BEFORE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. **530 of 2023**

IN RE:

Anuj Kumar ... Applicant

Versus

State of Uttarakhand & Ors. ...Respondents

WITH

Original Application No. **495/2023**

Mohd Amjad & Ors ... Applicant

Versus

State of Uttar Pradesh & Ors. ...Respondents

WITH

Original Application No. **369 of 2024**

Monika (Sarpanch) ... Applicant

Versus

State of Uttarakhand & Ors. ...Respondents

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Respondents

Delhi
Dated: 04.02.2025

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COMPLIANCE STATUS/REPORT AS PER ORDER DATED 29.07.2024 ON BEHALF OF RESPONDENT NO. 7 & 8

Most respectfully showeth:

1. That as per direction dated 04.11.2024 the project proponent qua the Respondents No. 7 & 8 has supplied copy of compliance affidavit to the concerned parties which was filed 02.11.2024.

2. That the answering respondents have filed this Compliance Report as per order dated 29.07.2024. Hon'ble Tribunal vide order dated 29.07.2024 indicated recommendations No. 3, 9, 10 and 11 as part compliance & 12 and 14 as Non-Compliance. It is relevant to mention here that Project proponent has scrupulously complied all 24 recommendations with utmost sincerity. Herein below given

complete recommendations chart along with compliance for kind perusal of this Hon'ble Tribunal with documents annexed hereto.

S. No.	**Observation/Violations/Recommendations observed in the Joint Inspection reports dated 21.11.2023 and 24.01.2024 by CPCB**	**Current status/Compliance of observations in the Joint Inspection reports by RBNS**
1.	Provision of laying out a closed conduit pipe line at Laksar Drain (Which is currently flowing as open channel) starting from 500 meters upstream (u/s) to 500 meter downstream (d/s) of unit shall be made by the unit under supervision of UKPCB to rule out any possibility of discharge of treated /untreated effluent into drain)	***Unit written letter dated 31.03.2024 to seek permission from Local body administration denied installation of Conduit Pipe on 15.04.2024.***
2.	It shall be responsibility of the unit to maintain the quality of Laksar drain at downstream of the unit in sync with the quality at upstream of the unit.	**UKPCB is being monitored water quality of Laksar Drain regularly on monthly basis.** **Kindly see Page No. 648 of Reply Affidavit of CPCB.**
3.	The unit shall install flow meters at the abstraction points on both the bore wells of sugar and distillery unit.	**Complied**
4.	Based on Analysis result, the quality of Laksar drain near Akoda kalan village (1.68 kms) shows Deteriorated condition, therefore the possibility of effluent mixing with sewage in drain cannot be ruled out.	**Complied** **"The Unit has installed No. 3 of STP having installed capacity of 15 KLD each while colony of Unit approx. 40 KLD generated only."** **Kindly see UKPCB report on page no. 768**
	Distillery Unit	

5.	The unit had 3 lagoons of total capacity of 5222 m3, which were found fully filled with raw spent wash/bio-methanated spent wash having total solids percentage less than 17% even during monsoon season and as these lagoons are located adjacent to Laksar drain hence there is potential of spillage /overflow/discharge of spent wash in the Laksar drain. This is the violation of CPCB direction dated 7.12.2015.	**Complied**
6.	The unit shall consume the concentrate spent wash stored in lagoons of capacity 1925 m3 and 1372 m3 in dryer in environmentally sound manner thereafter, unit shall dismantle 02 lagoons.	**Complied** Lagoons are dismantled.
7.	The unit was stored Bio-menthanated spent wash (BMSW) /raw spent wash in lagoons with solids content <30 %, which is in violation of CPCB direction dated 7.12.2015.	**Complied**
8.	The unit is discharging its distillery effluent from Bio-composting/lagoons and sugar effluent in to the Laksar drain, which is the violation to Zero Liquid Discharge (ZLD)/discharge conditions resulting in high pollution level of BOD (626mg/l) and COD (1638mg/l) which is about 17% higher than the upstream water quality of the drain.	**No effluents discharged by the distillery. Unit has complied with ZLD norms as per CPCB.** **see details of UKPCB Affidavit on page No. 772, 810**

9, 10, 11.	Unit shall clear up all the ready bio-compost stored in compost yard at the earliest and submit photographic evidence to CPCB & UKPCB. Also to avoid leachate run-off discharge in drain, the unit shall ensure to keep the stored ready bio-compost covered till it is completely removed from the bio-compost yard.	**Complied**
12.	The unit shall prepare adequacy and performance assessment report of ZLD scheme for molasses based distillery as unit has expanded its production capacity from 60 KLPD to 120 KLPD and has installed spray dryers as ZLD system.	**Complied** **NSI Report on Sugar and Distillery Unit at operational session dated 03.02.2025. Received on 04.02.2025 Copy Annexed**
13.	The unit shall comply with the consent conditions issued by UKPCB and shall ensure that no fresh concentrated spent wash shall be disposed through bio-composting and entire spent wash shall be totally disposed through spray dryer.	**Complied**
14.	UKPCB shall carry out detailed assessment of groundwater quality including ground water sampling & analysis in and around the unit to ascertain the groundwater contamination, if any	**Complied**
	SUGAR DIVISION	
15.	The unit gets evaluation of its Effluent treatment Plant (ETP) for its performance from Expert Institute of Repute/Experts in the field.	**Complied**
16.	The unit does not properly operate the effluent treatment plant installed in sugar unit as it was found Non-	**Complied with all the recommendations.**

	compliant w.r.t. the notified discharge norms.	As per NSI and UKPCB, **ETP treated water** reports as per prescribed norms. Therefore ETP performance is up-to the mark. **NSI Report:-** Page 205 **UKPCB report:** Page 799
17.	The unit shall install air mixing system in Equalization Tank for proper homogenization of effluent.	**Complied**
18.	The unit shall relocate the oil and shimmer belt at appropriate place to collect the entire Oil & Grease content of the effluent.	**Complied**
19.	The unit shall ensure proper functioning of lime dosing system.	**Complied**
20.	The unit shall operate Primary Clarifier properly to avoid anaerobic condition in the tank.	**Complied**
21.	As per Consent provided by UKPCB, unit has to install the sewage treatment plant (STP) in their premises for treatment of Generated sewage. However, as per the joint inspection report dated 21.11.2023, no STP is installed by the unit thus violating the consent condition.	**Complied**
22.	The unit has not yet prepared a comprehensive irrigation management plan validation by SPCB/Agricultural Universities for Utilizing the treated effluent in irrigation as per notified treated irrigation protocol for sugar industries.	**Complied**
23.	The unit shall maintain the proper record of ash disposal in low lying area.	**Complied**
24.	Unit must ensure regular water sprinkling in and around the boiler and near bagasse storage area of the	**Complied**

	unit minimize the dust dispersion in the ambient environment.	

As on dated all the Observation/Violations/Recommendations observed in the Joint Inspection reports dated 21.11.2023 and 24.01.2024 by CPCB complied by the answering Respondents.

3. NSI experts team visited on 04.01.2025 and After thorough inspection of the unit provided NSI Report on Validation of ETP Performance for Sugar Unit and Adequacy Report for the ETP of Distillery Unit dated 03.02.2025. In this report unit working as per the norm of CPCB.

   Annexure R/1: Copy of NSI Report on Validation of ETP Performance for Sugar Unit dated 03.02.2025.

   Annexure R/2: Copy of NSI Report on Adequacy Report for the ETP of Distillery Unit dated 03.02.2025

4. That vide letter No. UKPCB/HO/Con-R-95/2024/823 dated 27.08.2024 Consolidated Consent to Operate and Authorisation hereinafter referred to as the **CCA** (Consolidated Consent & Authorization) Renewal under Section- 25 of the "Water (Prevention & Control of Pollution) Act., 1974" and under Section- 21 of the "Air (Prevention & Control of Pollution) Act, 1981"and Authorization under' "rule"- 6(2)" of the "Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016" notified under "Environment (Protection) Act, 1986" as applicable (to be referred hereinafter as Water Act, Air Act and HW Rules respectively) is granted for the period upto **31.03.2028** for Distillery Unit. **Already on record at page no. 1412**

5. That vide letter No. UKPCB/HO/Con-R-4(Vol.II)/2024/824 dated 27.08.2024 **CCA** is granted for the period upto **31.03.2029** for Sugar Unit. **Already on record at page no. 1419.**

6. That Unit has installed flow meter with totalizer at the new borewell (distillery unit) which is in functional condition. **Already on record at page no. 1428.**

7. That UKPCB carried out detailed assessment of groundwater quality including sampling & analysis in and around the unit. **Already on record at page no. 1429.**

8. The respondents has already paid Environmental Compensation for Distillery unit and Sugar Unit vide Demand Draft No. 707700 & 707699 dated 06.08.2024 for Rs.11,23,200/- **each** Total **Rs. 22,46,400/-** against vide letter No. UKPCB/HO/C&M-235/2024/603 & 602 dated 22,07.2024 respectively and in compliance of direction issued by Hon'ble NGT dated 19.04.2024 **Already on record at page no. 1433.**

9. Fresh agreements have been executed between 98 farmers and answering Respondents w.r.t. treated water for irrigation of nearby agricultural land i.e. total 102.22 hectares and to supply the required treated water.

   Please see *NSI report on* ***pages no. 1249 & 1268*** *which is evident for complete utilization of treated water.* List of farmers and Copy of Agreements **Already on record at page no. *1437.***

   In view of the above stated submissions and facts & circumstance answering respondents have complied all recommendations and the prayer clause of the OAs does not survive.

It is prayed that this Hon'ble Tribunal may be pleased to dispose O.A. No. 530/2023, O.A. No. 495/2023 & O.A. No. 369/2024 as all the compliances have been made.

R.B.N.S. Sugar Mills Ltd. LAKSAR

Respondents

Laksar
Dated: 04.02.2025

Manish Jain

Manish Jain & Vikash Kumar Verma
Advocates for Respondents
Chamber No. 222, Civil Side,
Tis Hazari Courts, Delhi – 110054
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9911092646, 7042983890

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सत्यमेव जयते

INDIA NON JUDICIAL

Government of Uttarakhand

e-Stamp

Certificate No.	:	IN-UK72662958711204X
Certificate Issued Date	:	05-Feb-2025 01:35 PM
Account Reference	:	NONACC (SV)/ uk1276404/ LAKSAR/ UK-HD
Unique Doc. Reference	:	SUBIN-UKUK127640452519232641763X
Purchased by	:	R B N S SUGAR MILLS PVT LTD LAKSAR
Description of Document	:	Article 4 Affidavit
Property Description	:	0
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	R B N S SUGAR MILLS PVT LTD LAKSAR
Second Party	:	0
Stamp Duty Paid By	:	R B N S SUGAR MILLS PVT LTD LAKSAR
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

NO. 427
DATE 5/2/2025

NOTARIAL NOTARIAL
NOTARY GOVT. OF UTTARAKHAND

Statutory Alert:
1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

S.NO. 427
DATE 5/2/2025

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नोटरी उत्तराखण्ड सरकार
S.K. SHARMA
Advocate
Laksar, Distt. Haridwar
Reg. No.-25(05)2011/26
NOTARY GOVT. OF UTTARAKHAND

AFFIDAVIT

I, S. P. Singh S/0 Late Hukum Singh Age 66 Authorized Representative Office/at R.B.N.S Sugar Mill Ltd & R.B.N.S Distillery Pvt. Ltd, Shekhpuri, Laksar, Uttrakhand – 247663, presently at Delhi do hereby solemnly affirm and states:

1. That deponent is serving as General Manager – Unit Head - of Respondent No. 7 and 8. As such, well conversant with the facts

of the case as per the records available and competent to swear this affidavit.

2. That the statements of facts in the accompanying **Compliance Report along with annexures** are true to my knowledge and/or are true to the records of the case/ Respondent No. 7. Rest of the statements are in the nature of submissions to this Hon'ble Tribunal on the basis of advice received and believed to be correct.

3. That the annexures to the accompanying response are true copies of the respective certified copies/original.

4. That the statements made above are true and correct to the best of my knowledge and belief and nothing material has been concealed therefrom.

नोटरी उत्तराखण्ड सरकार
S.K. SHARMA Advocate Distt. Haridwar
Laksar Reg. No.-25(05)2011
NOTARY GOVT. OF UTTARAKHAND

DEPONENT

VERIFICATION:

Verified at .....on this ..... day of February, 2025 that the contents of my above affidavit are true and correct to my knowledge and no part of it is false and nothing material has been concealed therefrom.

DEPONENT

Verified By
Shive Kumar Sharma
Advocate & Notary
Laksar, Distt -Haridwar
No -25 (05)2011
5/2/2025

IDENTIFIED BY
RAMMOHAN SHARMA
ADVOCATE
COURT, LAKSAR
05.02.25

REPORT ON VALIDATION OF ETP PERFORMANCE

FOR

M/s RAI BAHADUR NARAIN SINGH SUGAR MILLS LTD.
(SUGAR DIVISION)
LAKSAR, HARIDWAR - 247663
UTTARAKHAND

PREPARED BY:

राष्ट्रीय शर्करा संस्थान
NATIONAL SUGAR INSTITUTE
भारत सरकार
Government of India
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Ministry of Consumer Affairs, Food & Public Distribution
खाद्य एवं सार्वजनिक वितरण विभाग
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1. GENERAL INFORMATION

1	**Name and address of the factory**	M/s Rai Bahadur Narain Singh Sugar Mills Ltd. (Sugar Division), Laksar, Haridwar- 247663 Uttarakhand	
2	**Standalone/ integrated (with co-generation)** **Sugar/ Sugar refinery**	Integrated with Co-generation Plantation White Sugar	
3	**License capacity of Sugar Mill (TCD)**	10,000 TCD	
4	**Average actual crush rate (TCD)**	9589 TCD (Avg. from 20.12.2024 to 03.01.2025)	
5	**Co-generation plant capacity (MW)**	29.6 MW	
6	**ETP installed capacity (KLPD)**	2500 KLPD	
7	**Date/ Period of visit**	04th January, 2025	
8	**Assessing officials**	**Designation**	**Contact No. & E-mail**
	1. Dr. Seema Paroha	Director, NSI Kanpur	
	2. Shri Anoop Kumar Kanaujia	Asst. Professor (Sugar Engineering)	9412583036 akk.nsi@gmail.com
9	**Factory officials consulted**	**Designation**	**Contact No. & E-mail**
	1. Shri S. P. Singh	Unit Head	7830778880
	2. Shri Ranbir Singh	Sr. D.G.M. (Production)	8077757035

2. INTRODUCTION

M/s Rai Bahadur Narain Singh Sugar Mills Ltd. (Sugar Division), Laksar, Haridwar vide letter no. GM/01/IC/369 dt. 26.12.2024 approached National Sugar Institute, Kanpur for inspecting their modified ETP being attached to 10,000 TCD sugar plant and to submit report on its validation keeping in view CPCB/ SPCB guidelines related to sugar factories.

3. OPERATIONAL INFORMATION

S. NO.	PARTICULAR	STATUS/ QUANTITY	REMARK
1	**Fresh water abstraction**		
	a. No & capacity of bore well	01 no. Capacity- 180 m^3/hr	
	Installation of flow meters	Yes	
	b. Recording & maintaining of log books of water abstraction	340 KLD	Logbook details attached as **Annexure - 01**
	c. Measurement facility of fresh water used in sugar plant & maintaining of log books	16 KLD	c=b-d-e
	d. Measurement facility of fresh water used at co-generation & maintaining of log books	287 KLD	Logbook details attached as **Annexure - 02**
	e. Measurement facility of fresh water used for human needs, residential buildings & maintaining of log books	36 KLD	Logbook details attached as **Annexure - 03**
	f. Total fresh water Consumption (Industrial)	**304 KLD** 31.7 Lit/tonne of cane	
2	**Measurement of Cold-water usage**		
	a. Power turbine	Flow meter available	Logbook details attached as **Annexure - 04**
	b. Fibrizer & other cane preparatory devices		
	c. Mills & drives		
	d. DM/RO plant at boilers	Flow meter available	Logbook details attached as **Annexure - 02**
	e. Cooling towers of co-generation	-	-
	f. SO2 gas cooling	Flow meter available	Logbook details attached as **Annexure - 04**
	g. B & C massecuite cooling	-	-
	h. Final molasses cooling	-	-
3	**Measurement of Hot water usage**		
	a. Imbibition water at mills	Flow meter available	Logbook details attached

			as **Annexure - 04**
	b. Filter cake wash water	Flow meter available	Logbook details attached as **Annexure - 04**
	c. Pan boiling, molasses conditioning	Flow meter available	Logbook details attached as **Annexure - 04**
	d. Wash water at centrifugals	Flow meter available	Logbook details attached as **Annexure - 04**
	e. Excess condensate taken into CPU	Flow meter available	Logbook details attached as **Annexure - 05**
4	**Measurement of effluent generation**		
	a. From mill house	665 KLD	Logbook details attached as **Annexure - 06**
	b. From boiling house		
	c. From steam generation		
	d. Spray pond/ Cooling tower over flow	385 KLD	
	e. Gross effluent generation at ETP inlet	**1050 KLD** (109.5 Litre per ton of cane @ 9589 TCD)	Logbook details attached as **Annexure – 06**
	f. ETP outlet	**1035 KLD** (108.0 Litre per ton of cane @ 9589 TCD)	Logbook details attached as **Annexure - 06**
5	**Cooling arrangement & recirculation of cooling water**		
	a. Power turbine	One no. fan-less cooling tower of 500 m^3/hr capacity	Cold Water UGR- 250+625+495 m^3
	b. Mill drives & mill bearings		
	c. Fibrizer & other cane preparatory devices		
	d. B & C massecuite cooling		
	e. SO2 gas coolers		
	f. Surplus condensate	Two nos. fan-less cooling tower of 50 M^3/hr capacity each	Hot Water UGR- 2x245 m^3
6	Construction of small pits near various pumps to collect gland cooling water for recirculation.	Small pits have been constructed.	
7	Construction of Hazardous tanks of adequate capacity to collect wash water generated during chemical/ mechanical cleaning of evaporators and discharging it in a controlled manner.	Hydrojet + Chemical Cleaning	Hazardous tank capacity 1x100 m^3 and 2x25 m^3
8	Installation of CPU (Condensate Polishing Unit) and circulation of	Part of Excess condensate is being	CPU flow diagram attached as **Annexure - 07**

	polished condensate to co-generation plant cooling towers as a make-up water for more than 45 kg/cm² working pressure boilers and to other purposes.	treated in CPU of adjacent distillery unit.	Logbook details attached as **Annexure - 05**
9	Use of membrane based (2 stage) or other suitable technologies to attain a brine recovery of at least 80 % in sugar refineries having IER.	-	Not Applicable
10	Closed loop hot and cold-water circulation systems.	Yes	Details attached as **Annexure - 08**
11	Sulphate removal system installed for spray pond/ process CT over flow. (System details with flow diagram to be enclosed)	Spray pond overflow treatment using conventional scheme followed by common treatment.	Flow diagram attached as **Annexure - 09**
12	**Retention/contact time in various units of ETP**	**Retention time (At installed capacity *i.e.* 10,000 TCD @ 109.5 liters/ ton of cane)**	**Remark**
	a. Bar screen chamber	-	Provided in inlet gutter itself
	b. Oil & grease trap chamber	42 mins	Marginally Adequate
	c. Equalization tank with aeration	9.6 hrs	Adequate; diffused aeration provided
	d. Primary clarifier	9.6 hrs	Adequate
	e. Aeration tank	32.6 hrs	Adequate; surface aeration provided
	f. Secondary clarifier	17.2 hrs	Adequate
	g. Multi grade filter	5.3 $m^3/m^2/hr$	Adequate
	h. Activated carbon filter	5.3 $m^3/m^2/hr$	Adequate
	i. Sludge drying bed or	0.09 m^2/ton of cane	Adequate
	Centrifuge or		
	Filter press		
13	**ETP Analysis (performance parameters), average value**	**As per record**	**As per sample taken during the visit**
A	**ETP Inlet**		
	a. Generated effluent flow rate (m^3/hr)	43.7 m^3/hr (109.5 liters/ ton of cane)	
	b. pH	7.4	6.9
	c. COD (mg/L)	462	672

	d. BOD (mg/L)	144	232
	e. TSS (mg/L)	104	186
	f. TDS (mg/L)	-	680
B	**ETP Outlet**		
	a. Treated effluent flow rate (m^3/hr)	43.1 m^3/hr (108.0 liters/ ton of cane)	
	b. pH	7.86	7.4
	c. COD (mg/L)	56	80
	d. BOD (mg/L)	18.3	24
	e. TSS (mg/L)	22.8	26
	f. TDS (mg/L)	-	562
C	**ETP Analysis (other parameters), average value**		
	a. MLSS (mg/L)	2500	2250
	b. DO (mg/L)	-	2.6
D	**Sulphate removal system analysis**		
	Inlet		
	a. Effluent flow rate (KLD)	385 KLD	
	b. Sulphur (mg/L)	-	540
	Outlet		
	a. Effluent flow rate (KLD)	-	Common treatment
	b. Sulphur (mg/L)	-	210
14	**Condensate Polishing Unit (CPU) Analysis**		
	Inlet		Part of Excess condensate is being treated in CPU of adjacent distillery unit. Logbook details attached as **Annexure - 05**
	TDS (mg/L)	755	
	BOD (mg/L)	1080	
	Outlet		
	TDS (mg/L)	75	
	BOD (mg/L)	25	
15	**Storage of treated effluent**		
	a. No & size of lagoons	Two nos. of capacity 3500 m^3 + 542 m^3	Retention time is approx. 04 days.
	b. Lagoon type- permeable/ impermeable	Impermeable	
16	**Recirculation of treated effluent in sugar plant**		
	Consumption points	**Quantity consumed (m^3/hr)/ % cane**	**Measured/Estimated**
	a. To TTP of distillery unit	50 m^3/day	Estimated quantity
	b. To irrigation	360 m^3/day	Estimated quantity

17	**Operation and maintenance staff of ETP**		
	Details	**Qualification**	
	Mgr. Q. C.- 01 ETP Incharge- 01 ETP Chemist- 04 ETP Operator- 03 ETP Helper- 04	Details attached as **Annexure - 10**	
		Status	**Remark**
18	**Analytical facility (laboratory)**	Yes	Analysed at sugar plant laboratory
19	**Adoption of rainwater harvesting system**	Not applicable	
20	**Dry cleaning of factory floors *etc.* using bagasse**	Adopted	

4. DOCUMENTS/ INFORMATION ATTACHED

S. No.	Particulars	Annexure No.
1	DMR copy for 20.12.2024 to 03.01.2025 for crushing season 2024-25	11
2	Photocopy of data recorded on log books of fresh water abstraction and consumption	01, 02 & 03
3	Recorded laboratory Analysis Report of ETP Parameters carried out by the factory	06
4	ETP performance report carried out by external laboratory	12
5	OCEMS recorded data *e.g.* flow rate, pH, COD, BOD, TSS *etc.* sent on CPCB server during the visit	13
6	Calibration Certificate of Flow meters and OCEMS	14
7	ETP details with flow diagram	15
8	Process flow diagram	16
9	Material/ Water balance calculation submitted by the factory	17
10	Status of consents & authorization from SPCB	18
11	NOC from Central Ground Water Authority (CGWA) -Applied	19
12	On-line Stack Monitoring Report	20

5. CONCLUSION

(i) Necessary flow meters are installed at major unit operations *e.g.* pan boiling & centrifugals washing, filter cake washing *etc.* to ascertain and control hot and cold-water requirement.

(ii) The capacity of the ETP plant shall be adequate to handle the generated effluent from the plant at the installed capacity of 10,000 TCD. However, bar screen chamber and diffused aeration in place of surface aeration in aeration tank may be provided to further improve the performance of ETP.

(iii) The effluent discharge through ETP is 108.0 liters/ ton cane as per flow meter reading, which is considered to be in order as per CPCB guidelines.

(iv) As per the analytical details submitted by the factory and also observed that the treated effluent quality was in conformity with the CPCB guidelines in the matter.

(v) The factory requires to carry out the regular analysis of ETP inlet/outlet, SRS inlet/outlet, Lagoon water for various parameters *viz.* TSS, TDS, BOD and COD *etc.*

6. ACKNOWLEDGEMENTS

The undersigned is thankful to all the technical and other staff of the factory for extending necessary assistance during the period of investigation.

(Anoop Kumar Kanaujia)
Asst. Professor (Sugar Engineering)

NATIONAL SUGAR INSTITUTE
(Government of India)
Ministry of Consumer Affairs, Food & Public Distribution
Department of Food & Public Distribution
Kanpur- 208017 (U.P.) India

R.B.N.S. Sugar Mills, Laksar Distt. Haridwar

Sugar Mill Tube Well Water Flow Meter Record Log Book

Date	Initial Reading	Final Reading	Water Consume per day in M^3	Total Water Consume in M^3	Remarks
31/10/24	55705	55757	52	55757	
1/11/24	55757	55809	52	55809	
2/11/24	55809	55857	48	55857	
3/11/24	55857	55897	40	55897	
4/11/24	55897	55943	46	55943	
5/11/24	55943	55994	51	55994	
6/11/24	55994	56030	36	56030	
7/11/24	56030	56078	48	56078	
8/11/24	56078	56123	45	56123	
9/11/24	56123	56338	215	56338	
10/11/24	56338	56736	398	56736	
11/11/24	56736	57157	421	57157	
12/11/24	57157	57538	381	57538	

RAGHUNATH NARAIN SINGH SUGAR MILLS LTD. LAKSAR (HARIDWAR)

Sr. Manager WR

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Annexure-1

R.B.N.S. Sugar Mills, Laksar Distt. Haridwar

Sugar Mill Tube Well Water Flow Meter Record Log Book

Date	Initial Reading	Final Reading	Water Consume per day in M^3	Total Water Consume in M^3	Remarks
13/11/24	57538	57872	334	57872	
14/11/24	57872	58315	443	58315	
15/11/24	58315	58483	168	58483	
16/11/24	58483	58915	432	58915	
17/11/24	58915	59319	404	59319	
18/11/24	59319	59429	110	59429	
19/11/24	59429	59762	443	59762	
20/11/24	59762	60070	308	60070	
21/11/24	60070	60484	414	60484	
22/11/24	60484	60828	344	60828	
23/11/24	60828	60949	121	60949	
24/11/24	60949	60982	33	60982	
25/11/24	60982	61198	216	61198	

Sr. Manager WR

1559

R.B.N.S. Sugar Mills, Laksar Distt. Haridwar

Sugar Mill Tube Well Water Flow Meter Record Log Book

Date	Initial Reading	Final Reading	Water Consume per day in M^3	Total Water Consume in M^3	Remarks
26/11/24	61198	61304	106	61304	
27/11/24	61304	61311	07	61311	
28/11/24	61311	61439	128	61439	
29/11/24	61439	61630	191	61630	
30/11/24	61630	61854	134	61854	
1/12/24	61854	62149	295	62149	
2/12/24	62149	62488	339	62488	
3/12/24	62488	62858	370	62858	
4/12/24	62858	63132	274	63132	
5/12/24	63132	63365	233	63365	
6/12/24	63365	63629	264	63629	
7/12/24	63629	63792	163	63792	
8/12/24	63792	64068	276	64068	

Sr. Manager WR

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R.B.N.S. Sugar Mills, Laksar Distt. Haridwar

Sugar Mill Tube Well Water Flow Meter Record Log Book

Date	Initial Reading	Final Reading	Water Consume per day in M^3	Total Water Consume in M^3	Remarks
3/12/24	64068	64375	307	64375	
4/12/24	64375	64645	276	64645	
5/12/24	64645	64802	157	64802	
6/12/24	64802	65143	341	65143	
7/12/24	65143	65489	346	65489	
8/12/24	65489	65863	374	65863	
9/12/24	65863	66215	352	66215	
10/12/24	66215	66719	504	66719	
11/12/24	66719	67099	380	67099	
12/12/24	67099	67375	276	67375	
13/12/24	67375	67778	403	67778	
14/12/24	67778	68107	392	68107	
15/12/24	68107	68499	392	68499	

Sr. Manager WR

15961

R.B.N.S. Sugar Mills, Laksar Distt. Haridwar

Sugar Mill Tube Well Water Flow Meter Record Log Book

Date	Initial Reading	Final Reading	Water Consume per day in M^3	Total Water Consume in M^3	Remarks
22/12/24	68499	68709	210	68709	
23/12/24	68709	68962	253	68962	
24/12/24	68962	69260	298	69260	
25/12/24	69260	69686	426	69686	
26/12/24	69686	70040	354	70040	
27/12/24	70040	70384	344	70384	
28/12/24	70384	70715	331	70715	
29/12/24	70715	71029	314	71029	
30/12/24	71029	71389	360	71389	
31/12/24	71389	71719	330	71719	
01/01/25	71719	72053	334	72053	
02/01/25	72053	72451	398	72451	
03/01/25	72451	72816	365	72816	

Sr. Manager WR

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R.O. Plant Feed Water Flow Meter Reading

Annexure-2

Date	Initial Reading	Final Reading	Total water
01/11/24	881866	881884	18
02/11/24	881884	881896	12
03/11/24	881896	881900	04
04/11/24	881900	881912	12
05/11/24	881912	881925	13
06/11/24	881925	881927	02
07/11/24	881927	881940	13
08/11/24	881940	881949	09
09/11/24	881949	882130	181
10/11/24	882130	882496	366
11/11/24	882496	882881	385
12/11/24	882881	883224	343
13/11/24	883224	883524	300
14/11/24	883524	883930	406
15/11/24	883930	884066	136
16/11/24	884066	884460	394
17/11/24	884460	884824	364
18/11/24	884824	884906	82
19/11/24	884906	885311	405
20/11/24	885311	885582	271
21/11/24	885582	885960	378
22/11/24	885960	886269	309
23/11/24	886269	886358	89
24/11/24	886358	886363	05
25/11/24	886363	886554	191
26/11/24	886554	886632	78
27/11/24	886632	886632	00
28/11/24	886632	886738	106
29/11/24	886738	886905	167
30/11/24	886905	887013	108

R.O. Plant Feed Water Flow meter Reading

Date	Initial Reading	Final Reading	Total water
01/12/24	887013	887276	263
02/12/24	887276	887581	305
03/12/24	887581	887918	337
04/12/24	887918	888156	238
05/12/24	888156	888351	195
06/12/24	888351	888586	235
07/12/24	888586	888722	136
08/12/24	888722	888964	242
09/12/24	888964	889236	272
10/12/24	889236	889477	241
11/12/24	889477	889606	129
12/12/24	889606	889918	312
13/12/24	889918	890228	310
14/12/24	890228	890564	336
15/12/24	890564	890877	313
16/12/24	890877	891343	466
17/12/24	891343	891686	343
18/12/24	891686	891986	300
19/12/24	891986	892351	365
20/12/24	892351	892707	356
21/12/24	892707	893061	354
22/12/24	893061	893235	174
23/12/24	893235	893454	219
24/12/24	893454	893716	262
25/12/24	893716	894104	388
26/12/24	894104	894422	318
27/12/24	894422	894734	312
28/12/24	894734	895028	294
29/12/24	895028	895305	277
30/12/24	895305	895627	322
31/12/24	895627	895920	293

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R.O. plant Feed Water Flow Meter Reading

Date	Initial reading	Final reading	Total water
01/01/25	895920	896142	222
02/01/25	896142	896412	270
03/01/25	896412	896658	246
04/01/25			

Borewell Water Distribution Log Book

Annexure-3

Page

Date	Total water (M3)	Domestic (M3)	Process (P) (M3)	Re-use (R) Da(M3)
01/11/24	52	34	14	04
02/11/24	48	36	09	03
03/11/24	40	36	03	01
04/11/24	46	34	09	03
05/11/24	51	38	10	03
06/11/24	36	34	00	02
07/11/24	48	35	10	03
08/11/24	45	36	07	02
09/11/24	215	34	136	45
10/11/24	398	32	275	91
11/11/24	421	36	289	96
12/11/24	381	38	257	86
13/11/24	334	34	225	75
14/11/24	443	37	304	102
15/11/24	168	32	102	34
16/11/24	432	38	296	98
17/11/24	404	40	273	91
18/11/24	110	28	62	20
19/11/24	443	38	304	101
20/11/24	308	37	203	68
21/11/24	414	36	284	94
22/11/24	344	35	232	77
23/11/24	121	32	67	22
24/11/24	33	28	04	01
25/11/24	216	25	143	48
26/11/24	106	28	59	19
27/11/24	07	~~07~~	00	00
28/11/24	128	22	80	26
29/11/24	191	24	125	42
30/11/24	134	26	81	27

Borewell Waters Distribution Log Book

Date	Total water (m3)	Domestic (m3)	Process (P) (m3)	Re-Use (R) Date (m3) Page
01/12/24	295	32	197	66
02/12/24	339	34	229	76
03/12/24	370	33	253	84
04/12/24	274	36	179	59
05/12/24	233	38	146	49
06/12/24	264	29	176	59
07/12/24	163	27	102	34
08/12/24	276	34	182	60
09/12/24	307	35	204	68
10/12/24	270	29	180	61
11/12/24	157	28	126	33
12/12/24	341	29	234	78
13/12/24	346	36	232	78
14/12/24	374	38	252	84
15/12/24	352	39	234	79
16/12/24	504	38	348	118
17/12/24	380	37	256	87
18/12/24	276	36	240	60
19/12/24	403	38	273	92
20/12/24	392	36	267	89
21/12/24	392	38	265	89
22/12/24	210	36	130	44
23/12/24	253	34	164	55
24/12/24	298	36	196	66
25/12/24	426	38	291	97
26/12/24	354	36	238	80
27/12/24	344	38	234	78
28/12/24	331	37	220	74
29/12/24	314	37	207	70
30/12/24	360	38	241	81
31/12/24	330	37	219	74

Borewell Water Distribution Log Book

Date	Total Water (m3)	Domestic (m3)	Process (m3)	Re-Use (m3)
01/01/25	334	37	222	75
02/01/25	398	38	270	90
03/01/25	365	37	246	82

Date
Page

R.B.N.S. Sugar Mills, Laksar (Haridwar)

Cold & Hot Water Flow Meter Log Book

Session : 20.24. - 20..25

DEC-2024

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Date	Vacume Filter Hot Water Flow Meter			Sulphur Furnace Cold Water Flow Meter			Pan Station Hot Water Flow Meter			B & C Cantri Fugal M/C Hot Water Flow Meter			Auto Centrifugal M/C Hot Water Flow Meter			Vertical Crustilizer Cold Water Meter			Imbibition Hot Water Flow Meter			Turbine Mill & Fibrizer Cold Water Flow Meter			Remarks
	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	
1-12-24	154901	310	310	9349	441	441	81994	476	476	10614	508	508	3704	158	158				3355	3355	3355	14810	307	307	
2-12-24	155235	334	644	9795	426	867	82521	535	1011	11107	493	1001	3868	164	322				6955	3600	6755	153916	5049	19856	
3-12-24	155705	570	1114	10214	439	1306	83060	531	1542	11563	456	1457	4039	171	493				9942	3187	9942	158174	5008	25164	
4-12-24	157949	244	1358	10652	438	1744	83623	613	2155	12051	488	1945	4203	164	657				13026	3084	13026	163375	5141	30305	
5-12-24	158189	240	1598	11097	445	2189	84048	375	2530	12593	492	2437	4355	152	809				16349	3323	16349	168477	4102	34407	
6-12-24	158534	345	1943	11505	408	2597	84567	459	2989	13055	512	2949	4526	171	980				19030	2681	19030	172469	5052	39459	
7-12-24	158927	393	2336	11917	412	3009	85027	520	3509	13539	484	3433	4694	168	1148				22453	3423	22453	177562	5093	44552	
8-12-24	159350	428	2764	12349	432	3441	85649	622	4131	14101	562	3995	4866	172	1320				25876	3423	25876	182919	5357	49909	
9-12-24	159862	512	3276	12807	458	3899	86187	538	4669	14572	471	4266	5037	171	1491				29291	3415	29291	188144	5221	55130	
10-12-24	160332	460	3736	13165	358	4257	86749	612	5281	15030	458	4724	5201	164	1655				32677	3386	32677	192103	3963	59093	
11-12-24	160815	493	4229	13522	357	4614	87356	557	5838	15520	490	5214	5366	165	1820				36101	3424	36101	196476	4373	63466	
12-12-24	161116	301	4525	13853	331	4945	87693	337	6175	16033	513	5727	5514	148	1968				39598	3497	39598	200969	4493	67959	
13-12-24	161569	453	4978	14288	435	5380	88083	390	6565	16522	489	6216	5685	171	2139				43150	3552	43150	205152	4183	72142	
14-12-24	162024	455	5433	14663	375	5755	88495	412	6977	17021	499	6715	5845	160	2299				46600	3450	46600	209234	4082	76224	
15-12-24	162489	465	5898	15043	380	6135	88983	488	7465	17534	513	7228	6000	155	2454				50039	3439	50039	213590	4356	80580	
16-12-24	162914	425	6323	15483	440	6575	89490	507	7972	18074	540	7768	6170	170	2624				53166	3127	53166	218161	4571	85151	
17-12-24	163360	446	6769	15959	476	7051	90069	579	8551	18636	562	8330	6334	164	2788				56574	3408	56574	222924	4760	89911	
18-12-24	163805	445	7214	16404	445	7496	90828	759	9310	19138	502	8832	6478	144	2932				59782	3208	59782	227394	4470	94381	
19-12-24	164151	346	7560	16717	313	7809	91214	386	9696	19588	450	9282	6609	131	3063				62215	2433	62215	231178	3934	98268	
20-12-24	164657	506	8066	17026	309	8118	91715	501	10197	20090	502	9784	6774	165	3228				65682	3467	65682	235805	4527	102795	
21-12-24	165105	448	8514	17307	281	8399	92018	303	10500	20380	490	10274	6946	172	3400				69033	3351	69033	240233	4428	107223	
22-12-24	165592	487	9001	17780	473	8872	92133	115	10615	21055	675	10949	7115	169	3569				72469	3431	72469	244895	4662	111885	
23-12-24	166085	493	9494	18265	485	9357	92234	101	10716	21544	489	11238	7235	120	3689				75980	3516	75980	248389	3992	115877	
24-12-24	166561	476	9970	18895	630	9987	92339	105	10821	22040	496	11734	7405	170	3859				79458	3478	79458	253443	6056	121933	
25-12-24	167047	486	10456	19550	655	10642	92531	192	11013	22555	515	12249	7585	180	4039				82969	3511	82969	260699	6256	128189	
26-12-24	167195	148	10604	19960	410	11052	92818	287	11300	23051	496	12745	7757	172	4211				84934	1965	84934	262749	2050	130239	
27-12-24	167537	342	10946	20410	450	11502	93050	232	11532	23522	471	13216	7933	176	4387				88148	3214	88148	264839	2090	132329	
28-12-24	167917	380	11326	20800	390	11892	93240	190	11722	24032	510	13726	8087	154	4541				90182	2034	90182	268129	3290	135619	
29-12-24	168307	390	11716	21250	450	12342	93450	210	11932	24532	490	14216	8235	148	4689				92524	2342	92524	272689	3960	139579	
30-12-24	168685	378	12094	21700	450	12792	93677	227	12159	24997	475	14691	8387	152	4841				95845	3321	95845	276479	3790	143369	
31-12-24	169055	370	12464	22210	510	13302	94018	341	12500	25512	515	15206	8527	140	4981				99175	3330	99175	280824	4042	147411	
Total																									

Annexure-4

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R.B.N.S. Sugar Mills, Laksar (Haridwar)

Cold & Hot Water Flow Meter Log Book

Session : 20..... - 20.....

