

SPSCL/KSPCB (BGK)/2025-26/ 555
Date: 19th June 2025



Shri Prabhulingeshwar
Sugars And Chemicals Ltd

To,
Regional Office
Karnataka State Pollution Control Board,
Sector No-07, Bypass Road, Navanagar,
Bagalkot - 587102

Email: bagalkot@kspcb.gov.in

Sir,

Sub: Submission of Environmental statement for the financial year
2024-25 reg...

With reference to the above subject here with we are submitting Environmental
statement for the financial year 2024-25 in duplicate.

Thanking you

Yours faithfully

For **SHRI PRABHULINGESHWAR SUGARS AND CHEMICALS LTD**


DHARMALINGAYYA. J. GUDAGUNTI.
DIRECTOR





**SHRI PRABHULINGESHWAR SUGARS
&
CHEMICALS LIMITED SIDDAPUR**

ENVIRONMENTAL STATEMENT FORM-V
(See rule 14)

*Environmental Statement for the financial year
ending with 31st March 2025*

PART -A

1	Name and Address of the owner/ Occupier of the industry	:	SHRI JAGADEESH. S. GUDAGUNTI CHAIRMAN AND MANAGING DIRECTOR SHRI PRABHULINGESHWAR SUGARS & CHEMICALS LIMITED At/PO: Siddapur Taluk: Jamkhandi, District: Bagalkot. PIN: 587301
2	Production capacity	:	12000 TCD of Sugarcane Crushing & 55.50MW Hour of Power Generation
3	Year of Establishment	:	1999
4	Date of last environment statement submitted	:	17-9 -2024

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PART-B
Water and Raw Material Consumption

(1) (a) Water Consumption m³/d

Source	During the year 2024-25	During the year 2023-24
a) Process	10	10
b) Cooling & Boiler Feed	525	500
c) Domestic	70	70
TOTAL	605	510
CPU Condensate		
Treated in CPU	2548	2895
Used for Sugar process	900	1200
Used for RO Plant (i.e., Boiler feed)	1210	450
Co-Gen Cooling tower makeup	255	650
Used for Agricultural use	183	595

* All quantities in Kilo Liter.

NOTE: In the sugar process, we are not consuming any raw/fresh water. For the sugar unit, condensate-treated effluent is used. The above data shows the consumption of fresh water for Boiler feed-water makeup and domestic only.

(b) Water consumption per unit of output: Water consumption per unit of Product in m³/MT

Name of the product	During the year 2024-2025	During the year 2023-24
Crushing days	140	160
Sugar	0.56	0.43

NOTE: The water consumption per unit of output is calculated based on the daily average sugar produced. The industry is continuously achieving the less than 100 liters per MT of cane crushed as per the EP Rules vide Notification No. GSR. 35 (E) 14.01.2016 by recycling the excess condensate available from cane. Also, we are complying with the sugar plant effluent discharge standards with respect to effluent quantity generation and the equality of discharge standards as stipulated in EP Rules vide No G.S.R 35 (E) 14.01.2016. OCEMS

for the treated effluent is provided the one month data is attached as sample
Annexure IA.

The Number of working days and production details are enclosed as
Annexure-IB

2) Raw Material Consumption:

Names of raw materials	Name of product	Consumption of raw materials (in MT/MT) per unit of sugar output.	
		During the year 2024-25	During the year 2023-24
a)sugar cane	Sugar	10.74	10.63
b) Lime		0.131	0.133
c) Sulphur		0.056	0.053
d) Caustic soda		0.000851	0.000651

PART-C

Pollution Generated

(Parameters as analyzed by III rd party enclosed)

Treated water Quality:	Annexure-II
Stack Monitoring Reports:	Annexure-III
Ambient Air Quality Monitoring:	Annexure-IV
Noise level monitoring reports:	Annexure- V

PART-D

Hazardous Waste [As specified under Hazardous Wastes Management Handling & Trans-boundary Movement Rules, 2008.

