



**SOLARA**  
Active Pharma Sciences

Communication Address :  
**Solara Active Pharma Sciences Limited**  
R.S.No. 33 & 34,  
Mathur Road, Periyakalpet  
Puducherry - 605 014, India  
Tel: +91 413 2654100.

Date: 26.09.2023

To

The Member Secretary,  
Puducherry Pollution Control Committee,  
Puducherry -5

Respected sir,

Sub: Submission of **Environment statement "FORM -V"** for the year 2022 – 2023.

With reference to the mentioned Subject, here with we are submitting the Environment statement " **Form – V** " for the year of April-2022 to March 2023.

This is for your kind information and record please.

Thanking you,

For Solara active pharma sciences Limited.,

**D. Krishnamoorthy**  
Factory Manager



**FORM-V**

**ENVIRONMENTAL STATEMENT**

Environmental statement (for the financial Year ending with 31<sup>st</sup> March 2023)

1. Name and address of the owner/  
Occupier of the industry  
Operation or process
- Poorvank Purohit  
Managing Director & CEO  
Solara Active Pharma Sciences Limited,  
R.S. No. 33 & 34 Mathur Road,  
Periyakalpet, Puducherry-605 014,  
India.
- ii. Industry category primary- (STC Code)  
Secondary- (STC Code)
- RED
- iii. Production category/Units
- Pharmaceutical - API
- iv. Year of establishment
- 1986
- v. Date of the last environmental  
Statement Submitted
- 26.09.2022

**PART-B**

1. Water consumption in m<sup>3</sup>/day

Domestic : 5 KL (Borewell)  
: 24 KL (STEW)  
Industrial : 105 KL (Borewell)  
Total : 110 KL (Borewell)

Sewage Treated Effluent water (STEW) purchased from PWD.  
Maximum quantity of 566 KLD as per CTO.

S.No	Name of products	Process water consumption per unit of products (KL)- During the previous year from April 2021 to March 2022.	Process water consumption per unit of products (KL)- During the current year from April 2022 to March 2023.
<b>Please Refer Annexure - I</b>			

Name of raw materials*	Name of products	Raw material consumption per unit of output –During the previous year from April-2021 to March -2022	Raw material consumption per unit of output – During the current year from April 2022 to March -2023
<b>Please Refer Annexure –II</b>			

*\*Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.*

### PART-C

Pollution discharged to environment/unit of output.

(Parameter as specified in the consent issued)

Pollutants	Quantity of pollutants discharged (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reasons
Water	No water pollutants are discharged to the environment as the effluent generated is treated in the ZLD Plant & recycled within the unit.		
Air	APC Measures. (Cyclone separator, Bag Filter available)	Standard prescribed By PPCC.	Nil

**PART-D****Hazardous Wastes**

(As specified under Hazardous wastes (management &amp; Handling Rules, 1989))

S.No.	Hazardous wastes	Total quantity During the current year from April-2021 to March-2022 (MT)	Total quantity During the current year from April-2022 to March-2023 (MT)
1	Waste Sodium Dichromate Solution	18452.52	20760.99
2	5.1. Spent lubricant oil	1.76	0.85
3	34.3 ETP Sludge	Nil	Nil
4	5.2. wastes /residues containing oil	Nil	0.72
5	20.2 Spent Solvents	706.62	898.28
6	20.3 Distillation Residues	43	48
7	28.1 Process Residues and Wastes	692.27	720
8	28.2 Spent catalyst/ Spent carbon	Nil	Nil
9	28.3 off specification products	0.207	Nil
10	28.4 Date Expired discarded and off specification drugs / Medicines	Nil	0.15
11	28.5/28.6 Spent Organic solvent	Nil	Nil
12	33.2 Sludge from treatment of wastewater arising out of cleaning / disposal of barrels / containers	Nil	Nil
13	33.3 Discarded containers/barrels/liners contaminate with HW/Chemicals	190.74	248.5
14	34.3 Chemical Sludge from wastewater Treatment	Nil	2.2
15	34.4 Oil and grease skimming residues	Nil	Nil
16	35.2 Spent Catalyst	Nil	Nil
17	35.3/28.3 Spent Carbon	16.6	53
18	35.3 chemical sludge from wastewater Treatment.	3958.59	3580.2

**PART-E**  
**Solids Wastes**

S.No.	Solids wastes	Total quantity During the current year from April 2021 to March 2022 MT	Total quantity During the current year from April 2022 to March 2023 MT
1	From Process (Fly Ash)	610	624
2	From Pollution Control Facilities	Nil	3.0
3	Quantity recycled or reused within the unit.	Nil	Nil