JAN - 2025

Date	Vacume Filter Hot Water Flow Meter			Sulphur Furnace Cold Water Flow Meter			Pan Station Hot Water Flow Meter			B & C Centri Fugal M/C Hot Water Flow Meter			Auto Centrifugal M/C Hot Water Flow Meter			Vertical Crustlizer Cold Water Meter			Imbibition Hot Water Flow Meter			Turbine Mill & Fibrizer Cold Water Flow Meter			Remarks
	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	Flow Meter Reading	Flow On Date	Flow To Date	
01/01/25	169800	555	555	22660	450	450	943008	290	290	26894	682	682	0654	127	127				3336	3336	3336	2894563	3942	3942	
02/01/25	170300	690	1245	23120	460	910	94570	260	550	26890	696	1378	0824	170	297				6670	3334	6670	2898008	3540	7482	
03/01/25	170968	668	1913	23612	492	1402	944033	263	813	27576	686	2064	0985	161	458				9940	3270	9940	2901456	3453	10935	

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RBNS SUGAR MILL LTD. CP LAKSAR, DISTILLERY DIVISION

PERFORMANCE

Date	Inlet Characterstic					Outlet Characterstic					Tube Well Reading			Energy Consumption			Sugar Mill Condensate		
	Flow	pH	BOD	COD	TDS	Flow	pH	BOD	COD	TDS	Initial	Final	Consumption	Initial	Final	Energy Consumption	Initial	Final	Sugar Mill Condensate
01/12/2024	765	7.92	1090	2365	790	765	7.25	25	130	80	273232	273282	90	240.97	241.42	0.45			
02/12/2024	450	7.83	1080	2346	775	450	7.23	25	125	75	273282	273439	157	241.42	241.89	0.46			
03/12/2024	461	7.79	1060	2290	770	461	7.19	25	120	75	273439	273735	156	241.89	242.33	0.45			
04/12/2024	415	7.96	1050	2310	765	465	7.22	20	115	70	273735	273289	154	242.33	242.78	0.45			
05/12/2024	455	7.93	1070	2280	760	455	7.21	20	110	70	273289	273548	159	242.78	243.24	0.46			
06/12/2024	451	7.96	1050	2290	755	451	7.18	20	105	70	273548	273662	154	243.24	243.70	0.46			
07/12/2024	493	7.98	1030	2310	750	493	7.19	25	100	70	273662	273771	169	243.70	244.17	0.47			
08/12/2024	489	7.96	1050	2280	745	489	7.22	20	100	75	273771	273937	166	244.17	244.64	0.47	36477	36526	49
09/12/2024	490	7.95	1060	2260	740	490	7.23	25	100	70	273937	274106	169	244.64	245.11	0.47	36526	36574	48
10/12/2024	499	7.98	1090	2290	735	499	7.26	25	95	70	274106	274272	166	245.11	245.58	0.47	36574	36621	47
11/12/2024	430	7.92	1070	2250	730	430	7.25	25	95	75	274272	274441	169	245.58	246.06	0.48	36621	36669	48
12/12/2024	435	7.96	1060	2270	725	435	7.22	20	95	75	274441	274598	157	246.06	246.54	0.48	36669	36718	49
13/12/2024	481	7.92	1040	2290	720	481	7.29	20	95	75	274598	274763	165	246.54	247.02	0.48	36718	36766	48
14/12/2024	478	7.89	1080	2310	715	478	7.25	20	90	70	274763	274830	67	247.02	247.50	0.48	36766	36813	47
15/12/2024	532	7.82	1060	2280	710	532	7.26	20	90	70	274830	274983	153	247.50	247.99	0.49	36813	36861	48
16/12/2024	552	7.79	1090	2260	705	552	7.22	25	90	70	274983	275148	165	247.99	248.48	0.49	36861	36910	49
17/12/2024	568	7.86	1110	2250	700	568	7.20	25	95	75	275148	275305	157	248.48	248.98	0.50	36910	36960	50
18/12/2024	590	7.82	1080	2280	705	590	7.22	20	90	70	275305	275474	169	248.98	249.48	0.50	36960	37011	51
19/12/2024	620	7.79	1090	2260	700	620	7.21	25	100	70	275474	275650	176	249.48	249.97	0.49	37011	37061	50
20/12/2024	638	7.83	1060	2240	705	638	7.19	20	95	75	275650	275810	160	249.97	250.47	0.50	37061	37112	51
21/12/2024	650	7.89	1080	2260	700	650	7.21	20	95	75	275810	275979	169	250.47	250.97	0.50	37112	37162	50
22/12/2024	680	7.91	1050	2290	695	680	7.26	20	100	75	275979	276159	180	250.97	251.47	0.50	37162	37211	49
23/12/2024	688	7.88	1070	2280	750	688	7.22	20	100	75	276159	276308	149	251.47	251.96	0.49	37211	37261	50
24/12/2024	695	7.89	1060	2250	700	695	7.25	25	100	75	276308	276472	164	251.96	252.46	0.50	37261	37310	49
25/12/2024	720	7.85	1050	2230	700	720	7.20	20	100	70	276472	276638	166	252.46	252.97	0.51	37310	37360	50
26/12/2024	712	7.82	1040	2260	700	712	7.22	25	100	70	276638	276804	166	252.97	253.48	0.51	37360	37409	49
27/12/2024	700	7.86	1060	2280	700	700	7.20	25	95	75	276804	276974	170	253.48	253.99	0.51	37409	37457	48
28/12/2024	705	7.89	1080	2260	700	705	7.22	25	95	75	276974	277133	159	253.99	254.49	0.50	37457	37504	47
29/12/2024	708	7.92	1070	2240	705	708	7.20	20	90	70	277133	277321	188	254.49	255.00	0.51	37504	37553	49
30/12/2024	710	7.88	1080	2290	705	710	7.22	20	90	70	277321	277560	179	255.00	255.5	0.50	37553	37603	50
31/12/2024	715	7.90	1090	2270	710	715	7.24	20	90	70	277560	277686	126	255.50	256.01	0.51	37603	37654	51

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Annexure-5

RBNS SUGAR MILL LTD
CPU

Date	Inlet Characterstic					Outlet Characterstic				
	Flow	pH	BOD	COD	TDS	Flow	pH	BOD	COD	TDS
01/10/2025	702	7.89	1080	2290	700	702	7.19	25	100	70
02/10/2025	705	7.92	1050	2310	700	705	7.22	25	100	70
03/10/2025	708	7.85	1070	2290	700	708	7.20	25	100	70
04/10/2025	709	7.88	1040	2280	700	709	7.20	20	95	70
05/10/2025	708	7.85	1060	2280	705	708	7.18	20	95	75
06/10/2025	710	7.80	1040	2230	705	710	7.22	20	95	75
07/10/2025		7.86	1060	2250	705		7.20	20	95	75

LAKSAR, DISTILLERY DIVISION
PERFORMANCE

Tube Well Reading			Energy Consumption			Sugar Mill Condansate		
Initial	Final	Consumption	Initial	Final	Energy Consumption	Initial	Final	Sugar Mill Condensate
277686	277874	188	256.01	256.50	0.49	316.54	317.03	49
277874	278037	163	256.50	257.00	0.50	317.03	317.54	51
278037	278199	162	257.00	257.51	0.51	317.54	318.04	50
278199	278374	175	257.51	258.02	0.51	318.04	318.54	50
278374	278545	171	258.02	258.52	0.50	318.54	319.03	49
278545	278723	178	258.52	259.03	0.51	319.03	319.53	50
278723	278854	131	259.03	259.53	0.50	319.53	320.02	49

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R.B. NARAIN SINGH SUGAR MILLS LTD., LAKSAR (HARIDWAR)

E.T.P. LOG BOOK

1. Date	05/11/24	06/11/24	07/11/24	08/11/24	09/11/24	10/11/24	11/11/24
2. Energy Meter Reading	483737	483836	483942	484042	484168	484293	484413
3. Flow Meter Reading	440786	440814	440864	440912	441327	441787	442287
4. Temp. of Equalization Tank	20c	19c	26 °c	27 c	29c	30 c	29 c
5. pH of Equalization Tank	7.8	8.0	7.8	8.0	7.8	7.6	7.8
6. MLSS in Process	22%	22%	22%	22%	25%	25%	25%
7. pH of Secondary clarifire	7.4	7.5	7.4	7.5	7.5	7.4	7.2
8. Temp. of Treated Water	19c	18c	19c	20c	22c	21c	21°c
9. B.O.D. of Treated Water	14.5	15.2	16.5	17.0	18.0	18.0	19.0
10. C.O.D. of Treated Water	99.5	98.6	94.8	98.5	99.5	100.	99.7
11. T.S.S. of Treated Water	14.0	13.0	11.0	11.0	10.0	11.0	12.0
12. Quantity of Raw Effluent	09	028	050	048	415	460	500
13. Quantity of Treated Water	07	025	045	043	410	450	490
UREA	04kg	05kg	05kg	05kg	5kg	5kg	5kg
DAP	02kg	03kg	03kg	03kg	03kg	03kg	03kg
MICROBIAL CULTURE	02kg	02kg	02kg	02kg	02kg	02kg	02kg
LIME		50kg			50kg	50kg	50

Remarks :-

Signature of Chemist

Authorised Signature

1573

Annexure-6

R.B. NARAIN SINGH SUGAR MILLS LTD., LAKSAR (HARIDWAR)

E.T.P. LOG BOOK

1. Date	12/11/24	13/11/24	14/11/24	15/11/24	16/11/24	17/11/24	18/11/24
2. Energy Meter Reading	484522	484635	484751	484895	485010	485116	485255
3. Flow Meter Reading	442952	443872	444834	445808	446801	447801	448786
4. Temp. of Equalization Tank	30°C	29°C	28°C	30°C	29°C	28°C	27°C
5. pH of Equalization Tank	8.5	8.0	7.8	7.6	7.7	8.0	7.6
6. MLSS in Process	25%	25%	25%	25%	25%	25%	25%
7. pH of Secondary clarifire	7.4	7.5	7.4	7.5	7.6	7.7	7.6
8. Temp. of Treated Water	18°C	17°C	16°C	18°C	19°C	17°C	18°C
9. B.O.D. of Treated Water	18.5	15.2	14.6	13.5	15.4	16.5	17.1
10. C.O.D. of Treated Water	98.5	100.0	96.4	95.4	98.6	100.0	98.5
11. T.S.S. of Treated Water	10.0	11.0	13.0	13.0	11.0	12.0	12.0
12. Quantity of Raw Effluent	665	920	962	974	993	1000	0985
13. Quantity of Treated Water	660	915	957	970	988	990	0980
UREA	5 Kg	5 Kg	5 Kg	5 Kg	5 Kg	5 Kg	5 Kg
DAP	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg
MICROBIAL CULTURE	2 Kg	2 Kg	2 Kg	2 Kg	2 Kg	2 Kg	2 Kg
LIME	50 Kg		50 Kg	50 Kg	50 Kg	100 Kg	50 Kg

Remarks :-

Signature of Chemist

Authorised Signature

1574

R.B. NARAIN SINGH SUGAR MILLS LTD., LAKSAR (HARIDWAR)

E.T.P. LOG BOOK

1. Date	19/11/24	20/11/24	21/11/24	22/11/24	23/11/24	24/11/24	25/11/24
2. Energy Meter Reading	485367	485492	485619	485733	485861	485986	486125
3. Flow Meter Reading	449916	451101	452288	453395	454437	455566	456598
4. Temp. of Equalization Tank	30°C	31°C	29°C	27°C	28°C	26°C	28°C
5. pH of Equalization Tank	7.8	7.5	8.5	8.0	7.5	8.1	7.5
6. MLSS in Process	25%	25%	25%	25%	25%	25%	25%
7. pH of Secondary clarifire	7.6	7.8	7.7	7.6	7.5	7.6	7.5
8. Temp. of Treated Water	19°C	18°C	18°C	15°C	17°C	19°C	18°C
9. B.O.D. of Treated Water	17.2	15.4	14.6	13.2	15.4	16.4	16.8
10. C.O.D. of Treated Water	102.3	103.6	97.5	95.1	110.2	105.6	98.5
11. T.S.S. of Treated Water	12.0	13.0	12.0	14.0	14.0	13.0	13.0
12. Quantity of Raw Effluent	1130	1185	1187	1107	1042	1129	0982
13. Quantity of Treated Water	1120	1175	1175	1100	1035	1120	0972
UREA	5 Kg	5 Kg	5 Kg	5 Kg	5 Kg	5 Kg	5 Kg
DAP	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg
MICRO BIAL CULTURE	2 Kg	2 Kg	2 Kg	3 Kg	3 Kg	3 Kg	3 Kg
LIME	50 Kg	100 Kg	50 Kg	50 Kg	50 Kg	100 Kg	150 Kg

Remarks :-

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Signature of Chemist

Authorised Signature

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R.B. NARAIN SINGH SUGAR MILLS LTD., LAKSAR (HARIDWAR)

E.T.P. LOG BOOK

1. Date	26/11/24	27/11/24	28/11/24	29/11/24	30/11/24	01/12/24	02/12/24
2. Energy Meter Reading	486263	486375	486522	486629	486760	486891	487021
3. Flow Meter Reading	457796	459028	460226	461462	462410	463422	464527
4. Temp. of Equalization Tank	29°C	31°C	30°C	27°C	29°C	31°C	29°C
5. pH of Equalization Tank	8·5	7·8	7·5	7·8	7·5	7·7	8·0
6. MLSS in Process	25%	25%	45%	25%	25%	25%	25%
7. pH of Secondary clarifire	7·5	7·6	7·4	7·8	7·6	7·5	7·5
8. Temp. of Treated Water	17°C	16°C	18°C	17°C	18°C	17°C	19°C
9. B.O.D. of Treated Water	18·2	16·5	15·7	17·6	18·8	15·8	18·7
10. C.O.D. of Treated Water	105·1	97·8	95·2	99·6	105·2	98·6	103·2
11. T.S.S. of Treated Water	14·0	15·0	13·0	13·0	14·0	13·0	14·0
12. Quantity of Raw Effluent	1248	1232	1198	1236	0948	1019	1105
13. Quantity of Treated Water	1235	1220	1185	1220	0940	1000	1090
URSA	5Kg	5Kg	5Kg	5Kg	5Kg	5Kg	5Kg
DAP	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg
MICROBIAL CULTURE	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg
LIME	50Kg	100Kg	50Kg	100Kg	90Kg	100Kg	100Kg

Remarks :-

Signature of Chemist

Authorised Signature

1576

R.B. NARAIN SINGH SUGAR MILLS LTD., LAKSAR (HARIDWAR)

E.T.P. LOG BOOK

1. Date	03/12/24	04/12/24	05/12/24	06/12/24	07/12/24	08/12/24	9/12/24
2. Energy Meter Reading	487149	487284	487438	487613	487750	487888	488039
3. Flow Meter Reading	465649	466779	467927	469079	470214	471354	472486
4. Temp. of Equalization Tank	30°C	29°C	31°C	30°C	32°C	30°C	29°C
5. pH of Equalization Tank	8.5	8.6	8.8	8.7	8.8	8.6	8.5
6. MLSS in Process	25%	25%	25%	25%	25%	25%	25%
7. pH of Secondary clarifire	7.6	7.5	7.6	7.5	7.5	7.6	7.8
8. Temp. of Treated Water	19°C	17°C	16°C	14.0	13°C	14°C	14°C
9. B.O.D. of Treated Water	19.0	18.1	18.6	20.0	18.3	20.4	20.8
10. C.O.D. of Treated Water	105.0	112.0	115.2	110.2	105.1	110.2	98.6
11. T.S.S. of Treated Water	15.0	14.0	15.0	15.0	14.0	15.0	15.0
12. Quantity of Raw Effluent	1122	1130	1148	1152	1135	1140	1132
13. Quantity of Treated Water	1110	1120	1130	1140	1120	1125	1118
UREA	5Kg	5Kg	5Kg	5Kg	5Kg	5Kg	5Kg
DAP	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg
MICRO BIAL CULTURE	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg
LIME	50Kg		50Kg	100Kg	50Kg	50Kg	50Kg

Remarks :

Signature of Chemist

Authorised Signature

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R.B. NARAIN SINGH SUGAR MILLS LTD., LAKSAR (HARIDWAR)

E.T.P. LOG BOOK

1. Date	10/12/24	11/12/24	12/12/24	13/12/24	14/12/24	15/12/24	16/12/24
2. Energy Meter Reading	488196	488352	488512	488676	488844	488970	489123
3. Flow Meter Reading	473656	474682	475714	476738	477758	478780	479857
4. Temp. of Equalization Tank	28°C	31°C	30°C	32°C	30°C	28°C	30°C
5. pH of Equalization Tank	8.5	8.6	8.5	8.6	8.5	8.4	8.6
6. MLSS in Process	25%	25%	25%	25%	25%	25%	25%
7. pH of Secondary clarifire	7.4	7.4	7.8	7.4	7.5	7.3	7.5
8. Temp. of Treated Water	13°C	12°C	13°C	13°C	14°C	13°C	14°C
9. B.O.D. of Treated Water	19.0	20.1	21.6	20.9	21.1	20.4	21.0
10. C.O.D. of Treated Water	98.6	101.2	104.7	108.1	110.2	105.2	98.2
11. T.S.S. of Treated Water	14.0	14.0	14.0	15.0	15.0	16.0	14.0
12. Quantity of Raw Effluent	1170	1026	1032	1024	1020	1022	1077
13. Quantity of Treated Water	1155	1010	1017	1010	1005	1007	1061
UREA	5Kg	5Kg	5Kg	5Kg	5Kg	5Kg	5Kg
DAP	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg
MICRO BIAL CULTURE	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg
LIME	50Kg	50Kg	50Kg	100Kg	50Kg	50Kg	50Kg

Remarks :-

Signature of Chemist

Authorised Signature

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R.B. NARAIN SINGH SUGAR MILLS LTD., LAKSAR (HARIDWAR)

E.T.P. LOG BOOK

1. Date	17/12/24	18/12/24	19/12/24	20/12/24	21/12/24	22/12/24	23/12/24
2. Energy Meter Reading	489123	489405	489538	489675	489835	489991	490162
3. Flow Meter Reading	480882	481962	482984	484039	485125	486193	487215
4. Temp. of Equalization Tank	30°c	28°c	31°c	29°c	28°c	30°c	31°c
5. pH of Equalization Tank	8.6	8.0	8.5	8.5	8.6	8.5	8.5
6. MLSS in Process	25%	25%	25%	25%	25%	25%	25%
7. pH of Secondary clarifire	7.5	7.4	7.6	7.5	7.4	7.5	7.5
8. Temp. of Treated Water	14°c	14°c	13°c	13°c	12°c	13°c	12°c
9. B.O.D. of Treated Water	21.2	19.1	18.8	15.1	14.6	14.8	13.8
10. C.O.D. of Treated Water	98.4	110.0	105.0	98.5	105.0	101.2	110.2
11. T.S.S. of Treated Water	14.0	16.0	17.0	15.0	16.0	16.0	15.0
12. Quantity of Raw Effluent	1025	1080	1022	1055	1086	1068	1022
13. Quantity of Treated Water	1010	1064	1008	1040	1071	1054	1010
UREA	5Kg	5Kg	5Kg	5Kg	5Kg	5Kg	5Kg
DAP	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg
BIOLOGICAL CULTURE	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg	3Kg
LIME	50Kg	50Kg	50Kg	100Kg	50Kg	50Kg	100Kg

Remarks :-

Signature of Chemist

BAHADUR NARAIN SINGH SUGAR MILLS LTD. LAKSAR (H.)

Authorised Signature

1579

R.B. NARAIN SINGH SUGAR MILLS LTD., LAKSAR (HARIDWAR)

E.T.P. LOG BOOK

1. Date	24/12/24	25/12/24	26/12/24	27/12/24	28/12/24	29/12/24	30/12/24
2. Energy Meter Reading	490309	490466	490601	490742	490887	491056	491214
3. Flow Meter Reading	488255	489307	490333	491443	492523	493571	494593
4. Temp. of Equalization Tank	30°c	31°c	28°c	27°c	26°c	28°c	27°c
5. pH of Equalization Tank	8·6	8·5	8·0	8·6	8·5	8·5	8·0
6. MLSS in Process	25 Y.	25 Y.	25 Y.	25 Y.	25 Y.	25 Y.	25 Y.
7. pH of Secondary clarifire	7·4	7·5	7·5	7·4	7·5	7·4	7·5
8. Temp. of Treated Water	12°c	13°c	11°c	11°c	12°c	11°c	11°c
9. B.O.D. of Treated Water	13·5	14·2	14·8	15·0	14·5	15·2	14·8
10. C.O.D. of Treated Water	96.8	98·8	110·2	98·5	92·8	96·5	102·4
11. T.S.S. of Treated Water	15·0	15.0	16·0	17·0	18·0	18·0	16·0
12. Quantity of Raw Effluent	1040	1052	1026	1110	1080	1048	1022
13. Quantity of Treated Water	1025	1037	1012	1095	1065	1034	1010
UREA	5 Kg	5 Kg	5 Kg	5 Kg	5 Kg	5 Kg	5 Kg
DAP	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg
MICRO BIAL CULTURE	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg	3 Kg
LIME	50 Kg	100 Kg	50 Kg	100 Kg	50 Kg	50 Kg	100 Kg

Remarks :-

Signature of Chemist

Authorised Signature

1580

R.B. NARAIN SINGH SUGAR MILLS LTD., LAKSAR (HARIDWAR)

E.T.P. LOG BOOK

1. Date	31/12/24	01/01/25	02/01/25	03/01/25			
2. Energy Meter Reading	491374	491545	491699	491852			
3. Flow Meter Reading	495628	496673	497695	498727			
4. Temp. of Equalization Tank	29°C	31°C	30°C	28°C			
5. pH of Equalization Tank	8.6	8.2	8.5	8.6			
6. MLSS in Process	30%	30%	30%	30%			
7. pH of Secondary clarifire	7.4	7.5	7.5	7.5			
8. Temp. of Treated Water	11°C	10°C	10°C	11°C			
9. B.O.D. of Treated Water	15.0	13.6	16.5	15.2			
10. C.O.D. of Treated Water	108.0	85.2	80.0	82.2			
11. T.S.S. of Treated Water	16.0	15.0	17.0	18.0			
12. Quantity of Raw Effluent	1035	1045	1022	1032			
13. Quantity of Treated Water	1020	1030	1010	1018			
UREA	5Kg	5Kg	5Kg	5Kg			
DAP	3Kg	3Kg	3Kg	3Kg			
MICRO NPK CULTURE	3Kg	3Kg	3Kg	3Kg			
LIME	50Kg	50Kg	100Kg	50Kg			

Remarks :-

Dinesh
Signature of Chemist

Authorised Signature

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R.B.N.S. SUGAR MILLS LTD. LAKSAR

SPRAY POND OVER FLOW WATER TREATMENT SYSTEM

Date	Flow Meter Initial Reading	Flow Meter Final Reading	Flow M³/Hr.	pH Inlet	Sulphate Inlet in Mg/Ltr.	Sulphate Outlet in Mg/Ltr.
08/11/24	59236	59476	10	10.0		
9/11/24	59476	59692	9	10.2	100	80
10/11/24	59692	59956	11	9.8		
11/11/24	59956	60151	8	10.1		
12/11/24	60151	60439	12	10.2		
13/11/24	60439	60703	11	10.0		
14/11/24	60703	60943	10	9.8		
15/11/24	60943	61303	15	10.0		
16/11/24	61303	61687	16	10.1	110	80
17/11/24	61687	62143	19	10.2		
18/11/24	62143	62537	16.0	10.0		
19/11/24	62537	62825	12.0	10.0		
20/11/24	62825	63137	13.0	10.1		
21/11/24	63137	63366	9.0	10.0		
22/11/24	63366	63702	14.0	10.1		
23/11/24	63702	64062	15.0	10.0		
24/11/24	64062	64446	16.0	10.2	120	100
25/11/24	64446	64758	13.0	10.0		
26/11/24	64758	65094	14.0	10.0		
27/11/24	65094	65454	15.0	10.2		

Authorised Signature

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R.B.N.S. SUGAR MILLS LTD. LAKSAR

SPRAY POND OVER FLOW WATER TREATMENT SYSTEM

Date	Flow Meter Initial Reading	Flow Meter Final Reading	Flow M^3/Hr.	pH Inlet	Sulphate Inlet in Mg/Ltr.	Sulphate Outlet in Mg/Ltr.
28/11/24	65454	65838	16.0	10.2		
29/11/24	65838	66210	15.5	10.0	100	70
30/11/24	66210	66560	14.6	10.1		
01/12/24	66560	66946	16.1	10.0		
02/12/24	66946	67354	17.0	10.1		
03/12/24	67354	67719	15.2	10.0		
04/12/24	67719	68107	16.2	10.2		
05/12/24	68107	68503	16.5	10.0		
06/12/24	68503	68882	15.8	10.1		
07/12/24	68882	69273	16.3	10.0		
08/12/24	69273	69659	16.1	9.8	110	70
9/12/24	69659	70019	15.0	10.0		
10/12/24	70019	70383	15.2	10.0		
11/12/24	70383	70738	14.8	10.1		
12/12/24	70738	71098	15.0	10.0		
13/12/24	71098	71470	15.5	10.2		
14/12/24	71470	71820	14.6	10.0		
15/12/24	71820	72211	16.3	10.0		
16/12/24	72211	72551	14.2	10.1		
17/12/24	72551	72920	15.4	9.8	100	60

Dinesh

Authorised Signature

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R.B.N.S. SUGAR MILLS LTD. LAKSAR

SPRAY POND OVER FLOW WATER TREATMENT SYSTEM

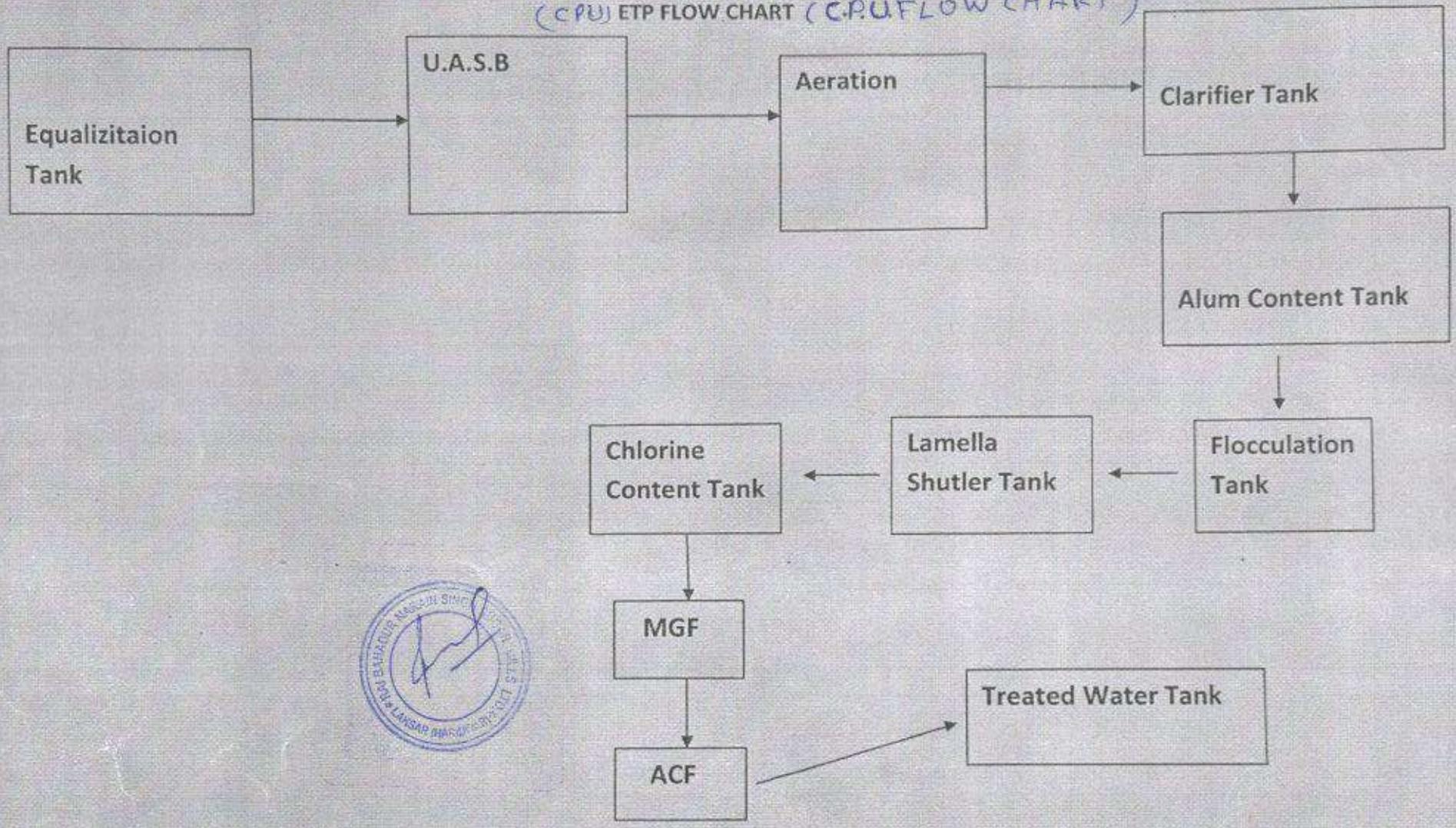
Date	Flow Meter Initial Reading	Flow Meter Final Reading	Flow M^3/Hr.	pH Inlet	Sulphate Inlet in Mg/Ltr.	Sulphate Outlet in Mg/Ltr.
18/12/24	72920	73284	15·2	10·0		
19/12/24	73284	73639	14·8	10·0		
20/12/24	73639	73639	16·0	10·1		
21/12/24	73639	73989	14·6	10·0	100	60
22/12/24	73989	74353	15·2	10·0		
23/12/24	74353	74727	15·6	10·1		
24/12/24	74727	75082	14·8	10·0		
25/12/24	75082	75427	14·4	10·1		
26/12/24	75427	75794	15·3	10·0		
27/12/24	75794	76166	15·5	10·0		
28/12/24	76166	76516	14·6	10·0		
29/12/24	76516	76900	16·0	10·2	110	60
30/12/24	76900	77264	15·2	10·0		
31/12/24	77264	77633	15·4	10·1		
01/01/25	77633	77993	15·0	10·2		
02/01/25	77993	78333	14·2	10·0		
03/01/25	78333	78695	15·1	10·0		
04/01/25	78695	79040	14·4	10·0		
05/01/25	79040	79390	14·6	10·2		
06/01/25	79390	79754	15·2	10·1	130	70

Authorised Signature

1584

R.B.N.S.SUGAR MILLS LAKSAR (HARIDWAR) DISTILLERY DIVISION

(CPU) ETP FLOW CHART (C.P.U FLOW CHART)



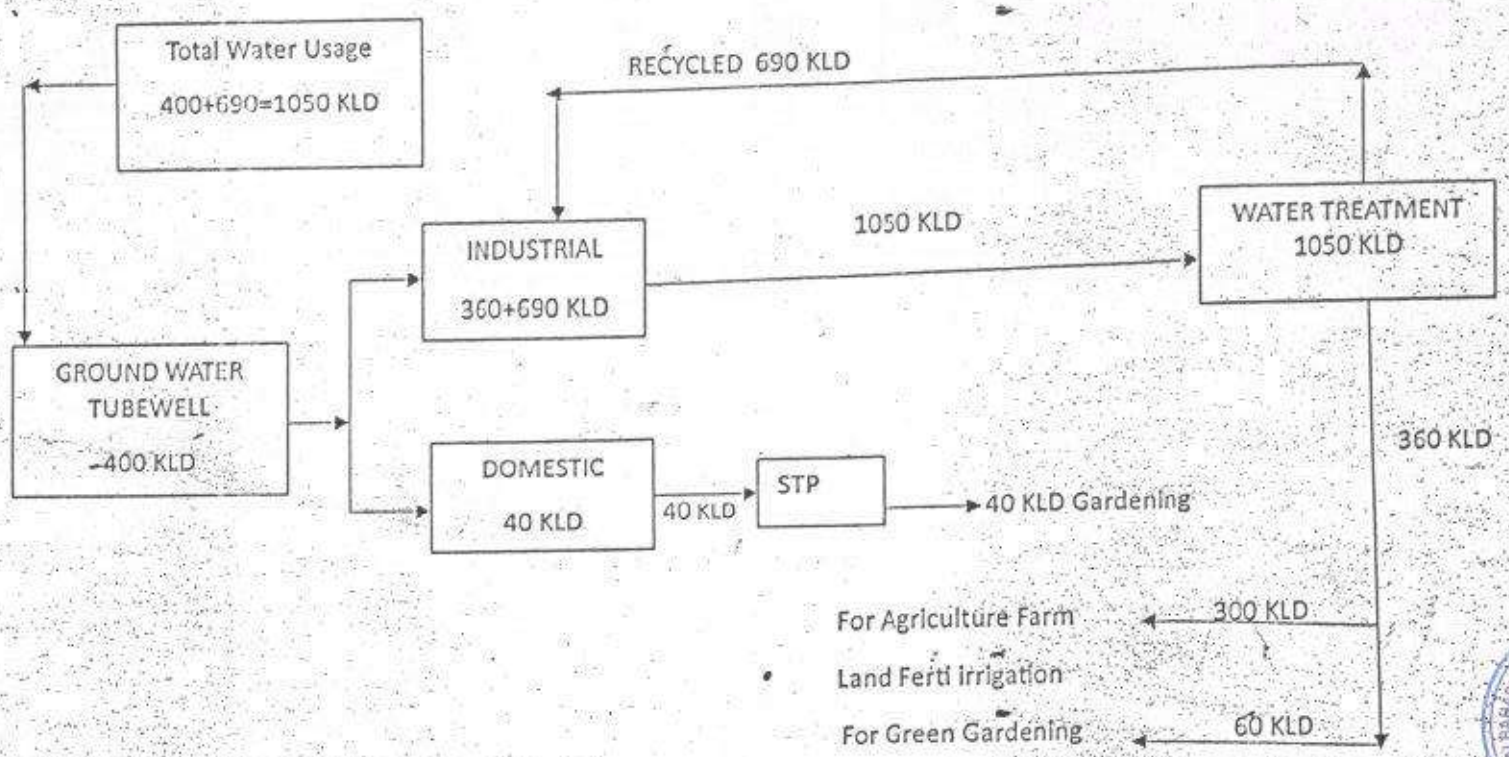
1585

Annexure-7

(8)

R.B.N.S SUGAR MILLS LTD., LAKSAR(DISTT- HARIDWAR)

WATER BALANCE FLOW CHART (FERTI IRRIGATION PLAN)

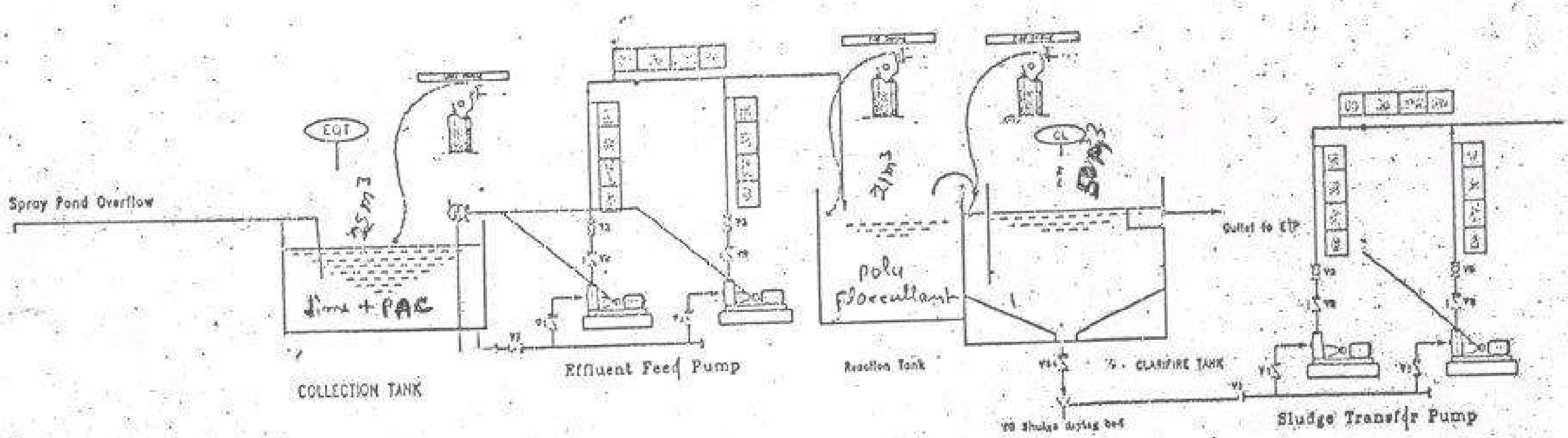


1586

Annexure-8

Annexure-9

SRS SYSTEM



Spray Pond ETP SYSTEM

Drawing Submitted to Laksar Sugar

RBNS SUGAR MILLS LTD. LAKSAR

Annexure-10

Grams : SUGAR LHAKSAR
Phones: 01332-254653
Fax: 01332-254655,254460
E-mail:edprbns@yahoo.com
CIN:U74899DL1932PLC000298
TIN :05002166908

Rai Bahadur Narain Singh Sugar Mills Limited

Laksar – 247663 (Distt. Haridwar) Uttarakhand

E.T.P. STAFF LIST

S.No.	Name	Designation	Experience
1	Bhuvnesh Kumar	Dy. Manager	17 years
2	Dinesh Kumar	Chemist	16 years
3.	Ravindra Kumar	Chemist	10 years
4	Janeshwar	Chemist	10 years
5	Indrajeet Shah	Operator	6 years
6	Manoj Kumar	Operator	8 years
7	Mohit Kumar	Operator	8 years
8	Anurag Kumar	Operator	5 years
9	Helpers	04 nos.	