Hazardous wastes	Total Quantity (liters)	
	During the year 2024-25	During the year
a) From process	NIL	Nil
b) From pollution control facilities	NIL	Nil
c) Used oil from DG sets & compressors (category No. 5.1)	200	330

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**PART-E
SOLID WASTES**

Waste Source	Total Quantity (MT)	
	During the year 2024-25	During the year 2023-24
a) From process (By-products)		
i) Bagasse	501928	570115
ii) Press mud	61288	69533
iii) Molasses (B Heavy)	991310	95581
b) From pollution control facility		
ETP sludge	30	20
c) Quantity recycled or reutilized within the unit		
1) Bagasse as boiler fuel	335170	370115
2) Solid (Boiler Ash)	5027	5552
ii) Press mud	61288	69533
iii) Molasses	991310	95581
d) Disposed	NIL	NIL

Note: Boiler ash, Press-mud, and ETP sludge are given to M/S Siddapur Distilleries Ltd for compost manufacturing along with their spent wash. The Boiler Ash and Press-mud generated are transported through Belt conveyors.

PART-F

- Please specify the characteristics (in terms of concentration and quantum) of hazards as well as solid wastes and indicate disposal practices adopted by both these categories of wastes.

1) Hazardous Waste:

The hazardous waste generation is from DG sets and compressors, this is in the form of used oil and is classified under category No 5.1 according to The Hazardous Wastes (Management, Handling, and Trans-boundary Movement) amended rules 2016, the Hazardous waste generated is stored securely in sealed barrels within the premises and used as a lubricant for conveyors, it is used for chain-links etc. for lubricating purpose within the premises / if in excess it will be sold to authorized used oil recyclers approved by KSPCB.

2) Solid Waste / By-products

All the Bagasse produced is used as fuel in boilers for the generation of steam and electricity. Characteristics of Bagasse is available in **Annexure VI**

The generated molasses is sold to M/s Siddapur distilleries Limited as raw material for the manufacture of rectified spirit/Ethanol. Characteristics of Molasses is available in **Annexure VI**

The press mud contains micro-nutrients essential for plant growth. The Press-mud, boiler ash ETP sludge and spent wash are mixed in a scientific

manner. The mixture is further subjected to composting by M/s. Siddapur Distilleries Ltd. This composted manure is sold to the member and farmers at a nominal cost. The factory also uses this manure for its own estate. The manure because of its rich nutrient value helps in a better yield of sugarcane. Characteristics of Press mud are available in **Annexure VI**.

PART-G

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

(A) Impact of pollution Abatement on conservation

Impact of the pollution abatement that could be identified is presented below along the activity responsible for the same:

- **Reduced water consumption**

In Condensate Polishing Unit (CPU) to we are treating the excess vapor condensate generated during the sugar process. We are consuming this CPU water for various applications in the process such as Co-Gen Cooling tower makeup, for Mill bearing cooling, Sulphur burner, Vessel cleaning & RO plant feed water etc... utilization of CPU treated condensate water reduced raw water consumption to zero. Such regular practices by the industry helped to achieve the CREP guidelines.

- **Ambient Air Quality**

Electrostatic precipitators are installed on all the boilers for controlling the suspended particulate matter in the flue gas. This ensures good ambient air quality in and around the factory premises.

- **Nutrient value of press-mud**

The industry educated its member farmers regarding the optimum usage of water, fertilizers, and composted manure. This resulted in less usage of inorganic fertilizers and a higher yield for better-quality.

(B) Effects of pollution Abatement on the Cost of Production:

The total expenditure incurred on the installation and maintenance of ETP and air pollution control measures is around **Rs 66.34,515 /-** for the year 2024-25. Expenditures details are enclosed as **Annexure VII**

- **Installation of Online monitoring system**

We installed the online monitoring systems for Treated effluent to measure pH, BOD, COD, TSS and Flow, as per CPCB/KSPCB directions. The generated data are regularly uploaded to CPCB/KSPCB servers around the clock. The monitored date is available in **Annexure II B**

PART-H

- Additional measures/investment proposal for environment including abatement of pollution/prevention of pollution.

