

## KRISHNA

## ORGANICS & CHEMICALS

(A unit of Power Chem. Chemicals) (Complete Solution of Water Technology)

18-	Media	4/8 800IV	50 kg 25 kg	
19-	Activated Carbon	80017	1 nos	Healthy
20-	Dosing Pump		1 nos	
21-	UV Sterlizer			<u> </u>

#### SCHEDULE OF EXCLUSION

#### **EXCLUSIONS**

The following equipment/work is excluded from our scope:

- 1. All civil works
- 2. All electrical supply for work & control panel .Unloading, storage, insurance & security of equipment at site.
- 3. Relevant connections from termination points given in our offer.
- 4. Raw water, Break tank & final treated water storage tank.
- 5. Transfer pumps and all Interconnecting Pipe works.

## TERMINATION POINTS

- Inlet point of Raw water Feed Pump
- Outlet of RO UNIT

#### ANNEXURE - V

PRICE & COMMERCIAL TERMS

lent fe. 99,000/2 Our prices for supply and supervision of erection and commissioning of equipment according to the variousannexure are given below:

Supply of Equipment Reverse Osmosis Plant: 115000/- Rs. Only (One Lakh Fifteen Thousand Rupees only)

Supervision of Erraction and Commissioning: 5000/- Rs. Only

(Five Thousand Rupees only) ors and tackles by purchaser) (Unloading, storage and security of equipment and labor

and 50% at material dispatch and the fances TERMS & CONDITIONS:-Payment Terms - 50% against with P. of. rele

Taxes extra @As the condition Faxes extra as actual service tak @ 18% IS : FOR BHIWADI...

1. Frieght & Forwarding Charges = Included.

2. Delivery = 7 days after received PO and Payment.

3. Validity = The offer is valid for 45 days.

4. Warranty 1 Year except plastic material, filter & membrane //GST
5. The estimated no. of days considered for supervision of erection and commissioning

P&F

DELIVERY

Mail Id: krishnachemicals A Near Central Market , Bhiwadi ( Ral 3010) RHB Housing Boa



## KRISHNA ORGANICS & CHEMICALS

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## Reverse Osmosis Plant

Capacity:

500 LPH

No. of Membranes:

2 nos.

Size of Membranes:

4040 (4" Dia., 40" long)

Make of Membranes:

Dow

MOC:

Polyamide

Membrane Housing size:

AS per design

Membrane Housing operating:

300 psi

Make:

UKL/Pentair

Housing MOC:

FRP

# NOTE: PUMPS FLOW RATE DEPENDS UPON HEAD (DECREASE THE HEAD INCREASE THE FLOWRATE

#### ANNEXURE - IIIS

## MISSLANOUS SCOPE OF SUPPLY

	TOTAL DESCRIPTION	CAPACITY/SIZE	QUANTITY	MOC/MAKE
SR. No.	ITEM DESCRIPTION		1 nos	55 309
1-	Stand	500ltr.		
2-	Vessel (MGF+ACF)	1054	2 nos	Pentair /
3-	Raw Water Pump	1 HP	1 nos	CRI
4-	High Pressure Pump	2-11	1 nos	CRI V
	Jumbo Housing	4x20"	1 nos	FRP
5-		4x20"	1 nos	
6-	Jumbo Spun	4080	1 nos	UKL/Pentair
7-	Membrane Housing		2 nos	Dow (Dupont)
8-	Membrane	4040	2 nos	Aster
9-	Rotameter		2 nos	- fortrative
10-	Multiport Valve	3/4"	2 nos	SS/Equiv
11-		0-7 & 0-21	2 1103	337 Equit
12-			1 nos	Manual
			1 nos	Aster/NXT
13-	Low Pressure Switch		1 nos	
14	- Floty	3m		
15	- Solenoid Valve	3/4"	1 nos	UPVC V
16	- Pipe and Fitting		1 lot 1 nos	Ol 4C
17	- Electricals		1 1105	

• 3/75 , RHB Housing Board Near Central Market ,Bhiwadi (Raj)-301019

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• Mail Id : krishnachemicals84@gmail.com