(S.P. Singh)
General Manager

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD., LAKSAR

DATE 20-DEC-24 CROP DAY 44 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 20-DEC-24 TO 8 AM 21-DEC-24

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(QTLS.)	99800.00	4153800.00		
(1) EARLY	101045.00	4154906.59	100.00	99.99
(2) GENERAL	0.00	0.00	0.00	0.00
(3) UN-APPROVED	0.00	0.00	0.00	0.00
(4) BURNT CANE	0.00	239.33	0.00	0.01
2. RECOVERY % CANE	8.95	8.63		
3. SUGAR BAGGED QTLS	8800.00	342200		
4. SUGAR BAGGED % CANE	8.82	8.24		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	72.83			
8. CAPACITY UTILIZATION	120.00	111.62		
9. CANE/TANK	9.32	9.48		
10. MIXED JUICE % CANE	106.82	104.90		
11. ADDED WATER % CANE	33.99	32.83		
12. ADDED WATER % FIBRE	265.75	254.16		
13. BAGASSE % CANE	26.64	27.40		
14. MOLASSES % CANE	5.11	5.06		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.40	0.44		
2. PRESS CAKE	0.05	0.06		
3. FINAL MOLASSES	2.26	2.24		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.02	0.02		
6. TOTAL LOSSES	2.73	2.76		
TECHNICAL CONTROL FIGURE				
1. CANE CRUSHED/SEASON D	99800.00	94404.55		
2. CANE CRUSHED/24 HOUR	99800.00	97981.42		
3. MILL EXTRACTION	96.58	96.17		
4. R. M. E. (DEER)	96.67	96.31		
5. JAWA RATIO	79.13	78.60		
6. UNDILUTED JUICE % CAN	81.19	80.57		
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	78.07	77.06		
8. UNDILUTED JUICE LOST BAGASS % FIBRE	24.65	26.71		
9. BOILING HOUSE RECOV.	79.36	78.83		
10. REDUCED BOILING HOUS	83.16	82.89		

CANE (GATE+OC)	Centre	TOTAL
2106253.95	1947846.97	4054100.92
55634.58	45410.42	101045.00
2161886.53	1993257.39	4155145.92

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	3040		3040	1520	17.27	48150	14.07
L-30				0	0.00	0	0.00
M-31	3260	11300	14560	7280	82.73	294050	85.93
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	6300	11300	17600	8800		342200	

Icumsa :L-98.83 M-92.14

S.No.	Duration
0	0.00
Total	0.00

DAILY STOPPAGE DETAILS

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.68		12.79	
2 BAGASSE	2.08	1.50		48.02	47.90
3 PRIMARY JUICE	17.60	14.76	83.86		
4 MIXED JUICE	12.86	10.56	82.12		
5 LAST MILL JUICE	1.75	1.26	72.00		
6 FILTER CAKE POL		1.20			
7 CLEAR JUICE	13.08	10.90	83.33		
8 UNSUL. SYRUP	61.53	51.09	83.03		
9 SUL. SYRUP	61.20	50.72	82.88		
10 A-MASSECUITE	93.02	81.32	87.42		
11 A-HEAVY MOLASSES	81.07	57.83	71.33		
PURITY DROP			16.09		
12 B-MASSECUITE	96.24	67.12	69.74		
13 B-HEAVY MOLASSES	88.14	44.21	50.16		
PURITY DROP			19.58		
14 A1-MASSECUITE	94.42	70.66	74.84		
15 A1-HEAVY MOLASSES	73.00	43.80	60.00		
PURITY DROP			14.84		
16 C1-MASSECUITE	0.00	0.00	0.00		
17 C1-HEAVY MOLASSES	0.00	0.00	0.00		
PURITY DROP			0.00		
18 C-MASSECUITE	0.00	0.00	0.00		
19 C-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
20 FIN. MOL. (C-Heavy)	88.14	44.21	50.16		
21 A-LIGHT MOLASSES	74.17	64.63	87.14		
22 C-LIGHT MOLASSES	0.00	0.00	0.00		

TIME ACCOUNTS

1. CANE SHORTAGE	0.00	0.00
2. MECHANICAL	0.00	8.10
3. PROCESS	0.00	0.00
4. ELECT. FAULT	0.00	5.45
5. CLEANINGS	0.00	17.20
6. INCL. WEATHER	0.00	0.00
7. MISCLENIOUS	0.00	1.00
Mill Sanitation	40.00	1504.00

	ON-DATE	TO-DATE
TOTAL HOURS	24.00	1050.00
HOURS CRUSHED	24.00	1017.45
HOURS LOST	0.00	32.15
%TOTAL HOURS TO TOTAL HOURS	0.00	3.06

	ON-DATE	TO-DATE
STEAM % CANE.(24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

STORE CONSUMPTION

		ON-DATE	%CANE	TO-DATE	%CANE
1	Jute Bags 50 kg (No	11300.00	11.08	74600.00	1.79
2	Lime (Qtl.)	205.00	0.20	8338.50	0.20
3	Sulphur (Qtl.)	80.00	0.08	3315.00	0.08
4	Plastic 50 KG Bags	6600.00	6.47	625610.00	14.99
5	Bagasse (Qtl.)	0.00	0.00	0.00	0.00
6	Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7	Caustic Soda (Kg.)	0.00	0.00	6500.00	0.16
8	Bleaching Powder (K	0.00	0.00	50.00	0.00
9	Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10	Magnafloc (Kg.)	25.00	0.02	1025.00	0.02
11	Ammonium SFF (Kg.)	0.00	0.00	0.00	0.00
12	Biocide (Kg.)	0.00	0.00	1500.00	0.04
13	Sprit (Ltr.)	0.00	0.00	0.00	0.00
14	Oil (Ltr.)	85.00	0.08	9859.00	0.24
15	Grease (Kg.)	4.00	0.00	1110.00	0.03

RAI BAHADUR NARAIN SINGH SUGAR MILLS LTD. LAKSAR (HARIDWAR) U.P. STATE

Asst. Mgr(QC) Sr. DyGM(Prod.)

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Annexure-II

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD., LAKSAR

DATE 21-DEC-24 CROP DAY 45 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 21-DEC-24 TO 8 AM 22-DEC-24

	ON-DATE	TO-DATE
1. CANE CRUSH(QTLS.)	100000.00	4253800.00
(1) EARLY	100113.80	4255020.39
(2) GENERAL	0.00	0.00
(3) UN-APPROVED	0.00	0.00
(4) BURNT CANE	0.00	239.33
2. RECOVERY % CANE	9.00	8.64
3. SUGAR BAGGED QTLS	9500.00	351700
4. SUGAR BAGGED % CANE	9.50	8.27
5. Sytup Diversion Qty.		0.00
6. Sugar Loss in Syrup		0.00
7. NET JUICE %CANE	72.83	
8. CAPACITY UTILIZATION	120.00	111.80
9. CANE/TANK	9.42	9.48
10. MIXED JUICE % CANE	105.68	104.92
11. ADDED WATER % CANE	32.85	32.83
12. ADDED WATER % FIBRE	257.07	254.23
13. BAGASSE % CANE	26.68	27.38
14. MOLASSES % CANE	5.05	5.06
15. SUGAR LOSSES % CANE		
1. BAGASSES	0.40	0.44
2. PRESS CAKE	0.06	0.06
3. FINAL MOLASSES	2.28	2.24
4. Loss in Syrup Div.	0.00	0.00
5. UNKNOWN	0.02	0.02
6. TOTAL LOSSES	2.76	2.76
TECHNICAL CONTROL FIGURE		
1. CANE CRUSHED/SEASON D	100000.00	94528.89
2. CANE CRUSHED/24 HOUR	103896.10	98112.73
3. MILL EXTRACTION	96.60	96.18
4. R. M. E. (DEER)	96.68	96.32
5. JAWA RATIO	79.57	78.63
6. UNDILUTED JUICE % CAN	81.61	80.60
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	78.43	77.09
8. UNDILUTED JUICE LOST BAGASS % FIBRE	24.79	26.68
9. BOILING HOUSE RECOV.	79.24	78.84
10. REDUCED BOILING HOUS	82.97	82.86

CANE (GATE+DC)	Centre	TOTAL
2161888.53	1993257.39	4155145.92
53965.09	46148.71	100113.80
2215853.62	2039406.10	4255259.72

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	2900		2900	1450	15.26	49600	14.10
L-30				0	0.00	0	0.00
M-31	5500	10600	16100	8050	84.74	302100	85.90
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	8400	10600	19000	9500		351700	

Icumsa :L-98.46 M-92.3

S.No.	Duration	**DAILY STOPPAGE DETAILS**
1	0.50	Mill DCS System failure
Total	0.50	

	ON-DT%	TO-DT%		BRIX	POL	PURITY	FIBRE %	MOIS.
			1 CANE		11.76		12.78	
	100.00	99.99	2 BAGASSE	2.09	1.50		47.91	50.00
	0.00	0.003	PRIMARY JUICE	17.62	14.78	83.88		
	0.00	0.004	MIXED JUICE	13.08	10.75	82.19		
	0.00	0.015	LAST MILL JUICE	1.73	1.24	71.68		
			6 FILTER CAKE POL		1.23			
			7 CLEAR JUICE	13.10	10.91	83.28		
			8 UNSUL. SYRUP	62.19	51.69	83.12		
			9 SUL. SYRUP	61.82	51.24	82.89		
			10 A-MASSECUITE	93.25	81.46	87.36		
			11 A-HEAVY MOLASSES	80.82	58.17	71.97		
			PURITY DROP			15.39		
			12 B-MASSECUITE	96.94	67.90	70.04		
			13 B-HEAVY MOLASSES	90.06	45.15	50.13		
			PURITY DROP			19.91		
			14 A1-MASSECUITE	94.42	70.57	74.74		
			15 A1-HEAVY MOLASSES	78.70	46.97	59.68		
			PURITY DROP			15.06		
			16 C1-MASSECUITE	0.00	0.00	0.00		
			17 C1-HEAVY MOLASSES	0.00	0.00	0.00		
			PURITY DROP			0.00		
			18 C-MASSECUITE	0.00	0.00	0.00		
			19 C-HEAVY MOLASSES	0.00	0.00			
			PURITY DROP			0.00		
			20 FIN. MOL. (C-Heavy)	90.06	45.15	50.13		
			21 A-LIGHT MOLASSES	72.53	62.40	86.03		
			22 C-LIGHT MOLASSES	0.00	0.00	0.00		

TIME ACCOUNT

				ON-DATE	TO-DATE
1. CANE SHORTAGE	0.00	0.00			
2. MECHANICAL	0.00	8.10			
3. PROCESS	0.00	0.00	TOTAL HOURS	24.00	1074.00
4. ELECT. FAULT	0.00	5.45	HOURS CRUSHED	23.10	1040.55
5. CLEANINGS	0.00	17.20	HOURS LOST	0.50	33.05
6. INCL. WEATHER	0.00	0.00	%TOTAL HOURS	2.08	3.08
7. MISCLENIOUS	0.50	1.50	TO TOTAL HOURS		

			ON-DATE	TO-DATE
Mill Sanitation	40.00	1544.00		
STEAM % CANE, (24 Hrs.)			0.00	0.00
BLEEDING PRD TON\Hrs.			0.00	0.00

STORE CONSUMPTION

		ON-DATE	%CANE	TO-DATE	%CANE
1	Jute Bags 50 kg (No	0.00	0.00	74600.00	1.74
2	Lime (Qtl.)	200.00	0.20	8538.50	0.20
3	Sulphur (Qtl.)	80.00	0.08	3395.00	0.08
4	Plastic 50 KG Bags	8500.00	8.33	634110.00	14.83
5	Bagasse (Qtl.)	0.00	0.00	0.00	0.00
6	Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7	Caustic Soda (Kg.)	0.00	0.00	6500.00	0.15
8	Bleaching Powder (K	0.00	0.00	50.00	0.00
9	Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10	Magnafloc (Kg.)	25.00	0.02	1050.00	0.02
11	Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12	Biocide (Kg.)	100.00	0.10	1600.00	0.04
13	Sprit (Ltr.)	0.00	0.00	0.00	0.00
14	Oil (Ltr.)	107.00	0.10	9966.00	0.23
15	Grease (Kg.)	0.00	0.00	1110.00	0.03

Asst. Mgr(GC) Sr. DyCM(Prod.)

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DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD., LAKSAR

DATE 22-DEC-24 CROP DAY 46 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 22-DEC-24 TO 8 AM 23-DEC-24

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(QTLS.)	99700.00	4353500.00		
(1) EARLY	100583.69	4355604.08	100.00	99.99
(2) GENERAL	0.00	0.00	0.00	0.00
(3) UN-APPROVED	0.00	0.00	0.00	0.00
(4) BURNT CANE	0.00	239.33	0.00	0.01
2. RECOVERY % CANE	9.00	8.65		
3. SUGAR BAGGED QTLS	9100.00	360800		
4. SUGAR BAGGED % CANE	9.13	8.29		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	72.59			
8. CAPACITY UTILIZATION	121.18	112.01		
9. CANE/TANK	9.41	9.48		
10. MIXED JUICE % CANE	105.90	104.94		
11. ADDED WATER % CANE	33.31	32.85		
12. ADDED WATER % FIBRE	260.05	254.37		
13. BAGASSE % CANE	27.00	27.37		
14. MOLASSES % CANE	5.05	5.06		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.40	0.43		
2. PRESS CAKE	0.05	0.06		
3. FINAL MOLASSES	2.25	2.24		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.02	0.02		
6. TOTAL LOSSES	2.72	2.75		

TECHNICAL CONTROL FIGURE

1. CANE CRUSHED/SEASON D	99700.00	94641.30
2. CANE CRUSHED/24 HOUR	102038.38	98162.34
3. MILL EXTRACTION	96.59	96.19
4. R. M. E. (DEER)	96.68	96.33
5. JAWA RATIO	79.30	78.65
6. UNDILUTED JUICE % CAN	81.23	80.63
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	76.11	77.12
8. UNDILUTED JUICE LOST BAGASS % FIBRE	24.60	26.63
9. BOILING HOUSE RECOV.	79.53	78.85
10. REDUCED BOILING HOUS	83.17	82.90

CANE (GATE+DC)	Centre	TOTAL
2215853.62	2039406.10	4255259.72
49929.67	50654.02	100583.69
2265783.29	2090060.12	4355843.41

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qtg.	% TOT. PROD	TO DATE	% TOT. PROD.
L-31	2800		2800	1400	15.38	51000	14.14
L-30				0	0.00	0	0.00
M-31	6200	9200	15400	7700	84.62	309800	85.86
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	9000	9200	18200	9100		360800	

Icumsa :L-98.71 M-91.42

S.No.	Duration	**DAILY STOPPAGE DETAILS**
1	0.15	RBC Rake broken & replaced
Total	0.15	

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.72		12.81	
2 BAGASSE	2.06	1.48		47.44	50.50
PRIMARY JUICE	17.63	14.78	83.83		
MIXED JUICE	13.00	10.69	82.23		
LAST MILL JUICE	1.71	1.23	71.93		
6 FILTER CAKE POL		1.10			
7 CLEAR JUICE	13.11	10.93	83.37		
8 UNSUL. SYRUP	58.43	48.54	83.07		
9 SUL. SYRUP	58.12	48.21	82.95		
10 A-MASSECUITE	93.22	81.41	87.33		
11 A-HEAVY MOLASSES	81.73	58.20	71.21		
PURITY DROP			16.12		
12 B-MASSECUITE	96.04	66.93	69.69		
13 B-HEAVY MOLASSES	89.04	44.54	50.02		
PURITY DROP			19.67		
14 A1-MASSECUITE	94.39	70.56	74.75		
15 A1-HEAVY MOLASSES	70.17	42.43	60.47		
PURITY DROP			14.28		
16 C1-MASSECUITE	0.00	0.00	0.00		
17 C1-HEAVY MOLASSES	0.00	0.00	0.00		
PURITY DROP			0.00		
18 C-MASSECUITE	0.00	0.00	0.00		
19 C-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
20 FIN. MOL. (C-Heavy)	89.04	44.54	50.02		
21 A-LIGHT MOLASSES	72.50	42.43	58.52		
22 C-LIGHT MOLASSES	0.00	0.00	0.00		

TIME ACCOUNT		
1. CANE SHORTAGE	0.00	0.00
2. MECHANICAL	0.15	8.29
3. PROCESS	0.00	0.00
4. ELECT. FAULT	0.00	5.45
5. CLEANINGS	0.00	17.20
6. INCL. WEATHER	0.00	0.00
7. MISCLENIOUS	0.00	1.50
Mill Sanitation	40.00	1584.00

	ON-DATE	TO-DATE
TOTAL HOURS	24.00	1098.00
HOURS CRUSHED	23.45	1064.40
HOURS LOST	0.15	33.20
%TOTAL HOURS	0.63	3.02
TO TOTAL HOURS		

	ON-DATE	TO-DATE
STEAM % CANE, (24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

STORE CONSUMPTION

		ON-DATE	%CANE	TO-DATE	%CANE
1	Jute Bags 50 kg (No	9200.00	8.93	83800.00	1.91
2	Lime (Qtl.)	195.00	0.19	8733.50	0.20
3	Sulphur (Qtl.)	80.00	0.08	3475.00	0.08
4	Plastic 50 KG Bags	9000.00	8.74	643110.00	14.68
5	Bagasse (Qtl.)	0.00	0.00	0.00	0.00
6	Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7	Caustic Soda (Kg.)	0.00	0.00	6500.00	0.15
8	Bleaching Powder (K	0.00	0.00	50.00	0.00
9	Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10	Magnafloc (Kg.)	25.00	0.02	1075.00	0.02
11	Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12	Biocide (Kg.)	0.00	0.00	1600.00	0.04
13	Sprit (Ltr.)	0.00	0.00	0.00	0.00
14	Oil (Ltr.)	295.00	0.29	10261.00	0.23
15	Grease (Kg.)	4.00	0.00	1114.00	0.03

Asst. Mgr(QC)

Sr. DyGM(Prod.)

1591

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD., LAKSAR

DATE 23-DEC-24 CROP DAY 47 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 23-DEC-24 TO 8 AM 24-DEC-24

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(GTLS.)	100000.00	4453500.00		
(1) EARLY	99913.05	4455517.13	100.00	99.99
(2) GENERAL	0.00	0.00	0.00	0.00
(3) UN-APPROVED	0.00	0.00	0.00	0.00
(4) BURNT CANE	0.00	239.33	0.00	0.01
2. RECOVERY % CANE	8.95	8.65		
3. SUGAR BAGGED GTLS	8700.00	369500		
4. SUGAR BAGGED % CANE	8.70	8.30		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	72.87			
8. CAPACITY UTILIZATION	124.71	112.28		
9. CANE/TANK	9.39	9.48		
10. MIXED JUICE % CANE	106.04	104.97		
11. ADDED WATER % CANE	33.17	32.85		
12. ADDED WATER % FIBRE	259.63	254.49		
13. BAGASSE % CANE	26.66	27.36		
14. MOLASSES % CANE	5.02	5.05		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.40	0.43		
2. PRESS CAKE	0.05	0.06		
3. FINAL MOLASSES	2.21	2.24		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.02	0.02		
6. TOTAL LOSSES	2.68	2.75		
TECHNICAL CONTROL FIGURE				
1. CANE CRUSHED/SEASON D	100000.00	94755.32		
2. CANE CRUSHED/24 HOUR	100000.00	98202.87		
3. MILL EXTRACTION	96.56	96.20		
4. R. M. E. (DEER)	96.65	96.34		
5. JAWA RATIO	78.68	78.65		
6. UNDILUTED JUICE % CAN	80.68	80.61		
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	77.56	77.15		
8. UNDILUTED JUICE LOST BAGASS % FIBRE	24.65	26.56		
9. BOILING HOUSE RECOV.	79.73	78.87		
10. REDUCED BOILING HOUS	83.28	82.90		

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.63		12.78	
2 BAGASSE	2.08	1.50		47.92	50.00
3 PRIMARY JUICE	17.60	14.78	83.98		
4 MIXED JUICE	12.87	10.59	82.28		
5 LAST MILL JUICE	1.76	1.27	72.16		
6 FILTER CAKE POL		1.21			
7 CLEAR JUICE	12.93	10.80	83.53		
8 UNSUL. SYRUP	58.97	49.16	83.36		
9 SUL. SYRUP	58.55	48.69	83.16		
10 A-MASSECUITE	93.30	81.60	87.46		
11 A-HEAVY MOLASSES	79.20	55.80	70.49		
PURITY DROP			16.97		
12 B-MASSECUITE	96.83	67.20	69.40		
13 B-HEAVY MOLASSES	87.88	43.99	50.06		
PURITY DROP			19.34		
14 A1-MASSECUITE	94.82	71.08	74.96		
15 A1-HEAVY MOLASSES	68.00	40.87	60.10		
PURITY DROP			14.86		
16 C1-MASSECUITE	0.00	0.00	0.00		
17 C1-HEAVY MOLASSES	0.00	0.00	0.00		
PURITY DROP			0.00		
18 C-MASSECUITE	0.00	0.00	0.00		
19 C-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
20 FIN. MOL. (C-Heavy)	87.88	43.99	50.06		
21 A-LIGHT MOLASSES	72.03	62.77	87.14		
22 C-LIGHT MOLASSES	0.00	0.00	0.00		

----------*T I M E			A C C O U N T*----------	ON-DATE	TO-DATE
1. CANE SHORTAGE	0.00	0.00			
2. MECHANICAL	0.00	8.25			
3. PROCESS	0.00	0.00	TOTAL HOURS	24.00	1122.00
4. ELECT. FAULT	0.00	5.45	HOURS CRUSHED	24.00	1088.40
5. CLEANINGS	0.00	17.20	HOURS LOST	0.00	33.20
6. INCL. WEATHER	0.00	0.00	%TOTAL HOURS	0.00	2.96
7. MISCLENIOUS	0.00	1.50	TO TOTAL HOURS		
				ON-DATE	TO-DATE
Mill Sanitation	40.00	1624.00			

	ON-DATE	TO-DATE
STEAM % CANE, (24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

CANE (GATE+DC)	Centre	TOTAL
2265783.29	2090060.12	4355843.41
51255.95	48657.10	99913.05
2317039.24	2138717.22	4455756.46

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	3300		3300	1650	18.97	52650	14.25
L-30				0	0.00	0	0.00
M-31	2100	12000	14100	7050	81.03	316850	85.75
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	5400	12000	17400	8700		369500	

STORE CONSUMPTION		ON-DATE	%CANE	TO-DATE	%CANE
1	Jute Bags 50 kg (No	12000.00	11.32	95800.00	2.14
2	Lime (Gtl.)	200.00	0.19	8933.50	0.20
3	Sulphur (Gtl.)	85.00	0.08	3560.00	0.08
4	Plastic 50 KG Bags	5700.00	5.38	648810.00	14.46
5	Bagasse (Gtl.)	0.00	0.00	0.00	0.00
6	Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7	Caustic Soda (Kg.)	0.00	0.00	6500.00	0.14
8	Bleaching Powder (K	0.00	0.00	50.00	0.00
9	Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10	Magnafloc (Kg.)	50.00	0.05	1125.00	0.03
11	Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12	Biocide (Kg.)	100.00	0.09	1700.00	0.04
13	Sprit (Ltr.)	0.00	0.00	0.00	0.00
14	Oil (Ltr.)	534.00	0.50	10795.00	0.24
15	Grease (Kg.)	3.00	0.00	1117.00	0.02

Icumsa : L-98.78 M-91.83

S. No.	Duration	**DAILY STOPPAGE DETAILS*
0	0.00	Nil
Total	0.00	

RAI BAHADUR HARAIN SINGH SUGAR MILLS (LTD.) LAKSAR (HARIDWAR)

Asst. Mgr(QC) Sr. DyGM(Prod.)

1592

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS L T D., LAKSAR

DATE 24-DEC-24 CROP DAY 48 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 24-DEC-24 TO 8 AM 25-DEC-24

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(QTLS.)	99900.00	4553400.00		
(1) EARLY	100339.55	4555856.68	100.00	99.99
(2) GENERAL	0.00	0.00	0.00	0.003
(3) UN-APPROVED	0.00	0.00	0.00	0.004
(4) BURNT CANE	0.00	239.33	0.00	0.015
2. RECOVERY % CANE	9.00	8.66		
3. SUGAR BAGGED QTLS	9700.00	379200		
4. SUGAR BAGGED % CANE	9.71	8.33		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	72.88			
8. CAPACITY UTILIZATION	122.35	112.49		
9. CANE/TANK	9.37	9.48		
10. MIXED JUICE % CANE	106.32	105.00		
11. ADDED WATER % CANE	33.44	32.87		
12. ADDED WATER % FIBRE	261.79	254.65		
13. BAGASSE % CANE	26.66	27.34		
14. MOLASSES % CANE	5.05	5.05		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.40	0.43		
2. PRESS CAKE	0.05	0.06		
3. FINAL MOLASSES	2.20	2.24		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.02	0.02		
6. TOTAL LOSSES	2.67	2.75		
TECHNICAL CONTROL FIGURE				
1. CANE CRUSHED/SEASON D	99900.00	94862.50		
2. CANE CRUSHED/24 HOUR	99900.00	98239.48		
3. MILL EXTRACTION	96.57	96.21		
4. R. M. E. (DEER)	96.66	96.34		
5. JAWA RATIO	78.90	78.66		
6. UNDILUTED JUICE % CAN	80.92	80.64		
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	77.74	77.13		
8. UNDILUTED JUICE LOST BAGASS % FIBRE	24.78	26.53		
9. BOILING HOUSE RECOV.	79.87	78.90		
10. REDUCED BOILING HOUS	83.38	82.92		

		BRIX	POL	PURITY	FIBRE %	MOIS
1	CANE		11.67		12.77	
2	BAGASSE	2.09	1.50		47.91	50.00
	PRIMARY JUICE	17.61	14.79	83.99		
	MIXED JUICE	12.88	10.60	82.30		
	LAST MILL JUICE	1.77	1.27	71.75		
6	FILTER CAKE POL		1.05			
7	CLEAR JUICE	12.96	10.84	83.64		
8	UNSUL SYRUP	59.12	49.20	83.22		
9	SUL. SYRUP	58.74	48.78	83.04		
10	A-MASSECUITE	93.09	81.23	87.26		
11	A-HEAVY MOLASSES	80.03	57.00	71.22		
	PURITY DROP			16.04		
12	B-MASSECUITE	96.62	67.57	69.93		
13	B-HEAVY MOLASSES	87.50	43.80	50.06		
	PURITY DROP			19.88		
14	A1-MASSECUITE	94.69	70.80	74.77		
15	A1-HEAVY MOLASSES	76.87	46.20	60.10		
	PURITY DROP			14.67		
16	C1-MASSECUITE	0.00	0.00	0.00		
17	C1-HEAVY MOLASSES	0.00	0.00	0.00		
	PURITY DROP			0.00		
18	C-MASSECUITE	0.00	0.00	0.00		
19	C-HEAVY MOLASSES	0.00	0.00			
	PURITY DROP			0.00		
20	FIN. MOL. (C-Heavy)	87.00	43.56	50.07		
21	A-LIGHT MOLASSES	69.50	60.60	87.19		
22	C-LIGHT MOLASSES	0.00	0.00	0.00		

CANE (GATE+OC)	Centre	TOTAL
2317039.24	2138717.22	4455756.46
60177.49	4016Z.06	100339.55
2377216.73	2178879.28	4556096.01

TIME ACCOUNTS

	ON-DATE	TO-DATE		ON-DATE	TO-DATE
1. CANE SHORTAGE	0.00	0.00			
2. MECHANICAL	0.00	8.25			
3. PROCESS	0.00	0.00	TOTAL HOURS	24.00	1146.00
4. ELECT. FAULT	0.00	5.45	HOURS CRUSHED	24.00	1112.40
5. CLEANINGS	0.00	17.20	HOURS LOST	0.00	33.20
6. INCL. WEATHER	0.00	0.00	%TOTAL HOURS	0.00	2.90
7. MISCLENIOUS	0.00	1.50	TO TOTAL HOURS		
				ON-DATE	TO-DATE
Mill Sanitation	40.00	1664.00			

STEAM % CANE (24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	3400		3400	1700	17.53	54350	14.33
L-30				0	0.00	0	0.00
M-31	5100	10900	16000	8000	82.47	324850	85.67
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	8500	10900	19400	9700		379200	

STORE CONSUMPTION

		ON-DATE	%CANE	TO-DATE	%CANE
1	Jute Bags 50 kg (No	10900.00	10.48	106700.00	2.32
2	Lime (Gtl.)	195.00	0.19	9128.50	0.20
3	Sulphur (Gtl.)	80.00	0.08	3640.00	0.08
4	Plastic 50 KG Bags	8600.00	8.27	657410.00	14.32
5	Bagasse (Gtl.)	0.00	0.00	0.00	0.00
6	Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7	Caustic Soda (Kg.)	0.00	0.00	6500.00	0.14
8	Bleaching Powder (K	0.00	0.00	50.00	0.00
9	Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10	Magnafloc (Kg.)	25.00	0.02	1150.00	0.03
11	Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12	Biocide (Kg.)	100.00	0.10	1800.00	0.04
13	Sprit (Ltr.)	0.00	0.00	0.00	0.00
14	Oil (Ltr.)	94.00	0.09	10889.00	0.24
15	Grease (Kg.)	3.00	0.00	1120.00	0.02

Icumsa : L-98.62 M-91.91

S.No.	Duration	**DAILY STOPPAGE DETAILS*
0	0.00	Nill
Total	0.00	

RAJ BAHADUR NARAYAN SINGH SUGAR MILLS LTD. LAKSAR (HARIDWAR)

Asst. Mgr(GC) Sr. DyGM(Prod.)

1593

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD. LAKSAR

DATE 25-DEC-24 CROP DAY 49 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 25-DEC-24 TO 8 AM 26-DEC-24

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(QTLS.)	100000.00	4653400.00		
(1) EARLY	100364.53	4656221.21	100.00	99.99.2
(2) GENERAL	0.00	0.00	0.00	0.003
(3) UN-APPROVED	0.00	0.00	0.00	0.004
(4) BURNT CANE	0.00	239.33	0.00	0.015
2. RECOVERY % CANE	9.00	8.67		
3. SUGAR BAGGED QTLS	9700.00	388900		
4. SUGAR BAGGED % CANE	9.70	8.36		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	72.47			
8. CAPACITY UTILIZATION	123.53	112.71		
9. CANE/TANK	9.40	9.47		
10. MIXED JUICE % CANE	105.91	105.02		
11. ADDED WATER % CANE	33.44	32.88		
12. ADDED WATER % FIBRE	260.47	254.78		
13. BAGASSE % CANE	27.06	27.34		
14. MOLASSES % CANE	5.05	5.05		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.40	0.43		
2. PRESS CAKE	0.05	0.06		
3. FINAL MOLASSES	2.21	2.24		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.02	0.02		
6. TOTAL LOSSES	2.68	2.75		

TECHNICAL CONTROL FIGURE

1. CANE CRUSHED/SEASON D	100000.00	94967.35
2. CANE CRUSHED/24 HOUR	100000.00	98276.66
3. MILL EXTRACTION	96.57	96.21
4. R. M. E. (DEER)	96.67	96.35
5. JAWA RATIO	78.92	78.67
6. UNDILUTED JUICE % CAN	80.94	80.67
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	77.76	77.16
8. UNDILUTED JUICE LOST BAGASS % FIBRE	24.62	26.49
9. BOILING HOUSE RECOV.	79.81	78.92
10. REDUCED BOILING HOUS	83.11	82.94

CANE (GATE+OC)	Centre	TOTAL
2377216.73	2178879.28	4556096.01
53339.12	47025.41	100364.53
2430555.85	2225904.69	4656460.54

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	3600		3600	1800	18.56	56150	14.44
L-30				0	0.00	0	0.00
M-31	3500	12300	15800	7900	81.44	332750	85.56
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	7100	12300	19400	9700		388900	

Icumsa : L-98.96 M-91.53

S.No.	Duration	**DAILY STOPPAGE DETAILS**
0	0.00	Nill
Total	0.00	

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.68		12.84	
2 BAGASSE	2.05	1.46		47.45	50.50
3 PRIMARY JUICE	17.58	14.80	84.19		
4 MIXED JUICE	12.91	10.65	82.49		
5 LAST MILL JUICE	1.79	1.29	72.07		
6 FILTER CAKE POL		1.14			
7 CLEAR JUICE	13.02	10.90	83.72		
8 UNSUL. SYRUP	59.16	49.40	83.50		
9 SUL. SYRUP	58.85	49.03	83.31		
10 A-MASSECUITE	92.77	81.03	87.35		
11 A-HEAVY MOLASSES	79.70	56.70	71.14		
PURITY DROP			16.20		
12 B-MASSECUITE	96.15	67.23	69.92		
13 B-HEAVY MOLASSES	87.00	43.76	50.30		
PURITY DROP			19.62		
14 A1-MASSECUITE	94.28	70.33	74.60		
15 A1-HEAVY MOLASSES	73.50	44.37	60.37		
PURITY DROP			14.23		
16 C1-MASSECUITE	0.00	0.00	0.00		
17 C1-HEAVY MOLASSES	0.00	0.00	0.00		
PURITY DROP			0.00		
18 C-MASSECUITE	0.00	0.00	0.00		
19 C-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
20 FIN. MOL. (C-Heavy)	87.00	43.76	50.30		
21 A-LIGHT MOLASSES	69.87	60.62	86.76		
22 C-LIGHT MOLASSES	0.00	0.00	0.00		

TIME ACCOUNT

1. CANE SHORTAGE	0.00	0.00
2. MECHANICAL	0.00	8.25
3. PROCESS	0.00	0.00
4. ELECT. FAULT	0.00	5.45
5. CLEANINGS	0.00	17.20
6. INCL. WEATHER	0.00	0.00
7. MISCLENIOUS	0.00	1.50
Mill Sanitation	40.00	1704.00

	ON-DATE	TO-DATE
TOTAL HOURS	24.00	1170.00
HOURS CRUSHED	24.00	1136.40
HOURS LOST	0.00	33.20
%TOTAL HOURS	0.00	2.84
TO TOTAL HOURS		

	ON-DATE	TO-DATE
STEAM % CANE, (24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

STORE CONSUMPTION

	ON-DATE	%CANE	TO-DATE	%CANE
1 Jute Bags 50 kg (No	12300.00	11.71	119000.00	2.53
2 Lime (Qtl.)	200.00	0.19	9328.50	0.20
3 Sulphur (Qtl.)	85.00	0.08	3725.00	0.08
4 Plastic 50 KG Bags	7100.00	6.76	664510.00	14.16
5 Bagasse (Qtl.)	0.00	0.00	0.00	0.00
6 Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7 Caustic Soda (Kg.)	0.00	0.00	6500.00	0.14
8 Bleaching Powder (K	0.00	0.00	50.00	0.00
9 Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10 Magnafloc (Kg.)	25.00	0.02	1175.00	0.03
11 Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12 Biocide (Kg.)	0.00	0.00	1800.00	0.04
13 Spirit (Ltr.)	0.00	0.00	0.00	0.00
14 Oil (Ltr.)	114.00	0.11	11003.00	0.23
15 Grease (Kg.)	0.00	0.00	1120.00	0.02

RAJA BAHADUR NARAIN SINGH SUGAR MILLS LTD. LAKSAR (HARIDWAR)

Asst. Mgr(GC)

Sr. DyGM(Prod.)

1594

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD., LAKSAR

DATE 26-DEC-24 CROP DAY 50 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 26-DEC-24 TO 8 AM 27-DEC-24

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(QTLS.)	79000.00	4732400.00		
(1) EARLY	76722.93	4732944.14	100.00	99.99
(2) GENERAL	0.00	0.00	0.00	0.00
(3) UN-APPROVED	0.00	0.00	0.00	0.00
(4) BURNT CANE	0.00	239.33	0.00	0.01
2. RECOVERY % CANE	9.00	8.67		
3. SUGAR BAGGED QTLS	6700.00	395600		
4. SUGAR BAGGED % CANE	8.48	8.36		
5. Syrup Diversion Qty		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	72.87			
8. CAPACITY UTILIZATION	74.12	111.94		
9. CANE/TANK	9.57	9.48		
10. MIXED JUICE % CANE	104.06	105.00		
11. ADDED WATER % CANE	31.19	32.86		
12. ADDED WATER % FIBRE	244.24	254.65		
13. BAGASSE % CANE	26.65	27.33		
14. MOLASSES % CANE	5.05	5.05		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.40	0.43		
2. PRESS CAKE	0.05	0.06		
3. FINAL MOLASSES	2.21	2.24		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.02	0.02		
6. TOTAL LOSSES	2.68	2.75		
TECHNICAL CONTROL FIGURE				
1. CANE CRUSHED/SEASON D	79000.00	94648.00		
2. CANE CRUSHED/24 HOUR	135428.57	98728.79		
3. MILL EXTRACTION	96.58	96.22		
4. R. M. E. (DEER)	96.66	96.35		
5. JAWA RATIO	78.81	78.66		
6. UNDILUTED JUICE % CAN	80.76	80.65		
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	77.58	77.14		
8. UNDILUTED JUICE LOST BAGASS % FIBRE	24.66	26.46		
9. BOILING HOUSE RECOV.	79.81	78.93		
10. REDUCED BOILING HOUS	83.11	82.93		

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.69		12.77	
2 BAGASSE	2.08	1.50		47.92	50.00
3 PRIMARY JUICE	17.62	14.82	84.11		
4 MIXED JUICE	13.14	10.84	82.50		
5 LAST MILL JUICE	1.86	1.34	72.04		
6 FILTER CAKE POL		1.02			
7 CLEAR JUICE	13.16	11.01	83.66		
8 UNSUL. SYRUP	61.28	51.17	83.50		
9 SUL. SYRUP	60.93	50.79	83.36		
10 A-MASSECUITE	93.11	81.39	87.41		
11 A-HEAVY MOLASSES	79.83	58.67	73.49		
PURITY DROP			13.92		
12 B-MASSECUITE	96.70	67.40	69.70		
13 B-HEAVY MOLASSES	87.15	45.74	52.48		
PURITY DROP			17.22		
14 A1-MASSECUITE	95.18	71.08	74.68		
15 A1-HEAVY MOLASSES	75.83	45.47	59.96		
PURITY DROP			14.72		
16 C1-MASSECUITE	0.00	0.00	0.00		
17 C1-HEAVY MOLASSES	0.00	0.00	0.00		
PURITY DROP			0.00		
18 C-MASSECUITE	0.00	0.00	0.00		
19 C-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
20 FIN.MOL. (C-Heavy)	87.15	43.74	50.19		
21 A-LIGHT MOLASSES	69.67	62.23	89.32		
22 C-LIGHT MOLASSES	0.00	0.00	0.00		

TIME ACCOUNT

	ON-DATE	TO-DATE
1. CANE SHORTAGE	0.00	0.00
2. MECHANICAL	10.00	16.25
3. PROCESS	0.00	0.00
4. ELECT. FAULT	0.00	5.45
5. CLEANINGS	0.00	17.20
6. INCL. WEATHER	0.00	0.00
7. MISCLENIOUS	0.00	1.50
Mill Sanitation	33.00	1737.00

	ON-DATE	TO-DATE
TOTAL HOURS	24.00	1194.00
HOURS CRUSHED	14.00	1150.40
HOURS LOST	10.00	43.20
%TOTAL HOURS	41.67	3.62

TO TOTAL HOURS

	ON-DATE	TO-DATE
STEAM % CANE,(24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

CANE (GATE+DC)	Centre	TOTAL
2430555.85	2225904.69	4656460.54
30630.47	46092.46	76722.93
2461186.32	2271997.15	4733183.47

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	2200		2200	1100	16.42	57250	14.47
L-30				0	0.00	0	0.00
M-31	3300	7900	11200	5600	83.58	338350	85.53
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	5500	7900	13400	6700		395600	

STORE CONSUMPTION

		ON-DATE	%CANE	TO-DATE	%CANE
1	Jute Bags 50 kg (No	7900.00	12.54	126900.00	2.67
2	Lime (Gtl.)	120.00	0.19	9448.50	0.20
3	Sulphur (Gtl.)	50.00	0.08	3775.00	0.08
4	Plastic 50 KG Bags	5500.00	8.73	670010.00	14.08
5	Bagasse (Gtl.)	0.00	0.00	0.00	0.00
6	Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7	Caustic Soda (Kg.)	0.00	0.00	6500.00	0.14
8	Bleaching Powder (K	0.00	0.00	50.00	0.00
9	Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10	Magnafloc (Kg.)	25.00	0.04	1200.00	0.03
11	Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12	Biocide (Kg.)	0.00	0.00	1800.00	0.04
13	Servit (Ltr.)	0.00	0.00	0.00	0.00
14	Oil (Ltr.)	493.00	0.78	11496.00	0.24
15	Grease (Kg.)	0.00	0.00	1120.00	0.02

Icumsa :L-98.75 M-91.38

DAILY STOPPAGE DETAILS

S.No.	Duration	
1	10.00	90 TPH Boiler Tube leakage attended
Total	10.00	

Ass't. Mgr(GC) Sr. DyGM(Prod.)