The company has improved manufacturing discipline, installed quality systems of proper standards, and adopted quality management. Excellent

house keeping and preventive maintenance are implicit therein. All these practices have lead to a significant reduction in quantity of wastewater.

Raw material consumption other than sugarcane is also reduced during the season compared to last season.

Waste reduction and material conservation are trust areas and such schemes are not only adopted but encouraged.

We are consuming almost all the cooled and treated vapor condensate generated during the process for various applications, such as Co-Gen Cooling tower makeup water, for various cooling applications like Mill bearing, Sulphur burner, Vessel cleaning, etc We are not using any fresh water for the process. To treat the Excess condensate, we have a Condensate polishing unit (CPU) nearby ETP. We are using this treated condensate as raw water for RO plant, further it will be used as boiler feed water.

We have constructed metallic collection pits to recover spillage juice, sugar material which is leaking and going for the drains. This has reduced organic load in the effluent, BOD or COD concentrations in the effluent is reduced and helps to operate the ETP smoothly as the shock loads are reduced.

The company is aware of the occupational health and is further providing regular medical check ups, first aid centers and ambulance etc... We are very much concerned about environment and we have celebrating environment day every year without fail.

We are adopting method of Reduce, Reuse, and Recirculate available water in such a way that the quantity of effluent is kept minimum. Also we are using cooled vapour condensate in cooling towers in place of raw water. We are planning for more conservation of energy and water for the coming crushing seasons.

The Industry has got ISO 14001:2015 EMS certification for the manufacturing and supply of White Crystal Sugar.

The Industry has also FSSC 22000 V 6.0 FSMS certification for the Manufacture and supply of White Crystal Sugar.

PART-I

- Any other particulars for improving the quality of the environment.

The industry has planted various trees like Mango, Neem, Acacia; Eucalyptus etc. (Around 18,400 plants) in it own premises covering an area of 30 acres. We utilized all the treated effluent and spray pond overflow for irrigating this. The factory is also growing sugar cane over an area of 40 acres using the treating effluent. Plantation details enclosed as **Annexure VIII**



DHARMALINGAYYA. J. GUDAGUNTI

DIRECTOR

**SHRI PRABHULINGESHWAR SUGARS
& CHEMICALS LTD SIDDAPUR**

Annexure IA
OCEMS Data

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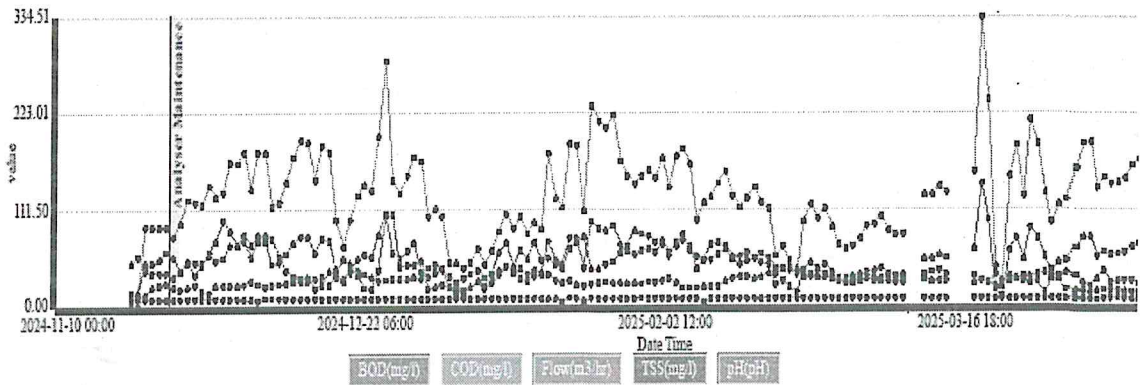
ETP-daily - Average Data