**PART-F**

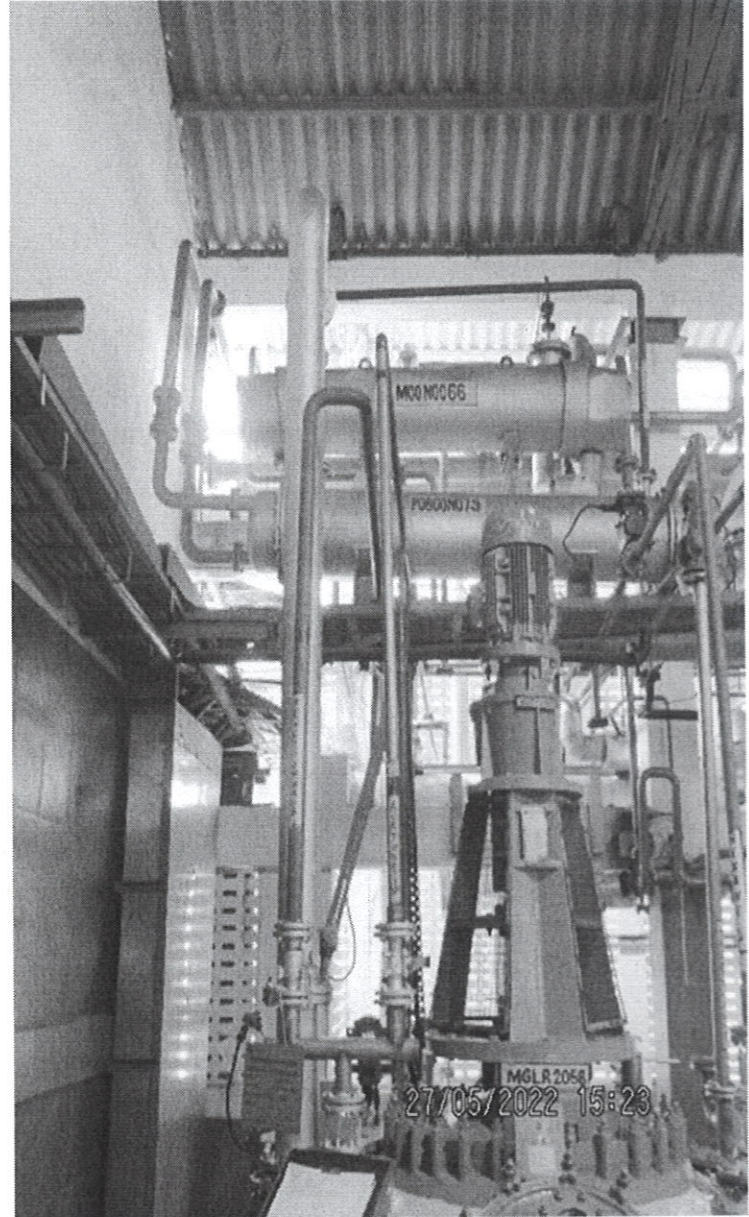
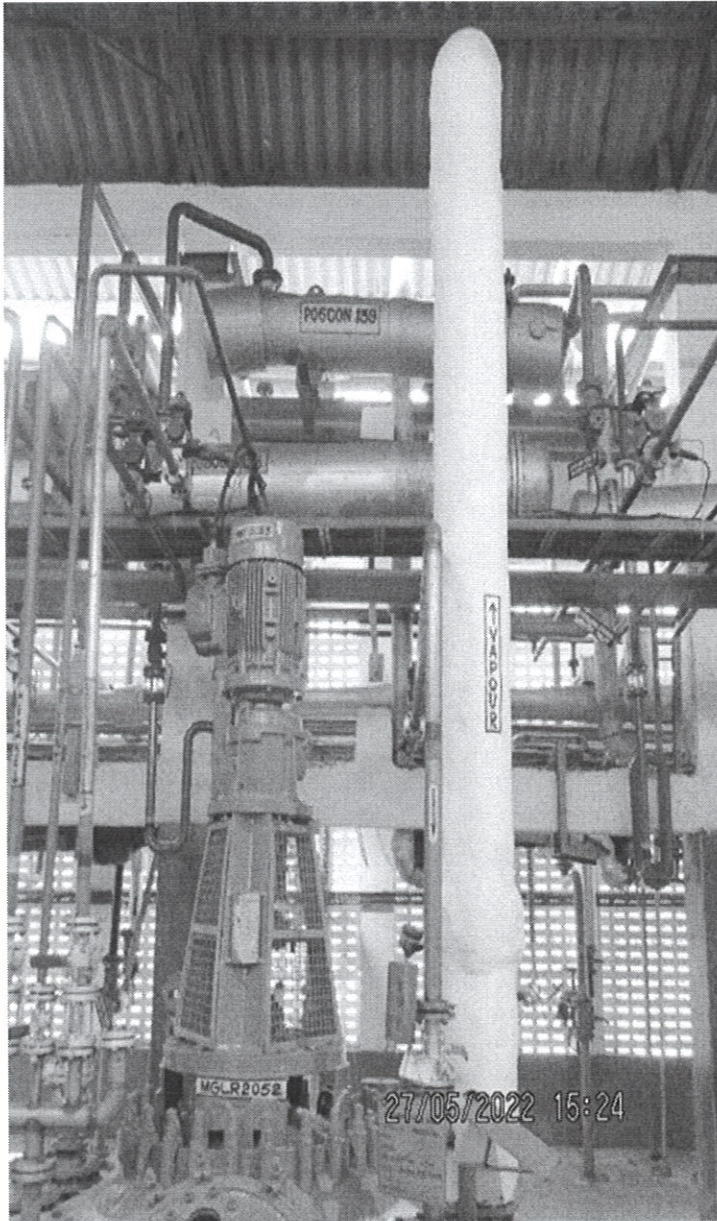
Please specify the characteristics (in terms of concentration and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Specification	Hazardous waste	Solid waste
Characteristics	<p>1.Process Wastes: Liquid / Tarry Residues.</p> <p>2.ETP Sludge: Solids/semi solids</p>	<p>Fly Ash:</p> <p>Solids</p>
Disposal	<p>Process Residues: Stored in HDPE barrels over impervious platform. under closed shed. Disposal to Co-Processing industry and recycle.</p> <p>ETP Sludge: Chemical sludge from wastewater treatment category no 35.3 disposal to co-processing industry/TSDF.</p> <p>Bio Sludge - Generated from Bio clarifier and sent to Thickener and followed by centrifuge and finally will get the Bio sludge disposal to TSDF</p>	<p>Fly Ash:</p> <p>Sold As manure</p>

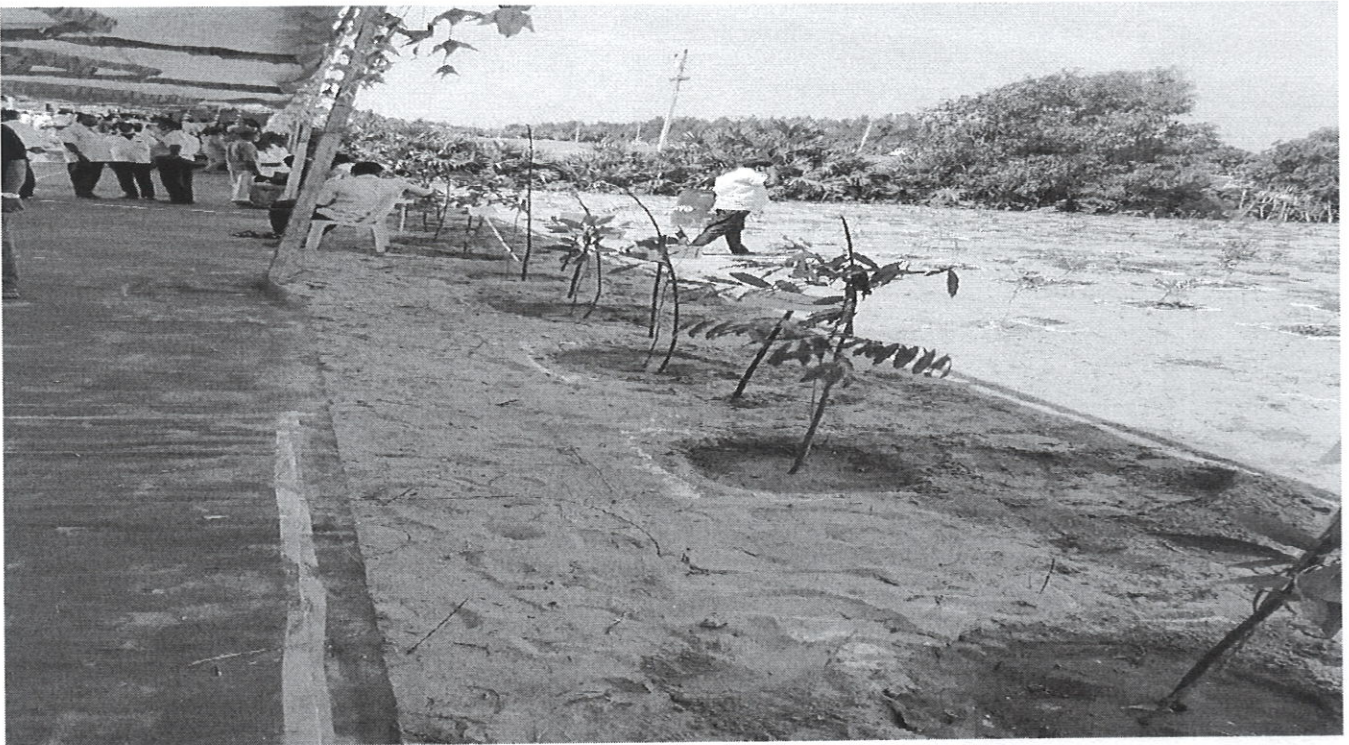
## PART-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production:

- All solvents process reactors are connected to condensers to avoid organic vapour losses and exposure.

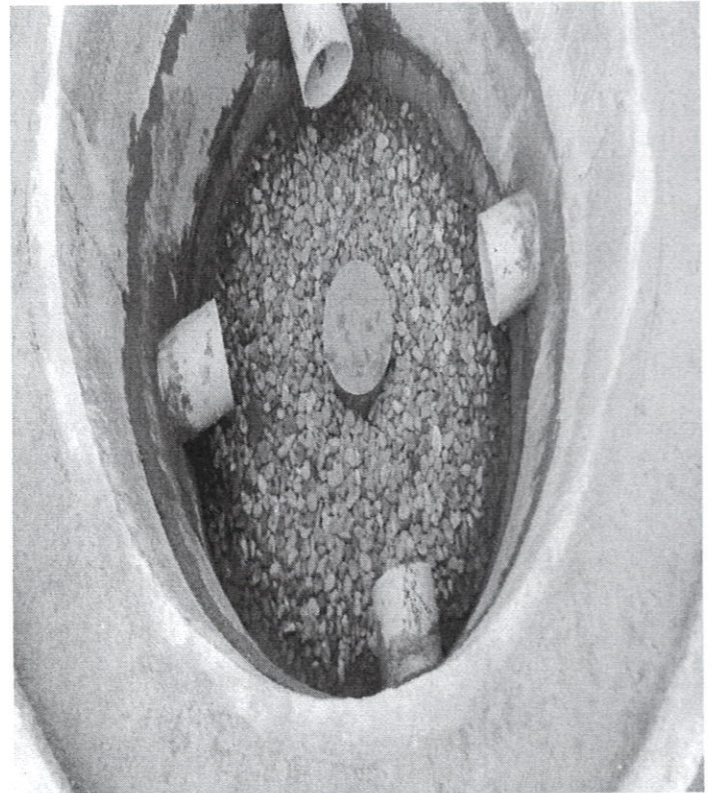


- Sapling were planted at “Ahad ka Amrit Mahotsav” for the 75<sup>th</sup> Independence Day celebration.





- Tsunami quarters Rainwater Harvesting pit provided for community usage.

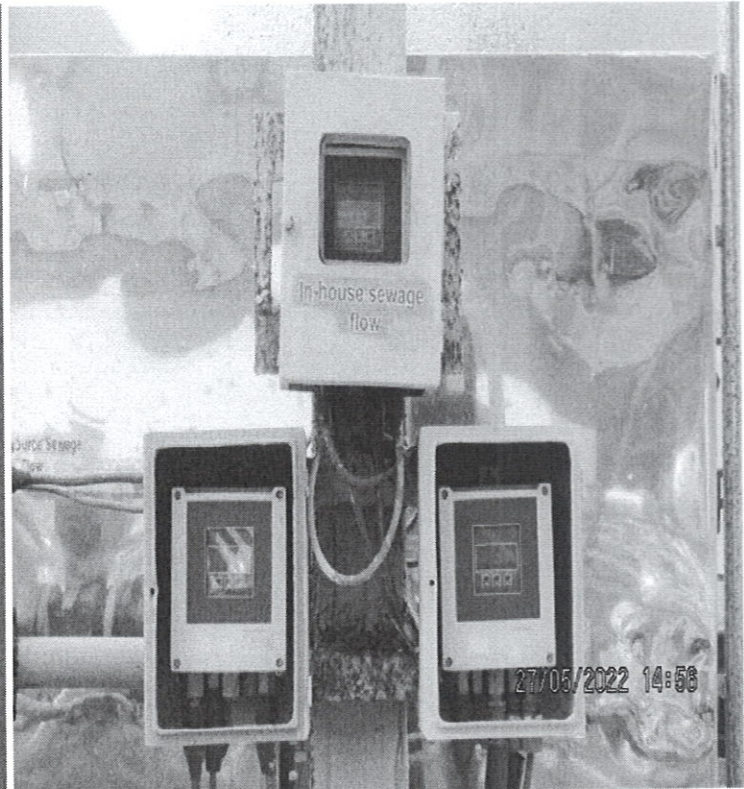
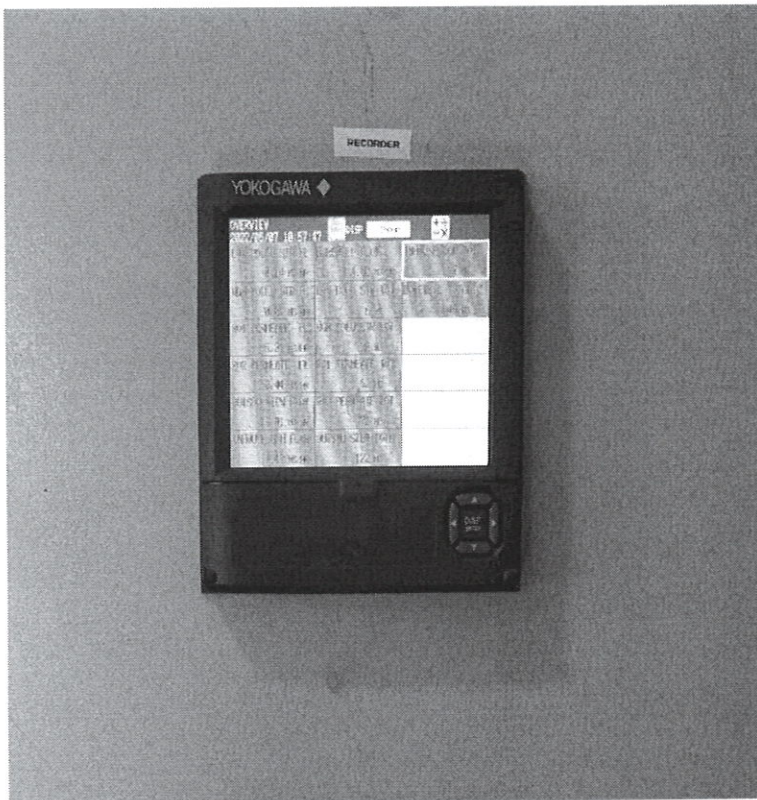