1595

D A I L Y M A N U F A C T U R I N G R E P O R T O F R. B. N. S. S U G A R M I L L S L T D., L A K S A R

DATE 27-DEC-24 CROP DAY 51 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 27-DEC-24 TO 8 AM 28-DEC-24

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(QTLS.)	99200.00	4831600.00		
(1) EARLY	99866.03	4832810.17	100.00	100.00
(2) GENERAL	0.00	0.00	0.00	0.003
(3) UN-APPROVED	0.00	0.00	0.00	0.004
(4) BURNT CANE	0.00	239.33	0.00	0.005
2. RECOVERY % CANE	9.60	8.69		
3. SUGAR BAGGED QTLS	8800.00	404400		
4. SUGAR BAGGED % CANE	8.87	8.37		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	71.32			
8. CAPACITY UTILIZATION	112.94	111.96		
9. CANE/TANK	9.49	9.48		
10. MIXED JUICE % CANE	104.80	105.00		
11. ADDED WATER % CANE	33.48	32.87		
12. ADDED WATER % FIBRE	255.13	254.66		
13. BAGASSE % CANE	28.11	27.34		
14. MOLASSES % CANE	4.37	5.04		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.47	0.43		
2. PRESS CAKE	0.05	0.06		
3. FINAL MOLASSES	1.40	2.22		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.10	0.02		
6. TOTAL LOSSES	2.02	2.73		

TECHNICAL CONTROL FIGURE

	ON-DATE	TO-DATE
1. CANE CRUSHED/SEASON D	99200.00	95166.67
2. CANE CRUSHED/24 HOUR	103513.04	98822.57
3. MILL EXTRACTION	95.96	96.21
4. R. M. E. (DEER)	96.18	96.35
5. JAWA RATIO	78.99	78.67
6. UNDILUTED JUICE % CAN	81.45	80.63
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	77.80	77.18
8. UNDILUTED JUICE LOST BAGASS % FIBRE	28.12	26.49
9. BOILING HOUSE RECOV.	86.13	79.07
10. REDUCED BOILING HOUS	88.86	83.05

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.62		13.12	
2 BAGASSE	2.31	1.67		46.67	51.02
3 PRIMARY JUICE	17.57	14.71	83.72		
4 MIXED JUICE	13.04	10.64	81.60		
5 LAST MILL JUICE	1.74	1.26	72.41		
6 FILTER CAKE POL		1.10			
7 CLEAR JUICE	13.06	10.71	82.01		
8 UNSUL. SYRUP	56.66	46.36	81.82		
9 SUL. SYRUP	56.28	45.96	81.66		
10 A-MASSECUITE	92.93	81.37	87.56		
11 A-HEAVY MOLASSES	81.57	58.60	71.84		
PURITY DROP			15.72		
12 B-MASSECUITE	96.67	67.28	69.60		
13 B-HEAVY MOLASSES	87.30	43.73	50.09		
PURITY DROP			19.51		
14 A1-MASSECUITE	0.00	0.00			
15 A1-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
16 C1-MASSECUITE	0.00	0.00	0.00		
17 C1-HEAVY MOLASSES	0.00	0.06	0.00		
PURITY DROP			0.00		
18 C-MASSECUITE	99.90	54.60	54.65		
19 C-HEAVY MOLASSES	87.85	32.06	36.49		
PURITY DROP			18.16		
20 FIN. MOL. (C-Heavy)	87.85	32.06	36.49		
21 A-LIGHT MOLASSES	72.57	63.00	86.81		
22 C-LIGHT MOLASSES	77.03	46.73	60.66		

T I M E A C C O U N T

	ON-DATE	TO-DATE
1. CANE SHORTAGE	0.35	0.35
2. MECHANICAL	0.25	18.50
3. PROCESS	0.00	0.00
4. ELECT. FAULT	0.00	5.45
5. CLEANINGS	0.00	17.20
6. INCL. WEATHER	0.00	0.00
7. MISCLENIOUS	0.00	1.50
Mill Sanitation	40.00	1777.00

	ON-DATE	TO-DATE
TOTAL HOURS	24.00	1218.00
HOURS CRUSHED	23.00	1173.40
HOURS LOST	1.00	44.20
%TOTAL HOURS TO TOTAL HOURS	4.17	3.63

	ON-DATE	TO-DATE
STEAM % CANE.(24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

CANE (GATE+OC)	Centre	TOTAL
2461186.32	2271997.15	4733183.47
43241.20	56624.83	99866.03
2504427.52	2328621.98	4833049.50

GRADEWISE SUGAR-PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	2600		2600	1300	14.77	58550	14.48
L-30				0	0.00	0	0.00
M-31	700	14300	15000	7500	85.23	345850	85.52
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	3300	14300	17600	8800		404400	

STORE CONSUMPTION

	ON-DATE	%CANE	TO-DATE	%CANE
1 Jute Bags 50 kg (No	14300.00	14.90	141200.00	2.91
2 Lime (Qtl.)	180.00	0.19	9628.50	0.20
3 Sulphur (Qtl.)	75.00	0.08	3850.00	0.08
4 Plastic 50 KG Bags	3300.00	3.44	673310.00	13.87
5 Bagasse (Qtl.)	0.00	0.00	0.00	0.00
6 Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7 Caustic Soda (Kg.)	0.00	0.00	6500.00	0.13
8 Bleaching Powder (K	0.00	0.00	50.00	0.00
9 Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10 Magnafloc (Kg.)	25.00	0.03	1225.00	0.03
11 Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12 Biocide (Kg.)	100.00	0.10	1900.00	0.04
13 Sprit [illegible]	0.00	0.00	0.00	0.00
14 Oil [illegible]	103.00	0.11	11599.00	0.24
15 Grease (Kg.)	182.00	0.19	1302.00	0.03

Icumsa :L-98.92 M-91.97

DAILY STOPPAGE DETAILS

S.No.	Duration	
1	0.25	Cane Jamming at Chopper & Low Steam Pressure
1	0.00	Note :- Less Crushing due to Rain fall
Total	0.25	

RAI BAHADUR NARAIN SINGH SUGAR MILLS LTD. LAKSAR (HARIDWAR)

Asstt. Mgr(QC)

Sr. DyGM(Prod.)

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD., LAKSAR

DATE 28-DEC-24 CROP DAY 52 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 28-DEC-24 TO 8 AM 29-DEC-24

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(QTLS)	77800.00	4909400.00		
(1) EARLY	78628.37	4911438.54	100.00	100.00
(2) GENERAL	0.00	0.00	0.00	0.00
(3) UN-APPROVED	0.00	0.00	0.00	0.00
(4) BURNT CANE	0.00	239.33	0.00	0.005
2. RECOVERY % CANE	9.60	8.71		
3. SUGAR BAGGED QTLS	7250.00	411650		
4. SUGAR BAGGED % CANE	9.32	8.38		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	71.59			
8. CAPACITY UTILIIATION	76.47	111.28		
9. CANE/TANK	9.67	9.48		
10. MIXED JUICE % CANE	102.88	104.97		
11. ADDED WATER % CANE	31.29	32.85		
12. ADDED WATER % FIBRE	241.55	254.48		
13. BAGASSE % CANE	27.83	27.35		
14. MOLASSES % CANE	4.07	5.03		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.47	0.43		
2. PRESS CAKE	0.05	0.06		
3. FINAL MOLASSES	1.31	2.21		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.10	0.02		
6. TOTAL LOSSES	1.93	2.72		
TECHNICAL CONTROL FIGURE				
1. CANE CRUSHED/SEASON D	77800.00	94411.54		
2. CANE CRUSHED/24 HOUR	121641.69	99083.88		
3. MILL EXTRACTION	95.92	96.21		
4. R. M. E. (DEER)	96.08	96.35		
5. JAWA RATIO	79.03	78.67		
6. UNDILUTED JUICE % CAN	80.97	80.69		
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	77.25	77.18		
8. UNDILUTED JUICE LOST BAGASS % FIBRE	28.96	26.52		
9. BOILING HOUSE RECOV.	86.83	79.18		
10. REDUCED BOILING HOUS	89.11	83.11		

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.53		12.95	
2 BAGASSE	2.35	1.69		46.55	51.10
3 PRIMARY JUICE	17.45	14.59	83.61		
4 MIXED JUICE	13.10	10.75	82.06		
5 LAST MILL JUICE	1.67	1.20	71.86		
6 FILTER CAKE POL		1.05			
7 CLEAR JUICE	13.14	10.89	82.88		
8 UNSUL. SYRUP	50.66	41.93	82.77		
9 SUL. SYRUP	50.33	41.56	82.58		
10 A-MASSECUITE	92.81	81.35	87.65		
11 A-HEAVY MOLASSES	81.87	58.27	71.17		
PURITY DROP			16.48		
12 B-MASSECUITE	96.25	67.48	70.11		
13 B-HEAVY MOLASSES	84.23	42.43	50.37		
PURITY DROP			19.74		
14 A1-MASSECUITE	0.00	0.00			
15 A1-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
16 C1-MASSECUITE	0.00	0.00	0.00		
17 C1-HEAVY MOLASSES	0.00	0.00	0.00		
PURITY DROP			0.00		
18 C-MASSECUITE	100.17	53.75	53.66		
19 C-HEAVY MOLASSES	87.98	32.15	36.54		
PURITY DROP			17.12		
20 FIN.MOL. (C-Heavy)	87.98	32.15	36.54		
21 A-LIGHT MOLASSES	73.03	63.47	86.91		
22 C-LIGHT MOLASSES	74.17	52.87	71.28		

TIME ACCOUNT

				ON-DATE	TO-DATE
1. CANE SHORTAGE	0.00	0.35			
2. MECHANICAL	0.00	18.50			
3. PROCESS	0.00	0.00	TOTAL HOURS	24.00	1242.00
4. ELECT. FAULT	0.00	5.45	HOURS CRUSHED	15.35	1189.15
5. CLEANINGS	0.00	17.20	HOURS LOST	8.25	52.45
6. INCL. WEATHER	8.25	8.25	%TOTAL HOURS	34.38	4.22
7. MISCLENIOUS	0.00	1.50	TO TOTAL HOURS		
				ON-DATE	TO-DATE
Mill Sanitation	30.00	1807.00			

	ON-DATE	TO-DATE
STEAM % CANE.(24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

CANE (GATE+DC)	Centre	TOTAL
2504427.52	2328621.98	4833049.50
35326.65	43301.72	78628.37
2539754.17	2371923.70	4911677.87

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	1800		1800	900	12.41	57450	14.44
L-30				0	0.00	0	0.00
M-31	1900	10800	12700	6350	87.59	352200	85.56
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	3700	10800	14500	7250		411650	

STORE CONSUMPTION

		ON-DATE	%CANE	TO-DATE	%CANE
1	Jute Bags 50 kg (No	10800.00	16.62	152000.00	3.09
2	Lime (Qtl.)	120.00	0.18	9748.50	0.20
3	Sulphur (Qtl.)	50.00	0.08	3900.00	0.08
4	Plastic 50 KG Bags	3800.00	5.85	677110.00	13.77
5	Bagasse (Qtl.)	0.00	0.00	0.00	0.00
6	Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7	Caustic Soda (Kg.)	1800.00	2.77	8300.00	0.17
8	Bleaching Powder (K	0.00	0.00	50.00	0.00
9	Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10	Magnafloc (Kg.)	25.00	0.04	1250.00	0.03
11	Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12	Biocide (Kg.)	100.00	0.15	2000.00	0.04
13	Sprit (Ltr.)	0.00	0.00	0.00	0.00
14	Oil (Ltr.)	100.00	0.15	11699.00	0.24
15	Grease (Kg.)	8.00	0.01	1306.00	0.03

Icumsa :L-98.97 M-92

DAILY STOPPAGE DETAILS

S.No.	Duration	
1	8.25	No Cane due to Rain Fall
1	0.00	NOTE :- 1- Less Crushing due to Rainfall
Total	8.25	

Asstt. Engr.(C.)

Sr. DyGM(Prod.)

1597

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD., LAKSAR

DATE 29-DEC-24 CROP DAY 53 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 29-DEC-24 TO 8 AM 30-DEC-24

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(GTLS.)	83800.00	4993200.00		
(1) EARLY	82454.08	4993892.62	100.00	100.00
(2) GENERAL	0.00	0.00	0.00	0.003
(3) UN-APPROVED	0.00	0.00	0.00	0.004
(4) BURNT CANE	0.00	239.33	0.00	0.005
2. RECOVERY % CANE	9.60	8.72		
3. SUGAR BAGGED GTLS	5050.00	416700		
4. SUGAR BAGGED % CANE	6.03	8.35		
5. Syrup Diversion Qty		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	71.36			
8. CAPACITY UTILIZATION	83.53	110.75		
9. CANE/TANK	9.53	9.48		
10. MIXED JUICE % CANE	104.35	104.96		
11. ADDED WATER % CANE	32.99	32.85		
12. ADDED WATER % FIBRE	251.57	254.44		
13. BAGASSE % CANE	28.06	27.36		
14. MOLASSES % CANE	4.07	5.01		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.48	0.43		
2. PRESS CAKE	0.05	0.06		
3. FINAL MOLASSES	1.27	2.19		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.10	0.03		
6. TOTAL LOSSES	1.90	2.71		
TECHNICAL CONTROL FIGURE				
1. CANE CRUSHED/SEASON D	83800.00	94211.32		
2. CANE CRUSHED/24 HOUR	118305.88	99354.81		
3. MILL EXTRACTION	95.83	96.20		
4. R. M. E. (DEER)	96.05	96.34		
5. JAWA RATIO	78.60	78.67		
6. UNDILUTED JUICE % CAN	80.56	80.68		
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	76.79	77.17		
8. UNDILUTED JUICE LOST BAGASS % FIBRE	28.94	26.56		
9. BOILING HOUSE RECOV.	87.13	79.29		
10. REDUCED BOILING HOUS	89.36	83.20		

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.50		13.11	
2 BAGASSE	2.37	1.71		46.73	50.90
PRIMARY JUICE	17.49	14.63	83.65		
MIXED JUICE	12.87	10.56	82.05		
LAST MILL JUICE	1.66	1.20	72.29		
6 FILTER CAKE POL		1.12			
7 CLEAR JUICE	12.96	10.66	82.25		
8 UNSUL. SYRUP	51.85	42.56	82.08		
9 SUL. SYRUP	51.33	42.00	81.82		
10 A-MASSECUITE	93.24	81.57	87.48		
11 A-HEAVY MOLASSES	79.83	57.90	72.53		
PURITY DROP			14.95		
12 B-MASSECUITE	96.67	69.33	71.72		
13 B-HEAVY MOLASSES	82.37	41.43	50.30		
PURITY DROP			21.42		
14 A1-MASSECUITE	0.00	0.00			
15 A1-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
16 C1-MASSECUITE	97.00	63.45	65.41		
17 C1-HEAVY MOLASSES	81.78	39.08	47.79		
PURITY DROP			17.63		
18 C-MASSECUITE	100.01	54.58	54.57		
19 C-HEAVY MOLASSES	87.85	32.01	36.44		
PURITY DROP			18.13		
20 FIN. MOL. (C-Heavy)	89.26	31.17	34.92		
21 A-LIGHT MOLASSES	71.83	62.77	87.39		
22 C-LIGHT MOLASSES	73.17	51.73	70.70		

TIME ACCOUNTS

				ON-DATE	TO-DATE
1. CANE SHORTAGE	0.00	0.35			
2. MECHANICAL	0.00	18.50			
3. PROCESS	0.00	0.00	TOTAL HOURS	24.00	1266.00
4. ELECT. FAULT	0.00	5.45	HOURS CRUSHED	17.00	1206.15
5. CLEANINGS	0.00	17.20	HOURS LOST	7.00	59.45
6. INCL. WEATHER	7.00	15.25	%TOTAL HOURS	29.17	4.70
7. MISCLENIOUS	0.00	1.50	TO TOTAL HOURS		
				ON-DATE	TO-DATE
Mill Sanitation	40.00	1847.00			

	ON-DATE	TO-DATE
STEAM % CANE, (24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

CANE (GATE+OC)	Centre	TOTAL
2539754.17	2371923.70	4911677.87
56305.54	26148.54	82454.08
2596059.71	2398072.24	4994131.95

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	1100		1100	550	10.89	60000	14.40
L-30				0	0.00	0	0.00
M-31	2300	6700	9000	4500	89.11	356700	85.60
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	3400	6700	10100	5050		416700	

STORE CONSUMPTION

		ON-DATE	%CANE	TO-DATE	%CANE
1	Jute Bags 50 kg (No	6700.00	9.44	158700.00	3.18
2	Lime (Qtl.)	140.00	0.20	9888.50	0.20
3	Sulphur (Qtl.)	55.00	0.08	3955.00	0.08
4	Plastic 50 KG Bags	3400.00	4.79	680510.00	13.64
5	Bagasse (Qtl.)	0.00	0.00	0.00	0.00
6	Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7	Caustic Soda (Kg.)	0.00	0.00	8300.00	0.17
8	Bleaching Powder (K	0.00	0.00	50.00	0.00
9	Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10	Magnafloc (Kg.)	25.00	0.04	1275.00	0.03
11	Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12	Biocide (Kg.)	0.00	0.00	2000.00	0.04
13	Sarit (Ltr.)	0.00	0.00	0.00	0.00
14	Oil (Kg.)	68.00	0.10	11767.00	0.24
15	Grease (Kg.)	182.00	0.26	1488.00	0.03

Icumsa : L-98.7 M-92.76

DAILY STOPPAGE DETAILS

S.No.	Duration	
1	7.00	No Cane due to Rain Fall
1	0.00	Note :- Falling Film Evaporator taken in line
Total	7.00	

RAI BAHADUR NARAIN SINGH SUGAR MILLS LTD. LAKSAR SHAHJAHANPUR

Asst. Mgr(QC)

Sr. DyGM(Prod.)

1598

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD., LAKSAR

DATE 30-DEC-24 CROP DAY 54 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 30-DEC-24 TO 8 AM 31-DEC-24

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(QTLS.)	100000.00	5093200.00		
(1) EARLY	101177.89	5095070.51	100.00	100.00
(2) GENERAL	0.00	0.00	0.00	0.00
(3) UN-APPROVED	0.00	0.00	0.00	0.00
(4) BURNT CANE	0.00	239.33	0.00	0.00
2. RECOVERY % CANE	9.50	8.73		
3. SUGAR BAGGED QTLS	8300.00	425000		
4. SUGAR BAGGED % CANE	8.30	8.34		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	71.12			
8. CAPACITY UTILIZATION	118.82	110.90		
9. CANE/TANK	9.56	9.48		
10. MIXED JUICE % CANE	104.00	104.94		
11. ADDED WATER % CANE	32.88	32.85		
12. ADDED WATER % FIBRE	248.86	254.33		
13. BAGASSE % CANE	28.33	27.38		
14. MOLASSES % CANE	4.22	5.00		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.49	0.43		
2. PRESS CAKE	0.06	0.06		
3. FINAL MOLASSES	1.25	2.18		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.10	0.03		
6. TOTAL LOSSES	1.90	2.70		
TECHNICAL CONTROL FIGURE				
1. CANE CRUSHED/SEASON D	100000.00	94318.52		
2. CANE CRUSHED/24 HOUR	100000.00	99367.39		
3. MILL EXTRACTION	95.70	96.19		
4. R. M. E. (DEER)	95.97	96.34		
5. JAWA RATIO	78.46	78.66		
6. UNDILUTED JUICE % CAN	80.87	80.66		
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	76.98	77.15		
8. UNDILUTED JUICE LOST BAGASS % FIBRE	29.45	26.62		
9. BOILING HOUSE RECOV.	87.10	79.44		
10. REDUCED BOILING HOUS	89.97	83.31		

CANE (GATE+DC)	Centre	TOTAL
2596059.71	2398072.24	4994131.95
76093.50	25084.39	101177.89
2672153.21	2423156.63	5095309.84

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	1700		1700	850	10.24	60850	14.32
L-30				0	0.00	0	0.00
M-31	2100	12800	14900	7450	89.76	364150	85.68
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	3800	12800	16600	8300		425000	

Icumsa :L-98.83 M-92.42

DAILY STOPPAGE DETAILS

S.No.	Duration
0	0.00
Total	0.00

Nill

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.40		13.21	
2 BAGASSE	2.41	1.73		46.64	50.95
3 PRIMARY JUICE	17.51	14.53	82.98		
4 MIXED JUICE	12.96	10.49	80.94		
5 LAST MILL JUICE	1.71	1.23	71.93		
6 FILTER CAKE POL		1.33			
7 CLEAR JUICE	12.96	10.50	81.02		
8 UNSUL. SYRUP	58.31	47.21	80.96		
9 SUL. SYRUP	57.90	46.80	80.83		
10 A-MASSECUITE	93.17	81.54	87.52		
11 A-HEAVY MOLASSES	81.03	56.97	70.31		
PURITY DROP			17.21		
12 B-MASSECUITE	96.66	67.26	69.58		
13 B-HEAVY MOLASSES	87.00	42.20	48.51		
PURITY DROP			21.08		
14 A1-MASSECUITE	0.00	0.00			
15 A1-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
16 C1-MASSECUITE	95.85	61.66	64.33		
17 C1-HEAVY MOLASSES	80.50	43.00	53.42		
PURITY DROP			10.91		
18 C-MASSECUITE	100.72	54.70	54.31		
19 C-HEAVY MOLASSES	89.77	29.59	32.96		
PURITY DROP			21.35		
20 FIN. MOL. (C-Heavy)	89.77	29.59	32.96		
21 A-LIGHT MOLASSES	73.40	62.17	84.70		
22 C-LIGHT MOLASSES	74.83	50.33	67.26		

TIME ACCOUNT

				ON-DATE	TO-DATE
1. CANE SHORTAGE	0.00	0.35			
2. MECHANICAL	0.00	18.50			
3. PROCESS	0.00	0.00	TOTAL HOURS	24.00	1290.00
4. ELECT. FAULT	0.00	5.45	HOURS CRUSHED	24.00	1230.15
5. CLEANINGS	0.00	17.20	HOURS LOST	0.00	59.45
6. INCL. WEATHER	0.00	15.25	%TOTAL HOURS	0.00	4.61
7. MISCLENIOUS	0.00	1.50	TO TOTAL HOURS		
Mill Sanitation	40.00	1887.00		ON-DATE	TO-DATE
STEAM % CANE, (24 Hrs.)				0.00	0.00
BLEEDING PRD TON\Hrs.				0.00	0.00

STORE CONSUMPTION

		ON-DATE	%CANE	TO-DATE	%CANE
1	Jute Bags 50 kg (No	12800.00	12.67	171500.00	3.37
2	Lime (Qtl.)	200.00	0.20	10088.50	0.20
3	Sulphur (Qtl.)	80.00	0.08	4035.00	0.08
4	Plastic 50 KG Bags	3900.00	3.86	684410.00	13.44
5	Bagasse (Qtl.)	0.00	0.00	0.00	0.00
6	Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7	Caustic Soda (Kg.)	0.00	0.00	8300.00	0.16
8	Bleaching Powder (K	0.00	0.00	50.00	0.00
9	Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10	Magnafloc (Kg.)	25.00	0.02	1300.00	0.03
11	Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12	Biocide (Kg.)	0.00	0.00	2000.00	0.04
13	Sprit (Ltr.)	0.00	0.00	0.00	0.00
14	Oil (Ltr.)	54.00	0.05	11821.00	0.23
15	Grease (Kg.)	0.00	0.00	1488.00	0.03

Asst. Mgr(GC) Sr. DyGM(Prod.)

1599

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD., LAKSAR

DATE 31-DEC-24 CROP DAY 55 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 31-DEC-24 TO 8 AM 01-JAN-25

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(QTLS.)	99800.00	5193000.00		
(1) EARLY	100033.20	5195103.71	100.00	100.00
(2) GENERAL	0.00	0.00	0.00	0.003
(3) UN-APPROVED	0.00	0.00	0.00	0.004
(4) BURNT CANE	0.00	239.33	0.00	0.005
2. RECOVERY % CANE	9.40	8.75		
3. SUGAR BAGGED QTLS	8350.00	433350		
4. SUGAR BAGGED % CANE	8.37	8.34		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	70.97			
8. CAPACITY UTILIZATION	118.82	111.05		
9. CANE/TANK	9.57	9.48		
10. MIXED JUICE % CANE	103.94	104.93		
11. ADDED WATER % CANE	32.97	32.85		
12. ADDED WATER % FIBRE	247.62	254.19		
13. BAGASSE % CANE	28.51	27.40		
14. MOLASSES % CANE	4.18	4.98		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.49	0.44		
2. PRESS CAKE	0.06	0.06		
3. FINAL MOLASSES	1.25	2.16		
4. Loss in Sytup Div.	0.00	0.00		
5. UNKNOWN	0.10	0.03		
6. TOTAL LOSSES	1.90	2.69		
TECHNICAL CONTROL FIGURE				
1. CANE CRUSHED/SEASON D	99800.00	94418.18		
2. CANE CRUSHED/24 HOUR	99800.00	99375.67		
3. MILL EXTRACTION	95.66	96.18		
4. R. M. E. (DEER)	95.96	96.33		
5. JAWA RATIO	78.37	78.66		
6. UNDILUTED JUICE % CAN	80.87	80.66		
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	76.97	77.15		
8. UNDILUTED JUICE LOST BAGASS % FIBRE	29.59	26.66		
9. BOILING HOUSE RECOV.	86.99	79.59		
10. REDUCED BOILING HOUS	90.03	83.42		

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.30		13.31	
2 BAGASSE	2.41	1.72		46.69	50.90
PRIMARY JUICE	17.41	14.42	82.83		
MIXED JUICE	12.89	10.40	80.68		
LAST MILL JUICE	1.72	1.23	71.51		
6 FILTER CAKE POL		1.22			
7 CLEAR JUICE	13.02	10.52	80.80		
8 UNBUL. SYRUP	61.11	49.30	80.67		
9 SUL. SYRUP	60.73	48.70	80.52		
10 A-MASSECUITE	93.13	81.43	87.44		
11 A-HEAVY MOLASSES	80.33	55.73	69.38		
PURITY DROP			18.06		
12 B-MASSECUITE	97.13	67.38	69.37		
13 B-HEAVY MOLASSES	82.17	41.13	50.05		
PURITY DROP			19.32		
14 A1-MASSECUITE	0.00	0.00			
15 A1-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
16 C1-MASSECUITE	94.30	60.50	64.16		
17 C1-HEAVY MOLASSES	70.00	37.50	53.57		
PURITY DROP			10.59		
18 C-MASSECUITE	99.43	52.53	52.83		
19 C-HEAVY MOLASSES	91.00	29.89	32.85		
PURITY DROP			19.98		
20 FIN.MOL. (C-Heavy)	91.00	29.89	32.85		
21 A-LIGHT MOLASSES	72.53	61.17	84.34		
22 C-LIGHT MOLASSES	70.83	47.20	66.64		

TIME ACCOUNT

			ON-DATE	TO-DATE
1. CANE SHORTAGE	0.00	0.35		
2. MECHANICAL	0.00	18.50		
3. PROCESS	0.00	0.00	TOTAL HOURS	24.00 1314.00
4. ELECT. FAULT	0.00	5.45	HOURS CRUSHED	24.00 1254.15
5. CLEANINGS	0.00	17.20	HOURS LOST	0.00 59.45
6. INCL. WEATHER	0.00	15.25	%TOTAL HOURS	0.00 4.52
7. MISCLENIOUS	0.00	1.50	TO TOTAL HOURS	
			ON-DATE	TO-DATE
Mill Sanitation	40.00	1927.00		

	ON-DATE	TO-DATE
STEAM % CANE.(24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

CANE (GATE+DC)	Centre	TOTAL
2672153.21	2423156.63	5095309.84
77356.99	22676.21	100033.20
2749510.20	2445832.84	5195343.04

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	2200		2200	1100	13.17	61950	14.30
L-30				0	0.00	0	0.00
M-31	2400	12100	14500	7250	86.83	371400	85.70
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	4600	12100	16700	8350		433350	

STORE CONSUMPTION

		ON-DATE	%CANE	TO-DATE	%CANE
1	Jute Bags 50 kg (No	12100.00	11.98	183600.00	3.54
2	Lime (Qtl.)	200.00	0.20	10288.50	0.20
3	Sulphur (Qtl.)	80.00	0.08	4115.00	0.08
4	Plastic 50 KG Bags	4600.00	4.55	689010.00	13.27
5	Bagasse (Qtl.)	0.00	0.00	0.00	0.00
6	Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7	Caustic Soda (Kg.)	0.00	0.00	8300.00	0.16
8	Bleaching Powder (K	0.00	0.00	50.00	0.00
9	Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10	Magnafloc (Kg.)	25.00	0.02	1325.00	0.03
11	Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12	Biocide (Kg.)	0.00	0.00	2000.00	0.04
13	Sprit (Ltr.)	0.00	0.00	0.00	0.00
14	Oil (Ltr.)	109.00	0.11	11930.00	0.23
15	Grease (Kg.)	10.00	0.01	1498.00	0.03

Icumsa : L-98.7 M-92.56

S.No.	Duration	**DAILY STOPPAGE DETAILS*
0	0.00	Nill
Total	0.00	

Asst. Mgr(GC) Sr. DyGM(Prod.)

1600

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD., LAKSAR

DATE 01-JAN-25 CROP DAY 58 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 01-JAN-25 TO 8 AM 02-JAN-25

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(QTLS)	100000.00	5293000.00		
(1) EARLY	100767.26	5295872.97	100.00	100.00
(2) GENERAL	0.00	0.00	0.00	0.003
(3) UN-APPROVED	0.00	0.00	0.00	0.004
(4) BURNT CANE	0.00	239.33	0.00	0.005
2. RECOVERY % CANE	9.40	8.76		
3. SUGAR BAGGED QTLS	9400.00	442750		
4. SUGAR BAGGED % CANE	9.40	8.36		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	71.20			
8. CAPACITY UTILIZATION	117.65	111.17		
9. CANE/TANK	9.52	9.48		
10. MIXED JUICE % CANE	104.56	104.92		
11. ADDED WATER % CANE	33.36	32.86		
12. ADDED WATER % FIBRE	252.74	254.16		
13. BAGASSE % CANE	28.31	27.42		
14. MOLASSES % CANE	4.18	4.97		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.49	0.44		
2. PRESS CAKE	0.05	0.06		
3. FINAL MOLASSES	1.24	2.14		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.10	0.03		
6. TOTAL LOSSES	1.88	2.67		
TECHNICAL CONTROL FIGURE				
1. CANE CRUSHED/SEASON D	100000.00	94517.86		
2. CANE CRUSHED/24 HOUR	100000.00	99387.40		
3. MILL EXTRACTION	95.66	96.17		
4. R. M. E. (DEER)	95.92	96.32		
5. JAWA RATIO	78.66	78.66		
6. UNDILUTED JUICE % CAN	80.94	80.66		
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	76.97	77.15		
8. UNDILUTED JUICE LOST BAGASS % FIBRE	29.94	26.73		
9. BOILING HOUSE RECOV.	87.14	79.73		
10. REDUCED BOILING HOUS	90.16	83.63		

CANE (GATE+DC)	Centre	TOTAL
2749510.2	2445832.84	5195343.04
69967.97	30799.29	100767.26
2819478.17	2476632.13	5296110.30

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	2760		2760	1380	14.68	63330	14.30
L-30				0	0.00	0	0.00
M-31	740	15300	16040	8020	85.32	379420	85.70
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	3500	15300	18800	9400		442750	

Icumsa : L-98.55 M-92.6

S.No.	Duration
0	0.00
Total	0.00

DAILY STOPPAGE DETAILS

Nill

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.28		13.20	
2 BAGASSE	2.42	1.73		46.63	50.95
3 PRIMARY JUICE	17.37	14.34	82.56		
4 MIXED JUICE	12.79	10.32	80.69		
5 LAST MILL JUICE	1.71	1.22	71.35		
6 FILTER CAKE POL		1.08			
7 CLEAR JUICE	12.93	10.46	80.90		
8 UNSUL. SYRUP	60.70	49.00	80.72		
9 SUL. SYRUP	59.98	48.32	80.56		
10 A-MASSECUITE	93.15	81.34	87.32		
11 A-HEAVY MOLASSES	80.50	57.47	71.39		
PURITY DROP			15.93		
12 B-MASSECUITE	96.23	67.62	70.27		
13 B-HEAVY MOLASSES	85.17	42.50	49.90		
PURITY DROP			20.37		
14 A1-MASSECUITE	0.00	0.00			
15 A1-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
16 C1-MASSECUITE	0.00	0.00	0.00		
17 C1-HEAVY MOLASSES	0.00	0.00	0.00		
PURITY DROP			0.00		
18 C-MASSECUITE	100.09	53.04	52.99		
19 C-HEAVY MOLASSES	90.33	29.66	32.84		
PURITY DROP			20.15		
20 FIN.MOL. (C-Heavy)	90.33	29.66	32.84		
21 A-LIGHT MOLASSES	74.50	62.70	84.16		
22 C-LIGHT MOLASSES	68.33	49.30	72.15		

	%TIME	ACCOUNT	ON-DATE	TO-DATE
1 CANE SHORTAGE	0.00	0.35		
2 MECHANICAL	0.00	18.50		
3 PROCESS	0.00	0.00	TOTAL HOURS	24.00	1338.00
4 ELECT. FAULT	0.00	5.45	HOURS CRUSHED	24.00	1278.15
5 CLEANINGS	0.00	17.20	HOURS LOST	0.00	59.45
6. INCL. WEATHER	0.00	15.25	%TOTAL HOURS	0.00	4.44
7. MISCLENIOUS	0.00	1.50	TO TOTAL HOURS		
Mill Sanitation	40.00	1967.00		ON-DATE	TO-DATE

STEAM % CANE.(24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

STORE CONSUMPTION	ON-DATE	%CANE	TO-DATE	%CANE
1 Jute Bags 50 kg (No	15300.00	15.30	198900.00	3.76
2 Lime (Qtl.)	195.00	0.20	10483.50	0.20
3 Sulphur (Qtl.)	75.00	0.08	4190.00	0.08
4 Plastic 50 KG Bags	3600.00	3.60	692610.00	13.09
5 Bagasse (Qtl.)	0.00	0.00	0.00	0.00
6 Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7 Caustic Soda (Kg.)	0.00	0.00	8300.00	0.16
8 Bleaching Powder (K	0.00	0.00	50.00	0.00
9 Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10 Magnafloc (Kg.)	25.00	0.03	1350.00	0.03
11 Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12 Biocide (Kg.)	0.00	0.00	2000.00	0.04
13 Sprit (Ltr.)	0.00	0.00	0.00	0.00
14 Oil (Ltr.)	90.00	0.09	12020.00	0.23
15 Grease (Kg.)	0.00	0.00	1490.00	0.03

Asst. Mgr(GC) Sr. DyGM(Prod.)

1601

DAILY MANUFACTURING REPORT OF R.B.N.S. SUGAR MILLS LTD., LAKSAR

DATE 02-JAN-25 CROP DAY 57 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 02-JAN-25 TO 8 AM 03-JAN-25

	ON-DATE	TO-DATE	ON-DTX	TO-DTX
1. CANE CRUSH(QTLS.)	99500.00	5392500.00		
(1) EARLY	99797.58	5395668.55	100.00	100.00
(2) GENERAL	0.00	0.00	0.00	0.003
(3) UN-APPROVED	0.00	0.00	0.00	0.004
(4) BURNT CANE	0.00	239.33	0.00	0.005
2. RECOVERY % CANE	9.40	8.77		
3. SUGAR BAGGED QTLS	9600.00	452350		
4. SUGAR BAGGED % CANE	9.65	8.39		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	71.15			
8. CAPACITY UTILIZATION	118.82	111.30		
9. CANE/TANK	9.55	9.48		
10. MIXED JUICE % CANE	104.16	104.90		
11. ADDED WATER % CANE	33.01	32.87		
12. ADDED WATER % FIBRE	250.02	254.08		
13. BAGASSE % CANE	28.31	27.43		
14. MOLASSES % CANE	4.16	4.95		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.49	0.44		
2. PRESS CAKE	0.06	0.06		
3. FINAL MOLASSES	1.24	2.12		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.06	0.03		
6. TOTAL LOSSES	1.85	2.65		
TECHNICAL CONTROL FIGURE				
1. CANE CRUSHED/SEASON D	99500.00	94605.26		
2. CANE CRUSHED/24 HOUR	99500.00	99389.47		
3. MILL EXTRACTION	95.65	96.16		
4. R. M. E. (DEER)	95.91	96.31		
5. JAWA RATIO	78.67	78.65		
6. UNDILUTED JUICE % CAN	80.80	80.67		
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	76.87	77.16		
8. UNDILUTED JUICE LOST BAGASS % FIBRE	29.78	26.78		
9. BOILING HOUSE RECOV.	87.39	79.87		
10. REDUCED BOILING HOUS	90.41	83.73		

CANE (GATE+OC)	Centre	TOTAL
2819478.17	2476632.13	5296110.30
64757.95	35039.63	99797.58
2884236.12	2511671.76	5395907.88

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qty.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	2240		2240	1120	11.67	64450	14.25
L-30				0	0.00	0	0.00
M-31	3900	13060	16960	8480	88.33	387900	85.75
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	6140	13060	19200	9600		452350	

Icumsa : L-98.9 M-91.7

S.No	Duration	**DAILY STOPPAGE DETAILS*
0	0.00	Nill
Total	0.00	

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.25		13.20	
2 BAGASSE	2.41	1.73		46.64	50.95
PRIMARY JUICE	17.34	14.30	82.47		
MIXED JUICE	12.80	10.33	80.70		
LAST MILL JUICE	1.74	1.25	71.84		
6 FILTER CAKE POL		1.27			
7 CLEAR JUICE	12.87	10.41	80.89		
8 UNSUL. SYRUP	59.43	47.96	80.70		
9 SUL. SYRUP	59.08	47.58	80.53		
10 A-MASSECUITE	92.80	81.14	87.44		
11 A-HEAVY MOLASSES	80.20	56.90	70.95		
PURITY DROP			16.49		
12 B-MASSECUITE	97.68	69.02	70.66		
13 B-HEAVY MOLASSES	85.50	42.57	49.79		
PURITY DROP			20.87		
14 A1-MASSECUITE	0.00	0.00			
15 A1-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
16 C1-MASSECUITE	0.00	0.00	0.00		
17 C1-HEAVY MOLASSES	0.00	0.00	0.00		
PURITY DROP			0.00		
18 C-MASSECUITE	100.61	52.95	52.63		
19 C-HEAVY MOLASSES	90.55	29.80	32.91		
PURITY DROP			19.72		
20 FIN. MOL. (C-Heavy)	90.55	29.80	32.91		
21 A-LIGHT MOLASSES	73.10	60.70	83.04		
22 C-LIGHT MOLASSES	75.83	53.33	70.33		

TIME ACCOUNT				ON-DATE	TO-DATE
1. CANE SHORTAGE	0.00	0.35			
2. MECHANICAL	0.00	18.50			
3. PROCESS	0.00	0.00	TOTAL HOURS	24.00	1362.00
4. ELECT. FAULT	0.00	5.45	HOURS CRUSHED	24.00	1302.15
5. CLEANINGS	0.00	17.20	HOURS LOST	0.00	59.45
6. INCL. WEATHER	0.00	15.25	%TOTAL HOURS	0.00	4.36
7. MISCLENIDUS	0.00	1.50	TO TOTAL HOURS		
				ON-DATE	TO-DATE
Mill Sanitation	40.00	2007.00			

	ON-DATE	TO-DATE
STEAM % CANE. (24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

STORE CONSUMPTION	ON-DATE	%CANE	TO-DATE	%CANE
1 Jute Bags 50 kg (No	13060.00	12.93	211960.00	3.93
2 Lime (Gtl.)	200.00	0.20	10683.50	0.20
3 Sulphur (Gtl.)	80.00	0.08	4270.00	0.08
4 Plastic 50 KG Bags	6200.00	6.14	698810.00	12.96
5 Bagasse (Gtl.)	0.00	0.00	0.00	0.00
6 Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7 Caustic Soda (Kg.)	0.00	0.00	8300.00	0.15
8 Bleaching Powder (K	0.00	0.00	50.00	0.00
9 Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10 Magnaflor (Kg.)	25.00	0.02	1375.00	0.03
11 Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12 Biocide (Kg.)	0.00	0.00	2000.00	0.04
13 Sprit (Ltr.)	0.00	0.00	0.00	0.00
14 Oil (Ltr.)	267.00	0.26	12287.00	0.23
15 Grease (Kg.)	186.00	0.18	1686.00	0.03

RAI BAHADUR NARAIN SINGH SUGAR MILLS LTD. LAKSAR (HARIDWAR)

Asst. Mgr(QC) Sr. DyGM(Prod.)

