

Date- 25.11.2022

Technical Proposal

EFFLUENT TREATMENT PLANT 5KL/DAY

PARRISH PHARMACEUTICALS PVT LTD

**Plot no- 50, Sector 8A IIE Sidcul Haridwar
(UK) Pin - 249403**



S N ENGINEERING WORKS

**Colnel's Enclave ,Near Bhawani Shankar Ashram
Roorkee - 247667 , Distt –Haridwar (Uttarakhand)
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QUANTITY OF WASTEWATER

The No. of hours to calculate the average flow has been taken as 20 hrs to ensure nearly continuous operation for the E.T.P.

Sr. No.	Type of Influent	Qty
a.	Effluent Waste Water	5 m ³ / day
b.	Average flow	0.75 m ³ / hr
c.	Peak Sewage flow	1m ³ / hr

RAW EFFLUENT CHARACTERISTICS

Sr. No.	Parameter	Unit	Value Effluent
1.	pH	-	6.5 – 7.5
2.	COD	mg/l	900
3.	BOD ₃ @ 27 °C	mg/l	600
4.	TSS	mg/l	550

TREATED EFFLUENT CHARACTERISTICS

Sr. No.	Parameter	Unit	Value
1.	pH	-	6.5 to 8.0
2.	COD	mg/l	< 100
3.	BOD ₃ @ 27 °C	mg/l	< 30

4.	TSS	mg/l	< 100
5.	OIL& Grease	mg/l	< 10

END USE OF THE TREATED EFFLUENT

The treated effluent will be used for the following purposes:

Reuse For Gardening and floor washing.

TREATMENT SCHEME

The ETP is of modular construction and the treatment process will consists of three stages.

Stage 1: Primary Treatment

Inlet chamber, Oil & waste, collection cum pumping sump

Stage 2: Secondary or biological treatment

Reaction tank , Secondary Clarifier

Stage 3: Tertiary treatment

Pressure Sand Filter, Activated Carbon Filter

Stage 4: Sludge Treatment

Sludge bed,

DETAIL OF CIVIL WORKS

S. No.	Description	Unit	Dimensions	No of Units	MOC
1.	Effluent Collection Tank	m	1.5M X 3M X 2M	1	RCC
2.	Oil & Waste tank	m	1M x 1M x 1M SWD	1	RCC
3.	Reaction tank	m	750 MM X750 MM x 1500 MM	1	M.S
4.	Secondary clarifier	m	750 MM X750 MM x 1500 MM	1	M.S.
5.	Sludge Drying Beds	m	1 x 1 x 1	3	BM
6.	Polishing tank	m	1.2 x 1.5 x 1.2	1	BM

LIST OF WORKING MECHANICAL EQUIPMENTS

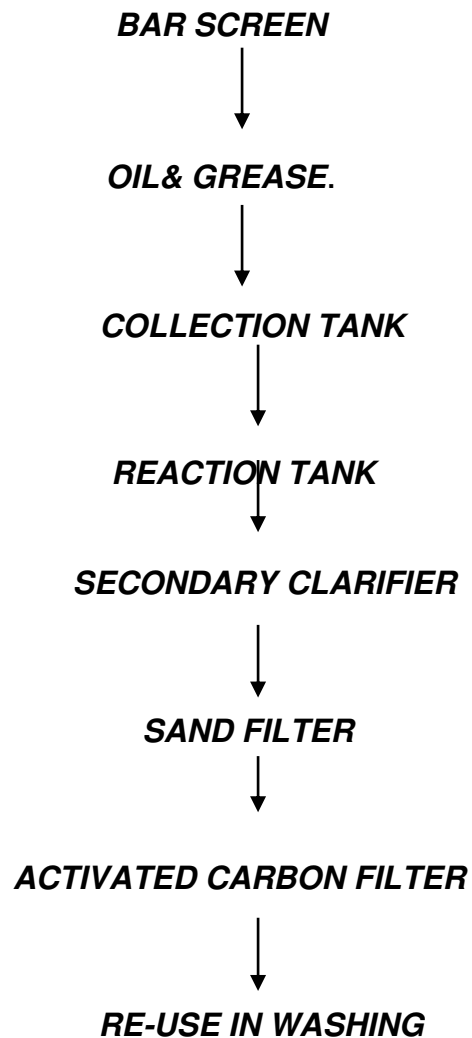
The list of the working mechanical equipments required for the ETP is given below.