- Management system, Re- certification obtained for ISO 14001 : 2015 & ISO 45001 : 2018

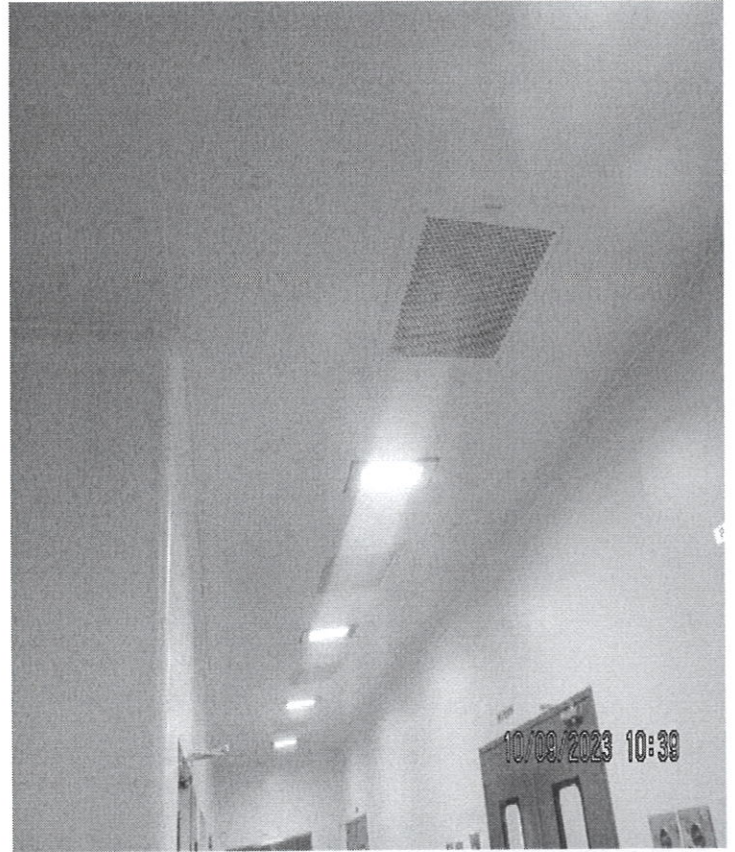
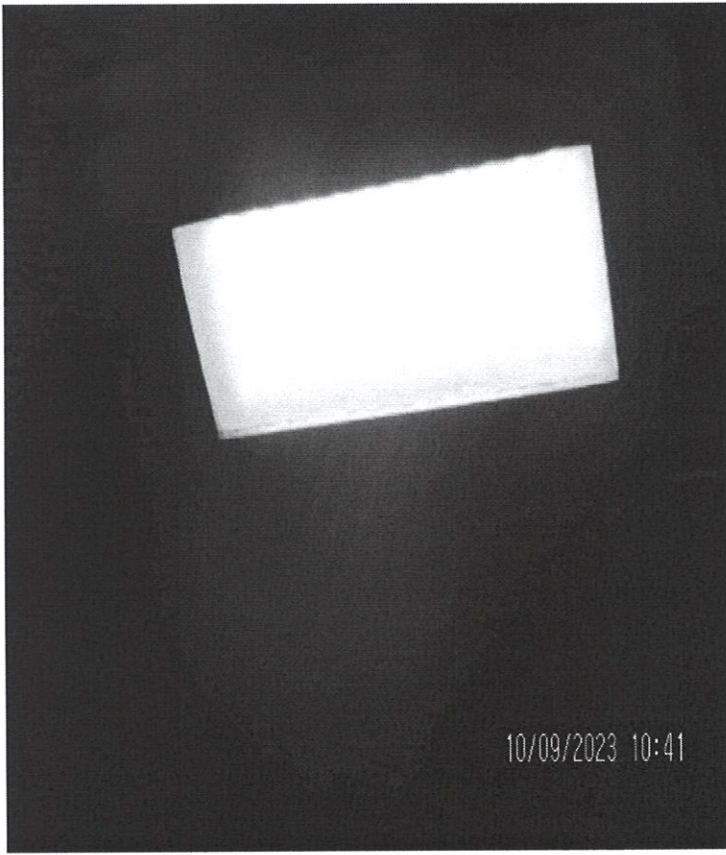




- Continuous online monitoring system (OCEMS) is connected to PPCC and CPCB.