Average Report

Shri Prabhulingeshwar Sugars And Chemicals Ltd, Bagalkot

Created By:- SPSAC, Created At:- 2025-04-29 15:54:27

From : 2024-11-10 00:00, To: 2025-04-28 00:00



Average Report

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Annexure IB
Working of the factory

SI. No.	Particulars	During the year 2024-25	During the year 2023-24
1	Working days for the season	140	160
2	Total sugarcane crushed during the season(MT)	1761150.882	2036124.557
3	Total Sugar Produced (MT)	149410	188795
4	Power Generation MW	115403.650	119964.876
5	Daily average of cane crushed (MT)	12579.649	12725.77
6	Daily average of sugar produced (MT)	1067.21	1179.96

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Annexure II (A)
Third party analysis reports
Treated Effluent

Parameters	Color	Odor	pH	BOD	TDS	TSS	Oil & Grease
Units	....	....	...	mg/liter	mg/liter	mg/liter	mg/liter
Limits	Not specified	Not specified	6.50-8.50	100 max	2100 max	100 max	10 Max
April 2024	Industry was not in operation (Off season)						
May 2024							
June 2024							
July 2024							
August 2024							
September 2024							
October 2024							
November 2024	Colorless	Agreeable	8.17	BDL	2226	BDL	BDL
December 2024	Colorless	Agreeable	8.43	86.2	1856	92	BDL
January 2025	Colorless	Agreeable	7.93	24.88	2026	20	BDL
February 2025	Colorless	Agreeable	7.82	26.83	1956	25	BDL
March 2025	Colorless	Agreeable	7.84	28.89	1820	21	BDL
M/s Shri K N Kulkarni NICHROME TESTING LABOROTARY 179 2 nd Main Narayanpur Dharwad 580008 Karnataka				<u>Recognitions/Accreditations</u> MoEF & CC, New Delhi ISO/IEC17025:2017 (NABL TC 6990) ISO: 9001:2015, ISO45001:2018 FOSTAC-FSSAI, AGMARK.			
BDL: Below detection Limit							

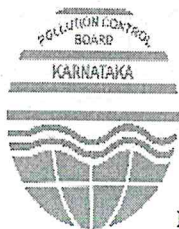
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Annexure II (B)

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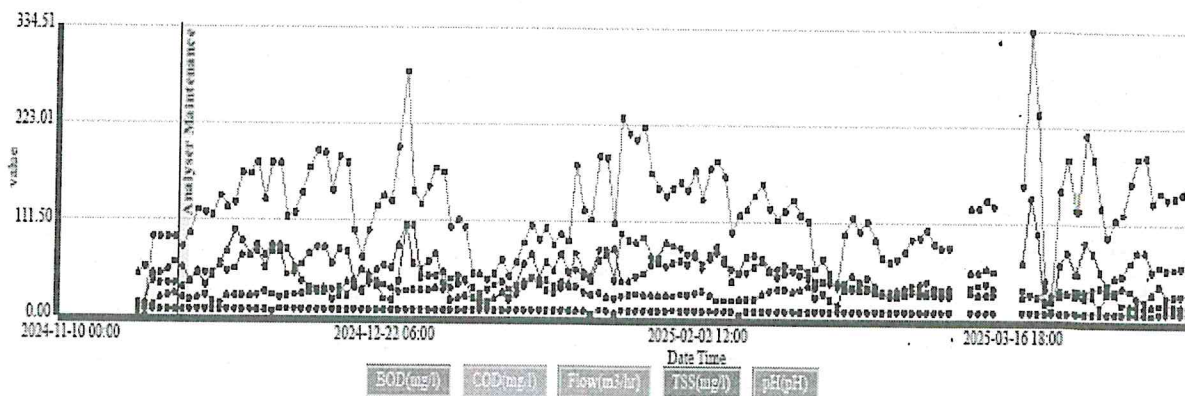
Average Report