Sr. No.	Description	Qty
1.	Effluent Lift Pump Set	2
2.	Reaction tank	1
3.	Tube settler	1
4.	Dosing pump	1
5.	FRP Pressure Sand Filter	1
6.	FRP Pressure Activated Carbon Filter	1
7	Water flow meter	1

8.	Air Blower	1
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SCHEME OF TREATMENT

VARIOUS SCHEME OF TREATMENT



Technical Specification:-

S.no	Description	Qty
1.0	Mechanical work	
1	FLACULATOR /REACTION TANK <ul style="list-style-type: none">• MOC- MS• Should be fitted with suitable inlet and outlet launder• Should be fitted with bio deck media• Make – S.N	1
2	<ul style="list-style-type: none">• TUBE SETTLER CLARIFIER• MOC-MS• Should be fitted with PVC tube settler size 1000mm , make MM Aqua• Should be fitted with suitable inlet and outlet launder.• MAKE- S.N	1
3	Pump-1HP Head-24M	1

	<ul style="list-style-type: none"> • Flow-3cum/hour • Model-KDS • Make- Kirlosker 	
4	Pump(For DMF and ACF) <ul style="list-style-type: none"> • Head-24M • Flow-3cum/hour • Model-KDS • Make-Kirlosker 	1
5	Sand and carbon Filter set MOC-FRP Should be fitted with valves & pipeline network. Should be fitted with pressure gauge and air vent valve. Should be fitted with filter media of different grade MAKE- S.N	1

6	Dosing Pump(1-5LPH) with fitting	2
7.	Plate Form & Ladder Make – S.N	
8.	PIPING WORKS	
	Supply, Laying, jointing , testing & commissioning of P.V.C. Pipe	
	Line of suitable size with all special fitting and valves etc. Complete interconnected pipeline MOC-UPVC	

9.	Water flow meter Make - Kranti	1
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10.	Air Blower MAKE – SHANTI / AKASH	1Nos.
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SAND FILTER

1. Flow Rate : 5.25 m³ / Hours
2. Working Pressure : 1-2 Kgs. / Cm²
3. Type of filter : Up-Flow with Back Wash Arrangement
4. Material of Construction: FRP
5. Media : Syno Crushes
6. Pables : 1", ½"

ACTIVATED CARBON FILTER

1. Flow Rate : 5.25 m³ / hours
2. Working Pressure : 1-2 Kgs. / Cm²
3. Type of filter : Up-Flow with Back Wash Arrangement
4. Material of Construction: FRP
5. Carbon : 200 Liters ("900 Iodine Value")
6. Carbon Size : +4 to + 6 Grades

S.N SCOPE OF SUPPLY

- | | | | |
|-----|--|----|--------|
| 1. | Reaction tank | = | 1 No |
| 2. | Secondary clarifier | = | 1 No |
| 3 | sand Filter | = | 1No |
| 4. | Activated Carbon filter | = | 1 No. |
| 5. | Effluent & filter Feed pump (1HP) | = | 2Nos. |
| 6. | Pipeline & accessories | = | 1 Lot |
| 7 | Erection of Mechanical equipment at site | = | 1 Lot. |
| 8. | Testing and commissioning of treatment Plant | = | 1 Lot. |
| 9. | Training to your personnel for a period of
Two week in pertaining the plant | = | 1 Lot. |
| 10. | Powder coated Electrical control Panel with energy meter,
ampere meter, volt meter, | = | 1 Nos |
| 11. | Water flow meter. | =. | 1Nos. |
| 12. | Air Blower. | =. | 1Nos. |

SECTION WISE OF THE EQUIPMENT MECHANICAL FOR
SINGLE UNIT.

S.No.	DESCRIPTION	QTY.
1.	<i>Non Clog centrifugal sludge pump Monoblock type Crompton Greaves make 1H.P.</i>	<i>1Nos.</i>
2.	<i>Reaction Tank, tube settler,</i>	<i>1 Nos.</i>
3.	<i>Sand Filter</i>	<i>1 Nos.</i>
4.	<i>Activated Carbon Filter</i>	<i>1Nos.</i>
5.	<i>Pipeline Valve/ Flanges Accessories etc. for complete system</i>	<i>1 Lot</i>
6.	<i>Erection and commissioning of plant</i>	<i>1 Lot</i>
7	<i>Automatic Chemical Dosing System (1 LPH to 5 LPH)</i>	<i>1 No.</i>
8.	<i>Electrical Penal</i>	<i>1 No</i>
9.	<i>Water flow meter</i>	<i>1Nos.</i>
10.	<i>Turbine Air Blower</i>	<i>1 Nos.</i>

CUSTOMER SCOPE OF SUPPLY

1. *All civil work*

PRICE PAYMENT TERMS AND CONDITIONS

TOTAL PRICE:

The total price mentioned in our proposal for package type effluent treatment plant Rs. 4,70,000/- (applicable tax will be apply at the time of P.O)

After GST 18 % --- 84600 /=

TOTAL AMOUNT -----554600 /-

PAYMENT TERMS:-

1. *50% as an advance along with order confirmation.*
2. *40% on Against Performa invoice.*
3. *10% after the suitable result for any other recognized laboratory.*
4. *GST Extra 18%.*
5. *Freight charge will pay by client.*

