max.	0.2	Not Detected (0.001)	No Relaxation	

Table-5 Pesticide Residues Limits

1.	Alachlor , µg/l Max.	20	Not Detected(0.1)	No Relaxation	USEPA.525.2,507
2.	Atrazine, µg/l Max.	2	Not Detected(0.1)	No Relaxation	USEPA,525.2,8141
3.	Aldrine/ Dieldrin, µg/l Max.	0.03	Not Detected(0.1)	No Relaxation	USEPA,508
4.	Alpha HCH, µg/l Max.	0.01	Not Detected(0.1)	No Relaxation	USEPA 508
5.	Beta HCH, µg/l Max.	0.04	Not Detected(0.1)	No Relaxation	USEPA 508
6.	Butachlor, µg/l, Max.	125	Not Detected(0.1)	No Relaxation	USEPA 525.2,8141A
7.	Chlorpyrifos, µg/l Max.	30	Not Detected(0.1)	No Relaxation	USEPA 525.2,8141A
8.	Delta HCH, µg/l Max.	0.04	Not Detected(0.1)	No Relaxation	USEPA 508
9.	2,4- Dichlorophenoxy acetic acid, µg/l Max.	30	Not Detected(0.1)	No Relaxation	USEPA 515.

CONT. 4

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-4-

QR-0302

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Party Ref No : Nil

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10.	DDT (O, P and P,P-Isomers of DDT, DDE and DDD) µg/l Max.	1	Not Detected (0.1)	No Relaxation	USEPA 508/ AOAC 990.06
11.	Endosulfan (α,β, and sulphate) µg/l Max.	0.4	Not Detected (0.1)	No Relaxation	USEPA 508/AOAC 990.06
12.	Ethion, µg/l Max.	3	Not Detected (0.1)	No Relaxation	USEPA 1657A
13.	Gama- HCH (lindane), µg/l Max.	2	Not Detected (0.1)	No Relaxation	USEPA 508/AOAC 990.06
14.	Isoproton, µg/l Max.	9	Not Detected (0.1)	No Relaxation	USEPA 532
15.	Malathion, µg/l, Max.	190	Not Detected (0.1)	No Relaxation	USEPA 8141 A
16.	Methyl parathion, µg/l Max.	0.3	Not Detected (0.1)	No Relaxation	USEPA 8141 A
17.	Monocrotophos, µg/l Max.	1	Not Detected (0.1)	No Relaxation	USEPA 8141 A
18.	Phorete, µg/l Max.	2	Not Detected (0.1)	No Relaxation	USEPA 8141-A

Remarks :- The sample **Conforms** to various requirement specified in IS:10500:2012. And as per A.P.I

Note :- 1- Figure in bracket indicate minimum detection limit.

Note:-2 * Applicable only done when water is chlorinated

Any deviation from the standard test method/specification- Nil

DOR:-25.02.2014

DOC:-07.03.2014

M.C. GOEL

Authorised Signatory - Director
Director