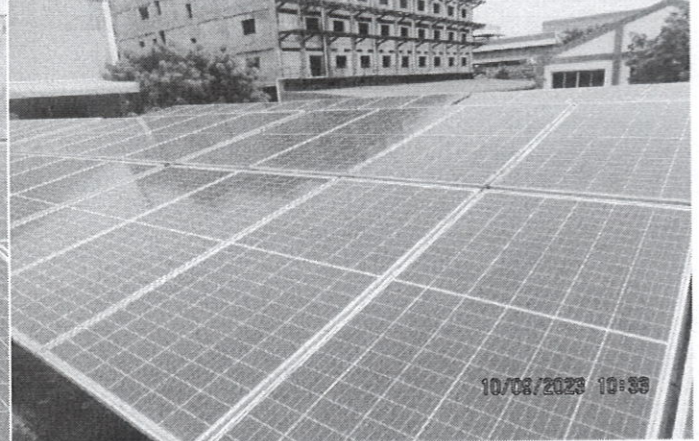
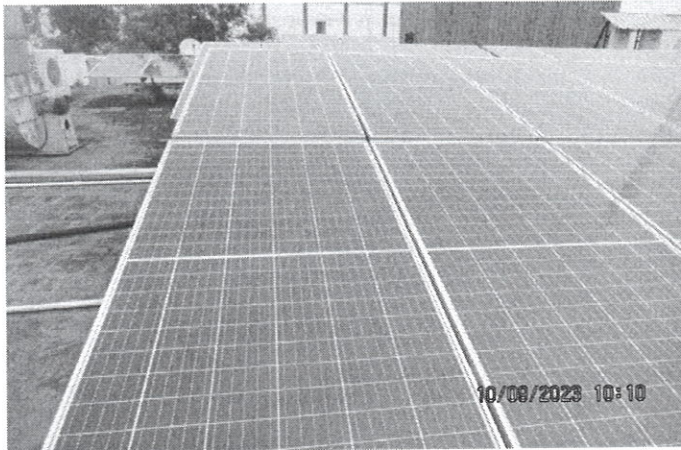
- The lights are changed with CFL to LED to reduce power consumption.