1602

DAILY MANUFACTURING REPORT OF R. S. N. S. SUGAR MILLS L T D., LAKSAR

DATE 03-JAN-25 CROP DAY 58 CRUSHING SEASON 2024-2025 DAY FROM 8 AM 03-JAN-25 TO 8 AM 04-JAN-25

	ON-DATE	TO-DATE	ON-DT%	TO-DT%
1. CANE CRUSH(QTLS.)	99800.00	5492300.00		
(1) EARLY	99689.28	5495357.83	100.00	100.00
(2) GENERAL	0.00	0.00	0.00	0.00
(3) UN-APPROVED	0.00	0.00	0.00	0.00
(4) BURNT CANE	0.00	239.33	0.00	0.00
2. RECOVERY % CANE	9.40	8.78		
3. SUGAR BAGGED QTLS	9400.00	461750		
4. SUGAR BAGGED % CANE	9.42	8.41		
5. Syrup Diversion Qty.		0.00		
6. Sugar Loss in Syrup		0.00		
7. NET JUICE %CANE	71.08			
8. CAPACITY UTILIZATION	117.41	111.41		
9. CANE/TANK	9.57	9.49		
10. MIXED JUICE % CANE	103.85	104.88		
11. ADDED WATER % CANE	32.77	32.86		
12. ADDED WATER % FIBRE	248.13	253.97		
13. BAGASSE % CANE	28.31	27.45		
14. MOLASSES % CANE	4.17	4.94		
15. SUGAR LOSSES % CANE				
1. BAGASSES	0.49	0.44		
2. PRESS CAKE	0.06	0.06		
3. FINAL MOLASSES	1.24	2.11		
4. Loss in Syrup Div.	0.00	0.00		
5. UNKNOWN	0.07	0.03		
6. TOTAL LOSSES	1.66	2.64		
TECHNICAL CONTROL FIGURE				
1. CANE CRUSHED/SEASON D	99800.00	94694.83		
2. CANE CRUSHED/24 HOUR	103241.38	99456.90		
3. MILL EXTRACTION	95.65	96.16		
4. R. M. E. (DEER)	95.92	96.31		
5. JAWA RATIO	78.79	78.66		
6. UNDILUTED JUICE % CAN	81.02	80.67		
7. UNDILUTED JUICE EXTRA IN MIXED JUICE % CANE	77.03	77.16		
8. UNDILUTED JUICE LOST BAGASS % FIBRE	30.32	26.84		
9. BOILING HOUSE RECOV.	87.30	80.00		
10. REDUCED BOILING HOUS	90.32	83.83		

CANE (DATE+OC)	Centre	TOTAL
2884236.12	2511671.76	5395907.88
64494.75	35194.53	99689.28
2948730.87	2546866.29	5495597.16

GRADEWISE SUGAR PRODUCTION

	PP Bag	Jute Bag	TOT. 50Kg Bags	ON DATE Qtg.	% TOT. PROD.	TO DATE	% TOT. PROD.
L-31	2700		2700	1350	14.36	65800	14.25
L-30				0	0.00	0	0.00
M-31	5600	10500	16100	8050	85.64	395950	85.75
M-30				0	0.00	0	0.00
S-31				0	0.00	0	0.00
S-30				0	0.00	0	0.00
SWEEP				0	0.00	0	0.00
BISS				0	0.00	0	0.00
BROWN				0	0.00	0	0.00
OTHER				0	0.00	0	0.00
L-SUP				0	0.00	0	0.00
TOTAL	8300	10500	18800	9400		461750	

Icumsa : L-98.68 M-92.06

DAILY STOPPAGE DETAILS

S.No.	Duration	
1	0.40	Cane Chopper Hood side Plate Broken & welded
Total	0.40	

	BRIX	POL	PURITY	FIBRE %	MOIS
1 CANE		11.26		13.20	
2 BAGASSE	2.45	1.73		46.65	50.90
PRIMARY JUICE	17.33	14.29	82.46		
MIXED JUICE	12.89	10.37	80.70		
LAST MILL JUICE	1.70	1.20	70.59		
6 FILTER CAKE POL		1.30			
7 CLEAR JUICE	12.86	10.40	80.87		
8 UNSUL. SYRUP	59.77	48.21	80.66		
9 SUL. SYRUP	59.39	47.81	80.50		
10 A-MASSECUITE	93.14	81.30	87.29		
11 A-HEAVY MOLASSES	80.25	57.73	71.94		
PURITY DROP			15.35		
12 B-MASSECUITE	96.98	67.80	69.91		
13 B-HEAVY MOLASSES	85.53	42.70	49.92		
PURITY DROP			19.99		
14 A1-MASSECUITE	0.00	0.00			
15 A1-HEAVY MOLASSES	0.00	0.00			
PURITY DROP			0.00		
16 C1-MASSECUITE	0.00	0.00	0.00		
17 C1-HEAVY MOLASSES	0.00	0.00	0.00		
PURITY DROP			0.00		
18 C-MASSECUITE	99.94	52.83	52.86		
19 C-HEAVY MOLASSES	90.55	29.73	32.83		
PURITY DROP			20.03		
20 FIN. MOL. (C-Heavy)	90.55	29.76	32.87		
21 A-LIGHT MOLASSES	73.83	63.33	85.78		
22 C-LIGHT MOLASSES	77.00	53.60	69.61		

	TIME ACCOUNT			ON-DATE	TO-DATE
1. CANE SHORTAGE	0.00	0.35			
2. MECHANICAL	0.40	19.30			
3. PROCESS	0.00	0.00	TOTAL HOURS	24.00	1386.00
4. ELECT. FAULT	0.00	5.45	HOURS CRUSHED	23.20	1325.35
5. CLEANINGS	0.00	17.20	HOURS LOST	0.40	60.25
6. INCL. WEATHER	0.00	15.25	%TOTAL HOURS	1.67	4.35
7. MISCLENIOUS	0.00	1.50	TO TOTAL HOURS		
Mill Sanitation	40.00	2047.00			

	ON-DATE	TO-DATE
STEAM % CANE, (24 Hrs.)	0.00	0.00
BLEEDING PRD TON\Hrs.	0.00	0.00

STORE CONSUMPTION

		ON-DATE	%CANE	TO-DATE	%CANE
1	Jute Bags 50 kg (No	10500.00	10.52	222460.00	4.05
2	Lime (Qtl.)	195.00	0.20	10878.50	0.20
3	Sulphur (Qtl.)	75.00	0.08	4345.00	0.08
4	Plastic 50 KG Bags	8300.00	8.32	707110.00	12.87
5	Bagasse (Qtl.)	0.00	0.00	0.00	0.00
6	Washing Soda (Kg.)	0.00	0.00	0.00	0.00
7	Caustic Soda (Kg.)	0.00	0.00	8300.00	0.15
8	Bleaching Powder (K	0.00	0.00	50.00	0.00
9	Phos. Acid (Kg.)	0.00	0.00	0.00	0.00
10	Magnafloc (Kg.)	25.00	0.03	1400.00	0.03
11	Ammonium BFF (Kg.)	0.00	0.00	0.00	0.00
12	Biocide (Kg.)	100.00	0.10	2100.00	0.04
13	Sprit (Ltr.)	0.00	0.00	0.00	0.00
14	Oil (Ltr.)	117.00	0.12	12404.00	0.23
15	[illegible] (Kg.)	0.00	0.00	1684.00	0.03

Asst. Mgr(QC)

Sr. DyCM(Prod.)

1603

Annexure-12

ECON LABORATORY & CONSULTANCY LLP

(ISO: 9001, 14001& 45001 Certified & MOEF & CC Recognized Laboratory)

Vill.: Khabarwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Client:		ULR No:	TC550724000010094 98F
M/s.R.B.N.S.SUGAR MILLS LTD. Laksar,Shekhpuri,Uttarakhand Pin-247663		Reporting Date:	19/12/2024
		Date of Sampling:	16/12/2024
		Receipt Date:	16/12/2024
		Period of Testing:	16/12/2024-19/12/2024
		Sample Collected By:	Lab. Rep.
		Sampling Type:	Grab
Sample Description:	ETP Inlet	Preservation:	Refrigerated
Sampling Location:	ETP Area	Format No:	7.8-F-01
Sampling Protocol:	Lab/STP/Water	Party Reference No:	By Mail
Sample Quantity:	2.0 Ltr.	Parameter Required;	As per work order

TEST RESULTS

S. No.	Parameters	Results	Units	Protocol Used
1.	PH	7.42	-	IS 3025 (Part-11) 1983:2017
2.	COD	462	mg/l	APHA 23rd Edi..5220B, Open Reflux Method
3.	BOD (3 Days at 27 ^{0}C)	144.0	mg/l	IS-3025 (P-44)1993,RA2019
4.	Total Suspended Solid	104.1	mg/l	APHA 23rd Edi. -2540 B, Gravimetric Method

End of Report

CHECKED BY :

AUTHORISED SIGNATORY :

NOTE : 1. The results listed only to the tested sample & applicable parameters.
2. Total liabilities of our lab will be restricted to the invoice amount only.
3. The sample will be destroyed after retention time unless otherwise specified.
4. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without prior permission

ECON LABORATORY & CONSULTANCY LLP

(ISO: 9001, 14001& 45001 Certified & MOEF & CC Recognized Laboratory)
Vill.: Khabarwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Client:		ULR No:	TC550724000010094 99F
M/s.R.B.N.S.SUGAR MILLS LTD. Saksar,hekhpuri,Uttarakhand Pin-247663		Reporting Date:	19/12/2024
		Date of Sampling:	16/12/2024
		Receipt Date:	16/12/2024
		Period of Testing:	16/12/2024-19/12/2024
		Sample Collected By:	Lab. Rep.
		Sampling Type:	Grab
Sample Description:	ETP Outlet	Preservation:	Refrigerated
Sampling Location:	ETP Area	Format No:	7.8-F-01
Sampling Protocol:	Lab/STP/Water	Party Reference No:	By Mail
Sample Quantity:	2.0 Ltr.	Parameter Required;	As per work order

TEST RESULTS

S. No.	Parameters	Results	General Std. Limit for Discharge (Inland Surface Water)	Units	Protocol Used
1.	PH	7.86	5.5-9.0	-	IS 3025 (Part-11):1983:2017
2.	COD	56.0	250	mg/l	APHA 23rd Edi..5220B, Open Reflux Method
3.	BOD (3 Days at 27 ^{0}C)	18.3	30	mg/l	IS-3025 (P-44)1993,RA2019
4.	Total Suspended Solid	22.8	100	mg/l	APHA 23rd Edi. -2540 B, Gravimetric Method

End of Report

CHECKED BY:

AUTHORISED SIGNATORY:

NOTE : 1. The results listed only to the tested sample & applicable parameters.
2. Total liabilities of our lab will be restricted to the invoice amount only.
3. The sample will be destroyed after retention time unless otherwise specified.
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Annexure -13

Rbns Sugar Mills Ltd 15UK592_ETP_Rbns Sugar Mills_Haridwar From: 2024-11-01 18:00:00 To: 2025-01-06 12:30:00					
Timestamp	pH	BOD	COD	TSS	FLOW
01-Nov-2024 00:00	7.39	6.42	104.39	14.81	0
02-Nov-2024 00:00	7.3	13.91	105.5	11.8	0.43
03-Nov-2024 00:00	7.27	18.93	108.7	10.63	0
04-Nov-2024 00:00	7.19	17.07	107.08	9.61	0
05-Nov-2024 00:00	7.28	17.42	106.7	10.81	0
06-Nov-2024 00:00	7.36	9.39	106.78	15.43	0.24
07-Nov-2024 00:00	7.47	12.08	101.19	10	0
08-Nov-2024 00:00	7.45	19.79	104.53	9.48	1.85
09-Nov-2024 00:00	7.17	19.75	108.27	10.92	1.93
10-Nov-2024 00:00	7.06	21.03	109.73	10.86	3.7
11-Nov-2024 00:00	6.67	22.69	111.43	10.82	14.68
12-Nov-2024 00:00	6.61	23.29	112.4	10.85	21.28
13-Nov-2024 00:00	7.17	19.76	111.99	12.03	30.19
14-Nov-2024 00:00	7.69	13.92	111.87	13.9	28.88
15-Nov-2024 00:00	7.71	13.36	105.7	14.18	21.37
16-Nov-2024 00:00	6.86	10.13	101.87	15.16	26.37
17-Nov-2024 00:00	7.97	22.84	105.21	12.01	51.82
18-Nov-2024 00:00	7.6	11.65	105.1	16.35	27.02
19-Nov-2024 00:00	7.98	8.76	104.16	16.57	37.08
20-Nov-2024 00:00	7.88	12.31	106.35	15.65	40.47
21-Nov-2024 00:00	7.94	9.92	110.7	18.69	30.75
22-Nov-2024 00:00	7.56	7.08	112.05	18.73	34.73
23-Nov-2024 00:00	7.83	13.47	108.97	15.75	32.71
24-Nov-2024 00:00	7.65	12.34	110.03	16.35	25.04
25-Nov-2024 00:00	7.47	11.76	118.48	19.67	37.17
26-Nov-2024 00:00	7.13	22.4	116.83	14.64	31.65
27-Nov-2024 00:00	7.09	22.69	117.75	14.74	36.09
28-Nov-2024 00:00	7.03	23.04	118.44	14.84	28.83
29-Nov-2024 00:00	7.08	23.47	120.03	15.03	41.86
30-Nov-2024 00:00	7.45	23.79	121.4	15.27	28.92
01-Dec-2024 00:00	7.1	24.23	122.7	15.34	30.56
02-Dec-2024 00:00	6.83	24.48	123.75	15.37	45.25
03-Dec-2024 00:00	7	24.42	124.54	15.61	34.2
04-Dec-2024 00:00	7.49	24.49	126.37	15.86	45.51
05-Dec-2024 00:00	7.7	25.27	130.62	16.39	44.68
06-Dec-2024 00:00	7.68	25.96	134.64	16.83	29
07-Dec-2024 00:00	7.15	27.73	137.17	17.14	34.88
08-Dec-2024 00:00	7.63	25.99	122.75	16.31	33.17
09-Dec-2024 00:00	7.98	24.5	111.55	15.66	42.85
10-Dec-2024 00:00	7.91	22.29	105.36	14.57	32.66
11-Dec-2024 00:00	7.08	20.97	101.81	14.07	33.27
12-Dec-2024 00:00	7.08	21.02	102.51	14.23	27.09
13-Dec-2024 00:00	7.08	21.77	105.16	14.9	35.13
14-Dec-2024 00:00	7.08	22	108.85	15.7	25.16

15-Dec-2024 00:00	7.08	21.54	112.92	16.76	29.23
16-Dec-2024 00:00	7.08	20.95	115.15	17.42	33.55
17-Dec-2024 00:00	7.08	20.09	114.53	17.51	34.6
18-Dec-2024 00:00	7.08	20.47	111.13	16.65	34.11
19-Dec-2024 00:00	7.08	19	112.73	17.44	33.72
20-Dec-2024 00:00	7.08	16.17	110.87	17.8	38.45
21-Dec-2024 00:00	7.08	14.18	104.49	17.06	34.36
22-Dec-2024 00:00	7.08	13.56	107.21	17.91	35.5
23-Dec-2024 00:00	7.08	12.8	111.87	19.31	23.38
24-Dec-2024 00:00	7.08	11.11	111.65	20.23	34.51
25-Dec-2024 00:00	7.09	7.86	96.44	18.72	29.81
26-Dec-2024 00:00	7.08	13.96	99.96	20.27	31.49
27-Dec-2024 00:00	7.09	8.61	104.44	24.31	38.45
28-Dec-2024 00:00	7.08	6.25	88.78	24.7	32.74
29-Dec-2024 00:00	7.08	1.22	83.99	26.12	35.09
30-Dec-2024 00:00	7.07	1.97	82.77	38.63	28.08
31-Dec-2024 00:00	7.08	0	100.26	61.61	34.98
01-Jan-2025 00:00	7.08	10.32	78.65	50.49	23.05
02-Jan-2025 00:00	7.08	9.73	60.98	27.63	30.94
03-Jan-2025 00:00	7.08	22.43	63.84	20.45	34.57
04-Jan-2025 00:00	7.08	32.45	50.04	17.72	29.1
05-Jan-2025 00:00	7.08	30.7	57.84	13.96	27.72
06-Jan-2025 00:00	7.08	2.03	78.21	14.62	46.68

Reported via: https://tpro.telsys.in by user: edprbns@yahoo.com

Annexure-14

AAXIS NANO
TECHNOLOGIES PVT. LTD.
Solutions For A Sustainable Environment

+91-7428541532
0120 415 9238
info@aaxisnano.com
www.aaxisnano.com

CALIBRATION REPORT

To,

RAI BAHADUR SUGAR MILLS LTD,
Laksara Haridwar U.K-247663

NAME OF THE INSTRUMENT : ONLINE EFFLUENT WATER QUALITY MONITORING SYSTEM

Analyser Make	S::can, AUSTRIA
Instrument details/ parameters	spectro::photometer (COD,BOD, TSS & pH)
Sampling location	ETP OUTLET/FINAL DISCHARGE
Industry type	Sugar Mill
Date of Calibration	01 DEC, 2024
Calibration due date	28 feb, 2025

Diagnostic Checks	Pass / Fail	Pass	Deviation %
Physical Check	Pass / Fail Dimensions & designed characteristics Hardware & Software Sensor function test	Pass Pass Pass	
Power Supply Test	230V AC	Pass	
INSTRUMENTS	STANDARD/LAB VALUES	EQMS VALUES	Error %
SPECTRO::LYSER: TSS (mg/l) (VALIDATION WITH LAB STANDARD)	14 .00 10.00	15.00 11.10	±7.14%
SPECTRO::LYSER: COD (mg/l) (VALIDATION WITH LAB STANDARD)	100.00 122.0	104.00 119.20	±2.52%
SPECTRO::LYSER: BOD (mg/l) (VALIDATION WITH LAB STANDARD)	5.00 8.00	5.12 8.90	±10.00%
Parameter :pH (units) (VALIDATION WITH KNOWN BUFFERS)	4.00 pH 7.00 pH	4.01 pH 6.99 pH	±0.14%

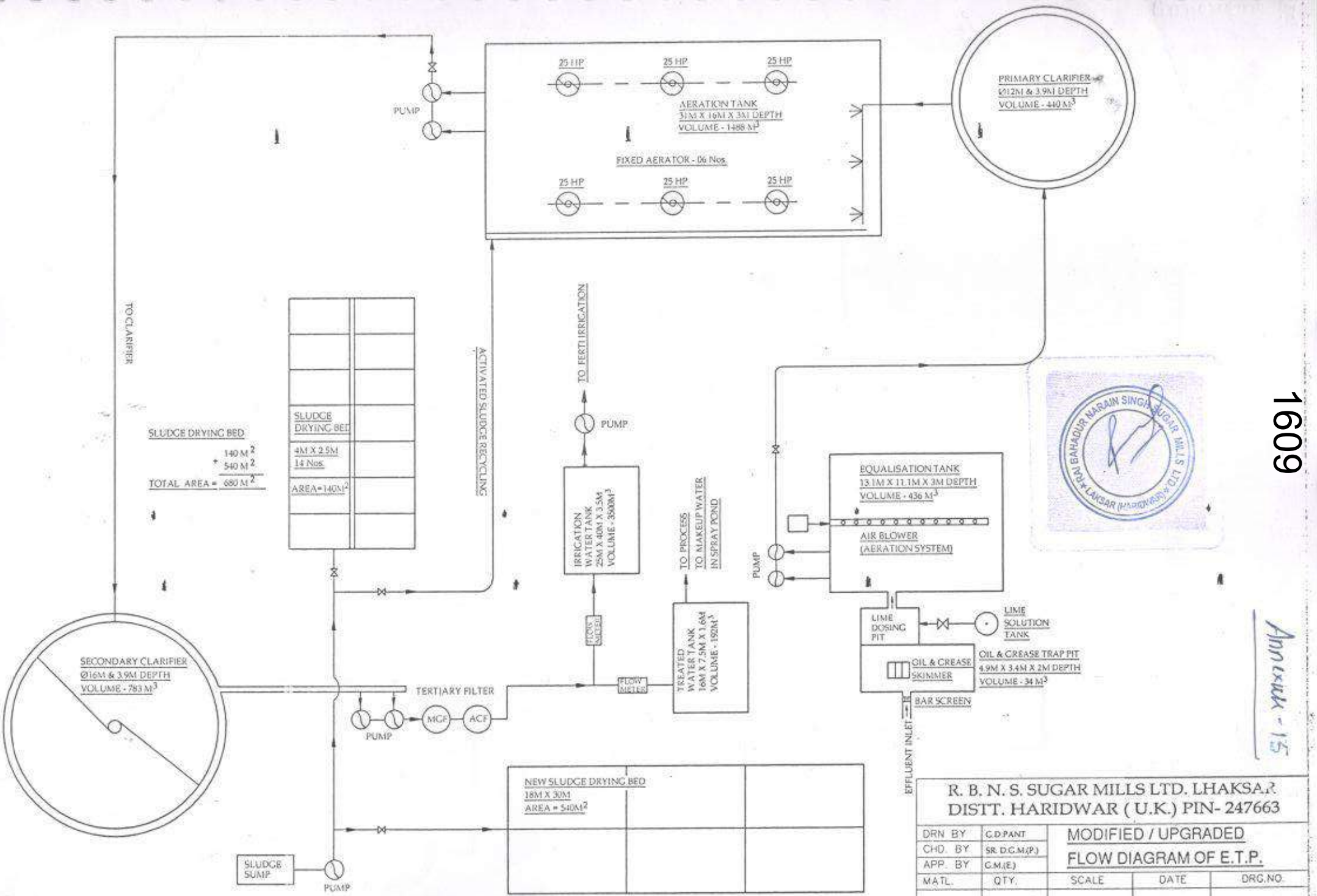
Conclusion & Results: The system has been validated and calibrated with known standards and found operational & satisfactory.

CALIBRATED BY: Mithun Kumar

CHECKED BY: Mr. Mohit Kumar

AAXIS NANO TECHNOLOGIES PVT. LTD. NOIDA U.P. DELHI NCR

Annexure - 17



Annexure - 15

1609

R. B. N. S. SUGAR MILLS LTD. LHAKSAR DISTT. HARIDWAR (U.K.) PIN- 247663				
DRN. BY	G.D.PANT	MODIFIED / UPGRADED FLOW DIAGRAM OF E.T.P.		
CHD. BY	SR. D.G.M.(P.)			
APP. BY	G.M.(E.)			
MATL.	QTY.	SCALE	DATE	DRG.NO.

Annexure-16

PROCESS FLOW CHART OF R.B.N.S. LAKSAR

Cane

↓

Milling → Bagasse

↓

Mixed Juice

↓

Juice Heating upto 70° C

↓

Lime+So_2 Gas → Juice sulphiter

↓

Sulphited Juice

↓

Sulphited Juice heaters up to 103° C

↓

Clarifier → Muddy Juice

↓

Clear Juice

↓

Evaporator

↓

Syrup 60-62° Brix

↓

Syrup sulphiter

↓

Sulphited Syrup pH_4.9-5.0

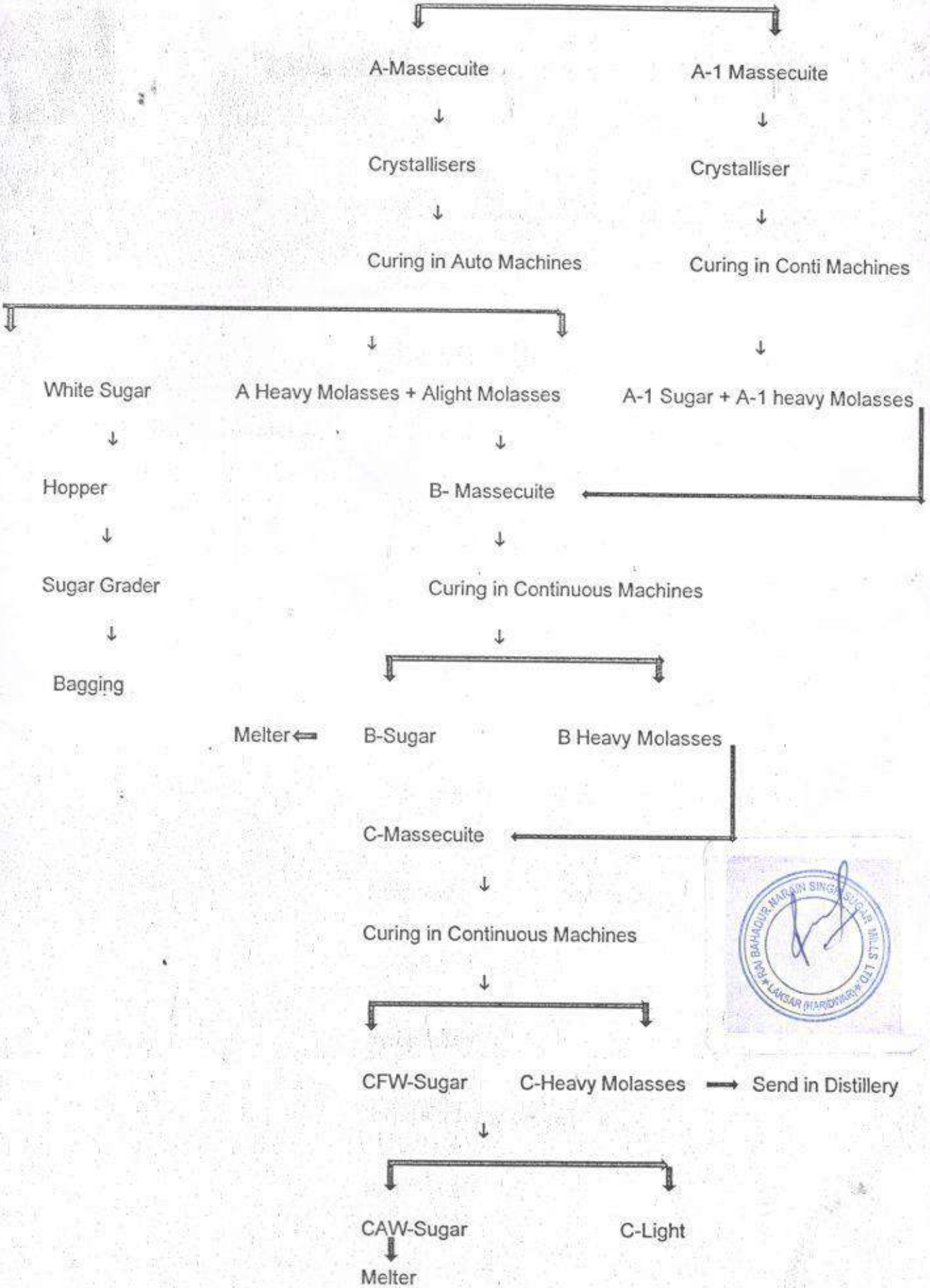
↓

Pan Station

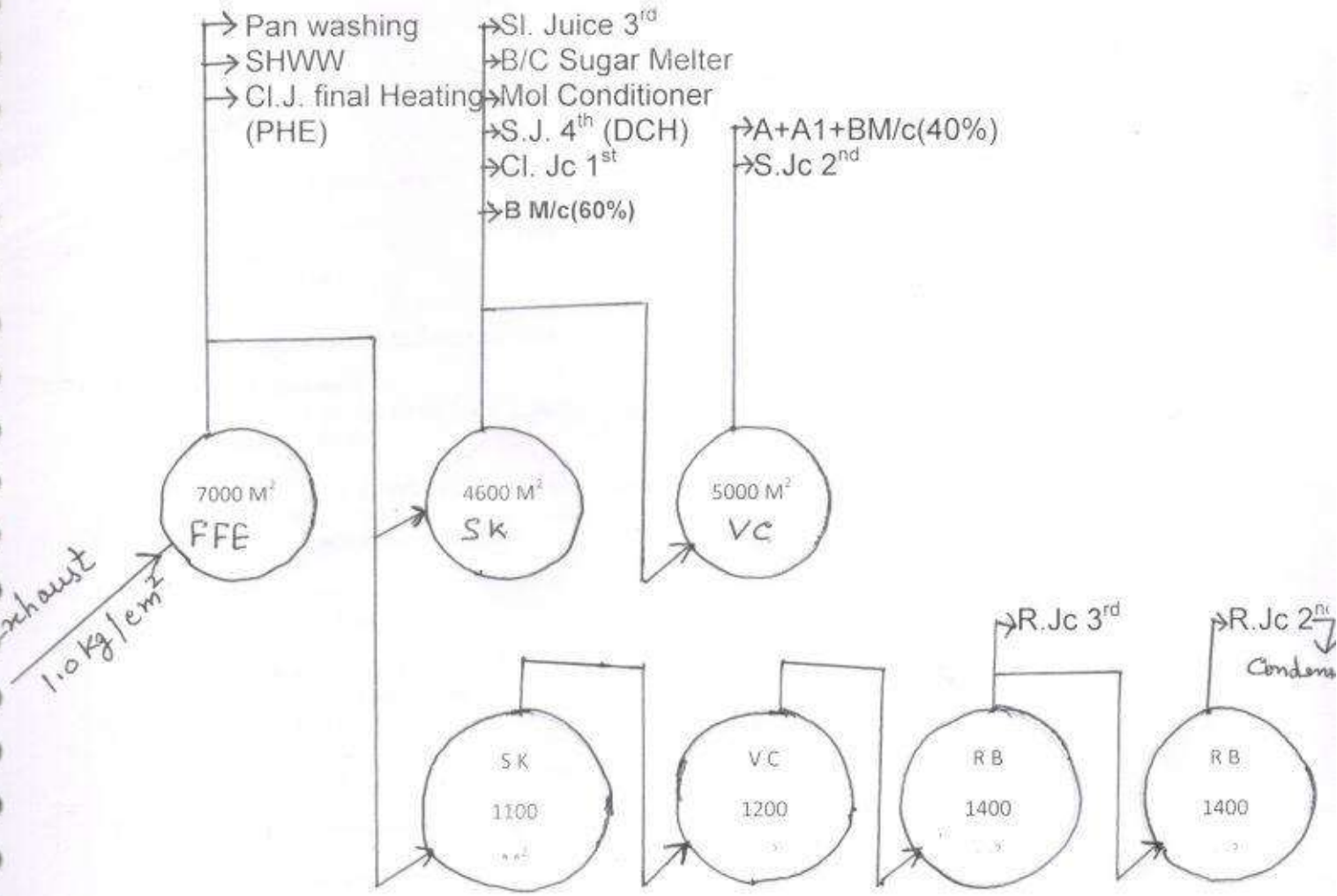
↓

Bagasse → Boilers → Steam → Turbines → Electricity

Muddy Juice → Vacuum Filter → Filtrate Juice / Press Mud


A-Massecuite
A-1 Massecuite
Crystallisers
Crystalliser
Curing in Auto Machines
Curing in Conti Machines
White Sugar
A Heavy Molasses + Alight Molasses
A-1 Sugar + A-1 heavy Molasses
Hopper
B- Massecuite
Sugar Grader
Curing in Continuous Machines
Bagging
Melter
B-Sugar
B Heavy Molasses
C-Massecuite
Curing in Continuous Machines
CFW-Sugar
C-Heavy Molasses
Send in Distillery
CAW-Sugar
C-Light
Melter

Existing Evaporator Configuration RBNS Sugar Mills, Laksar



Annexure -17

M/S R.B.N.S. SUGAR MILLS LTD., LAKSAR

WATER MANAGEMENT AND WATER BALANCE FOR THE SUGAR PLANT (10000 TCD)

S. No.	Particulars	Purpose	Qty M3/hr	Use of Water
A				
1	Mill Drive and Mill bearings	Cooling	150	Recycled
2	Fibrizor Turbine	Cooling		Recycled
3	Power Turbine	Cooling	400	Recycled
4	Pumps	Cooling	5	waste
5	Sulphur Furnace	Cooling	20	Recycled
6	Air Compressor	Cooling	5	Recycled
7	Juice Heater, Evaporator Cleaning	Cooling	10	Waste
8	Mics.	Cleaning	4	Waste
	Total		594	
9	Recycled water		575	
10	Waste water to ETP		19	
11	DM Plant		16	
B	Condensate Avaiable from Sugar Process			
1.1	Exhaust Condensate		135	
1.2	Exhaust Condensate utilized for Sugar Boiler		135	
1.3	Makeup water for Boiler		10	
2	**Utilisation of Vapour Condensate in Sugar Process**			
2.1	Vapour Condensate Available		269	
2.2	Imbibition (Added water)		125	
2.3	MOL Preparation		6	
2.4	Filter Cake Washing		14	
2.5	Movement water at Pan		15	
2.6	Centrifugal Machine		15	
2.7	Magma Mixter sugar Melter		19	
2.8	Evaporation Losses, crystalizer etc.		20	
2.9	Floor Washing to ETP		5	
	Total		219	
3	**Surplus vapour condensate**		50	
C	**Water Balance at Spray Pond**			
1	Surplus vapour Condensate		50	
2	Water added by condensing of vapour at Pan & Evaporator		75	
3	Make up water to spray from ETP S. No. D-5		17	
	Total		142	
4	Losses of water in Spray Pond		87	
5	Make up water required for wet Scrubber		15	
6	Spray pond overflow to ETP		15	
	Total		117	
D	**Water to ETP for Treatment**			
1	Waste water to ETP S. No. A-10		19	
2	Floor washing to ETP S. No. B 2.9		5	
3	Spray Pond Over flow		15	
4	Boiler Blow down to ETP		3	
	Total		42	

Total effluent to ETP recycled after treatment to Spray	17
Cold water UGR	10
Gardening	3
Ferti-errigation	12
Total	**42**

RAI BAHADUR NARAIN SINGH SUGAR MILLS LTD. LAKSAR (HARYANA)

(S.P. Singh)
General Manager

MATERIAL BALANCE FOR SEASON 2024-25

Bx% clJc	=	13.91
ClJc % cane	=	105.00
(Syp).Un sulphured pty	=	83.03
Unknown losses	=	0.02
Am/c Pty	=	87.42/93.02
BM/c Pty	=	69.74/96.24
A -1M/c Pty	=	74.84/94.42
AHy Pty	=	71.33/81.07
Alt Pty	=	87.14/74.17
A-1 Hy Pty	=	60.00/73.00
BHy Pty	=	50.16/90.06
AFWS Pty	=	99.0
AASW Pty	=	99.9
Solids in ClJc	=	13.08 x 1.05 = 13.73
Solids in syp	=	13.73

Syrup solids in sugar =9.07

Un known losses =0.02

Syp solids remaining in sugar	=	9.07 – 0.02	=	9.05
Solids in BHy	=	13.73 – 9.05	=	4.68

BM/c curing-

Solids in BM/c = 8.17

Solids in B-Sugar = 8.17 - 4.68= 3.49

BM/c Formation-

Solids of Bgr = 4.37

Solids of (AH + A1 Hy) Mix	=	8.17 – 4.37	=	3.80
Solids of Bgr	=Solids of (AHy+Syp)		=	4.37

Solids of syrup =1.27

Solids of A Hy = 4.37-1.27=3.10

Solids of A1 Hy = 2.46

solids of AHY in Mix = 3.80 – 2.46 = 1.34

Total Solids of AHy in BM/c = 3.10 + 1.34 = 4.44

A1M/c curing-

Solids of A1M /c = 4.11

solids of A1 Sugar = 4.11 - 2.46 = 1.65

Solids of A1Hy = 2.46

Solids of A1M/c = (Syp +AHy) = 4.11

A1M/c Formation –

Solids of Syp = 1.76

Solids of AHy = 4.11 – 1.76 = 2.35

Total Solids of AHy = 2.35 + 4.44+3.10 = 9.89

AM/C Curing –

Solids in AM/c = 23.63

Solids in AFWS = 23.63 – 9.89 = 13.74

Solids in AAWS = 12.77

Solids in Alt = 13.74 – 12.77 = 0.97

AM/c % cane	=	23.63 x 100 / 93.02	=	25.40
AHy % cane	=	9.89 x 100 / 81.07	=	12.20
ALt % cane	=	0.97 x 100 / 74.17	=	1.30
BM/c % cane	=	8.17 x 100 / 96.24	=	8.49
BHy % cane	=	4.68 x 100 / 90.06	=	5.19
A-1 M/c % cane	=	4.11 x 100 / 94.42	=	4.35
A-1 Hy % cane	=	2.46 x 100 / 73.00	=	3.37

Annexure-18

HEAD OFFICE
Uttarakhand Pollution Control Board
"Gauradevi Paryavaran Bhawan"
46B, IT Park, Sahastradhara Road, Dehradun
E-mail : mailpcb@yahoo.com, Phone No.-0135-2607092

Letter No.: UKPCB/HO/Con-R-4(Vol.-II)/2024/ 5014 Date: 27.08.2024

Regd. Post

To,
R.B.N.S. Sugar Mills Ltd.,
Laksar, District Haridwar (Uttarakhand)

Consolidated Consent to Operate and Authorization hereinafter referred to as the C CA (Consolidated Consent & Authorization) Renewal under Section- 25 of the "Water (Prevention & Control of Pollution) Act., 1974"and under Section- 21 of the "Air (Prevention & Control of Pollution) Act, 1981"and Authorization under "Rule -6(2)"of the "Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016"notified under "Environment (Protection) Act, 1986"as applicable (to be referred hereinafter as Water Act, Air Act and HW Rules respectively).