## KRISHNA

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## MGF (MULTI GRADE Filter)

Filter Media: 🗸

Media 2M3/H

Flow Rate:

MOC:

FRP

Make:

Pentair

Size:

(dia-10"&hight-54")

Operating pressure:

75 psi (5 kg/cm2)

Warranty:

1 Year

## ACF (ACTIVATED CARBON FILTER)

Filter Carbon:

Carbon

Flow Rate:

2M3/H

FRP

MOC:

Pentair

Make:

(dia-10"&hight-54")

Size: Warranty:

1 Year

#### Cartridge Filter

Filter:

4×20"{1 NOS CARTRIDGE HOUZING}

Flow:

5m3/hr

MOC:

FRP

Make:

NS Operating

Pressure:

1-3 kg/cm2

## Chemical Dosing Pump (RO Antisclant)

Pump capacity:

0-6 LPH@4 bar

Quantity:

01 Nos.

MOC:

PP

Make:

CLD/EDOSE.

Dosing Tank Capacity:

50 liter

Dosing Tank MOC:

**HDPE** 

#### RO High pressure Pump

Pump Capacity:

2.5m3/Hr@11 bar 🛆

2-11

Size:

1 Nos.

Quantity:

SS 304

MOC:

Make:

CRI

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Recovery of 70 % APPX, LIMITING CONDITIONS ON FEED WATER TO R.O. UNIT

Bacteria, Organic

Oil & Grease

Nil

Temp

< 40 Deg.C.

BOD

<1

COD

<3

Colour

Absent

Odour

Absent

Turbidity

<1 NTU

Silt Density Index

<3 NTU

Free Chlorine / Strong oxidizing

Nil Total

Iron

<0.1 mg/l

Heavy Metal

Nil

All limiting conditions must be observed during the plant operation for satisfactory performance throughout the membranes/plant life .Please consult enterprises for remedial measuresrequired, if any, if the limiting conditions are exceeded.

## Treated water Quality-RO PLANT

PH:

6.5 APPX.

TDS:

<50PPM

Total Hardness:

<10ppm

Capacity:

500 LPH > Hr/day)

Operation

<20PPM

chlorides:

Recovery %:

70% appx.

#### ANNEXURE - II

## TECHNICAL SPECIFICATION & SCOPE OF SULLY

Feed Pump

Pump Capacity:

- CRI 1 HP

Head:

06 MTR

Quantity:

01 Nos.

MOC:

MS

Make:

CRI



## KRISHNA

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Source of Water Bore well water

**Total Dissolved Solids** 

**Total Alkanity** 

Chloride

Sulphate

**Temporary Hardness** 

Permanent Hardness

**Total Hardness** 

Turbidity

Iron

Silica

1500 mg/ltr

ppm ppm

ppm

ppm

ppm mag

NTU

mg/ltr. mg/ltr.

#### ANTISCALENT DOSING

A/S shall be dosed in order to avoid any scale formation on RO membrane, thereby leading tolonger membrane life and avoid fouling problems, which may arise due to scaling. We are recommending dosage of 5 to 10 ppm of our Antiscalant.

#### R.O. Plant

#### a) Micron Filtration

The water from the above unit shall be passed through a Cartridge filter assembly with cartridgesof5 micronsnominal rating. This has been incorporated to carry on fine filtration before subjecting the water to RO Membranes. This will avoid choking of the membranes.

#### b) R.O. FEED WATER PRESSURISATION

The RO plant works on higher pressures because of the Osmotic pressures, therefore, the feed water RO is first pressurized by pumping it through a High pressure pump.