Shri Prabhulingeshwar Sugars And Chemicals Ltd, Bagalkot

Created By:- SPSAC, Created At:- 2025-04-29 15:54:27

From : 2024-11-10 00:00, To: 2025-04-28 00:00

ETP-daily - Average Data



Average Report

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Annexure III
Third party Boiler Stack Monitoring reports

a) Boiler Stack reports

Stack No I					
Stack Height: 54 m		Stack Dia: 3.25 m		C S Area: 7.07 Sqm	
Fuel Used: Bagasse		Boiler capacity: 60 TPH			
APC: Electro Static Precipitator (ESP)					
Flue gas Parameters	Temp	Velocity	SPM	SOx	NOx
Units	Deg ⁰ C	m/s	mg/Nm ³	mg/Nm ³	mg/Nm ³
Limits (CFE-Max)	.....	.....	115.00	.....	.....
April 2024 to October 2024Unit not in operation due to offseason					
November 24	130	9.27	44.5	17.2	32.7
December 24	162	9.36	42.1	16.6	47.9
January 25	135	7.06	43.7	13.52	31.75
February 25	110	9.04	45	9.09	29.61
March25	130	7.19	52.1	19.28	39.72
M/s Shri K N Kulkarni NICHROME TESTING LABORATORY, 179 2nd Main Narayanpur, Dharwad 580008 Karnataka			Recognitions/Accreditations MoEF & CC, New Delhi ISO/IEC17025:2017 (NABL TC 6990) ISO: 9001:2015, ISO45001:2018 FOSTAC-FSSAI, AGMARK.		

Stack No II					
Stack Height: 74 m		Stack Dia: 4.23 m		C S Area: 7.07 Sqm	
Fuel Used: Bagasse		Boiler capacity: 60+135 TPH			
APC: Electro Static Precipitator (ESP)					
Flue gas Parameters	Temp	Velocity	SPM	SO x	NO x
Units	Deg ⁰ C	m/s	mg/Nm ³	mg/Nm ³	mg/Nm ³
Limits CFE- (Max)	.....	.....	115.00	.....	.....
April 2024 to October 2024 Unit not in operation due to offseason					
November 22	145	9.45	48.1	20.1	33.9
December 22	168	9.55	47	18.1	48.9
January 23	140	7.36	47.45	17.51	39.87
February 23	149	9.84	49	9.21	37.18
March 23	130	7.19	59.1	19.2	37.84
M/s Shri K N Kulkarni NICHROME TESTING LABORATORY, 179 2 nd Main Narayanpur, Dharwad 580008 Karnataka			Recognitions/Accreditations MoEF & CC, New Delhi ISO/IEC17025:2017 (NABL TC 6990) ISO: 9001:2015, ISO45001:2018 FOSTAC-FSSAI, AGMARK.		

Annexure IV
Ambient Air Quality Monitoring
A) Station: Near Main Gate

Month	PM 10	PM 2.5	SOx	NOx
Units	mg/Nm3	mg/Nm3	mg/Nm3	mg/Nm3
April 24				
May 24	Industry was not in operation (Off season)			
June 24				
July 24				
August 24				
September 24				
October 24				
November 24	84.9	38.6	5.88	10.9
December 24	89.45	49	6.66	11.17
January 25	87.22	35.21	5.34	11.12
February 25	80.6	29.62	5.33	9.14
March 25	87.18	38.1	4.35	10.08
M/s Shri K N Kulkarni NICHROME TESTING LABORATORY 179 2 nd Main Narayanpur Dharawad 580008 Karnataka			<u>Recognitions/Accreditations/Certifications</u> MoEF & CC, New Delhi (F.NO Q-15018/34/2015/CPW), ISO/IEC17025:2017 NABL -ACCREDITED, ISO: 9001:2015 OHSAS 18001:2007	