CAF ID – 13060	Application ID-5446498
CCA (Renewal)	Date: 29.02.2024

CCA is hereby granted to M/s. R.B.N.S. Sugar Mills Ltd., located at Vill.- Laksar (Lattitude *29°44'47.82"N Longitudes 78° 01'45.51"*E) subject to the provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the orders that may be made further and subject to following terms and conditions: -

1. This CCA is granted for the period up to 31.03.2029 from the date of issuance of this letter, under Section-25 of the "Water (Prevention & Control of Pollution) Act, 1974.
2. This CCA is granted for the period up to 31.03.2029 from the date of issuance of this letter, under Section-21 of the "Air (Prevention & Control of Pollution) Act, 1981.
3. This CCA is granted for the period up to 31.03.2029 from the date of issuance of this letter under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016" notified under "Environment (Protection) Act, 1986.

4. Production capacity:

S. No.	Type of Sugar Industry	Production Capacity & Co-generation capacity	Cane crushing capacity (in TCD)	Permitted by the Board
1.	Sugar with co-generation	Sugar:1000 MT/Day Co-gen:30 MW	10000 TCD	Sugar:1000 MT/Day Co-gen: 30 MW

5. By- Product if any with capacity:

Name of By Product	Unit Name	License Product Capacity	Install Product Capacity
C-Heavy Molasses	MT/ Day	450 MT/day	450 MT/day
B- Heavy Molasses	MT/Day	578 MT/day	578 MT/day
Bagasse	MT/ Day	2850 MT/day	2850 MT/day
Press Mud	MT/ Day	559 MT/day	559 MT/day

Water conservation:

A. Fresh water consumption:

a. Categorization of existing groundwater area: Safe.
b. Status of NOC from CGWA/SGWB: Applied.
c. Validity of NOC: .....
d. Details of Artificial recharge system/rain water harvesting unit installed with capacity-NA
e. Details of piezometer installed i.e., numbers with coordinates-1Nos. (29.4444.5"N & 78.0156.1"E).
f. Industry shall install sealed and calibrated flow meters at fresh water abstraction and consumption points (process & domestic) and maintain the logbooks for same.
g. Maximum allowable fresh water consumption based on applicable specified process category
h.

S. N.	Sources of fresh water	Nos. with daily abstraction capacity		Applied quantity (KLD)	Max. Permitted abstraction quantity (KLD)	Status of flow meter installed
1.	Borewell	BW	594 KLD	---	594 M³/Day	Yes

S. No.	Type of Sugar Industry	Fresh Water Consumption
		Industrial (L/T of Cane Crushed)
1.	Standalone sugar	230 Litre /Tonnes of Cane crushed.
2.	Sugar with co-generation	<100 Litre /Tonnes of Cane crushed.
3.	Refinery	<80 Litre /Tonnes of Cane crushed.
4.	Refinery with co-generation	<100 Litre /Tonnes of Cane crushed.

B. Effluent generation, treatment and disposal: -

S.No.	Kind of Effluent	Maximum daily discharge, KLD	Treatment Facility and Discharge point
1	Domestic	30 KLD	STP (15 KLD, 15 KLD & 15 KLD jointly for sugar & Distillery unit)
2	Industrial	1050 KLD	ETP

a. The specific quantity of maximum daily effluent discharge should not be more than the following:

S. No.	Type of Sugar Industry	Maximum daily treated effluent discharge limit* (L/T of cane crushed)
1.	Standalone sugar	---
2.	Sugar with co-generation	192L/T of cane crushed
3.	Refinery	----
4.	Refinery with co-generation	----

**Maximum daily discharge shall be equal to multiplication of total production as per Para 4 and specific effluent discharge as per Para 5 (B-a). The treated effluent shall be recycled to the maximum extent and remaining treated effluent after tertiary level treatment shall be used for irrigation purpose/disposed.*

b. Industry shall install the Effluent treatment plant consisting of primarily (screen, grit chamber and equalization tank with air blower, neutralization tank, primary clarifier), secondary biological treatment (anaerobic filter tank**), aeration tank and secondary clarifier) and tertiary treatment (MGF/ACF etc.) units with adequate capacity.

**In case no separate sulphate removal system installed.

c. The industry shall install flow meters at ETP inlet, outlet and recycling poin t and maintain the daily logbook for the same.

d. Industry shall install the OCEMS of parameters pH, BOD, COD, TSS and flow at outlet and connected to CPCB/SPCB servers.

e. Effluent generated in all the processing houses viz. mill & boiling house, Steam generation house, Process Cooling Tower (PCT) blow down/ spray pond i.e. overflow, DM/RO reject/ gland leakages from boiler feed pump, effluent generated from dewatering of sludge and washing of floor and other equipment etc. should be treated in ETP before its disposal* so that it should be according to the norms prescribed as under.

S. No.	Parameter	Standard
1.	pH	5.5 – 8.5
2.	Biological Oxygen Demand (BOD) (mg/l)	30
3.	Chemical Oxygen Demand (COD) (mg/l)	250
4.	Total Suspended Solids (TSS) (mg/l)	30
5.	Total Dissolved Solids (TDS) (mg/l)	2100
6.	Oil & Grease (O&G) (mg/l)	10

In case of stoppage of functioning of ETP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

f. During no demand period for irrigation, the treated effluent to be stored in a seepage proof lined pond (Lagoon) having 15 days holding capacity only. The treated effluent being pumped for irrigation purpose from lagoon shall comply with the effluent discharge norms prescribed for irrigation vide Gazette dated 14.01.2016 under Schedule I of E(P)Rules,1986. The industry shall install sealed electromagnetic flow meter at outlet point of lagoon and shall maintain record of running hours and treated effluent used for irrigation purpose.

g. Effluent Treatment Plant to be stabilised one month prior to the start of the crushing season andcontinue to operate one month after the crushing season.

h. Proper colour coding of pipe lines and water channels to be implemented for the recycled process water, fresh water and effluent carrying lines.

i. The industry shall identify recipient drains/rivulets and their u/s & d/s location in consultation with Uttarakhand Pollution Control Board and shall carry out monthly monitoring of identified recipient drains at u/s & d/s location through lab recognized under Environment (P) Act, 1986 and shall submit the analysis report on monthly basis to CPCB and Uttarakhand Pollution Control Board.

S.No.	Name of recipient drain/rivulets	Latitude	Longitude	Quality of effluent of drain	Name of the recipient river
1.	Laksar	29°44'44.4"N	78°01'58.0"E	To be assessed	Banganga

j. Sludge handling system:

S.No.	Sludge handling system (SDB/Centrifuge/Filter press)	Quantity of ETP sludge	Sludge storage area	Sludge disposal mechanism
1	Sludge Bed	30-40 MT	680 M^2	Disposal for farmers

C. Domestic sewage

i. The domestic effluent should be disposed separately in STP.

ii. Industry shall maintain the ... logbook.

iii. Industry shall explore the possibility to recycle the treated used water shall be utilized in gardening, irrigation, industrial utility and toilet flushing to minimize the fresh water consumption up to 20 % per year.

Cleaner Technology and waste minimization options:

i. Directions issued by Uttarakhand Pollution Control Board to all sugar mills to implement the **"Charter for Effluent Treatment by Sugar Factories Situated in River Ganga Basin"** conditions, which was formulated by CPCB to enforce appropriate technologies for effluent treatment in sugar factories and to comply with the prescribed environmental norms, accomplish desired level of environmental protection and achieve prescribed norms of discharge.

ii. According to Charter, the industry shall implement a "Model condensate conservation cum Hot & cold Water Management System" focusing on maximum recycling of water. Necessary system comprising cooling towers and underground reservoirs etc. shall be implemented separately for cold re- circulating water and surplus condensate. Unit shall install electromagnetic flow meters at following points:

S.No.	Flow meter installation points at Hot &Cold-water recycling system
1.	Hot water UGR.
2.	Cold water UGR and cooling towers
Hot water- Location of flow meter & its Installation	
1.	Imbibition water at mills
2.	Filter cake wash water at rotary vacuum filter
3.	Sugar melting, pan boiling, molasses conditioning
4.	Wet Scrubber make-up
5.	Boiler make-up in case of low pressure boiler
Cold water- Location of flow meter & its Installation.	
1.	Power turbine cooling
2.	Mills, fibrizer bearing, pumps cooling
3.	Wet scrubber make-up
4.	Cooling tower of co-generation make-up
5.	SO_2 gas cooling
6.	B and C massecuite cooling
7.	Final molasses cooling

iii. Recirculation of water employed in SO2 gas coolers shall be ensured with proper cooling through cooling towers in case of plantation white sugar.

iv. The industry shall ensure the construction of small pits with smooth cleaned inner surface preferably with ceramic tiles near to boiler feed pumps, condensate pumps, Injection pumps spray pumps and RVF vacuum pumps to collect gland cooling water in their respective pits without any contamination.

v. The industry shall implement dry cleaning of factory floors etc. using bagasse instead of wet cleaning using water.

vi. The industry shall provide covered conveyor to transfer bagasse by the sugar factories to prevent floating bagasse particles in ambient air.

vii. Re-circulation of cooling water used for cooling B and C- massecuites with proper cooling through cooling towers arrangement rather drawing fresh water shall be adopted.

viii. Minimum quantity of wash water to be applied at centrifugals for B and C massequite curing to minimize loss of sugar in molasses and to control steam consumption.

ix. The industry shall install CPU (Condensate Polishing Unit) to use surplus condensate for use

as make-up water at cogeneration cooling tower & boiler feed water (for low/medium pressure boilers) and for use as make-up water at cogeneration cooling tower (for high pressure boilers).

x. The industry shall install membrane based (2-stage) or other suitable technologies to attain a brine recovery of at least 80% in sugar refineries having Ion Exchange Resins for de-colorization of the sugar melt and rinse water recovery system in case of sugar refinery.

xi. The industry shall use of surplus cooled condensate as make up water replacing the fresh water thus reducing fresh water requirement and effluent generation as well.

xii. The industry shall adopt different options for separate or combined treatment of spray pond/PCT overflow as mentioned in charter.

xiii. The industry shall ensure the maintenance of retention /contact time in various sub-units of ETP viz. equalization tank, aeration tank, primary and secondary clarifiers, multi-grade filters, multi grad and activated carbon filter etc. as per charter.

S.No.	Unit with sizes/capacity	Retention Time/Contact Time (Mentioned in CPCB charter)	To be followed by Industry
1.	Bar screen Chamber	30 minutes	30 minutes
2.	Oil & grease tank	45 minutes	45 minutes
3.	Equalization tank with aeration	10 hrs	10 hrs
4.	pH correction tank	10 minutes	10 minutes
5.	Primary Clarifier	4-5 hrs	4-5 hrs
6.	Aeration tank	24-28 hrs	24-28 hrs
7.	Secondary Clarifier	5-6 hrs	5-6 hrs
8.	Sand/multi grade filter	20-25 minutes	20-25 minutes
9.	Activated carbon filter	20-25 minutes	20-25 minutes
10.	Sludge drying bed	Not less than 0.03 m^3 per ton of cane.	Not less than 0.03 m^3 per ton of cane.
11.	Centrifuge	The equipment's to be of adequate capacity for handling the sludge generated in the process.	The equipment's to be of adequate capacity for handling the sludge generated in the process.
12.	Filter Press		

xiv. Proper infrastructure for operation and maintenance of ETP shall be developed by recruiting hiring required skilled & technical staff.

xv. Analytical facilities (laboratory) for analysis various streams of water, untreated and treated effluent for various parameters viz. pH, BOD, COD, TSS, TDS and MLSS etc. shall be developed by the industry.

xvi. The industry shall create Environment Management Cell by appointing Environment officer, Engineer, chemist, agricultural expert and the same copy submitted to the board with contact details.

xvii. The industry shall resort to rain water harvesting as a measure towards avoiding exploitation of natural resources. Rain water recharge structures/ pits/ ponds near to processing area should be discouraged due to possibilities of entering effluent/ industrial runoff in ground water.

Environmental management system

i. Industry shall setup the environmental management cell including unit head, purchase/store manager, process operation head, ETP in charge to effectively monitoring of environmental compliance

ii. Industry shall setup the environmental laboratory for testing of minimum wastewater quality

parameters like pH, TSS, BOD, COD, [illegible] control parameters and ETP discharge norms.

7. Air pollution mitigation:

i. The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as is required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards:

Sr. No.	Stack attached with	Stack height (M)	Type of Fuel	Fuel Quantity	Emission Control Equipment	Emission standards not to exceed
1.	Boiler (90TPH × 1Nos.)	60	Bagasse	1080 MT/Day	Stack and Wet scrubber	PM-150 mg/NM^3
	Boiler (70 TPH× 1Nos.)	60	Bagasse	840 MT/Day	Stack and Wet scrubber	PM-150 mg/NM^3
	Boiler (30 TPH × 1 Nos.) (Stand by for distillery operations)	40	Bagasse	360 MT/Day	Stack and Wet scrubber	PM-150 mg/NM^3
2.	DG Set (320KVA ×1Nos. & 625 KVA × 1 Nos.)	4 each	HSD	75 Lt./Hr. & 100Lt/Hr.	Acoustic Enclosure	--
3	DG Set 1010 KVA × 1Nos.	6	HSD	200 Lt./Hr.	Acoustic Enclosure	--

In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

ii. Noise from the D.G set and other sources (s) should be controlled by providing an acoustic enclosure as is required for meeting and ambient noise standards for night and day time as prescribed for respective areas/zones (industrial, Commercial, Residential, Silence) which are as follows: -

Standards for noise level in db(A) leq	Industrial Area	
	Day time	Night time
	75	70

Day time: - 6.00 am to 10.00 pm, Night time: - 10.00 pm to 06.00 am

iii. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.

iv. The industry shall keep record for boiler ash & its disposal and maintain the designated boiler ash disposal site properly fenced with caution display to avoid accidents.

v. The APCS for controlling emissions should be properly maintained and continuously operated. The stack should be as per norms and regular monitoring of stack and ambient air should be done by the laboratory recognized under E(P) Act 1986 and report be sent to the Board.

vi. The water shall be sprinkled on the roads and premises for suppression of road dust.

vii. The sugar factories shall provide On-line emission (stack) monitoring system to monitor, record and transmit the data related to SPM level (mg/Nm^3) to UKPCB / CPCB.

viii. The industry shall prepare Standard Operating Procedures (SOPs) for accident management and Process safety management.

8. Conditions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016: -

Hazardous Waste Management (As per FORM 2 - [rule 6(2)])

i. Number of authorization and date of issue:.....
Reference of application (No. and date) : Application ID: 5446498 Date 29-02-2024

ii. Factory Manager of M/S R.N.B.S. Sugar Mills Ltd., is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilization, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at

Details of Authorization:

Sl. No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorized mode of disposal or recycling or utilization or co-processing, etc.	Quantity (ton/annum)
1.	Used Oil (Schedule-I-5.1)	Recyclable	0.400 MTA
2.	Schedule-I -1.7	Recyclable	0.300 MTA

iii. The authorization shall be valid for a period of 31.03.2029.

iv. The authorization is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

A. General conditions of authorization:

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site-specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorization shall be made as laid down under these Rules.

13. Any other conditions for compliance as per the Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

General Conditions

1. The applicant shall get analyses the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF&CC and shall report to the SPCB.
2. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.
3. Treated waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.
4. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions with 30 days of receipt of this CCA. If, at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the Board, legal action shall be initiated against the applicant.
5. The applicant shall maintain good housekeeping. All valves/pipes/sewer/drains etc. must be leak-proof.
6. The industry shall provide uninterrupted entry to this STP's/ETP's inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control measures.
7. The industry shall provide "Inspection Book" at the time of inspection to the Board's officials.
8. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect.
9. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.
10. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point.
11. The Board reserves the right to revoke/add/modify any stipulated conditions issued along with CCA, as may be necessary.
12. Any unauthorized change in personnel, equipment as working condition as mentioned in the application by the person authorized shall constitute a breach of his authorization.
13. It is the duty of the authorized person to take prior permission of the Board to close down the facility.
14. The authorization is valid for temporary storage of Hazardous Waste within premises only.
15. It is duty of the authorized person to take prior permission of this Board to close and cleanup the facility for treatment, storage and disposal of hazardous waste.
16. Industry shall submit the latest copy of Audit Balance sheet/C.A. Certificate (Fixed Assets + Current Assets-Current Liabilities) so that the Consent fee payable by the industry may be verified.
17. Generated hazardous waste shall be stored temporarily in the factory premises and disposed of through authorized TSDF after obtaining the authorization from the Board

18. Unit shall develop green belt as per the guidelines provided by Central Pollution Control Board.
19. In case of non-compliance of CCA condition(s), Bank Guarantee No. 46/RRK/2019-20 submitted by the unit will be forfeited without any further information. The occupier shall submit validity extension of Bank Guarantee upto validity of CCA order i.e. 31-03-2029 validity, before one month of expiry of Bank Guarantee.
20. The industry shall comply with the provisions of Environment (Protection) Amendment, Rules 2018 notified by MoEF&CC by Notification no 49 Dated 25.01.2018, Environment (Protection) Act 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended, Plastic Waste Management Rule 2016, E-Waste (Management and Transboundary Movement) Rules 2016 (whichever is applicable).
21. In case of any closure order is issued by CPCB or SPCB against the unit, then this CCA order will remain suspended during the closure period. After ensuring the compliance and after revocation of the closure order, the CCA will automatically be effective from the date of issuance of the closure revocation order with additional conditions mentioned in the closure revocation order.

Dr. Parag Madhukar Dhakate
Member Secretary

Copy to:

Regional Officer, Uttarakhand Pollution Control Board, Regional Office, Roorkee (Haridwar) for information and compliance.

Member Secretary

Annexure-19

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Central Ground Water Authority (CGWA)
Application for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater (Save As Draft Application For Renewal of NOC)

Application Number : 21-4/733/UT/IND/2017

Applied For Renewal : 1st

(Scanned copy of this page after signature and seal should be attached at "Application with Signature and Seal" in attachment section before submission of application)

	Name of Industry:	RAI BAHADUR NARAIN SINGH SUGAR MILL LTD. LAKSAR
	Location Details of the Industrial Unit	
	Address Line 1 :	LAKSAR
	Address Line 2 :	
	Address Line 3 :	
	State:	UTTARAKHAND
	District:	HARIDWAR
	Sub-District:	LAKSAR
	Village/Town:	Laksar (NP)
	Net Ground Water(m3/day):	460.00
	Area Type Category :	Safe

INDUSTRIAL USE- Self Declaration

I hereby certify that the data and information furnished above are true to the best of my knowledge and belief and I am aware that if any part of the data / information submitted is found to be false or misleading at any stage, the application will be rejected outright.

I hereby declare that all the mandatory documents prescribed in the application form have been uploaded and no blank /irrelevant documents have been uploaded. I am also aware that any false/ wrong submission /uploading of document will lead to rejection of my application without any notice.

It is to certify that no case related to ground water withdrawal/ contamination is pending against the industry/ project/ unit as on date. Any such case filed against the company/ project/ unit in respect of ground water withdrawal/ contamination during the pendency of this application shall be immediately brought to the notice of CGWA.

I hereby undertake that in case any environmental compensation/ penalty is imposed on the firm by any statutory authority, I shall comply with the decision of such authority.

यह प्रमाणित करता हूं कि ऊपर प्रस्तुत किये गऐ आँकड़े और जानकारी मेरे ज्ञान और विश्वास के अनुसार सही हैं और मुझे पता है कि यदि प्रस्तुत आँकड़े / सूचना का कोई भी भाग किसी भी स्तर पर गलत या भ्रामक पाया जाता है, तो आवेदन बिना किसी पूर्व सूचना के निरस्त कर दिया जाएगा।

मैं इसके द्वारा घोषित करता हूं कि आवेदन पत्र में निर्धारित सभी अनिवार्य दस्तावेजों को अपलोड किया गया है और कोई रिक्त / अप्रासंगिक दस्तावेज अपलोड नही किया गया है। मुझे यह भी पता है कि कोई भी गलत दस्तावेज अपलोड करने पर मेरे आवेदन को बिना किसी सूचना के निरस्त कर दिया जाएगा।

यह प्रमाणित करता हूँ कि उद्योग / परियोजना / इकाई के खिलाफ आज तक भूजल निकासी / प्रदूषण से संबंधित कोई भी मामला किसी भी न्यायालय में लंबित नही है। इस आवेदन की प्रक्रिया के दौरान भूजल निकासी / प्रदूषण के संबंध में कंपनी / परियोजना / इकाई के खिलाफ दायर किसी भी मामले को तुरंत के. भू. ज. प्राधिकरण के ध्यान में लाउंगा।

मैं इस बात का वचन देता हूं कि यदि किसी भी वैधानिक प्राधिकरण द्वारा फर्म पर कोई पर्यावरणीय क्षतिपूर्ति / जुर्माना लगाया जाता है,तो मैं प्राधिकरण के उस निर्णय का पालन करूंगा।

R.B.N.S. Sugar Mills Ltd. LAKSAR

Date :

Place :

Name & Signature of the applicant
(With official seal)

Associated User : rbns

* In case signed by any authorized signatory, the details of the signatory with the authorization shall be enclosed.

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)
NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Rai Bahadur Narain Singh Sugar Mill Ltd. Laksar		
Project Address:	Laksar		
Town:	Laksar (np)	Block:	Laksar
District:	Haridwar	State:	Uttarakhand
Pin Code:			
Communication Address:	Rai Bahadur Narain Singh Sugar Mill Ltd, Laksar, Laksar, Haridwar, Uttarakhand - 247663		
Address of CGWB Regional Office :	Central Ground Water Board Uttarakhand Region, 419-a, Kanwali Road, Baluwala , Near Urja Bhawan, Dehradun, Dehradun, Uttarakhand - 248001		

1. NOC No.: CGWA/NOC/IND/ORIG/2021/10108
2. Application No.: 21-4/733/UT/IND/2017
3. Category: (GWRE 2017) Safe
4. Project Status: Existing Project
5. NOC Type: New
6. Valid from: 29/12/2020
7. Valid up to: 28/12/2023
8. Ground Water Abstraction Permitted:

Fresh Water		Saline Water		Dewatering		Total	
m³/day	m³/year	m³/day	m³/year	m³/day	m³/year	m³/day	m³/year
594.00	77220.00						

9. Details of ground water abstraction /Dewatering structures

	Total Existing No.:1						Total Proposed No.:0					
	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
Abstraction Structure*	0	0	0	1	0	0	0	0	0	0	0	0

*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps

10. Ground Water Abstraction/Restoration Charges paid (Rs.): 463320.00

11. Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism.

No. of Piezometers	Monitoring Mechanism		
	Manual	DWLR**	DWLR With Telemetry
2	0	1	1

**DWLR – Digital Water Level Recorder

(Compliance Conditions given overleaf)

This is an auto generated document & need not to be signed.

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011
Phone: (011) 23383561 Fax: 23382051, 23386743
Website: cgwa-noc.gov.in

Validity of this NOC shall be subject to compliance of the following conditions:

Mandatory conditions:

1) Installation of digital water flow meter (conforming to BIS/ IS standards) having telemetry system in the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate through the web-portal.

2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.

3) Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines . Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II.

4) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.

5) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.

6) In case of mining project the firm shall submit water quality report of mine discharge/ seepage from Govt. approved/ NABL accredited lab.

7) The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.

8) The firm shall submit the water audit report in case of water requirement is in excess of 100 m3/day through certified auditors within three months of completion of the same to CGWA.

9) Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986.

10) This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.

General conditions:

11) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).

12) The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).

13) Proponents shall install roof top rain water harvesting in the premise as per the existing building bye laws in the premise.

14) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises, failing which the firm shall be responsible for any consequences arising thereupon.

15) In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.

16) Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.

17) Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.

18) Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.

19) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 16 of Guidelines.

20) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.

21) The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.

22) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.

23) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)

RAI BAHADUR NARAIN SINGH SUGAR MILLS LTD. LANSAR (HARIDWAR)

Annexure-20

Rbns Sugar Mills Ltd

15UK592_STACK1_Boiler_Rbns Sugar Mills_Haridwar

From: 2024-11-01 18:00:00 To: 2025-01-06 11:38:00

Timestamp	SPM
01-Nov-2024 00:00	0
02-Nov-2024 00:00	0
03-Nov-2024 00:00	0
04-Nov-2024 00:00	0
05-Nov-2024 00:00	0
06-Nov-2024 00:00	0
07-Nov-2024 00:00	0
08-Nov-2024 00:00	0
09-Nov-2024 00:00	32.64
10-Nov-2024 00:00	81.82
11-Nov-2024 00:00	74.79
12-Nov-2024 00:00	71.82
13-Nov-2024 00:00	59.77
14-Nov-2024 00:00	67.83
15-Nov-2024 00:00	57.82
16-Nov-2024 00:00	61.21
17-Nov-2024 00:00	63.79
18-Nov-2024 00:00	54.38
19-Nov-2024 00:00	62.23
20-Nov-2024 00:00	65.3
21-Nov-2024 00:00	60.53
22-Nov-2024 00:00	58.93
23-Nov-2024 00:00	61.45
24-Nov-2024 00:00	65.26
25-Nov-2024 00:00	59.96
26-Nov-2024 00:00	61.20
27-Nov-2024 00:00	60.69
28-Nov-2024 00:00	59.20
29-Nov-2024 00:00	61.00
30-Nov-2024 00:00	62.09
01-Dec-2024 00:00	57.41
02-Dec-2024 00:00	61.79
03-Dec-2024 00:00	63.11
04-Dec-2024 00:00	56.34
05-Dec-2024 00:00	59.03
06-Dec-2024 00:00	58.16
07-Dec-2024 00:00	58.54
08-Dec-2024 00:00	66.54
09-Dec-2024 00:00	68.14
10-Dec-2024 00:00	58.41
11-Dec-2024 00:00	39.11
12-Dec-2024 00:00	57.09
13-Dec-2024 00:00	69.35
14-Dec-2024 00:00	69.38
15-Dec-2024 00:00	69.87
16-Dec-2024 00:00	74.35
17-Dec-2024 00:00	70.83
18-Dec-2024 00:00	73.62
19-Dec-2024 00:00	75.44
20-Dec-2024 00:00	78.16
21-Dec-2024 00:00	75.97
22-Dec-2024 00:00	75.46
23-Dec-2024 00:00	76.67
24-Dec-2024 00:00	76.94
25-Dec-2024 00:00	76.87
26-Dec-2024 00:00	77.17
27-Dec-2024 00:00	91.28
28-Dec-2024 00:00	91.00
29-Dec-2024 00:00	89.95
30-Dec-2024 00:00	84.99
31-Dec-2024 00:00	73.86
01-Jan-2025 00:00	70.82
02-Jan-2025 00:00	72.54
03-Jan-2025 00:00	74.05
04-Jan-2025 00:00	76.66
05-Jan-2025 00:00	77.53
06-Jan-2025 00:00	77.82

Reported via: https://tnpo.telsys.in by user: edprbns@yahoo.com

Rbns Sugar Mills Ltd

15UK592_STACK_Boiler_Rbns Sugar Mills_Haridwar

From: 2024-11-01 18:00:00 To: 2025-01-06 11:53:00

Timestamp	SPM
01-Nov-2024 00:00	0
02-Nov-2024 00:00	0
03-Nov-2024 00:00	0
04-Nov-2024 00:00	0
05-Nov-2024 00:00	0
06-Nov-2024 00:00	0
07-Nov-2024 00:00	0
08-Nov-2024 00:00	0
09-Nov-2024 00:00	36.01
10-Nov-2024 00:00	85.56
11-Nov-2024 00:00	86.15
12-Nov-2024 00:00	85.93
13-Nov-2024 00:00	83.3
14-Nov-2024 00:00	84.61
15-Nov-2024 00:00	82.6
16-Nov-2024 00:00	85.56
17-Nov-2024 00:00	84.95
18-Nov-2024 00:00	83.3
19-Nov-2024 00:00	84.04
20-Nov-2024 00:00	84.72
21-Nov-2024 00:00	84.33
22-Nov-2024 00:00	79.59
23-Nov-2024 00:00	81.17
24-Nov-2024 00:00	80.15
25-Nov-2024 00:00	79.74
26-Nov-2024 00:00	78.47
27-Nov-2024 00:00	78.41
28-Nov-2024 00:00	85.23
29-Nov-2024 00:00	91.29
30-Nov-2024 00:00	87.76
01-Dec-2024 00:00	84.05
02-Dec-2024 00:00	85.68
03-Dec-2024 00:00	87.58
04-Dec-2024 00:00	81.59
05-Dec-2024 00:00	83.54
06-Dec-2024 00:00	77.44
07-Dec-2024 00:00	86.06
08-Dec-2024 00:00	84.58
09-Dec-2024 00:00	86.9
10-Dec-2024 00:00	80.42
11-Dec-2024 00:00	83.56
12-Dec-2024 00:00	81.4
13-Dec-2024 00:00	78.33
14-Dec-2024 00:00	81.17
15-Dec-2024 00:00	83.52
16-Dec-2024 00:00	86.34
17-Dec-2024 00:00	84.77
18-Dec-2024 00:00	84.91
19-Dec-2024 00:00	71.65
20-Dec-2024 00:00	82.06
21-Dec-2024 00:00	76.97
22-Dec-2024 00:00	75.44
23-Dec-2024 00:00	69.6
24-Dec-2024 00:00	67.81
25-Dec-2024 00:00	62.91
26-Dec-2024 00:00	59.5
27-Dec-2024 00:00	92.65
28-Dec-2024 00:00	82
29-Dec-2024 00:00	70.65
30-Dec-2024 00:00	84.97
31-Dec-2024 00:00	85.52
01-Jan-2025 00:00	77.84
02-Jan-2025 00:00	84
03-Jan-2025 00:00	85.78
04-Jan-2025 00:00	88.26
05-Jan-2025 00:00	89.39
06-Jan-2025 00:00	90.36
Reported via: https://tpro.telsys.in by user: edprbns@yahoo.com	

ECON LABORATORY & CONSULTANCY LLP

(ISO: 9001, 14001& 45001 Certified & MOEF & CC Recognized Laboratory)

Vill.: Khabarwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Customer:	ULR No:	TC550724000009515F
M/s.R.B.N.S.SUGAR MILLS LTD. Laksar,hekhpuri,Uttarakhand Pin-247663	Reporting Date:	19/12/2024
	Receipt Date:	17/12/2024
	Period of Testing:	18/12/2024-19/12/2024
	Format No:	7.8F-01
	Party Reference No:	By Mail

SAMPLE DESCRIPTION: BOILER STACK EMISSION MONITORING

General Information:

Sample Collected by	: Lab. Rep.
Date of Sampling	: 17/12/2024
Sampling duration (minute)	: 30.0
Stack Attached to	: Boiler Set-2
Sampling location	: Utility Area
Capacity of Boiler	: 70 Ton/Hr
Meteorological condition	: Clear Sky
Instrument Calibration Status	: Ok
Diameter of Stack	: 300cm
Height of Stack	: 60 m
Ambient Temperature-Ta (^{0}C)	: 22.7
Temperature of Stack-Ts (^{0}C)	: 122.0
Velocity of stack in (m/s)	: 8.46
Flow rate of PM (LPM)	: 19.7
Flow rate of Gas (LPM)	: 2.0
Sampling Condition	: Isokinetic
Protocol Used	: 11255
Parameters Required	: As per Work Order
Fuel Used	: Bagasse
Quantity of Emission	: 141587 Nm^3/Hr

TEST RESULTS

S. No.	Parameters	Test Methods	Units	Results	Limits
1.	Particulate Matter, (Corrected at 12 % CO_2)	IS:11255(Part1):1985, RA 2019	mg/Nm^3	106.4	150

*** End of Report***

CHECKED BY :

AUTHORISED SIGNATORY :

NOTE : 1. The results listed only to the tested sample & applicable parameters.
2. Total liabilities of our lab will be restricted to the invoice amount only.
3. The sample will be destroyed after retention time unless otherwise specified.
4. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without prior permission

ECON LABORATORY & CONSULTANCY LLP

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Vill.: Khabarwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Customer:	ULR No:	TC550724000009516F
M/s.R.B.N.S.SUGAR MILLS LTD. Laksar,hekhpuri,Uttarakhand Pin-247663	**Reporting Date:**	19/12/2024
	Receipt Date:	17/12/2024
	Period of Testing:	18/12/2024-19/12/2024
	Format No:	7.8F-01
	Party Reference No:	By Mail

SAMPLE DESCRIPTION: BOILER STACK EMISSION MONITORING

General Information:

Sample Collected by	: Lab. Rep.
Date of Sampling	: 17/12/2024
Sampling duration (minute)	: 30.0
Stack Attached to	: Boiler Set-3
Sampling location	: Utility Area
Capacity of Boiler	: 32 Ton/Hr
Meteorological condition	: Clear Sky
Instrument Calibration Status	: Ok
Diameter of Stack	: 300cm
Height of Stack	: 40 m
Ambient Temperature-Ta (^{0}C)	: 22.7
Temperature of Stack-Ts (^{0}C)	: 117.0
Velocity of stack in (m/s)	: 8.22
Flow rate of PM (LPM)	: 17.2
Flow rate of Gas (LPM)	: 2.0
Sampling Condition	: Isokinetic
Protocol Used	: 11255
Parameters Required	: As per Work Order
Fuel Used	: Bagasse
Quantity of Emission	: 117823 Nm^3/Hr

TEST RESULTS

S. No.	Parameters	Test Methods	Units	Results	Limits
1.	Particulate Matter, (Corrected at 12% CO_2)	IS:11255(Part1):1985, RA 2019	mg/Nm^3	72.5	150

*** End of Report***

CHECKED BY :

AUTHORISED SIGNATORY :

NOTE : 1. The results listed only to the tested sample & applicable parameters.
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ECON LABORATORY & CONSULTANCY LLP

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Vill.: Khabarwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Customer:	ULR No:	TC550724000009514F
M/s.R.B.N.S.SUGAR MILLS LTD. Laksar,hekhpuri,Uttarakhand Pin-247663	Reporting Date:	19/12/2024
	Receipt Date:	17/12/2024
	Period of Testing:	18/12/2024-19/12/2024
	Format No:	7.8F-01
	Party Reference No:	By Mail

SAMPLE DESCRIPTION: BOILER STACK EMISSION MONITORING

General Information:

Sample Collected by	: Lab. Rep.
Date of Sampling	: 17/12/2024
Sampling duration (minute)	: 30.0
Stack Attached to	: Boiler Set-1
Sampling location	: Utility Area
Capacity of Boiler	: 90 Ton/Hr
Meteorological condition	: Clear Sky
Instrument Calibration Status	: Ok
Diameter of Stack	: 300cm
Height of Stack	: 60 m
Ambient Temperature-Ta (^{0}C)	: 22.7
Temperature of Stack-Ts (^{0}C)	: 136.0
Velocity of stack in (m/s)	: 9.22
Flow rate of PM (LPM)	: 20.6
Flow rate of Gas (LPM)	: 2.0
Sampling Condition	: Isokinetic
Protocol Used	: 11255
Parameters Required	: As per Work Order
Fuel Used	: Bagasse
Quantity of Emission	: 136658 Nm^3/Hr

RAJ BAHADUR NARAIN SINGH SUGAR MILLS LTD. LAKSAR (HARIDWAR)

TEST RESULTS

S. No.	Parameters	Test Methods	Units	Results	Limits
1.	Particulate Matter, (Corrected at 12 % CO_2)	IS:11255(Part1):1985, RA 2019	mg/Nm^3	88.3	150

*** End of Report***

CHECKED BY :

AUTHORISED SIGNATORY :

NOTE : 1. The results listed only to the tested sample & applicable parameters.
2. Total liabilities of our lab will be restricted to the invoice amount only.
3. The sample will be destroyed after retention time unless otherwise specified.
4. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without prior permission

ADEQUACY REPORT

FOR

THE EFFLUENT TREATMENT PLANT OF DISTILLERY

OF

M/s RAI BAHADUR NARAIN SINGH SUGAR MILLS LTD.
(DISTILLERY DIVISION)
LAKSAR, HARIDWAR - 247663
UTTARAKHAND

PREPARED BY:

राष्ट्रीय शर्करा संस्थान
NATIONAL SUGAR INSTITUTE
भारत सरकार
Government of India
उपभोक्ता मामले खाद्य एवं सार्वजनिक वितरण, मंत्रालय
Ministry of Consumer Affairs, Food & Public Distribution
खाद्य एवं सार्वजनिक वितरण विभाग
Department of Food & Public Distribution
कानपुर-208017 (उत्तर प्रदेश) भारत
Kanpur- 208017 (U.P.) India
Ph. +91-512-2570730, 2570273
E-mail: *nsikanpur@nic.in*

1. INTRODUCTION

M/s Rai Bahadur Narain Singh Sugar Mills Ltd. (Distillery Division), Laksar, Haridwar vide letter no. GM/01/IC/370 dt. 26.12.2024 approached National Sugar Institute, Kanpur for inspecting their modified ETP being attached to 120 KLPD molasses-based distillery located in close proximity with 10,000 TCD sugar plant and to submit report on its adequacy keeping in view CPCB/ SPCB guidelines related to molasses-based distilleries. The factory proposes to operate the unit for 300 days following spray dryer route. Hence, the adequacy through spray dryer route has been assessed for 300 days of operation.

2. COMPOSITION OF THE TEAM

1. Dr. Seema Paroha, Director, NSI Kanpur
2. Shri Anoop Kumar Kanaujia, Asst. Professor (Sugar Engineering)

3. DATE /PERIOD OF VISIT

The visit was undertaken by the above officers on 04th January, 2025 to assess adequacy of the modified Effluent Treatment Plant of molasses-based distillery. The report is based on the data provided by the factory and physical verification made at site. During the period of visit the factory was found in operation and as such the inferences has been drawn on the basis of data made available by the factory.

4. FACTORY OFFICIAL PRESENT DURING THE VISIT

Shri S P Singh, General Manager and Shri Manish Rathi, D.G.M. (Distillery) of the unit along with their other technical staff were present during the visit for detailed discussion and physical verification of the site.

5. OBSERVATION AND DISCUSSIONS

The Molasses based distillery unit namely M/s Rai Bahadur Narain Singh Sugar Mills Ltd. (Distillery Division) is situated in Laksar, Haridwar, Uttarakhand adjacent to the Sugar unit of 10,000 TCD capacity which was established in the year 2014 and its present Licensed/ Installed capacity is 120 KLPD.

The consent issued by UKPCB, Environment Consent, and Excise/PD-2 are attached as **Annexure 1, 2, & 3** respectively. The factory has installed Bio-digester, Multiple Effect Evaporator system to concentrate the spent wash generated during the distillation process and being dried into spray dryer to achieve Zero Liquid Discharge (ZLD).