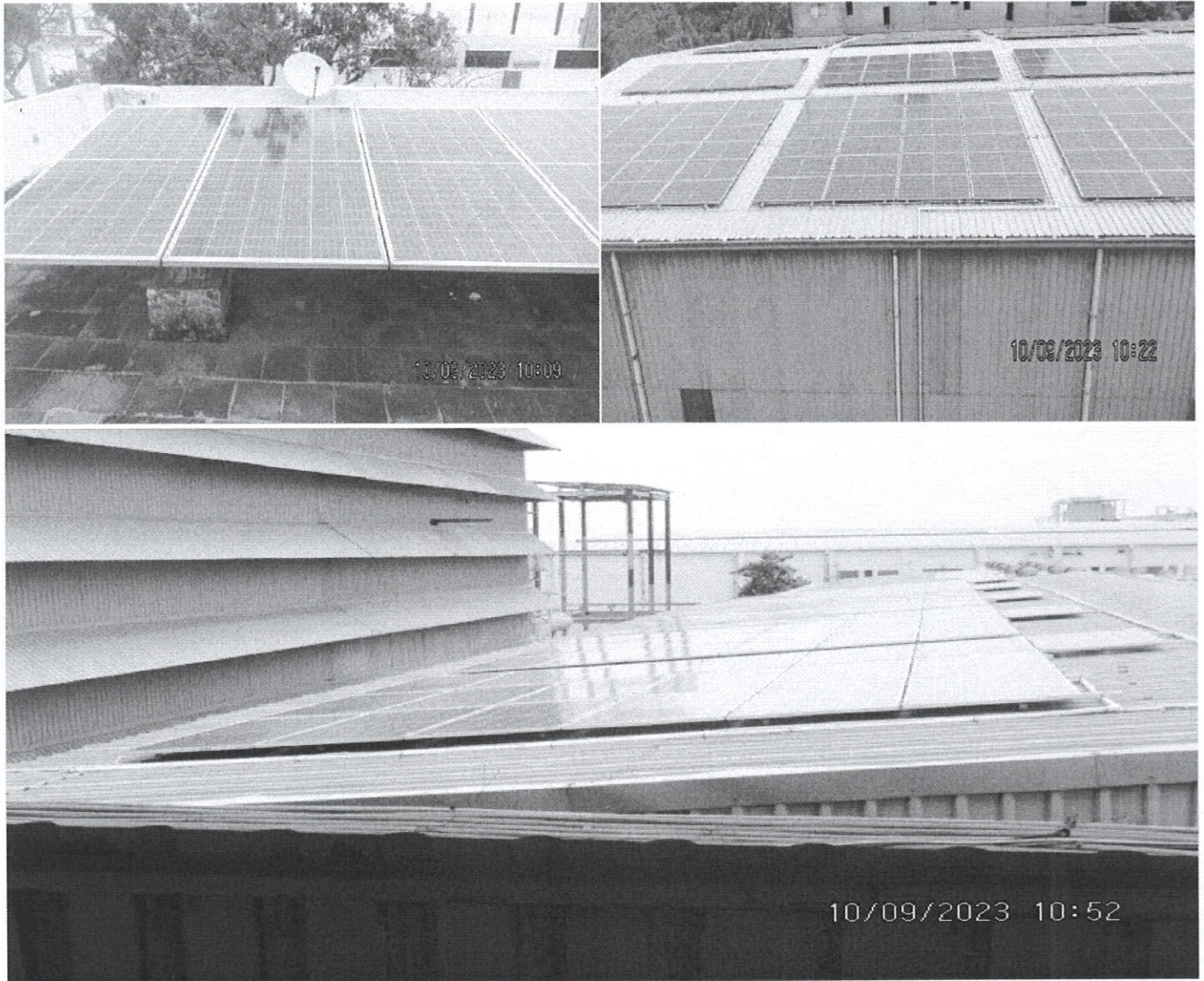


#### PART-H

#### Additional measures / investment proposal for Environmental protection including abatement of pollution:

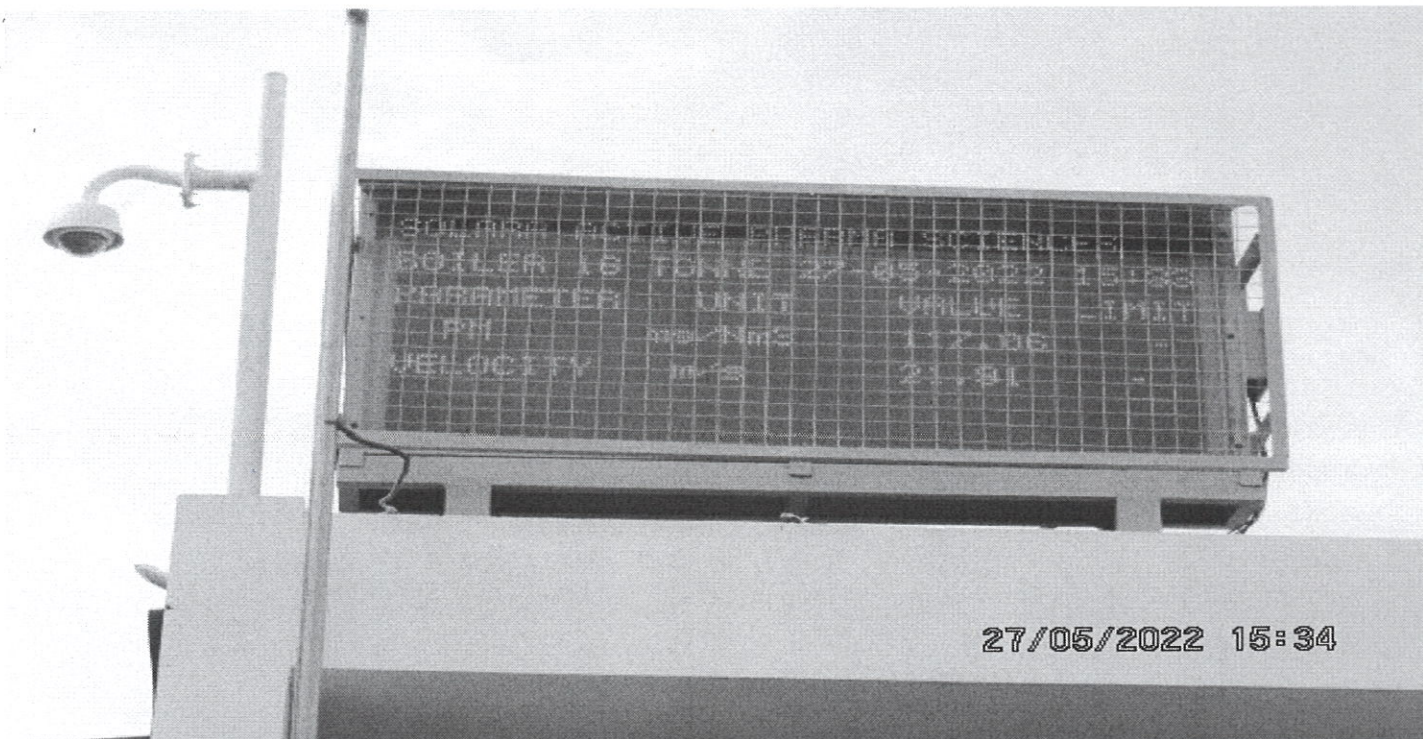
1. Sewage Treated Effluent Water (STEW) received from PWD and further treated in our ZLD-ETP system and reused to non-process operation.
2. Solar Power is installed in the Capacity of 360 KWP, All the Roof Sheet Solar Power Panel is Provided.





3. 1.8 MW Solar power enhancement plant planned, mutual agreement signed and copy of the agreement attached for your reference.
4. Hazardous waste details displayed in LED board 24\*7 in front our industry.





5. We are in progress of Installing Sludge Rotary Dryer to minimize the sludge disposal quantity using Flue gas from the boiler.

Flue gas at 140 Deg from boiler is sent to drying section for drying purpose. Flue gas from Boiler is heated from 140 deg C to 160 Deg C in a thermic fluid heat exchanger. Sludge Feeding is done at controlled rate. The sludge material and hot air come in indirect contact with each other and drying takes place. The moisture removed from the product is carried away by the exhaust air. feed material comes into agitator which breaks the lumps and keeps the material in floating condition. As the material particle size reduces and is dried, becomes light and gets conveyed with exhaust air. The exhaust gases are then passed through cyclone. The product is separated and collected at the bottom. The exhaust gases are further passed through a ventury scrubber. Clean air is then exhausted to the atmosphere. The entire operation of the plant is controlled through an Automation operating panel.

Purchase order raised. Project proposal will be completed in another 10 months period tentatively.



# Purchase Order

Solara Active Pharma Sciences Limited, 201, Deshpande, New Mumbai 400170 Tel: 9122-27892434 Fax: 9122-27892434

<b>Supplier Address</b> <b>MOJI ENGINEERING SYSTEMS LIMITED ( 0031009836 )</b> General Block, 83-B/15, MIDC BHOSARI, PUNE 411026 GSTIN: 27AABCM1797L1Z0 PAN : AABCM1797L Tel No: 9766640675 Fax No : Contact Person & No: - Email ID : pankaj.ekad@mojipune.com	<b>PO No</b> : 5500013842 <b>PO Date</b> : 30.05.2022 <b>PO Currency</b> : INR <b>Amendment No</b> : <b>Amendment Date</b> : <b>Your Quotation No.&amp; Date</b> : <b>Old Reference NO.</b> :
<b>Billing Address</b> Solara Active Pharma Sciences Limited API Puducherry R.S. No. 33 & 34 Mathur Road,Periakalpet  Puducherry 605014 Puducherry-INDIA GSTIN: 34AAYCS2093N1ZH PAN: AAYCS2093N Tel No:0413-2654100 Fax No:+91 4132655154	<b>Delivery Address</b> Solara Active Pharma Sciences Limited API Puducherry R.S. No. 33 & 34 Mathur Road,Periakalpet  Puducherry 605014 Puducherry-INDIA GSTIN : 34AAYCS2093N1ZH PAN : Tel No :0413-2654100 Fax No : +91 4132655154

We are pleased to place the order as per below mentioned price, terms & conditions.

Item No	Item Details	Quantity UOM	Unit Rate INR	Discount	Amount INR	Taxes INR	Total INR
10	- Thermic Fluid AIR HEATER HSN/SAC:	1,000 EA	750,000.00	0.00	750,000.00	IGST:18% 135,000.00	885,000.00
20	- DUCTING HOT AIR HSN/SAC:	1,000 LOT	630,000.00	0.00	630,000.00	IGST:18% 113,400.00	743,400.00
30	- AIR DISTRIBUTOR & Agitator assembly HSN/SAC:	1,000 EA	1,350,000.00	0.00	1,350,000.00	IGST:18% 243,000.00	1,593,000.00
40	- SPIN DUCT HSN/SAC:	1,000 LOT	900,000.00	0.00	900,000.00	IGST:18% 162,000.00	1,062,000.00
50	- CYCLONE SEPARATOR HSN/SAC:	1,000 SET	1,800,000.00	0.00	1,800,000.00	IGST:18% 324,000.00	2,124,000.00
60	- ROTARY VALVE HSN/SAC:	1,000 EA	150,000.00	0.00	150,000.00	IGST:18% 27,000.00	177,000.00
70	- DUCTING INTERCONNECTING & Powder HSN/SAC:	1,000 LOT	450,000.00	0.00	450,000.00	IGST:18% 81,000.00	531,000.00
80	- EXHAUST BLOWER WITH MOTOR HSN/SAC:	1,000 EA	1,125,000.00	0.00	1,125,000.00	IGST:18% 202,500.00	1,327,500.00
90	- WET SCRUBBER assembly HSN/SAC:	1,000 SET	2,025,000.00	0.00	2,025,000.00	IGST:18% 364,500.00	2,389,500.00
100	- Feed conditioner HSN/SAC:	1,000 LOT	1,035,000.00	0.00	1,035,000.00	IGST:18% 186,300.00	1,221,300.00