B) Station: Near Store

Month	PM 10	PM 2.5	Sox	NOx
Units	mg/Nm3	mg/Nm3	mg/Nm3	mg/Nm3
April 24				
May 24	Industry was not in operation (Off season)			
June 24				
July 24				
August 24				
September 24				
October 24				
November 24	78.2	30.2	6.19	9.18
December 24	79.93	45.32	5.71	11.91
January 25	84.96	32.04	4.58	10.58
February 25	82.96	27.15	5.8	9.86
March 25	80.69	30.15	4.87	10.18
M/s Shri K N Kulkarni NICHROME TESTING LABORATORY 179 2 nd Main Narayanpur Dharawad 580008, Karnataka			<u>Recognitions/Accreditations</u> MoEF & CC, New Delhi ISO/IEC17025:2017 (NABL TC 6990) ISO: 9001:2015, ISO45001:2018 FOSTAC-FSSAI, AGMARK.	

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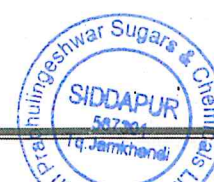
c) Station: Near Effluent Treatment Plant

Month	PM 10	PM 2.5	SOx	NOx
Units	mg/Nm3	mg/78.Nm3	mg/Nm3	mg/Nm3
April 24				
May 24	Industry was not in operation (Off season)			
June 24				
July 24				
August 24				
September 24				
October 24				
November 24	76.1	29.4	5.84	11.4
December 24	76.57	4125	4.76	1042
January 25	79.3	28.61	4.35	9.86
February 25	77.16	25.13	5.33	10.54
March 25	78.27	30.08	4.49	9.67
M/s Shri K N Kulkarni5.18 10.87NICHROME TESTING LABORATORY 179 2 nd Main Narayanpur Dharwad 580008 Karnataka			<u>Recognitions/Accreditations</u> MoEF & CC, New Delhi ISO/IEC17025:2017 (NABL TC 6990) ISO: 9001:2015, ISO45001:2018 FOSTAC-FSSAI, AGMARK.	

D) Station: Near Weigh Bridge

Month	PM 10	PM 2.5	Sox	NOx
Units	mg/Nm3	mg/Nm3	mg/Nm3	mg/Nm3
April 24				
May 24	Industry was not in operation (Off season)			
June 24				
July 24				
August 24				
September 24				
October 24				
November 24	72.3	27.6	5.81	11.3
December 24	73.2	35.62	5.01	9.68
January 25	74.76	25.32	4.83	10.96
February 25	74.47	23.14	4.58	9.86
March 25	79.72	28.31	4.84	10.79
Monitoring was not carried due to COVID 19 pandemic				
M/s Shri K N Kulkarni NICHROME TESTING LABORATORY 179 2 nd Main Narayanpur Dharwad 580008, Karnataka			<u>Recognitions/Accreditations</u> MoEF & CC, New Delhi ISO/IEC17025:2017 (NABL TC 6990) ISO: 9001:2015, ISO45001:2018 FOSTAC-FSSAI, AGMARK.	

M. Kulkarni



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E) Ambient Air Quality Monitoring 12 Parameters monitored for 24 Hrs duration.

Month	February 2025			
Station Name	Main Gate	Weigh Bridge	Store	Effluent Treatment Plant
PM 10	80.6	82.96	74.47	77.16
PM 2.5	29.62	27.15	23.14	25.13
Sox	5.33	5.8	4.58	5.33
NOx	9.14	9.86	9.86	10.54
Ammonia (NH3)	BDL	BDL	BDL	BDL
Ozone (O3)	BDL	BDL	BDL	BDL
Carbon monoxide (CO)	1.17	1.11	1.16	1.13
Benzene (C6H6)	BDL	BDL	BDL	BDL
Lead (Pb)	BDL	BDL	BDL	BDL
Benzopyrine (BaP)	BDL	BDL	BDL	BDL
Arsenic (As)	BDL	BDL	BDL	BDL
Nickel (Ni)	BDL	BDL	BDL	BDL
Duration (Hrs)	24	24	24	24
M/s Shri K N Kulkarni NICHROME TESTING LABORATORY 179 2 nd Main Narayanpur Dharawad 580008, Karnataka		<u>Recognitions/ Accreditations</u> MoEF & CC, New Delhi ISO/IEC17025:2017 (NABL TC 6990) ISO: 9001:2015, ISO45001:2018 FOSTAC-FSSAI, AGMARK.		