Performance of the distillery unit as reported by the unit for the last three Alcohol years:

Sl. No	Particulars	2021-22 (December to November)	2022-23 (December to November)	2023-24 (December to November)
1	Installed Capacity in KLPD	60	120	120
2	Production in KL/ Annum	C-Heavy- 410.55 B-Heavy- 15259.88	B-Heavy- 16315.19 Syrup- 6904.74	C-Heavy- 806.87 B-Heavy- 13606.40
3	**Products Manufactured KL/ Annum**			
	Rectified Spirit	15.42	0	0
	Extra Neutral Alcohol	1476.45	763.93	1189.29
	Absolute Alcohol/Fuel Ethanol	14206.63	22500.96	13250.03
4	Type of Raw Material consumed	C-Heavy/ B-Heavy	Syrup/ B-Heavy	C-Heavy/ B-Heavy
5	Raw Material consumed MT/Annum	1951.57 (C-Heavy) 51805.5 (B-Heavy)	22341.50 (Syrup) 55034.1(B-Heavy)	3491.12 (C-Heavy) 46794.2 (B-Heavy)
6	No. of operating days	270.46	213.63	143.46
7	Alcohol % in wash	C-Hy- 9.57 B-Hy- 11.93	B-Hy- 12.04 Syrup- 13.34	C-Hy- 8.82 B-Hy- 11.26
8	Alcohol yield lit/qtl	C-Hy- 21.04 B-Hy- 29.46	B-Hy- 29.65 Syrup- 30.91	C-Hy- 23.11 B-Hy- 29.08
9	Spent wash generation, l/l	C-Hy- 8.0 B-Hy- 6.0	B-Hy- 5.98 Syrup- 5.80	C-Hy- 7.97 B-Hy- 5.95

The last three months data duly certified with Excise Department regarding performance of distillery is as under:

Month	Month wise Alcohol Production (in B.L.)	Working Days	Avg. Alcohol production per day in KL	Molasses Distilled (in Qtls.)	Recovery In BL/Qtls.
Feb-24	B-Hy: 2712363.3	26	104.32	B-Hy: 91696	29.58
	C-Hy: 179851.8	03	59.95	C-Hy:7764	23.16
	Total-2892215.1	29	99.73	Total-99460	29.08
Mar-24	B-Hy: 2533418.3	26	97.44	B-Hy: 85403	29.66
	C-Hy: 299477.5	05	59.90	C-Hy:12921	23.18
	Total-2832895.8	31	91.38	Total-98324	28.81
Dec-24	2955708.8	31	95.35	B-Hy- 101659	29.07
Total	**8680819.7**	**91**	**95.39**	**299443**	**28.99**

Production data duly certified with Excise Department of last three months attached as **Annexure 4 (Copy of Form PD-9/ PD-29)**.

6. PROCESS ADOPTED FOR ALCOHOLPRODUCTION

The factory uses fed batch fermentation, MPR distillation system for production of Rectified Spirit (RS)/ ENA and Ethanol. The factory has installed Bio-digester, Multiple Effect Evaporator system to concentrate the spent wash generated during the distillation process and being dried into spray dryer to achieve Zero Liquid Discharge (ZLD). C-Heavy Molasses/ B-Heavy Molasses/ Syrup is being used as raw material for producing RS, ENA and Ethanol which is obtained from own sugar factory or procured from other sugar factories.

The main processes for the production of RS, ENA and Ethanol at the unit are:

a) Fermentation (Fed batch)
b) Distillation (MPR)
c) Molecular Sieve Dehydration (MSDH)
d) Bio-Digester
e) Multiple Effect Evaporator (MEE)
f) Spray Dryer
g) Condensate Polishing Unit (CPU)

The various sections involved in the process for manufacture of RS, ENA and Ethanol are:

i. Molasses Storage and Handling Section
ii. Fermentation Section
iii. Distillation Section
iv. Molecular Sieve Dehydration

v. Bio-Methanation/ Bio-Digester Section
vi. Multiple Effect Evaporator Section
vii. Spray Dryer
viii. Process Water Treatment Section

(i) Molasses Storage, Handling and Distribution:

Molasses is stored in two steel tanks at the distillery having storage capacity of 60000 Qtls. and 80000 Qtls. Stored molasses in the molasses storage tank is pumped to the molasses receiving tank in the fermentation section.

(ii) Molasses Fermentation:

The fermentation consists of following steps;

a. Molasses weighing
b. Yeast Propagation
c. Pre fermentation
d. Fermentation

a. **Molasses Weighing** - Molasses is transferred into fermentation house after weighment. This molasses is diluted in diluter as per feed requirement like feed to Pre-fermentation/ Fermentation stages.

b. **Yeast Propagation**- Culture yeast is grown in own laboratory. Yeast propagation section comprises of molasses diluter and hygienically engineered yeast vessels equipped with cooling and air sparging facility.

c. **Pre-Fermentation**- In Pre-Fermenter vessel, molasses, process water, nutrients and additives are added for activation/growth of cell mass. Filtered air is given as required for cell growth. Activated cell mass is transferred to Fermenter to maintain desired cell mass concentration in Fermenter. Laboratory propagated cell mass is scaled up in series of yeast vessels. Cell mass from Yeast vessel is transferred to yeast activation vessel to build up cell mass required for Fermentation by cell mass transfer pump.

d. **Fermentation** -The fermentation process is engineered to operate in fed-batch mode depending upon varying qualities of molasses. The purpose of fermentation is to convert the fermentable sugars into alcohol. During fermentation, sugars are broken down into alcohol and carbon–di–oxide. Significant heat release takes place during fermentation. The fermenter temperature is maintained by cooling the fermented wash by forced circulation in plate heat exchangers. The cooling water used in plate type heat exchanged is cooled by circulating through cooling tower. Around 63 m^3 spent lees from MPR distillation produced in the process is re-cycled and used for dilution during fermentation process. There is also a provision for spent wash recycle to fermentation depending on solid concentration in fermented wash and molasses composition.

Type: Molasses based Fed Batch Type Fermentation
Nos. of Fermenter: Total 07 Nos. of Fermenters, Total Capacity – 28 Lac liters, 01 no. Wash Holding/ Intermediate tank for uninterrupted wash feed to Distillation Plant.
Yeast Vessels: 01 series of 04 vessels in each and of Capacity 100, 520, 2600 and 13000 Liters.
Unit has also installed Fermenters sludge settling system consists of 02 Nos. settling tanks having a capacity of 20000 liters each.

(iii) Distillation

The next stage in the production of alcohol is to separate alcohol from fermented wash and to concentrate it for final Product. The fermented wash is distilled and rectified. The following equipments are used.

1. Degasifying Column
2. Analyzer Column
3. Pre-Rectification Column
4. R.S. Recovery Column
5. Ethanol Recovery Column
6. Molecular Sieve Bed (03 nos.)
7. Purifier Column
8. Rectifier cum Exhaust Column
9. ENA Simmering Column

Pre-heated Fermented wash is fed to Degasifying Column. Fermented wash is stripped off alcohol by a small quantity of Steam is feed in degasifying column. Vapors of Degasifying Column are fed to Aldehyde column and appropriate technical alcohol cut is taken out from this Column. The Degasifying column bottom Liquid is pumped to analyzer Column for stripping of alcohol from fermented wash. Analyzer vapors from Top are fed to pre-rectifier column this column further concentrates alcohol to @ 95 % v/v and also separates low boiling impurities from column top. The column operates under vacuum. Rectified spirit draw of 95% v/v is taken out from the upper trays of pre rectifier column and fed to RS simmering column which separate the light ends present in RS under high reflux and taken to storage section after passing it through a cooler.

Molecular Sieve Dehydration (MSDH):

Rectified Spirit (RS) fed into the top of the re-boiler and steam applied in bottom of re-boiler. The alcohol and water vapors pass through the super heater to maintain the out let temperature between 135-138°C. After that alcohol and water vapors goes to sieve bed where water vapors are absorbed by molecular sieve and alcohol vapors pass out. These vapors condensed in product condenser and cooled through cooler which is called absolute alcohol having alcohol concentration between 99.8 -99.9% v/v.

Heat integration and Energy input Points

- Analyzer column driven by vapour of analyzer re-boiler.
- Vapors from analyzer column sent to pre-rectifier column and trapped alcohol fed to purifier column with small qty of DM water. recovery column is again driven by small qty of steam for separation of fusel oil. MSDH section evaporator column is driven by steam during Ethanol production.

Supplier: M/s Naran Lala Pvt. Ltd., Gujrat
Nos. of Column: 08 Nos. for Wash to Ethanol and 07 Nos. Wash to ENA.
Type: Wash to RS and Wash to ENA are multi pressure fractional distillation.

Cooling Towers:
One No. for Fermentation- 750 M^3/hr Recirculation Rate
One No. for Distillation 1400 M^3/hr Recirculation Rate
One No. for MSDH- 350 M^3/hr Recirculation Rate
One No. for MEE Plant - 1500 M^3/hr Recirculation Rate

The plant process flow diagram is attached as **Annexure 5.**

7. EQUIPMENT INSTALLED FOR ACHIEVING ZERO LIQUID DISCHARGE (ZLD)

The factory has envisaged two stages of treatment for the spent wash to obtain Zero Liquid Discharge. The raw spent wash from the distillery is being taken in Bio-digester and then concentrated into Multiple Effect Evaporator (MEE) System. The concentrated spent wash from MEE is then being dried into spray dryer.

As per the data provided, the plant generates spent wash at the rate of about 6.0 lit/lit of Alcohol produced with a Brix of around 10.5-11.5. Average spent wash generated is about 720 KL/day on full plant capacity (Volume is measured by Mass Flow meter) which is fed into MEE. Copy of log book in respect to spent wash generated is attached as **Annexure 6.**

The characteristics of raw spent wash (on B-Hy molasses) produced are given below;

pH	4.5– 4.7
Specific gravity	1.02 - 1.03
Brix Content	10.5-11.5
Sludge v/v	08-10%
VFA	3000– 4000 mg/l
COD	120000 - 125000 mg/l

Spent Wash Generation Data – (February, March & December 2024)

Total spent wash generation Feb, March & Dec 2024 from Log book (KL)	51319.78
Total Alcohol production Feb, March & Dec 2024 from Excise data (KL)	8680.82
Spent wash generation KL/KL of Alcohol	5.9

i. Bio-Methanation Plant/ Bio-Digester

Three nos. CSTR type Bio-digesters were installed in year 2014 and 2022. The capacity of two bio-digesters is 10000 M^3 each and other one is 7500 M^3 and hydraulic retention time of bio-digesters is about 21 days. During idle days digesters are maintained by keeping some spent wash in storage pits and slow feeding into digesters is being carried out. Temperature of digesters is being maintained through PHE, by exchanging heat of spent wash with bio-digester re-circulation material. Generated sludge is being consumed as bio-manure. The initial and final COD/ BOD and Bio-gas production data is attached as **Annexure 7.**

ii. Multiple Effect Evaporator (MEE)

a. Multiple Effect Evaporator (MEE) – Old Plant of 60 KLPD

The factory has six-effect Multiple Effect Evaporator which comprises of 4 nos. (4W+0S) Falling Film Evaporator bodies and 2 nos. (2W+0S) Forced Circulation Evaporator bodies wherein the solid content of BMSW is increased up to 36-37% solids. The system is having one degasser and does not have any stand-by body. MEE is designed for feed capacity of 750 KLPD.

The first and second body of the evaporator is driven by steam at suitable temperature and pressure. The third effect is driven through the vapour from the first and second effect and consequently the fourth effect is driven through the vapour from the third effect and so on up to sixth effect. The configuration of old MEE set is attached as **Annexure 8**.

Designed Technical Specifications of 6 Stage- Old Multi Effect Evaporator (MEE)

S.No.	Particulars	Type	HTA (M^2)	OD of tubes (mm)	Length of tubes (mm)	Thickness of tubes (mm)	Thickness of shell (mm)
1	Falling Film Evaporator- 1	Falling Film	250	50.8	12000	1.2	4
2	Falling Film	Falling	250	50.8	12000	1.2	5

	Evaporator- 2	Film					
3	Falling Film Evaporator- 3	Falling Film	250	50.8	12000	1.2	5
4	Falling Film Evaporator- 4	Falling Film	250	50.8	12000	1.2	5
5	Forced Circulation Evaporator- 1	Forced Circulation	264	38.1	9000	1.6	5
6	Forced Circulation Evaporator- 2	Forced Circulation	264	38.1	9000	1.6	5
7	Surface Condenser		220	50.8	12000	1.2	5

The MEE is designed for feed rate @ 750 m^3/day to concentrate the spent wash at about 180 m^3/day with solid content 36-37%. Copy of log book in respect to MEE performance is attached as **Annexure 9.**

b. Multiple Effect Evaporator (MEE) – New Plant of 60 KLPD

The factory has two-effect integrated Multiple Effect Evaporator which comprises of 3 nos. (2W+1S) Falling Film Evaporator bodies and three-effect standalone Multiple Effect Evaporator which comprises of 2 nos. (2W+0S) Falling Film Evaporator bodies and 2 nos. (1W+1S) Forced Circulation Evaporator bodies wherein the solid content of BMSW is increased up to 37-38% solids. The system is having one degasser and does not have any stand-by body. MEE is designed for feed capacity of 750 KLPD. The configuration of new MEE set is attached as **Annexure 10**.

Designed Technical Specifications of 3 Stage- Integrated Multi Effect Evaporator (MEE)

S.No.	Particulars	Type	HTA (M^2)	OD of tubes (mm)	Length of tubes (mm)	Thickness of tubes (mm)	Thickness of shell (mm)
1	Falling Film Evaporator- 1	Falling Film	410	50.8	12000	1.2	4
2	Falling Film Evaporator- 2	Falling Film	410	50.8	12000	1.2	5
3	Falling Film Evaporator- 3	Falling Film	300	50.8	12000	1.2	5
4	Surface Condenser		185	50.8	12000	1.2	5

Designed Technical Specifications of 4 Stage- Standalone Multi Effect Evaporator (MEE)

S.No.	Particulars	Type	HTA (M^2)	OD of tubes (mm)	Length of tubes (mm)	Thickness of tubes (mm)	Thickness of shell (mm)
1	Falling Film Evaporator- 1	Falling Film	450	50.8	9000	1.2	4
2	Falling Film Evaporator- 2	Falling Film	450	50.8	9000	1.2	5
3	Forced Circulation Evaporator- 1	Forced Circulation	650	38.1	9000	1.6	5
4	Forced Circulation Evaporator- 2	Forced Circulation	650	38.1	9000	1.6	5
5	Surface Condenser		275	50.8	12000	1.2	5

The MEE is designed for feed rate @ 750 m^3/day to concentrate the spent wash at about 180 m^3/day with solid content 37-38%. Copy of log book in respect to MEE performance is attached as **Annexure 11.**

iii. Spray Dryer

The Multiple Effect Evaporator system is followed by spray dryer system for attaining Zero Liquid Discharge (ZLD).

1	No. of Spray Dryers	02 nos.
2	Year of installation/ establishment & commissioning of Spray Dryer	2019-20 & 2021-22
3	Type of Spray Dryer	Rotating Disk Spray Dryer
4	Capacity of Spray Dryer	2 x 45 TPD
5	Design details	
	Feed rate of Concentrated Spent Wash	2 x 180 TPD
	Product manufacturing capacity	2 x 45 TPD
6	Spray Dryer Supplier details	M/s Raj Process Equipments & Systems Pvt. Ltd., Pune

7	Spray Dryer Performance details	
	Actual Slop used	178 TPD
	Quantity of product generated	68 TPD
	Characteristics of generated product	Potash Rich
	Method of disposal	Copy of sale invoices attached as **Annexure 12.**
	No. of working days per annum	300 days
8	Other Details	
	Shut down days-cleaning period required	-
	Hot air temperature Deg. Cent.	240°C
	Bio-gas required	1200 m^3/hr
9	Emission control system or Air Pollution Control Device (APCD) installed (Yes/No)	Yes
	Name of installed Emission control system/ APCD	Wet Scrubber
	Stack Height	40 Mtrs.
10	On-line emission (stack) monitoring system installed (Yes/No)	Yes
	Details of on-line emission (stack) monitoring system for boiler	Provided by M/s N.T. Bloomfield Enterprises, New Delhi
	On-line emission (stack) monitoring system connected to CPCB/SPCB server at time of inspection? (Yes/No)	Yes

Copy of log book records of spray dryer performance is attached as **Annexure 13.**

iv. Condensate Polishing Unit (CPU)

The conventional (Anaerobic/ Aeration/ MGF/ ACF) CPU was installed in year 2014 supplied by M/s M.M. Enviro Projects Pvt. Ltd. P& I diagram of CPU System is attached as **Annexure 14**.

Designed Characteristics of CPU:

Capacity	1050 KLD
Sources of effluent coming into CPU	MEE condensate Spent lees Cooling Tower Blow-down
Recovery %	90%
Quantity utilized per day %	100% of treated water is proposed to be used in molasses dilution/ cooling tower make-up water/ floor washings *etc.*

Copy of log book records of CPU performance is attached as **Annexure 15.**

8. ETP PLANT & MACHINERY DETAILS

S. No.	Description	Details
1	**Multi Effect Evaporator**	**a. Old MEE Plant** The six-effect MEE of capacity 750 M^3/ day is installed for concentrating bio-methanated spent wash. It consists of Falling Film type Evaporators (4W+0S) having 250 m^2 HSA each and Forced Circulation type Evaporators (2W+0S) having 264 m^2 HSA each. **b. New MEE Plant** The five-effect MEE of capacity 750 M^3/ day is installed for concentrating bio-methanated spent wash. The two-effect integrated MEE consists of Falling Film type Evaporators (2W+1S) having 410 m^2, 2x300 m^2 HSA. The three-effect standalone MEE consists of Falling Film type Evaporators (2W+0S) having 450 m^2 HSA each and Forced Circulation type Evaporators (1W+1S) having 650 m^2 HSA each.
2	**Bio-digester**	Three nos. CSTR type Bio-digesters of capacity 2x10000 M^3 and 1x7500 M^3 are provided for bio-methanation.
3	**Spray Dryer**	Two nos. Rotating Disk type Spray Dryer of capacity 45 TPD each are provided for drying concentrated bio-methanated spent wash

4	**Lagoon**	One no. of lagoon of total capacity 1925 m^3 is available for storage of concentrated spent wash.
5	**Condensate Polishing Unit (CPU)**	Conventional (Anaerobic/ Aeration/ MGF/ ACF) CPU of capacity 1050 KLD is provided for treatment of process condensate and other low strength effluents.

9. STEAM AND POWER GENERATION

The steam and power requirement for distillery are being met out through sugar mill boiler of capacity 30 TPH (32 kg/cm^2 and 400°C) integrated with back pressure type turbine of capacity 3 MW.

10. FRESH WATER MANAGEMENT SYSTEM

The raw water requirement of approximately 250-300 m^3/day for the plant is being met by one borewell located in sugar premises. The water balance of distillery as reported by the factory is attached as **Annexure 16**. The distillery has applied for the NOC for ground water abstraction from CGWA, which is enclosed as **Annexure 17**. The up-stream and down-stream water analysis reports are also attached as **Annexure 18.** Records of fermenter sludge generation and disposal is enclosed as **Annexure 19.**

11. OBSERVATIONS ON PHYSICAL PARAMETERS

S. No	Particulars	Actual in the unit
1.	Spent wash Generation l/l alcohol	About 6.0 litre/ litre of alcohol (three months average)
2.	Concentration of spent wash up to 36-38 % solids and spray dryer	Concentrated bio-methanated spent wash is being dried through spray dryers
3.	On line flow meters with data recording facility which should be transmitted online to CPCB and SPCB shall be installed at the raw spent wash/whole still age generation line, MEE feed and MEE concentrate	Online flow meters with data recording facility have been installed as per details at *para 12*.
4.	Cameras (IP) with PAN, Tilt zoom *etc.* to be installed at relevant locations of final spent wash lagoon storage/ concentrated spent wash storage tank	One no. camera is provided at Concentrated SW storage lagoon and MEE area as per details at *para 12* and are connected with CPCB and UKPCB servers.
5.	Boiler should have online continuous	Online SPM analyzer has been installed.

	stack emission monitoring system	
6.	Mass flow meters at the inlet and outlet of the MEE	Mass flow meter has been installed at the outlet of Distillation section. Mass flow meters have been provided at the feed and outlet of the MEE.
7.	ZLD system	The distillery has adopted spray drying route to achieve ZLD through Bio-methanation followed by MEE + Spray Dryer & Conventional CPU System for recycling of condensate and other low strength effluents.

12. ONLINE MONITORING SYSTEM

Details of Online PTZ Cameras & Flow Meters:

Location / Place Installed	Parameter monitored	Device Make & Serial No./ Device ID	Device Model	Device Vendor	System Certified	Certified Agency	Range
Lagoon and MEE area	PTZ Camera	Hikvision 103.66.74.213:83	DS-2DE7A225IW-AEB	Mozilla Firebox	NA	NA	NA
Spent Wash Generation	Mass flow meter	ABB	FCB430	Aaxis Nano Technologies Pvt. Ltd.	Yes	ABB	0-32000 Kg/Hr
MEE Feed-Old Plant	Mass flow meter	ABB 244367863/X002/00708	FCB430	Aaxis Nano Technologies Pvt. Ltd.	Yes	ABB	0-42850 kg/hr
MEE Concentrate-Old Plant	Mass flow meter	ABB 244327875/X002100708	FCB430	Aaxis Nano Technologies Pvt. Ltd.	Yes	ABB	0-21000 kg/hr
MEE Feed-New Plant	Mass flow meter	ABB X001/009479	FCB430	Aaxis Nano Technologies Pvt. Ltd.	Yes	ABB	0-35000 kg/hr
MEE Concentrate-New Plant	Mass flow meter	ABB X002/009480	FCB430	Aaxis Nano Technologies Pvt. Ltd.	Yes	ABB	0-26000 kg/hr

The photographs of MEE plant, CPU, Lagoon, Spray-dryer, Mass flow meters at the feed and outlet of MEE, PTZ cameras at Lagoon *etc.* are being attached as **Annexure 20**.

13. RECOMMENDATIONS & CONCLUSIONS

(i) M/s Rai Bahadur Narain Singh Sugar Mills Ltd. (Distillery Division), Laksar, Haridwar, Uttarakhand is having a molasses-based distillery of licensed capacity of 120 KLPD. The factory has adopted spray drying route to achieve ZLD through Bio-methanation followed by MEE + Spray Dryer & Conventional CPU System for recycling of condensate and other low strength effluents.

(ii) The factory has three nos. CSTR type Bio-digesters for bio-methanation. The bio-methanated spent wash is being sent to Multiple Effect Evaporator (MEE) system to concentrate upto 36-38 brix and then concentrated bio-methanated spent wash is being used in spray dryers so as to comply with CPCB norms to achieve Zero Liquid Discharge (ZLD) through spray drying route.

(iii) The factory has also provided the granulation unit along with the spray drying system to achieve ZLD. However, the unit may enter into formal agreement with other vendors/ growers for its safe disposal & utilization. The factory may also obtain the analysis report of spray dryer powder/ granules from the external agency.

(iv) The installed capacity of conventional Condensate Polishing Unit (CPU) system shall be sufficient to handle the MEE condensate & other low strength effluents (Spent lees and Cooling tower blow down *etc.*) at production capacity of 120 KLPD of RS/ENA/Ethanol. However, the factory may explore the possibilities to provide RO & UV system for better utilization of treated water of CPU, if required.

(v) Air Pollution Control (APC) system *i.e.* Wet Scrubber and OCEMS provided for emission control and monitoring system shall be sufficient to cope up with production capacity of 120 KLPD of RS/ENA/Ethanol.

(vi) The factory has provided the PTZ camera to cover the MEE/ lagoon area. The available PTZ camera(s) may be re-located from bio-compost yard to cover the area of spray drying of bio-methanated spent wash.

(vii) The factory has provided one no. of lagoon of total capacity 1925 m^3 for storage of concentrated spent wash.

(viii) The factory has provided necessary Mass flow meters with data recording facility for MEE feed and MEE concentrate and have been connected with the CPCB/ SPCB servers for transmitting data. The online stack monitoring system has also been commissioned and connected with the CPCB/ SPCB servers for transmitting data.

14. ACKNOWLEDGEMENTS

The undersigned is thankful to all the technical and other staff of the factory for extending necessary assistance during the period of investigation.

(Anoop Kumar Kanaujia)
Asst. Professor (Sugar Engineering)

NATIONAL SUGAR INSTITUTE
(Government of India)
Ministry of Consumer Affairs, Food & Public Distribution
Department of Food & Public Distribution
Kanpur- 208017 (U.P.) India

Annexure-1

File No. IA- J-11011/618/2010-IA II(I)
Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division
***

Indira Paryavaran Bhawan,
Jal Wing, 3rd Floor, Aliganj,
Jor Bagh Road, New Delhi-110 003

Dated:27th August,2021

To,

Shri. Satya pal singh,
Additional General Manager,
M/s. Rai Bahadur Narain Singh Sugar Mills Limited (Distillery Division),
Laksar village, Laksar tehsil,
Haridwar- 247663.

Sub: Expansion of Molasses Based Distillery from 60 KLPD to 120 KLPD by installation of new 60 KLPD Ethanol Plant at Village Laksar, Tehsil Laksar, District Haridwar, Uttarakhand by M/s. Rai Bahadur Narain Singh Sugar Mills Limited (Distillery Division)- Consideration of Environment Clearance.

Sir,

This has reference to your online proposal No. IA/UK/IND2/218585/2021, dated 14th July, 2021 for environmental clearance to the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the proposed project expansion of Molasses Based Distillery from 60 KLPD to 120 KLPD by installation of new 60 KLPD Ethanol Plant at Village Laksar, Tehsil Laksar, District Haridwar, Uttarakhand by M/s. Rai Bahadur Narain Singh Sugar Mills Limited (Distillery Division).

3. The project/activities are covered under category A of item 5 (g) 'Distilleries' of the Schedule to the EIA, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC). The proposal has been submitted under the Ministry's EIA Notification, 2006 amendments vide Notification no. S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750(E) dated 17th February 2020, S.O 980(E) dated 2nd March, 2021. Accordingly, the proposal is appraised as category 'B2' project at Central Level by Expert Appraisal Committee (EAC).

4. Ministry had issued EC earlier vide letter no. J-11011/78/2005-IA-II (I) dated 24th May, 2006 to the existing operational project in favor of M/s Rai Bahadur Narain Singh Sugar Mills Limited (Distillery Division). It was informed that no litigation is pending against the proposal.

5. The details of products and capacity are as under: -

S. No.	Unit	Existing	Proposed Additional	Total after expansion	Remarks
1.	Distillery	60 KLPD (Ethanol /ENA/ RS)	New 60 KLPD Ethanol Plant	120 KLPD	Additional increased 60 KLPD capacity will be Ethanol only

6. Existing land area is 14.5 hectares (145000 m^2). The proposed expansion will be done within the existing plant premises so no additional land is required. Industry has already developed greenbelt in an area of 35% i.e. 5.0 ha (50000 m^2) out of total area of the project. The estimated project cost is Rs. 33.0 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 15.0 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.5 Crore per annum. Total Employment will be 56 persons as Permanent & 7 persons as temporary during operation phase after expansion. Industry proposes to allocate Rs. 66 Lakhs @2 % of total project cost towards Social developmental activities.

7. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc., within 10 km distance from the plant site. There is 1 Reserved Forest (RF) within 10 km radius namely Pathri Reserve Forest (3.0 km in NE direction). River i.e. Harwaha Nadi (1.0 km in West direction), Pathari Rao (1.5 km in NE direction), Pir Khala (2.5 km in NNE direction), Begam Nadi (4.0 km in ESE direction), Bodi Nadi (5.0 km in WSW direction), Solani River (5.0 km in West direction), Banganga River (5.5 km in SE direction), Pathawa Nadi (5.5 km in North direction) are flowing within 10 km radius.

8. Total fresh water requirement after expansion will be 474 KLPD which will be met from Groundwater and condensate water of their own Sugar Mill. Effluent of 886 KLPD quantity after expansion will be treated through state of art CPU (1050 KLPD Capacity) Treatment Plant (Anaerobic- UASB Reactor, Extended Aeration ASP, Clarifiers, Filters, & Chlorine chamber). The plant will be based on Zero Liquid discharge system.

9. Power requirement for distillery after expansion will be 3.0 MW including existing 1.5 MW and will be met from 30 MW Co-generation Power Plant in adjacent own Sugar Mill & D.G. Sets (for emergency). Sugar Mill Plant has one DG set of capacity 1010 KVA which is used as standby during power failure. Adequate Stack height (6 m) has been provided as per CPCB norms to the existing DG set. No additional DG set is proposed. Existing 70 & 90 TPH Bagasse & Biogas fired boilers are present in own adjacent Sugar Mill. A 30 TPH boiler is kept as standby in Sugar Mill campus for emergency operations which will be used as and when required for distillery operations. No additional boiler will be installed. Wet Scrubber with a stack height of 60 m is already installed in existing 70 & 90 TPH boilers for controlling the particulate emissions within the statutory limit.

10. Details of Process emissions generation and its management:

- Wet Scrubber with stack of adequate height (60 m) is already installed with the boilers to control the particulate and gaseous emissions as per CPCB guidelines. No new boiler is proposed.
- CO2 generated during the fermentation process sold to vendors.

- Online Continuous Emission Monitoring System has been installed with the existing stack and data transmitted to CPCB/SPCB servers.

11. Details of Solid waste/Hazardous waste generation and its management:

- Presently, Spent Wash generated during the process, is being first treated in Bio-Digester (Bio- Methanation) followed by Multi-effect evaporator and then used for Bio-composting. Bio-compost generated (9922 TPA) is sold to farmers.
- In proposed new Ethanol Plant, spent wash generated in the new Ethanol Plant will be treated in bio-digestor (bio-methanation) followed by Multi Effect Evaporator and concentrated spent wash will be dried in Spray Dryer and the powder will be used as potash rich manure (45 TPD).
- ETP Sludge is being/will be dried and given to farmers to be used as organic manure.
- Used oil (1 MT/Year) generated from the plant machinery/ gear boxes as hazardous waste is being/will be sold out to the CPCB authorized recycler.

12. Certified EC compliance Report has been obtained by Regional Office, MoEFCC, Dehradun vide F. No: NC-RO/UTR/IND-3/31/2006/2251 dated 08th February, 2021 wherein one non-compliance and two partial compliances were observed. PP has submitted ATR to IRO Dehradun.

13. As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 60 KLPD will be for manufacturing of fuel ethanol only.

14. After detailed deliberations, EAC desired PP to submit ash disposal plan. PP submitted that there is no boiler in the distillery unit. The distillery unit is interlinked with adjacent own sugar mill and the requirement of power and steam is fulfilled from the sugar mill. The adjacent sugar mill has 3 boilers viz., 90 TPH, 70 TPH& 30 TPH (Standby) which are bagasse and biogas based. The ash generated from the sugar mill is being and will be given to the nearby brick manufacturing units. Ash disposal is being and will be done as per the guidelines of CPCB and SPCB.

15. The proposal was considered by the EAC in its 38th meeting held during 28th -29th July, 2021 in the Ministry, wherein the project proponent and their consultant M/s. J.M. EnviroNet Pvt. Ltd presented the EMP report as per the PFR. The Committee found the EMP report complying with the PFR and recommended the project for grant of environmental clearance.

16. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

17. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of environmental clearance.

18. The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

19. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance for to the proposed project expansion of Molasses Based Distillery from 60 KLPD to 120 KLPD by installation of new 60 KLPD Ethanol Plant at Village Laksar, Tehsil Laksar, District Haridwar, Uttarakhand by M/s. Rai Bahadur Narain Singh Sugar Mills Limited (Distillery Division), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under: -

A. <u>Specific Conditions:</u>

(i) As per OM dated 16th June, 2021, project falls in category B2 and the proposed additional capacity of 60 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of an affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii) The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.

(iv) Total fresh water requirement after expansion will be 474 KLD which will be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/Irrigation division in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Rainwater shall be collected in storage ponds and utilized for plant activities. Ground water monitoring

shall be done regularly and report is to be submitted to concerned authorities regularly.

(v) The spent wash generated shall be treated by bio-methanation followed by Multi Effect Evaporator and concentrated spent wash will be dried in Spray Dryer.

(vi) CO2 generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(vii) Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(viii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(ix) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.

(x) Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(xi) The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

(xii) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

(xiii) As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall be completed within time as proposed.

(xiv) There shall be at least 20% parking space out of total area of plant site which shall be earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

(xv) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

(xvi) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xvii) A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

B. General Conditions:

(i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

(ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.

(iii) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

(iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

(v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

(vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

(vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

(viii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

(ix) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

(x) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

(xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

20. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

21. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

22. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

23. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

24. This issues with the approval of the competent authority.

27.08.2024

(Ashok Kumar Pateshwary)
Director

Copy to: -

1. Principal Chief Conservator of Forest & HoFF, 85, Rajpur Road, Dehradun, Uttarakhand, India.
2. Deputy Director General of Forests (C), Ministry of Env., Forest and Climate Change, Integrated Regional Office, 25, Subhash Road, Dehradun - 248001
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
4. The Member Secretary, Uttarakhand Pollution Control Board, Gaura Devi Bhawan, 46 B IT Park Sahastradhara, Dehradun, Uttarakhand.
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
6. The District Collector, Haridwar District, Uttarakhand.
7. Guard File/Monitoring File/Parivesh portal/Record File

27.08.2024

(Ashok Kumar Pateshwary)
Director
E-mail: ak.pateshwary@gov.in
Tel. No. 24695290

Annexure-2

HEAD OFFICE
Uttarakhand Pollution Control Board
"Gauradevi Paryavaran Bhawan"
46B, IT Park, Sahastradhara Road, Dehradun
E-mail : mailukpcb@yahoo.com, Phone No.-0135-2607092

Letter No.: UKPCB/HO/Con-R-95/2024/823 Date: 27.08.2024

REGD. POST

To,

M/S Rai Bahadur Narayan Singh Sugar Mills Ltd.,
(Distillery Unit)
Laksar, Distt. Haridwar
(Uttarakhand)

Subject: Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & Authorization) Renewal under Section- 25 of the "Water (Prevention & Control of Pollution) Act., 1974"and under Section- 21 of the "Air (Prevention & Control of Pollution) Act, 1981"and Authorization under " Rule - 6(2)"of the "Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016"notified under "Environment (Protection) Act, 1986"as applicable (to be referred hereinafter as Water Act, Air Act and HW Rules respectively).

CAF ID: 9158	Application No. 5445375
CCA (Renewal)	Date:- 01.03.2024

Consolidated Consent and Authorization (CCA):

CCA is hereby granted to M/S Rai Bahadur Narayan Singh Sugar Mills Ltd. (Distillery Unit) located at Laksar, Distt. Haridwar (Uttarakhand) subject to the provisions of the Water (Prevention and Control of Pollution) Act, 1974; the Air (Prevention and Control of Pollution) Act, 1981 and the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the orders that may be made further and subject to following terms and conditions:

1. This CCA is granted for the period up to 31.03.2028, under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974, as amended.
2. This CCA is granted for the period up to 31.03.2028, under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981, as amended.
3. This CCA is granted for the period of 31.03.2028, under the Hazardous and Other Waste (Management & transboundary Movement) Rules, 2016 as amended.
4. Production Capacity:

S. No.	Declared by the industry		Permitted by Board	
	Raw Material/ Feedstock	Finished Product (KLD)	Raw Material/ Feedstock (M^3/Day)	Finished Product (KLD)
1.	C-Heavy/ B-Heavy Molasses- 372 M^3/Day	Ethanol/ENA/RS-60 KLD & Etanol-60 KLD	C-Heavy/ B-Heavy Molasses- 372 M^3/Day	Ethanol/ENA/RS-60 KLD & Etanol-60 KLD

5. Production Process Infrastructure:

S.n o.	Declared by the unit				Permitted by the Board
	Number of fermenters	Capacity of fermenters (M^3	Type of fermentation technology adopted	Type of Distillation	
1.	07	400 M^3 each	Feed Batch	Molasses based	As declared by Unit.

Molasses storage infrastructures:

Declared by the unit			Permitted by SPCB
Capacity	No. of tanks	No. of lined pits*	
60000 Qtl. & 85000 Qtl.	02 Nos.	NA	60000 Qtl. & 85000 Qtl. (02 Nos.)

*The unit shall not store molasses in *Kaccha/* unlined pits.

6. Water Conservation:

A. Fresh water Consumption

i. The unit shall obtain permission / NOC from State or Central Ground Water Authority for Groundwater abstraction and shall comply with the conditions mentioned in the NOC.

ii. Industry shall install separate sealed, calibrated Electro Magnetic Flow meters with flow totalizer at all water abstraction sources, utilization lines- process, domestic and boiler.

iii. The industry shall maintain duly signed logbook of fresh water consumption and utilization.

iv. The specific water consumption shall not exceed values mentioned below as per consented product type.

Category	Specific Water Consumption not to exceed
B-heavy / C-Heavy	8-10KL/KL of product
Cane syrup/ sugar cane juice	6-8KL/KL of product

	Declared by the Industry	Permitted by NOC issued by CGWA	CGWA conditions
No. of bore wells	01	01	To be complied.
Daily quantity of water to be abstracted (KLD)	250 KLD	500 KLD	

B. Effluent generation, treatment and disposal:

i. The quantity of maximum specific effluent generation shall be as specified below:

Category	Specific spent wash generation5, not to exceed
B-heavy / C-Heavy	6-8KL/KL of product
Cane syrup/ sugar cane juice	4-6KL/KL of product

ii. The quantity of maximum daily effluent generation & discharge should not be more than the following:

S.No.	Kind of Effluent	Maximum daily generation	Maximum daily discharge, (KLD)	Treatment Facility and Discharge point
1	Domestic	15 KLD		Septic Tank & Soak Pits.
2	Industrial (Spent wash)	720 M^3/Day	Zero Liquid Discharge (ZLD)	

iii. Arrangement should be made for collection of water used in process and domestic effluent separately in closed water supply system. It should be ensured that domestic effluent should not be discharged in the storm water drain.

iv. The domestic effluent should be treated in sewage treatment plant (STP) and it should be in conformity with the norms of treated effluent as stipulated in E.P. Rules, 1986 as amended.

v. The unit shall identify recipient drains/ rivulets and their u/s & d/s locations in consultation with SPCB for monthly monitoring by industry to ensure ZLD from distilleries within 30 days. The monitoring report shall be submitted to CPCB on monthly basis.

S.No.	Name of recipient drain/rivulets	Latitude	Longitude	Name of the recipient river
1.	u/s of Laksar drain	28°44'59"N	78°01'40"E	Banganga
2.	d/s of Laksar drain	29°44'36"N	78°01'53"E	Banganga

vi. The industry shall maintain Zero Liquid Discharge (ZLD). ZLD refers to installation of facilities and system which will enable industrial effluent (all streams) for absolute recycling of or re-use in to industrial processes and converting solute (dissolved organic and in-organic compounds / salts) into residue in solid form by adopting method such as concentration/ evaporation/drying. ZLD will be recognized and certified based on two broad parameters that is, water consumption versus waste water reused or recycled (permeate) and correspondingly solids recovered (percent total dissolved / suspended solids in effluents).

C. Effluent Management Infrastructure:

Bio-digester

S.no.	No. of digesters	Designed Capacity (m3)	Sludge generation from digester	Method of disposal/ utilization of sludge
1.	03	10000 x 02 nos. 7500 x 01 nos.	--	Spray Dryers

Multi Effect Evaporator (MEE)

S.No.	Nos. of MEE	Design Capacity (m3)	Type of technology of MEE (stages)	Mass flow meter installed at inlet and outlet of MEE
1.	02 Nos.	5028 Sq. Meter	Multi-Effect Evaporation	Yes.

Condensate Polishing Unit (CPU):
**For treatment of MEE condensate and other low-strength effluent

S.No.	Design Capacity (m3)	Type of technology of CPU	Sources of effluent coming into CPU with Quantity	Quantity of treated effluent from CPU and its utilization	Quantity of CPU sludge & its disposal mechanism
1.	1050	USAB	Condensate of MEE	485 KLD Reused in cooling and processes.	Sludge Drying Bed. To be used as manure.

