To

**Sub.**: Offer for Water Treatment System. (Cap: 2000 Lit per Hr RO System.)

Dear Sir,

This is with reference with the telephonic discussion had with you regarding the aforesaid subject matter.

We are very much thankful to you for showing your keen interest in our water treatment range of products & furnishing us an opportunity. This will be a small but significant step in establishing the long lasting & mutually beneficial relationship between "HI TECH PURIFICATION SYSTEM" & "YOUR SELF"

As per your requirement, we are very much pleased to submit our Techno – Commercial proposal for Water Treatment System incorporating latest **REVERSE OSMOSIS Water Treatment System (2000 L.P.H.)**.

Meanwhile, if you require any further information, please feel free to contact us for the same.

With regards,

HI ECH PURIFICATION SYSTEMS

**DINESH ASHAR** 

NOTE. WITH REF. TO PERSONAL VISIT AT SITE FOR MESURING HARDNESS OF WATER OLD BORING .1440 TOTALS DESOLVE SOLIDS, TDS NEW BOARING, 1640 TDS

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## ANNEXURE-I

### BASIS OF DESIGN AND TREATMENT SCHEME

## 1.1 PLANT INTRODUCTION:

✓ The proposed Water Treatment Plant is designed to produce product water at the flow rate of 2000 L.P.H. based on latest Reverse Osmosis and ion Exchange Technology.

**Note:** The proposed Water treatment system based on R.O. Technology can even Work continuo sally for 8 - 10 hours per day.

### 1.2 RAW WATER ANALYSIS:

We have designed the proposed Water Treatment System based on below mentioned Raw Water Analysis provided by you..

Sr. No.	Parameter	Value
1.	Source Of Water	Bore Water
2.	Total Dissolve Solids	2500 Mg/Liter

## 1.3 END WATER QUALITY: -

TDS : < 100 PPM

### 1.4 RO PLANT OPERATING CONDITION:

Sr. No.	Parameter	Value
1.	Feed Flow Rate	4000 LPH
2.	Product Flow Rate	2000 LPH
3.	Reject Flow Rate	2000 LPH AS your requirement
4.	Operating Pressure	11 – 15 kg/cm2

## 1.5 TREATMENT SCHEME:

Sr. No.	Description		
PRE-TR	PRE-TREATMENT:		
1.	RAW WATER STORAGE TANK (BY CLIENT)		
2.	RAW WATER PUMP		
3.	MULTI GRADE FILTER		
4.	SPECIAL ANTI-SCALENT DOSING SYSTEM		
5.	MICRON CARTRIDGE FILTER (5.0 MICRON)		
R.O.MODULE			
6.	HIGH PRESSURE PUMP		
7.	R.O. MODULE		
8.	RO WATER STORAGE TANK (BY CLIENT)		

#### 1.5 R.O. FEED LIMITING CONDITIONS:

1]	T.D.S.	 2500 P.P.M. (Max.)
2]	Suspended Solids	 Nil
3]	Heavy Metals	 Nil
4]	Oil and Grease	 Nil
5]	Turbidity	 Nil
6]	Residual Chlorine	 Nil
7]	Color / Odor	 Absent
8]	pН	 7.3

## The END WATER quality shall be achieved subject to:

- Feed quality is same as specified in your enquiry. In case of any change in the quality of raw water, the same may have an implication on the Operating parameters and End-water quality of the system.
- 2] Feed limiting condition mentioned in our offer is strictly maintained.
- Operation of Water treatment plant is strictly followed in totality as per our operating manual & instructions.

## ANNEXURE-II

## **TECHNICAL SPECIFICATION**

## 1] RAW WATER TANK (BY CLIENT)

2] RAW WATER PUMP	
Quantity	One No.
Capacity	4000 L.P.H.
Discharge Pressure	3.5 kg/cm2.
MOC	CI
Make	CRI / ANY GOOD BRAND

3] MULTI GRADE FILTE	R
Quantity	Two No.
Type	Vertical Pressure Vessel 18 * 65
Operating capacity	4000 L.P.H
M.O.C.	FRP Structural With Manual Multi port valve 1.5 "
Filter Media	Silica Quartz Sand with Pebbles & Gravels.
Service Cycle	Whenever pressure drop across unit exceeds 0.8 kg/cm <sup>2</sup> .
Backwash Duration	20 – 25 mins.
Operating Pressure	$3.5 \text{ kg/cm}^2$

4] SPECIAL ANTISCALANT DOSING SYSTEM		
Quantity offered	One No. of Dosing Pump	
Type	Electronic Diaphragm type Dosing Pump	
Flow rate	0 – 5 L.P.H.	
HDPE Tank Size	100 ltr.	
Operating Pressure	1.5 kg/cm2	
Make	Painter water / ANY GOOD BRAND	

5] MICRON CARTRIDGE FILTER		
Quantity	Two No. 20" jambo	
Туре	Replaceable Cartridge	
M.O.C. of Cartridge	Polypropylene	
M.O.C. of Housing	Polycarbonate	
Operating capacity	5000LPH	
Micron Size	5.0 micron	
Operating Pressure	2.50 kg/cm2.	