# Purchase Order

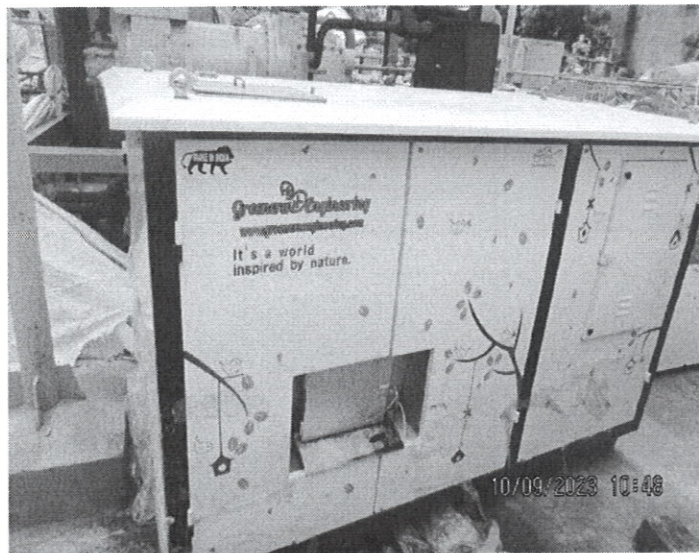
Solano Active Pharma Sciences Limited SSI, 201, Durgam Chauri, Hyderabad - 500011 Tel No:022 2794024 Fax No:022 2794204

PO Number: 5500013842  
PO Date: 30.05.2022

PO Version Number:  
PO Version Date:

Item No	Item Details	Quantity UOM	Unit Rate INR	Discount	Amount INR	Taxes INR	Total INR
110	- SCREW FEEDER HSN/SAC:	1,000 SET	735,000.00	0.00	735,000.00	IGST:18% 132,300.00	867,300.00
120	- Control panel HSN/SAC:	1,000 SET	750,000.00	0.00	750,000.00	IGST:18% 135,000.00	885,000.00
130	- Insulation and cabling HSN/SAC:	1,000 LOT	450,000.00	0.00	450,000.00	IGST:18% 81,000.00	531,000.00
140	- Cables and trays HSN/SAC:	1,000 LOT	450,000.00	0.00	450,000.00	IGST:18% 81,000.00	531,000.00
<b>Total</b>				<b>0.00</b>	<b>12,600,000.00</b>	<b>2,268,000.00</b>	<b>14,868,000.00</b>
Freight Charges							0.00
Loading and Unloading charges							0.00
Clearing & Forwarding							0.00
Storage Charges							0.00
Insurance							0.00
Development Charges							0.00
Others							0.00
<b>Grand Total</b>	<b>ONE CRORE FORTY EIGHT LAKH SIXTY EIGHT THOUSAND RUPEES ONLY</b>						<b>14,868,000.00</b>
ICICI LOMBARD GENERAL INSURANCE CO LTD Policy No:2002/169820707/03/000 dt.31.03.2023							
<b>Terms of Payment: See Remarks</b>							
<b>Incoterms:</b>							
<b>Incoterms Location:</b>							
<b>Remarks/Special Instructions:</b>							
Material Should Be Supplied as per the above mentioned specification number and manufacturer(s)							
Payment terms:							
40% advance along with the order.							
Balance against Profoma invoice prior to despatch but after final inspection							
<b>DELIVERY SCHEDULE:</b>							
The deliveries shall be with part shipment.							
Delivery starts on Ex works basis : 16 Weeks							
Delivery ending on Ex works basis : 18 Weeks							
Installation starts after : 16 Weeks (Estimated)							
Commissioning and Product Trials complete before: 22 Weeks (Estimated)							
Total duration of project from starting to completion of commissioning : 22 Weeks (Estimated)							
<b>Detailed Delivery Schedule</b>							

6. We procured Organic waste convertor for handling our canteen waste and Garden wastes generated at our premises. Equipment landed at site, erection, and commissioning work under progress.



#### PART-I

Any other particulars in respect of environmental protection and abatement of pollution.

- 2 x 16 TPH boiler's - bag filters changed to control the particulate matter emissions.
- In house LDAR study conducted by every three months to reduce VOC emission.
- Creating awareness of Environmental awareness and better environmental practices among employees, Visitors, and students through trainings, Etc.
- Life-cycle assessment (LCA) is a tool for measuring the environmental impacts associated with all stages of a product's life cycle, from raw material extraction to production, use, and disposal. It combines quantitative data from different sources to identify and assess the potential environmental effects of various activities. The main purpose of LCA is to enable businesses to reduce their environmental impact and improve their sustainability performance. We done LCA study for Ibuprofen following the International Standards Organisation (ISO) 14040 and 14044, which promote environmental management through life-cycle assessment (LCA).
- Limiting the presence of pharmaceuticals in the environment is an environmental priority for Solara. Typically, a fraction of the product manufactured is naturally excreted and may enter waterways or in air, following the treatment by a wastewater treatment plant. To a lesser extent, pharmaceuticals can enter the environment through improper disposal of product and from manufacturing wastewater discharges. We are committed to responsibly managing wastewater recycling in our site and assessing discharges from site to assure that the research, development, manufacture, use and disposal of our product does not adversely affect human health or the environment. Pharmaceuticals in

Environment (PiE) analysis study conducted for our ibuprofen product on all emissions and water recycle points states no remnants of ibuprofen found in environment.