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Annexure V
Third Party Noise level monitored reports

a) Noise Level Reports

Stations	Mill House	Boiling House	Turbo Generator Room
Units	dB	dB	dB
April 24	Industry was not in operation (Off season)		
May 24			
June 24			
July 24			
August 24			
September 24			
October 24			
November 24	71.2	72.7	72.4
December 24	72.4	73.3	73.5
January 25	71.0	72.2	73.9
February 25	70.8	73.8	72.6
March 25	72.0	70.9	71.0
M/s Shri K N Kulkarni NICHROME TESTING LABORATORY 179 2 nd Main Narayanpur Dharawad 580008 Karnataka		<u>Recognitions/Accreditations</u> MoEF & CC, New Delhi ISO/IEC17025:2017 (NABL TC 6990) ISO: 9001:2015, ISO45001:2018 FOSTAC-FSSAI, AGMARK.	

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ANNEXURE -VI

Characteristics of Bagasse

Sl. No.	Parameters	Concentration
1	Calorific value	2722 K Cal/Kg
2	Nitrogen (%)	0.1 to 0.3
3	Phosphorus (%)	0.2 to 0.3
4	Potassium (%)	0.05 to 0.07
5	Organic Carbon (%)	35 to 45
6	Moisture (%)	47 to 50

Characteristics of press-mud

Sl. NO.	Parameters	Concentrations
1	Ph	6.5 to 7.0
2	Organic Matter %	62.0
3	Organic carbon %	35.28
4	Available Nitrogen (N) %	1.70
5	Phosphorous (as P ₂ O ₅)%	1.88
6	Potassium (as K ₂ O) %	0.42
7	Calcium (as Ca) %	2.8
8	Magnesium (Mg)	1.5
9	Wax %	8.0
10	Sulphur %	1.4

Characteristics of Molasses

Sl. No.	Parameters	Concentration in mg/L (except pH & Color)
1	pH	3.5 to 4.1
2	Color	Dark Brown
3	TDS	2,70,000
4	BOD	4,25,000
5	COD	9,50,000
6	Chlorides	32,000
7	Sulphates	15,000

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Annexure VII

A. Effluent Treatment Plant maintenance charges (Per Annum):

Details	Basic cost (Rs)
Chemical and culture consumption cost:	
Soda ash consumption	25,86,500/-
Cow dung consumption	1,35,000/-
Power consumed charges: (Units cons200704 KWh* Rs 7.40)	14,85,209/-
Total	42,06,709/-

B. Air Pollution control equipment's maintenance charges (Per Annum):

Details	Basic cost (Rs)
ESP Maintenance charges:	
PO No196/5-10-2024	3,65,800/-
PONo260/30-6-2024	
Dust monitoring system for boiler stacks	12,39,000/-
ESP Power consumed charges (Units cost 111217 KWh* Rs 7.40)	8,23,005/-
Total	2,47,805/-

Grand Total: Rs 66, 34,514 /-

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Annexure VIII

**SHRI PRABHULINGESHWAR SUGARS & CHEMICALS LTD., SIDDAPUR
PLANTATION DETAILS 2024-25**

S.No.	Type	Trees
01	Sandal	58
02	Teak wood	60
03	Neem	5300
04	Tamarind +300	879
05	Ashok	600
06	Eucalyptus	270
08	Cheery	843
09	Badam	762
10	Mango	98
11	Gulmoner	1432
12	Coconut	12
13	Jamboo tree	32
14	Sapota	70
15	Banni tree	505
16	Custard	283
17	Lime	258
18	Drumstick	72
19	Silver oak	1800
20	Red Sandal	183
21	Amla	56
22	Guava tree	147
23	Jali tree	1680
24	Pam tree	70
25	Fig tree	138
26	Honge	2900
TOTAL		18,508

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