6] HIGH PRESSURE PUMP		
Quantity	One No.	
Туре	Vertical –	
Capacity	4000 L.P.H	
Discharge Pressure	12 – 14 kg/cm2	
Type of Drive	III phase squirrel cage induction motor.	
Make	Nanfang pump	

7] R.O. MODULE	
Item	R.O. Module with S S pressure tubes & R.O. Membranes.
Type of Membrane	Thin Film Composite Polyamide Spirally Wounded 4080
Operating Pressure	12 – 14 kg/cm2
Make of membranes	M/s. hydronotics USA make/
No. of Membranes	2 Nos.
M.O.C. of Pressure Housings	FRP
Make of Pressure Housing	Painter water / any good brand
No. of Pressure Housings	1 Nos.

## 8] RO WATER STORAGE TANK (BY CLIENT)

## ANNEXURE-III

## SCOPE OF SUPPLY FOR RO SYSTEM

Sr. No.	Item/ Component	Qty.	
PRETREATMENT			
1.	Raw Water Storage Tank	By Client	
2.	Raw water pump	One No.	
3.	Multi Grade Filter consists of	Two No.	
	- S.S. Pressure vessel with 1" multi-port valve.		
	- Initial charge of media.		
	- Frontal pvc pipe& SS work with necessary fittings.		
4.	Special Anti –Scalent Dosing System	One No.	
	- Dosing Tank along with Dosing Pump		
5.	Micron Cartridge Filter (5.0 micron) in Blending Line incorporating	Two No.	
	- Micron Cartridge Filter		
	- Micron Cartridge Housing		
6.	High Pressure Pump with Motor	One No.	
	DO MODAY F		
	RO MODULE		
7.	R.O. Module incorporating	One Lot.	
	R.O. Membrane: M/s USA		
	- R.O. Pressure Tubes [M.O.C. :FRP]		
	- R.O. Skid with Electrical Control panel Based Control panel along with Instruments.		
8.		Dry Cli ant	
8.	RO Water Storage Tank  INSTRUMENTATION	By Client	
1.	Flow Indicator	Two Nos.	
2.	Low pressure Switch HI pressure	One No.	
3.	Pressure Gauges  Reverse Control Penal LCD	Three Lot.	
<u>4.</u> 5.	Reverse Osmosis Control Panel LCD	One No.	
6.			
7.			
8.			
δ.			

## ANNEXURE-IV

### SCHEDULE OF EXCLUSIONS AND TERMINATIONS

#### SCHEDULE OF EXCLUSIONS :

- 1] All civil works such as plant foundation of the equipments, mass concreting, etc.
- 2] Supply of power to Motors, regeneration chemical for trial run and commissioning.
- 3] Laboratory testing facility, Instruments and reagents.
- 4] Lubricants, Oil and Grease as and when required.
- 5] Raw water storage tank, Product water storage tank and transfer pump.
- 6] All equipments, works and services, not specifically mentioned in our proposal.
- 7] Storage & site security.

### TERMINATION POINTS

- 1] Inlet of Raw water Pump
- 2] Permeate /Reject Outlet of Reverse Osmosis system
- 3] Inlet/ Outlet of Sterilization System
- 3] Overflow and drain pipe work of all vessels
- 4] Power control termination at High pressure pump, RO. Product / Raw water transfer Pump

### CLIENT TO PROVIDE

1] Control supply : 220 Volts  $\pm$  10, Single phase, 50 Hz. for all

Instrumentations.

2] Power supply : 415 Volts  $\pm$  10, three phases, 50 Hz. for High pressure

Pump & other pumps...

3] Service water : Flow Rate @ 4000 L.P.H. at the inlet of RWP (Raw Water

Pump)

4] Lab testing facility: for Analysis of water
5] Labor : As and when required.
6] Chemicals : Special Anti-scalent

## ANNEXURE-V

## PRICE, COMMERCIAL TERMS & CONDITIONS

PRICE :

Our price for Design, Engineering and Supply of Proposed Water Treatment System, based on R.O. System, as described in our earlier Annexure shall be:

Sr.	DESCRIPTION	QTY.	AMOUNT
1.	Reverse Osmosis based Water Treatment System (Cap – 2000 LPH)	1 No.	RS 4,80,000.00

Our price is Ex-works (Factory) and Exclusive of

- Transportation up to your site.

**EXCISE DUTY** : Extra at actual, if applicable. At present Nil.

SALES TAX : Extra at actual. At present 12,5 % V.A.T. /

**OCTROI** : Extra at actual, if applicable.

AND INSURANCE

However, any change in Govt. levies / interpretation /etc. at the time of Execution will be on Buyer's account.

**PAYMENT TERMS** : 70% Advance along with Detailed Purchase Order.

30% Balance against Performa Invoice prior to

Dispatch.

**DELIVERY** : Within 3 weeks from the date of receipt of Purchase

Order

Along with advance subject to Force Major Clause.

With Regards, HI TECH PURIFICATION SYSTEM DINESH ASHAR 9833558086