#### c) DESALINATION BY R.O.

Pressurized water from high pressure pump shall be fed to the RO Membranes held in RO Pressure Tubes, wherein there will be a rejection of the dissolved solids and the permeate you will get will be with reduced dissolved solids. We recommend you to go for R.O units with flow rate of and these units can deliver output of 450 LPH (15 hours operation Appx.) Recovery and quality of water from the system will varies based on your feed water characteristic sand as per your present raw water analysis report you can run thisunit with maximum



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M/S JINDAL ALUMINIUM LIMITED

Add: - SP-2/333, RIICO Industrial Area, Bhiwadi-301019

(Dist : Alwar) Rajasthan

SUBJECT: REVERSE OSMOSIS PLANT 500 LPH 70% RECOVERY

This is with reference to the discussion held with your good self-regarding your requirement of water treatment plant for RO drinking plant. We thank you very much for your kind interest in our range of products. We acknowledge with thanks the receipt of your enquiry for the above subject matter. We are also pleased to introduce ourselves as one of the leading company in the field of water Treatment, Filling systems and all other relevant machines and components. We have designed the plant as per your requirement and shall meet all the Indian standard norms for packaged drinking water. We have included all the necessary equipment to give you a well- engineered and reliable Water Treatment for Packaged Drinking Water. We have earned a high reputation in the industry for our quality, design and performance. Our technical expertiseis always at your disposal to assist you ju operating and maintaining systems for years to come. The en Closed bid index forms part of our detailed offer. We hope you will find our offer and business terms in the line of your requirement. Should you require any further clarifications/information we shall be glad to furnish the same.

In case you required any further clarification please feel free to contact us.

Thanking you and assuring you of our best services always.

#### ANNEXURE - I

**DESIGN SCHEME** 

BASIS1. Requirement - REVERSE OSMOSIS PLANT (RO) for Bore well Water- Water (RO Cap:-500 LPH)

2. Raw Water Parameters

Our Design and system assembling is entirely based on the following Raw / feed water data. Water analysis as provided by you or assume and design at 1500 ppm.

#### DESIGN AT RAW WATER ANALYSIS

Our Design and system manufacturing / assembling is entirely based on the following Raw /feed Water analysis detail as tested by you.

 3/75 , RHB Housing Board Near Central Market ,Bhiwadi (Raj)-301019 Mail Id: krishnachemicals84@gmail.com GST IN 08DIAPK5489L1ZN

Date:- 29-11-2022

as to so.



# Off. Add.: House No. H-154, Gali No.-14, Kunwar Singh Nagar, Near Budh Bazar Road, Nanglol, New Delhi-110041 E-mail: delhlenvironmentat@gmail.com, rkguptanv@gmail.com Website: www.delhlenvironmentat.com, Mob.: +91-9911775384. +91-9250655679

	PARTY AND RESIDENCE	PRICE IN RS.
SR. NO	DESCRIPTION	
1	Our Prices for Supplies & Installation	Rs. 1,38,000/-
	of Complete 500 LPH R.O. System	(Without Civil Work)
	With Standby Accessories as per	Front Catalog and
	Scope of Supplies mentioned in	The Cataly C
	earlier Annexure.	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
The a	bove prices are Ex Works Delhi and t	he following will be Extra
as un		(100)
Α	Packing and Forwarding	2 % on Basic
C	IGST Tax on Basic,	18 % on Basic
7	Transit Insurance	By Client
7 D		10% on Basic
E	Installation & Commissioning of All	10% on Basic
	Equipments	As applicable
F	Works Contract Tax	By Client
G	Transportation up to your site	A CHARLES AND A
H	Site Storage , Security Etc.	By Client
	DISCOUNT -P.C. COUPT	at alove.
	CONTRACTOR BHIWAE	FOR-JAL BWY.
	Transportation up to your site  Site Storage, Security Etc.  DISCOUNT FOR BHIWAE  SINCL SECURITY STORES  ON SET SINCL SECURITY SE	EXTRA
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R	eg. Address: Bolock, 8-023 Tup (Particular	The state of the s



No.-14, Kunwar Singh Nagar, Near Budh Bazar Road, Nanglol, New Delhi-110041 sa. : nouse No. n-194, Gail No.-14, Nunwar singn Nagar, Near Buan Bazar Hosa, Nangiol, New Deini-1 E-mail : delhlenvironmental@gmail.com, rkguptanv@gmail.com Website : www.delhlenvironmental.com, Mob. : +91-9911775384. +91-9250655679

Hereby we are pleased to give our proposal for the same assignment, which is as follows: -

## SCOPE OF WORK

Delhi Environmental Services shall design, supply and commission the R.O. Unit in the said assignment.