- EcoVadis is a globally recognized assessment platform that rates businesses' sustainability based on four key categories: environmental impact, labour, and human rights standards, ethics, and procurement sustainability practices. Our Puducherry site awarded Bronze medal on EcoVadis, with 53 percentile ESG score complies the performance on several themes, considering Environment, human rights, ethics, and sustainable procurement.

ecovadis

EcoVadis Scorecard

www.ecovadis.com

## SOLARA ACTIVE PHARMA SCIENCES LTD (PUDUCHERRY SITE)

India | Manufacture of basic pharmaceutical products and pharmaceutical preparations

Risk country operations



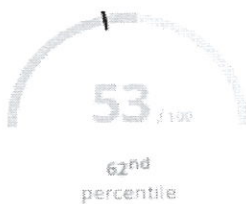
Publication date: 25 Jul 2022

Valid until: 25 Jul 2023

Sustainability performance

Insufficient 
  Partial 
  Good 
  Advanced 
  Outstanding 
 Average score

### OVERALL SCORE



### ENVIRONMENT



### LABOR & HUMAN RIGHTS



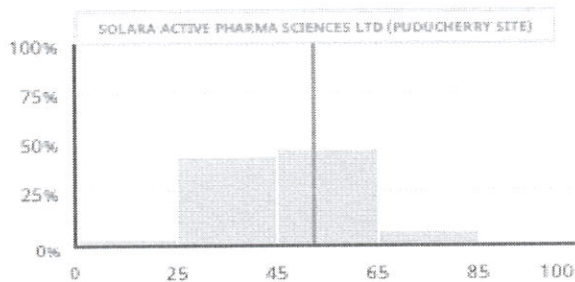
### ETHICS



### SUSTAINABLE PROCUREMENT

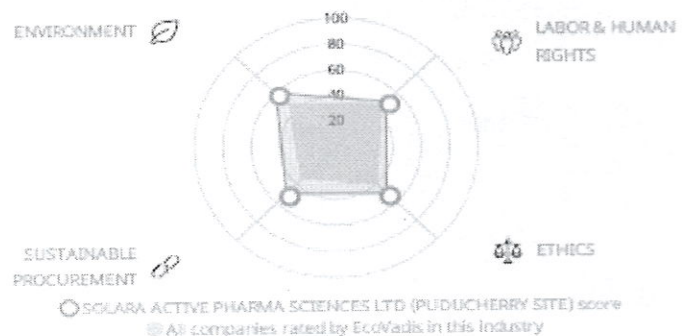


### Overall score distribution



● All companies rated by EcoVadis in this industry

### Theme score comparison





Annexure I

YEAR April 2021-March 2022		Production in MTA	3534
S. No	Raw Material Name	Total Raw Water Consumption in MT	Raw water Consumption /Mt of Product
1	Ibuprofen & Ibu derivatives	35361	10

YEAR April 2022-March 2023		Production in MTA	4154
S. No	Raw Material Name	Total Raw Water Consumption in MT	Raw water Consumption /Mt of Product
1	Ibuprofen & Ibu derivatives	35770	8.61

## Annexure II

RAW MATERIAL CONSUMPTION			
PRODUCTION: IBUPROFEN			
YEAR April 2021-March 2022		Production in MTA	3534 MT
S.No	Raw Material Name	Total Raw Material Consumption in MT	Raw Material Consumption /Mt of Product
1	Acetone	5287.61	1.5
2	Activated Carbon	17.13	0.005
3	Aldehyde	4283.64	1.21
4	Dilute Sulphuric Acid	10976.82	3.11
5	Hexane	6620.9	1.87
6	Hydrochloric Acid	803.18	0.23
7	IBAP	2744.2	0.78
8	Isopropyl Alcohol (IPA)	12861.62	3.64
9	Mono Chloro Acetate (MCA)	6015.15	1.7
10	Sodium Bicarbonate	1137.84	0.32
11	Sodium Dichromate	2583.57	0.73
12	Sodium Hydroxide	1606.36	0.45
13	Sodium Metal	508.68	0.14
14	Sulphuric Acid	1070.91	0.3

RAW MATERIAL CONSUMPTION			
Ibu Derivatives (Ibu DC, Lysine, Sodium, S+ Ibuprofen)			
YEAR April 2021-March 2022		Production in MTA	355.20 MT
S.No	Raw Material Name	Total Raw Material Consumption in MT	Raw Material Consumption /Mt of Product
1	Ibuprofen	1114.74	3.13
2	Isopropyl Alcohol (IPA)	5447.05	15.33
3	Toluene	1672.117	4.7
4	Sodium Hydroxide	38	0.1
5	DL. Lysine	228.02	0.64
6	Hexane	1249.02	3.51
7	Hydrochloric Acid	443.37	1.24
8	Methanol	212.81	0.59
9	SPBA	293.89	0.82

**Annexure II**

<b>RAW MATERIAL CONSUMPTION</b>			
<b>PRODUCTION: IBUPROFEN</b>			
<b>YEAR April 2022 - March 2023</b>		<b>Production in MTA</b>	<b>4154 MT</b>
<b>S. No</b>	<b>Raw Material Name</b>	<b>Total Raw Material Consumption in MT</b>	<b>Raw Material Consumption /Mt of Product</b>
1	Acetone	6216.25	1.50
2	Activated Carbon	20.1438	0.00
3	Aldehyde	5035.949	1.21
4	Dilute Sulphuric Acid	12904.62	3.11
5	Hexane	7783.68	1.87
6	Hydrochloric Acid	944.2405	0.23
7	IBAP	3226.155	0.78
8	Isopropyl Alcohol (IPA)	5237.387	1.26
9	Mono Chloro Acetate (MCA)	7868.67	1.89
10	Sodium Bicarbonate	1337.674	0.32
11	Sodium Dichromate	3037.307	0.73
12	Sodium Hydroxide	1888.481	0.45
13	Sodium Metal	598.019	0.14
14	Sulphuric Acid	1258.987	0.30

<b>RAW MATERIAL CONSUMPTION</b>			
<b>Ibu Derivatives (Ibu DC, Lysine, Sodium, S+ Ibuprofen)</b>			
<b>YEAR April 2022 - March 2023</b>		<b>Production in MTA</b>	<b>612 MT</b>
<b>S. No</b>	<b>Raw Material Name</b>	<b>Total Raw Material Consumption in MT</b>	<b>Raw Material Consumption /Mt of Product</b>
1	Ibuprofen	1915.56	3.13
2	Isopropyl Alcohol (IPA)	6933.96	11.33
3	Toluene	2876.4	4.7
4	Sodium Hydroxide	61.2	0.1
5	DL. Lysine	391.68	0.64
6	Hexane	2148.12	3.51
7	Hydrochloric Acid	758.88	1.24
8	Methanol	361.08	0.59
9	SPBA	501.84	0.82