## BASIS OF DESIGN

Input Data:

Design Flow: 500 Liters/Hrs.

## Characteristics of Raw water

рН

7.0 - 7.5

Hardness

250 mg/Ltr. (Exp.)

Total Dissolved Solid

1500 mg/Ltr. (Exp.)

Output Permeate

6000 Ltrs./Day

Quality of make up water:

pH

-6.8 - 7.0

Total Dissolved Solid

- < 80 mg/l



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SPECIFICATION DETAIL:

	Supply material details for RO Unit Cap 1000 LPH (TDS: 1500)					
	Description	Model / Specification	Qty.			
S.No.			2 Nos.			
1	Raw Water Pump 100LPH / 30Mtr.	CRI / WILO	01 No.			
2	PSF(Vessel)	Pentair 1265	01 Lot.			
3	Sand Media	Differnet Grade	01 No.			
4	Multiport Valve	1.0" SMF	02 Nos.			
5	Distribution System	2 1265	01 No.			
6	ACF(Vessel)	Pentair 1265	01 Lot.			
7	Carbon	Carbon-800IV	01 No.			
8	Multiport Valve	1.0" SMF	02 Nos.			
9	Dictribution System	Donfos	01 Set.			
10	BB Housing With Spun Cartridge	Denfos Minlac	01 No.			
11	Low Pressure Switch	CRI/ WILO	02 Nos.			
12	High Pressure Pump 1000LPH	Denfos	01 No.			
13	High Pressure Switch	FRP 40X40 1 Ele.	01 No.			
14	Membrane Housing	TORY/HYDRONAUTIC	02 Nos.			
15	Membrane	TORT/TITE	01 No.			
16	Rotameter - Reject Water		01 No.			
17	Potameter - Product Water		01 No.			
18	Rotameter - Recirculation Water	Electrical	01 Set.			
19	(DICDACED)	SS 304	01 Set.			
2	Skid	33 30 1	01 No.			
2	1 Online TDS Meter	E-Dose_	01 No.			
2	2 Anti-Escalante Dosing Pump	Syntex/ Jindal	01 No.			
2	3 LLDP Chemical Dosing Tank	Syntexy sinder	02 Nos.			
2	4 Pressure Guage	1"	01 Lot.			
2	S.Valve	1	01 Lot.			
2	26 NRV	Astral U-PVC	01 Lot.			
	Pipe & Fitting (UPVC)	E-Dose	01 Set.			
	28 Dosing Pump & Tank		03 Mtrs			
	29 Floaty 3Mtr.					
	30 Installation & Commissioning					
	Expenses					



# DELHI ENVIRONMENTAL SERVICES

ISO 9801:2015 CERTIFIED COMPANY

Off. Add.: House No. H-154, Gali No.-14, Kunwar Singh Nagar, Near Budh Bazar Road, Nangloi, New Delhi-118041

E-mail: delhlenvironmental@gmail.com, rkguptanv@gmail.com Website: www.delhlenvironmental.com,

Mob.: +91-9911775384. +91-9250655679

## COMMERCIAL TERMS AND CONDITIONS

Delhi Environmental Services has carefully tested and standardized with selected world renowned products and components for its system manufacturing. Although we will provide a test certificate for complete system offered by us. In case if any special test certificate for individual product/component is required, by the client, it will be charged extra by us.

## PAYMENT TERMS:

50% Advance along with techno-commercial clear Purchase Order.

40% + IGST against Performa invoice prior to before dispatch the material.

10% after installation & commissioning.

## VALIDITY:

The offer is valid for 30 days.

## **DELIVERY**:

We shall complete supply of system as mentioned in our technical specification within **8 - 10** days from the date of receipt of Purchase Order along with advance payment. Delivery is subject to force majeure conditions.

## **GUARANTEE/WARRANTEE:**

The equipment supplied is guaranteed for a period of 12 months from the date of commissioning or beneficial operation of plant.

Equipment Guarantee is valid against defective workmanship and /or poor performance of the system only. Our liability is limited to repair or replace