Reverse Osmosis (RO) system

S.No.	Design Capacity (m3)	No. of stages	Quantity of RO permeate (m3) & purpose of utilization	Quantity of RO reject (m3) & disposal mechanism

i. All process and non-process effluents such as Spent lees, Process condensates, Boiler RO reject, CT blowdown, Softener/DM plant backwash, Pump gland cooling water etc. should be treated through CPU and recycled back in the process.

ii. The unit shall install mass flowmeters with totalizers at inlet and outlet of Multi Effect Evaporator (MEE) (concentrate) and shall connect the same with CPCB and Uttarakhand Pollution Control Board's servers.

iii. The unit shall install electromagnetic flowmeters with totalizer at CPU inlet & outlet and at water recirculation points like make up water for cooling towers & in process. The unit shall have separate energy meter for ETP/CPU and maintain the duly signed logbook of the same.

iv. The unit shall maintain duly signed logbooks of spent wash generation, MEE feed, MEE condensate, MEE concentrate, CPU inlet & outlet, cooling tower make up water and treated effluent reused in process.

v. The unit shall ensure proper marking/and colour coding of all the pipelines carrying industrial effluent accordingly.

Distilleries opting for Spray Dryer;

i. Minimum Solid % in feed for dryer shall be 40-45%.
ii. Maximum storage of Bio-methanated spent wash utilized in dryer shall strictly be restricted to seven days (07) equivalent of concentrated Bio-methanated spent wash generated. Excess storage facilities beyond this shall be levelled and dismantled.
iii. Unit shall dispose the spent wash through Bio-methanation followed by MEE and concentrated spent wash will be dried through Spray Dryers- 02 Nos. and the powder will be used as Potash Rich manure (45 TPD each Dryer).
iv. The unit shall collect powder produced from dryer in common silo and should be disposed of as fertilizer.

D. Domestic sewage

i. The domestic effluent should be treated separately in sewage treatment plant/ soak pit so that it should be in conformity with the following norms.
Trade effluent and domestic sewage shall be treated separately and also to be monitored for compliance w.r.t. notified norms separately. However, Single outlet can be provided after mixing for outside disposal.
ii. Industry shall install the flow meter at STP inlet and outlet and maintain the daily logbook.
iii. Industry shall explore the possibility to recycle the treated used water shall be utilised in gardening, irrigation, industrial utility and toilet flushing to minimise the fresh water consumption up to 20 % per year.

7. Air pollution mitigation:

i. The industry shall use following fuel and install air pollution control devices (APCD) of adequate capacity to comply with the following;

S. No.	Equipment	Fuel used	Stack height (m)	Air Pollution Control Device (APCD)	Stack Emission standards
I.	Spray Dryer (45 TPD)	Bagasse-168 TPD	40	Individual Wet Scrubber	PM-150 mg/N M^3
II.	Spray Dryer (45 TPD)	Biogas-1500 M^3/day			

ii. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only. Porthole, platform and stairs shall be provided as per prescribed guidelines for stack emission monitoring.
iii. The APCS will be maintained and operated in such a manner that emissions always conform to the standard laid down under the E.P Act 1986 as amended. The ash generated from the Boiler shall be disposed of properly in such a manner that not affect the environment adversely.
iv. The unit shall install Online Stack Emission Monitoring System (OEMS) for PM and ensure with its connectivity (24x7) to CPCB server and Uttarakhand Pollution Control Board's dashboard.
v. The unit shall submit manual stack emission monitoring report and ambient air quality report on quarterly basis during operation of the plant.
vi. Water shall be sprinkled on the roads and premises for suppression of road dust.
vii. The solid waste namely boiler ash shall be disposed of properly and ensure that there is no fugitive emission from their transportation, storage and handling.
viii. The industry shall provide ports in the chimney/stack and facilities such as ladder, platform etc. as per requirement for monitoring the air emissions and the same shall be open for inspection and use at all time) by the Board's staff, the chimney/stack attached to various sources of emission shall be designated by number such as S-1, S-2 etc. and these shall be painted/ displayed to facilitate identification.

8. Noise Pollution Mitigation:

i. Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial and Commercial) which are as follows: -

Standards for Noise level in db.(A) L_{eq}			
Industrial Area		Commercial Area	
Day	Night	Day	Night
75	70	65	55

Day time: from 6.00 a.m. to 10.00 p.m., Night time: from 10.00 p.m. to 6.00 a.m.

ii. The industry shall take adequate measures to control of noise from its own source so as to comply with the standards as may be applicable.
iii. The industry shall provide acoustics enclosure on DG sets as per Environment (Protection) Rules, 1986.

9. Conditions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016: -

Hazardous Waste Management:

i. Number of authorization and date of issue: As above.
ii. Reference of application (No. and date) : As above.
iii. The Factory Manager of M/S Rai Bahadur Narayan Singh Sugar Mills Ltd. is hereby granted an authorization for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilization, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at Laksar, District Haridwar (Uttarakhand).

Details of Authorization

Sl. No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity (ton/annum)
--NA--			

iv. The authorization shall be valid for a period of .....NA.....
v. The authorization is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

A. General conditions of authorization:

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site-specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.
15. The occupier shall strictly comply with condition of prior environmental clearance accorded by MoEF & CC vide letter File no. IA-J-110011/618/2010-IA II(I) dated 27-08-2021 and shall submit regular compliance of the same.
16. The occupier shall submit water Balance & material Balance within one month of start of operation and same shall be communicated in each season to the Board's offices.
17. The occupier shall strictly comply with provisions of Water Act, Air Act, E(P) Act & Rues mad thereunder and directions issued from time to time.

General Conditions

1. Environmental management system:
   i. Industry shall setup the environmental management cell including unit head, purchase/store manager, process operation head, ETP in charge to effectively monitoring of environmental compliance
   ii. Industry shall setup the environmental laboratory for testing of minimum wastewater quality parameters like pH, TSS, BOD, COD, MLSS and DO to effectively monitoring of ETP control parameters and ETP discharge norms.
2. The applicant shall get analyses the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF&CC and shall report to the SPCB.
3. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.
4. Treated waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.
5. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions with 30 days of receipt of this CCA. If, at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the Board, legal action shall be initiated against the applicant.
6. The applicant shall maintain good housekeeping. All valves/pipes/sewer/drains etc. must be leak-proof.
7. The industry shall provide uninterrupted entry to this STP's/ETP's inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control measures.
8. The industry shall provide "Inspection Book" at the time of inspection to the Board's officials. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect
9. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.
10. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point.
11. The Board reserves the right to revoke/add/modify any stipulated conditions issued along with CCA, as may be necessary.

12. Any unauthorized change in personnel, equipment as working condition as mentioned in the application by the person authorized shall constitute a breach of his authorization.
13. It is the duty of the authorized person to take prior permission of the Board to close down the facility.
14. The authorization is valid for temporary storage of Hazardous Waste within premises only.
15. It is duty of the authorized person to take prior permission of this Board to close and clean up the facility for treatment, storage and disposal of hazardous waste.
16. Industry shall submit the latest copy of Audit Balance sheet/C.A. Certificate (Fixed Assets + Current Assets-Current Liabilities) so that the Consent fee payable by the industry may be verified.
17. Generated hazardous waste shall be stored temporarily in the factory premises and disposed of through authorized TSDF after obtaining the authorization from the Board
18. Unit shall develop green belt as per the protocol of Central Pollution Control Board.
19. In case of non-compliance of CCA condition(s) Bank Guarantee No.006081G1600000**10** submitted by the unit will be forfeited without further information.
20. The industry shall comply with the provisions of Environment (Protection) Amendment, Rules 2018 notified by MoEF&CC by Notification no 49 Dt. 25.01.2018, Environment (Protection) Act 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended, Plastic Waste Management Rule 2016, E-Waste (Management and Transboundary Movement) Rules 2016 (whichever is applicable).
21. If closure order is issued by CPCB or SPCB against the unit then CCA will remain suspended during the closure period. After ensuring the compliance and after revocation of the closure order, the CCA will automatically be effective from the date of issuance of the closure revocation/modification order with additional conditions mentioned in the closure revocation/modification order.

Dr. Parag Madhukar Dhakate
Member Secretary

Copy to:
Regional Officer, Uttarakhand Pollution Control Board, Regional Office, Roorkee (Haridwar) for information and compliance.

Member Secretary

Annexure-3

3553 कार्यालय आबकारी आयुक्त, उत्तराखण्ड, देहरादून। 24

संख्या /सात0लाई0–नौ–विधि–14 (भाग–2)/पी0डी0–2 अनु0/लक्सर/2018–19/दिनांक: मई, 2024

आसवक,
मैसर्स राय बहादुर नारायण सिंह शुगर मिल्स लि0,
(डिस्टिलरी डिवीजन) लक्सर,
जनपद –हरिद्वार।

विषयः– वर्ष 2024–25 के लिये पी0डी0–2 अनुज्ञापन के नवीनीकरण के सम्बन्ध में।

उपर्युक्त विषयक जिलाधिकारी, हरिद्वार के पत्र संख्या 93/आबकारी/हरिद्वार/पी0डी0–2/अनुज्ञापन/नवीनीकरण/2024–25 दिनांक 16.04.2024 एवं जिला आबकारी अधिकारी, हरिद्वार के पत्र संख्या संख्या 160/आबकारी/हरिद्वार/पी0डी0–2/अनुज्ञापन/नवीनीकरण/2024–25 दिनांक 16.04.2024 व प्रभारी आबकारी अधिकारी, मैसर्स राय बहादुर नारायण सिंह शुगर मिल्स लि0 के द्वारा प्रेषित की गयी संस्तुति के आधार पर आपकी आसवनी के पी0डी0–2 अनुज्ञापन को वर्ष 2024–25 (दिनांक 01.04.2024 से 31.03.2025 तक) के लिये नवीनीकृत किया जाता है। नवीनीकृत पी0डी0–2 अनुज्ञापन की मूल प्रति इस पत्र के साथ संलग्नकर प्रेषित की जा रही है।

संलग्नकः– उपरोक्तानुसार मूल पी0डी0–2 अनुज्ञापन।

(प्रशांत आर्य)
आबकारी आयुक्त,
उत्तराखण्ड।

संख्या ——— /सात0लाई0–नौ–विधि–14 (भाग–2)/पी0डी0–2 अनु0/लक्सर/2018–19/तद्दिनांक।

प्रतिलिपि निम्नलिखित को सूचनार्थ एंव आवश्यक कार्यवाही हेतु प्रेषितः–

1. जिलाधिकारी, हरिद्वार।
2. जिला आबकारी अधिकारी, हरिद्वार।
3. प्रभारी आबकारी अधिकारी, मैसर्स राय बहादुर नारायण सिंह शुगर मिल्स लि0, (डिस्टिलरी डिवीजन) लक्सर, जनपद हरिद्वार।

(प्रशांत आर्य)
आबकारी आयुक्त,
उत्तराखण्ड।

372

FORM P.D.-2

Licence to work a distillery in a premises owned by any person other than the Government

Licence No.-04 Date: 20-03-2014

Licence is hereby granted to M/s Rai Bahadur Narian Singh Sugar Mills Ltd. (Distillery Division) Laksar Distt Haridwar Uttarakhand resident (s) of Laksar Distt Haridwar for the period 31-03-2014

(1) to manufacture spirit/E.N.A. in their distillery situated at- Laksar Distt Haridwar

(2) to supply it to warehouses within his/their contract area, and

(3) to sell it to Government or to such licenses vendors and other persons as are entitled to purchase spirit direct from distiller subject to the following conditions:

CONDITIONS

1. The Licence shall be subject to—
   (i) rules relating to import, export and transport of spirit/E.N.A. contained in Chapter VII and VIII of the excise Manual, Volume 1;
   (ii) rules relating to manufacture of spirit in distilleries, contained in Chapter IX of the Excise Manual, Vol. 1; and
   (iii) Such other rules as may, from time to time be made by the Excise Commissioner and the Government for the security of Excise Revenue and for regulating the manufacture, sale, supply and prices of Indian Made Foreign Liquor, including rectified spirit, denatured spirit, power and fuel alcohols.
2. The Licensee shall erect and maintain in proper order all permanent building, wells, water channels and drains necessary for a distillery.
3. The Licensee shall subject to the previous approval of the Excise Commissioner, supply and erect all plant and appliances necessary for the production, storage and transport of spirit.
4. No alterations in the buildings or fixed plant shall be made without the previous sanction of the Excise Commissioner.
5. The Licensee shall be bound to maintain such minimum stock of absolute alcohol, rectified spirit, denatured spirit, country spirit and denaturants as may be prescribed by the Excise Commissioner, U.K. keeping in view the quantum of normal demand.
6. The Licensee shall be responsible for maintaining proper cleanliness within the premises of the distillery and shall observe all the provisions of sub-section (1) of section 11 of the Factories Act. 1948 and rules made and orders, if any, issued thereunder, unless specially exempted by the State Government from any of these provisions.
7. The Licensee shall make effective arrangements for the disposal of wastes and effluents from the manufacture of alcohol and shall make all such arrangements as prescribed by the State Government in this behalf under the provisions of sub-section (2) of section 12 of the Factories Act, 1948.
8. As security for the due fulfillment of the conditions of this licence, the licensee shall deposit with the Excise Commissioner Rs. 20,000/- in Government Promissory Notes or other Government securities of equivalent market value or in such other form as the Excise Commissioner may approve.
9. Any contravention of the rules or conditions hereinbefore enumerated shall involve cancellation of the licence in addition to such other penalties as may be prescribed under U.P. Excise Act, 1910

Distillery capacity shall be 16200 K.L./Annum

20/3/14

(Vinay Shankar Pandey)
Excise Commissioner,
Uttarakhand.

COUNTERPART-AGREEMENT

I, Ajay khandelwal, GM .... the above named licensee, for myself, my heirs legal representatives and assigns hereby agree to all terms and conditions hereinbefore written and expressed.

Date .... 20th March ......, 2014

Witnesses:

1. Vakil Ahmad (I.O) RBNS Laksar
2. [illegible]

(Ajay Khandelwal)
General Manager,
Rai Bahadur Narain Singh Sugar Mills (Distillery Division)
Laksar, Haridwar.

पी0डी0–2 अनुज्ञापन नवीनीकरण पृष्ठांकन

मैसर्स राय बहादुर नारायण सिंह शुगर मिल्स लि0, (डिस्टिलरी डिवीजन) लक्सर, जनपद हरिद्वार के पी0डी0–2 अनुज्ञापन को वर्ष 2024–25 (दिनांक 01.04.2024 से 31.03.2025 तक) के लिये नवीनीकृत किया जाता है।

(प्रशांत आर्य)
आबकारी आयुक्त,
उत्तराखण्ड।

Received
25/8/24

Annixuu-4

R.B.N.S.SUGAR MILLS LTD.

DISTILLERY DIVISION LAKSAR DISTT. HARIDWAR

CONSOLIDATE REPORT FOR THE MONTH---------- Feb-24

FORM-P.D.-- 29

RAW MATERIAL	OPENING BALANCE	RECEIPT	ISSUE	CLOSING BAL BY A/C	CLOSING BAL. ACTUAL	STORAGE WASTAGE	TRS	BRIX
MOLASSES IN QTL.								
TANK NO. 01(B-Heavy Molasses)	38291.00	65100.00	85776.00	17615.00	17615.00	-----	57.00	87.00
TANK NO. 02(C-Heavy Molasses)	0.00	18900.00	12940	5960.00	5960.00	-----	45.50	88.00
TOTAL	38291.00	84000.00	98716.00	23575.00	23575.00	-----	----	----

	OPENING BAL.IN RECEIVER	OPENING BAL.IN WAREHOUSE	PRODUCTION On Month	PRODUCTION Todate QTY.	ACTUAL ISSUE W.HOUSE	CLOSING BAL. IN WAREHOUSE	WASTAGE On Month	CLOSING BAL. Actual
0	-----	8566.40	0.0	0.00	0.00	8566.40	0.00	8566.40
0	-----	8129.50	0.0	0.00	0.00	8129.50	0.00	8129.50
(A) RECTIFIED SPIRIT BL	-----	172691.40	179851.80	764070.30	93860.00	258683.20	73.40	258609.80
(B) RECTIFIED SPIRIT AL	-----	164056.80	170859.20	725866.80	89167.00	245749.00	69.70	245679.30
(E) ENA BL	-----	1140080.30	2662278.40	18074750.70	2083840.70	1718518.00	77.40	1718440.60
(F) ENA AL	-----	1137800.20	2656953.60	18045213.80	2079673.30	1715080.50	76.80	1715003.70
(G) ETHANOL BL	-----	204437.30	2088006.70	16979488.90	2146000.00	146444.00	1096.90	145347.10
(H) ETHANOL AL	-----	203926.20	2083297.70	16941194.00	2140635.00	146588.90	1605.20	144983.70
(I) ANHYDROUS SDS BL	-----	0	2000.00	27000.00	2000.00	0	0	0
(J) ANHYDROUS SDS AL	-----	0	1995.40	25740.40	1995.00	0.40	0.40	0
(K) SDS BL	-----	0	0.00	1000.00	0.00	0	0	0
(L) SDS AL	-----	0	0.00	949.80	0.00	0.00	0.00	0
(M) DS BL	-----	0	50084.90	80521.90	28996.00	25979.20	221.90	25757.30
(N) DS AL	-----	4890.30	49984.70	80360.80	28938.00	25927.20	221.40	25705.80
ABSOLUTE ALCOHOL BL	-----	4880.50						
ABSOLUTE ALCOHOL AL	-----							

EFFICIENCY DATA(B-HEAVY MOLASSES)

1. NO.OF WORKING DAYS	26.00	11.MAXIMUM POSSIBLE RECOVERY	34.45
2 ACTUAL DISTILLATION Hrs	624	12 FERMENTION HOUSE RECOVERY	30.10
3 MAIN STOPPAGE WITH REASONS Hrs	0	13.ACTUAL OVERALL RECOVERY	29.52
POWER,STEAM,CLEANING,WATER,	0	14.ALCOHOL IN MONTH PRODUCED IN AL	2706938.30
RAINFALL,MECH,BOILER OFF TAKE OF ALCOHAL	0	15.ALCOHOL IN WASH	11.76
4 RATE PRODUCTION IN AL.Hr	4338.04	16.FERMENTATION EFFICIENCY .	87.37
5 MOLASSES DISTILLED IN Month	91696	17.OVER ALL RECOVERY IN AL QTL	55.18
6 .MOLASSES DISTILLED FROM 1st NOV.	324794.00	OF FERMENTABLE SUGAR	0
7 TOTAL SUGAR IN QTL	51808.24	18.DISTILLATION EFFICIENCY	98.06
8 FERMANTABE SUGAR IN QTL	49057.36	19.OVER ALL EFFICIENCY	85.68
9. TOTAL WASH DISTILLED IN LITERS	23472852	20.OVER ALL RECOVERY IN AL/QTL MOLA	29.52
10 ESTIMATED ALCOHOL IN A.L	3159293.98	21.STEAM CONSUMED Kg/Ltr	5.00

EFFICIENCY DATA(C-HEAVY MOLASSES)

1. NO.OF WORKING DAYS	3.00	11.MAXIMUM POSSIBLE RECOVERY	25.76
2 ACTUAL DISTILLATION Hrs	72.00	12 FERMENTION HOUSE RECOVERY	22.44
3 MAIN STOPPAGE WITH REASONS Hrs	0.00	13.ACTUAL OVERALL RECOVERY	22.01
POWER,STEAM,CLEANING,WATER,	0.00	14.ALCOHOL IN MONTH PRODUCED IN AL	170859.20
RAINFALL,MECH,BOILER OFF TAKE OF ALCOHAL	0.00	15.ALCOHOL IN WASH	9.65
4 RATE PRODUCTION IN AL.Hr	2373.04	16.FERMENTATION EFFICIENCY	87.12
5 MOLASSES DISTILLED IN Month	7764.00	17.OVER ALL RECOVERY IN AL QTL	55.02
6 .MOLASSES DISTILLED FROM 1st NOV.	7764.00	OF FERMENTABLE SUGAR	
7 TOTAL SUGAR IN QTL	3532.62	18.DISTILLATION EFFICIENCY	98.06
8 FERMANTABE SUGAR IN QTL	3105.60	19.OVER ALL EFFICIENCY	85.43
9. TOTAL WASH DISTILLED IN LITERS	1805604.00	20.OVER ALL RECOVERY IN AL/QTL MOLA	22.01
10 ESTIMATED ALCOHOL IN A.L	200000.64	21.STEAM CONSUMED Kg/Ltr	5.00

NAME OF SUGAR FACTORY	QUANTITY LIFTED	QUANTITY RECEVIED	Brix	TRS
R.B.N.S.SUGAR MILLS	65100.00	65100.00	87.00	57.00
B-Heavy Molasses	18900.00	18900.00	88.00	45.50
C-Heavy Molasses				

NAME OF ISSUE ALCOHOL		B.L.	QUANTITY A.L.
RBNS Sugar Mills Ltd.Distillery Sanitizer Plant Laksar	ENA	0.00	0.00
RBNS Sugar Mills Ltd.Distillery CL Bottiling Plant Laksar	ENA	0.00	0.00
RBNS Sugar Mills Ltd.Distillery IMFL Bottiling Plant Laksar		0.00	0.00
The Bazpur Coop.Sugar Fact.Bazpu Dist.Bazpur	ENA	400.00	380.00
Malik Lifescience Pvt Ltd Haridwar	SDS	2000.00	1995.00
Principal Govt Medical College Haldwani	ABSOLUTE ALCOHOL	12000.00	11976.00
Ambe Phyoextracts Pvt Ltd Pauri Garhwal	ABSOLUTE ALCOHOL	12000.00	11976.00
Ambe Phyoextracts Pvt Ltd Pauri Garhwal	ABSOLUTE ALCOHOL	3000.00	2994.00
James Lifescience Pvt Ltd Bhagwanpur	D.A.Ethanol	1156000.00	1153110.00
Indian Oil Corp.Ltd.Landhora Roorkee	D.A.Ethanol	881000.00	878797.50
Hindustan Petroleum Corp.Ltd.Landhora	D.A.Ethanol	80000.00	79800.00
Bharat Petroleum Corp.Ltd.BijwasanDelhi	D.A.Ethanol	29000.00	28927.50
Indian Oil Corp.Ltd Bijwasan Delhi	Total----------	2175400.00	2169956.00

A.G.M. (Distillery)
Raj Bhadur Narain Singh Sugar Mills Ltd.
Laksar Distt. Haridwar (Distillery Division)

AGM (Distillery)
RBNS Sugar Mills Ltd.

Excise Officer Incharge
Raj Bhadur Narain Singh Sugar Mills Ltd.
Laksar Distt. Haridwar (Distillery Division)

प्रभारी आबकारी अधिकारी
लक्सर आसवनी
हरिद्वार

R.B.N.S.SUGAR MILLS LTD.
DISTILLERY DIVISION LAKSAR DISTT. HARIDWAR

CONSOLIDATE REPORT FOR THE MONTH---------- **Mar-24**

FORM-P.D.-- 29

RAW MATERIAL	OPENING BALANCE	RECEIPT	ISSUE	CLOSING BAL BY A/C	CLOSING BAL ACTUAL	STORAGE WASTAGE	TRS	BRIX
MOLASSES IN QTL.								
TANK NO. 01(B-Heavy Molasses)	17615.00	93275.00	91108.00	19782.00	19782.00	.....	57.00	87.00
TANK NO. 02(C-Heavy Molasses)	5960.00	1785.00	7745	0.00	0.00	.....	45.50	88.00
TOTAL	23575.00	95060.00	98853.00	19782.00	19782.00	.....	----	----

	OPENING BAL.IN RECEIVER	OPENING BAL.IN WAREHOUSE	PRODUCTION On Month	PRODUCTION Todate QTY.	ACTUAL ISSUE W.HOUSE	CLOSING BAL. IN WAREHOUSE	WASTAGE On Month	CLOSING BAL. Actual
0		8566.40	0.0	0.00	2343.00	6223.40	23.70	6199.70
0		8129.50	0.0	0.00	2223.50	5906.00	22.50	5883.50
(A) RECTIFIED SPIRIT BL	.....	258609.80	438892.70	1202963.00	75840.00	621662.50	68.20	621594.30
(B) RECTIFIED SPIRIT AL	.....	245679.30	416948.00	1142814.80	72048.00	590579.30	64.70	590514.60
(E) ENA BL	.....	1718440.60	2394003.10	20468753.80	1565146.20	2547297.50	110.40	2547187.10
(F) ENA AL	.....	1715003.70	2389215.10	20434428.90	1562015.90	2542202.90	110.20	2542092.70
(G) ETHANOL BL	.....	145347.10	1568275.20	18547764.10	1637000.00	76622.30	730.10	75892.20
(H) ETHANOL AL	.....	144983.70	1564738.10	18505932.10	1632907.50	76814.30	1111.80	75702.50
(I) ANHYDROUS SDS BL	.....	0	1790.00	28790.00	1790.00	0	0	0
(J) ANHYDROUS SDS AL	.....	0	1696.10	27436.50	1695.50	0.60	0.60	0
(K) SDS BL	.....	0	0.00	1000.00	0.00	0	0	0
(L) SDS AL	.....	0	0.00	949.80	0.00	0.00	0.00	0
(M) DS BL	.....	25757.30	0.00	80521.90	3000.00	22757.30	46.60	22708.50
(N) DS AL	.....	25705.80	0.00	80360.80	2994.00	22711.80	48.70	22663.10
ABSOLUTE ALCOHOL BL								
ABSOLUTE ALCOHOL AL								

EFFICIENCY DATA(B-HEAVY MOLASSES)

1. NO OF WORKING DAYS	26.00	11.MAXIMUM POSSIBLE RECOVERY	34.45
2.ACTUAL DISTILLATION Hrs	624	12.FERMENTION HOUSE RECOVERY	30.10
3.MAIN STOPPAGE WITH REASONS Hrs	0	13.ACTUAL OVERALL RECOVERY	29.53
POWER,STEAM,CLEANING,WATER,	0	14.ALCOHOL IN MONTH PRODUCED IN AL	2521659.60
RAINFALL,MECH,BOILER OFF TAKE OF ALCOHAL	0	15.ALCOHOL IN WASH	11.62
4.RATE PRODUCTION IN AL.Hr.	4041.12	16.FERMENTATION EFFICIENCY	87.37
5.MOLASSES DISTILLED IN Month	85403	17.OVER ALL RECOVERY IN AL QTL	55.19
6. MOLASSES DISTILLED FROM 1st.NOV.	410197.00	OF FERMENTABLE SUGAR	0
7. TOTAL SUGAR IN QTL	48252.70	18.DISTILLATION EFFICIENCY	98.09
8.FERMANTABE SUGAR IN QTL	45690.61	19.OVER ALL EFFICIENCY	85.70
9. TOTAL WASH DISTILLED IN LITERS	22114038	20.OVER ALL RECOVERY IN AL/QTL MOLA.	29.53
10.ESTIMATED ALCOHOL IN A.L	2942474.96	21.STEAM CONSUMED Kg./Ltr	5.00

EFFICIENCY DATA(C-HEAVY MOLASSES)

1. NO OF WORKING DAYS	5.00	11.MAXIMUM POSSIBLE RECOVERY	25.76
2.ACTUAL DISTILLATION Hrs	120.00	12.FERMENTION HOUSE RECOVERY	22.44
3.MAIN STOPPAGE WITH REASONS Hrs	0.00	13.ACTUAL OVERALL RECOVERY	22.02
POWER,STEAM,CLEANING,WATER,	0.00	14.ALCOHOL IN MONTH PRODUCED IN AL	284503.50
RAINFALL,MECH,BOILER OFF TAKE OF ALCOHAL	0.00	15.ALCOHOL IN WASH	9.64
4.RATE PRODUCTION IN .AL.Hr.	2370.86	16.FERMENTATION EFFICIENCY	87.13
5.MOLASSES DISTILLED IN Month	12921.00	17.OVER ALL RECOVERY IN AL QTL	55.05
6. MOLASSES DISTILLED FROM 1st.NOV.	20685.00	OF FERMENTABLE SUGAR	
7. TOTAL SUGAR IN QTL	9411.68	18.DISTILLATION EFFICIENCY	98.10
8.FERMANTABE SUGAR IN QTL	5168.40	19.OVER ALL EFFICIENCY	85.48
9. TOTAL WASH DISTILLED IN LITERS	3009340.00	20.OVER ALL RECOVERY IN AL/QTL MOLA.	22.02
10.ESTIMATED ALCOHOL IN A.L	332844.96	21.STEAM CONSUMED Kg./Ltr	5.00

NAME OF SUGAR FACTORY	QUANTITY LIFTED	QUANTITY RECEVIED	Brix	TRS
R.B.N.S.SUGAR MILLS				
B-Heavy Molasses	93275.00	93275.00	87.00	57.00
C-Heavy Molasses	1785.00	1785.00	88.00	45.50

NAME OF ISSUE ALCOHOL		B.L.	QUANTITY A.L.
RBNS Sugar Mills Ltd.Distillery Sanitizer Plant Laksar	ENA	0.00	0.00
RBNS Sugar Mills Ltd.Distillery CL Bottling Plant Laksar	ENA	31880.00	30267.00
RBNS Sugar Mills Ltd.Distillery IMFL Bottling Plant Laksar	ENA	43980.00	41781.00
The Bazpur Coop.Sugar Fact.Bazpu Dist.Bazpur	ENA	0.00	0.00
Ordance Factory Raipur Dehradun	RS	600.00	569.40
Ordance Factory Raipur Dehradun	SDS	1790.00	1695.5
James Lifescience Pvt Ltd Bhagwanpur	ABSOLUTE ALCOHOL	3000.00	2994.00
Indian Oil Corp.Ltd Landhora Roorkee	D.A.Ethanol	1158000.00	1155105.00
Hindustan Petroleum Corp.Ltd.Landhora	D.A.Ethanol	25000.00	24937.50
Bharat Petroleum Corp.Ltd.BijwasanDelhi	D.A.Ethanol	167000.00	166582.50
Indian Oil Corp.Ltd Bijwasan Delhi	D.A.Ethanol	68000.00	67855.00
Indian Oil Corp.Ltd Tikri Kalan	D.A.Ethanol	80000.00	79800.00
Hindustan Petroleum Corp.Ltd Tikri Kalan	D.A.Ethanol	149000.00	148627.50
	Total----------	1718230.00	1710214.39

A.G.M. (Distillery)
Rai Bhadur Narain Singh Sugar Mills Ltd.
Laksar Distt. Haridwar (Distillery Division)

Excise Officer Incharge
Rai Bhadur Narain Singh Sugar Mills Ltd.
Laksar Distt. Haridwar (Distillery Division)

आबकारी अधिकारी
लक्सर आसवनी
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R.B.N.S.SUGAR MILLS LTD.
DISTILLERY DIVISION LAKSAR DISTT. HARIDWAR

CONSOLIDATE REPORT FOR THE MONTH---------- Dec-24

FORM-P.D.-- 29

RAW MATERIAL	OPENING BALANCE	RECEIPT	ISSUE	CLOSING BAL BY A/C	CLOSING BAL. ACTUAL	STORAGE WASTAGE	TRS	BRIX
MOLASSES IN QTL								
TANK NO. 01(B-Heavy Molasses)	17645.00	91070.00	102678.00	6037.00	6037.00	.....	56.00	87.00
TANK NO. 02(C-Heavy Molasses)	0.00	0.00	0.00	0.00	0.00	.....	44.00	87.00
TOTAL	17645.00	91070.00	102678.00	6037.00	6037.00	.....	.....	.....

	OPENING BAL.IN	OPENING BAL.IN	PRODUCTION On Month	PRODUCTION Todate QTY.	ACTUAL ISSUE	CLOSING BAL. IN	WASTAGE On Month	CLOSING BAL.
0	RECEIVER	WAREHOUSE			W.HOUSE	WAREHOUSE		Actual
0								
(A) RECTIFIED SPIRIT BL	.....	4779.70	0.0	0.00	0.00	4779.70	0.00	4779.70
(B) RECTIFIED SPIRIT AL	.....	4535.90	0.0	0.00	0.00	4535.90	0.00	4535.90
(E) ENA BL	.....	739895.70	0.00	409176.50	0.00	739895.70	0.00	739895.70
(F) ENA AL	.....	702900.90	0.00	388717.70	0.00	702900.90	0.00	702900.90
(G) ETHANOL BL	.....	65163.80	2955708.80	4979427.40	2122685.10	898187.50	120.50	898067.00
(H) ETHANOL AL	.....	65033.50	2949797.10	4959468.20	2118439.80	896390.80	120.00	896270.80
(I) ANHYDROUS SDS BL	.....	3057.50	2126929.10	6641543.50	2097000.00	32986.60	1257.10	31729.50
(J) ANHYDROUS SDS AL	.....	3049.90	2122132.10	6626564.00	2091757.50	33424.50	1774.30	31650.20
(K) SDS BL	.....	0	0.00	4950.00	0.00	0	0	0
(L) SDS AL	.....	0	0.00	4935.60	0.00	0.00	0.00	0
(M) DS BL	.....	0	0.00	0.00	0.00	0	0	0
(N) DS AL	.....	0	0.00	0.00	0.00	0.00	0.00	0
ABSOLUTE ALCOHOL BL	.....	9971.50	0.00	10021.30	2970.00	7001.50	11.00	6990.50
ABSOLUTE ALCOHOL AL	.....	9951.60	0.00	10001.30	2964.10	6987.50	11.00	6976.50

EFFICIENCY DATA(B-HEAVY MOLASSES)

1. NO OF WORKING DAYS	31.00	11 MAXIMUM POSSIBLE RECOVERY	33.81
2.ACTUAL DISTILLATION Hrs	744	12 FERMENTION HOUSE RECOVERY	29.58
3.MAIN STOPPAGE WITH REASONS Hrs	0	13 ACTUAL OVERALL RECOVERY	29.02
POWER,STEAM,CLEANING,WATER	0	14.ALCOHOL IN MONTH PRODUCED IN AL	2949797.10
RAINFALL,MECH,BOILER OFF TAKE OF ALCOHAL	0	15.ALCOHOL IN WASH	11.62
4.RATE PRODUCTION IN AL.Hr	3964.78	16.FERMENTATION EFFICIENCY	87.49
5.MOLASSES DISTILLED IN Month	101659	17.OVER ALL RECOVERY IN AL QTL	55.27
6. MOLASSES DISTILLED FROM 1st NOV	104239.00	OF FERMENTABLE SUGAR	0
7.TOTAL SUGAR IN QTL	56929.04	18.DISTILLATION EFFICIENCY	98.09
8.FERMANTABE SUGAR IN QTL	53370.98	19.OVER ALL EFFICIENCY	85.82
9. TOTAL WASH DISTILLED IN LITERS	901966	20.OVER ALL RECOVERY IN AL/QTL MOLA	29.02
10.ESTIMATED ALCOHOL IN A.L	3437090.79	21.STEAM CONSUMED Kg /Ltr	5.00

EFFICIENCY DATA(C-HEAVY MOLASSES)

1. NO OF WORKING DAYS	0.00	11 MAXIMUM POSSIBLE RECOVERY	0.00
2.ACTUAL DISTILLATION Hrs	0.00	12 FERMENTION HOUSE RECOVERY	0.00
3.MAIN STOPPAGE WITH REASONS Hrs	0.00	13 ACTUAL OVERALL RECOVERY	0.00
POWER,STEAM,CLEANING,WATER	0.00	14.ALCOHOL IN MONTH PRODUCED IN AL	0.00
RAINFALL,MECH,BOILER OFF TAKE OF ALCOHAL	0.00	15.ALCOHOL IN WASH	0.00
4.RATE PRODUCTION IN AL.Hr	0.00	16.FERMENTATION EFFICIENCY	0.00
5.MOLASSES DISTILLED IN Month	0.00	17.OVER ALL RECOVERY IN AL QTL	0.00
6. MOLASSES DISTILLED FROM 1st NOV	551.20	OF FERMENTABLE SUGAR	0.00
7.TOTAL SUGAR IN QTL	0.00	18.DISTILLATION EFFICIENCY	0.00
8.FERMANTABE SUGAR IN QTL	0.00	19.OVER ALL EFFICIENCY	0.00
9. TOTAL WASH DISTILLED IN LITERS	0.00	20.OVER ALL RECOVERY IN AL/QTL MOLA	0.00
10.ESTIMATED ALCOHOL IN A.L	0.00	21.STEAM CONSUMED Kg /Ltr	0.00

NAME OF SUGAR FACTORY	QUANTITY LIFTED	QUANTITY RECEVIED	Brix	TRS
R.B.N.S.SUGAR MILLS				
B-Heavy Molasses	91070.00	91070.00	87.00	56.00
C-Heavy Molasses	0.00	0.00	87.00	44.00
NAME OF ISSUE ALCOHOL			B.L.	QUANTITY A.L.
RBNS Sugar Mills Ltd.Distillery Sanitizer Plant Laksar	ENA		0.00	0.00
RBNS Sugar Mills Ltd.Distillery CL Bottling Plant Laksar	ENA		0.00	0.00
RBNS Sugar Mills Ltd.Distillery IMFL Bottling Plant Laksar	ENA		0.00	0.00
The Bazpur Coop.Sugar Fact.Bazpu Dist.Bazpur	ENA		0.00	0.00
James lifescience Pvt Ltd Sikanderpur Bhagwanpur	Absloute Alcohol		2970.00	2964.1
Indian Oil Corp.Ltd.Landhora Roorkee	D.A.Ethanol		1539000.00	1535152.50
Hindustan Petroleum Corp.Ltd.Landhora	D.A.Ethanol		558000.00	556605.00
	Total---------		2099970.00	2094721.60

D.G.M. (Distillery)
Rai Bhadur Narain Singh Sugar Mills Ltd.
Laksar Distt. Haridwar (Distillery Division)

Manish Rawat
DGM (Distillery)
RBNS Sugar Mills Laksar

Excise Officer Incharge
Rai Bhadur Narain Singh Sugar Mills Ltd
Laksar Distt. Haridwar (Distillery Division)

आबकारी अधिकारी
लक्सर आसवनी
हरिद्वार

MST OF THE MONTH of Feb (B-Heavy)

Opening Balance of Molasses	=	5920
Molasses Consume	=	85776
Molasses Distilled	=	91696
Closing Balance of Molasses	=	Nil
opening Balance of wash	=	1503834
wash prepared	=	21969018
Wash Distilled	=	23472852
losing Balance of wash	=	23472852
Production in B.L	=	2712363.30
Production in A.L	=	2706938.30
Recovery in B.L	=	29.58
Recovery in A.L	=	29.52

MST OF THE MONTH of Feb (C-Heavy)

Opening Balance of Molasses	=	Nil
Molasses Consume	=	12940
Molasses Distilled	=	7764
Closing Balance of Molasses	=	5176
Opening Balance of wash	=	Nil
wash prepared	=	3009340
wash Distilled	=	1805604
Closing Balance of wash	=	1203736
Production in B.L	=	179851.80
Production in A.L	=	176859.20
Recovery in B.L	=	23.16
Recovery in A.L	=	22.0

नागरी आबकारी अधिकारी
लवसर आसावनी
हस्ताक्षर

1671

MST OF THE MONTH OF MARCH- 24 (B-HY)

Opening Balance of Molasses	=	Nil
Molasses Consume	=	91108
Molasses Distilled	=	85403
Closing Balance of Molasses	=	5705
Opening Balance of wash	=	Nil
Wash prepared	=	23618708
Wash Distilled	=	22114038
Closing Balance of Wash	=	1504670
Production in BL	=	253341B.30
Production in AL	=	252165 9.60
Recovery in BL	=	29.66
Recovery in AL	=	29.53

MST OF THE MONTH of March (C-HY)

Opening Balance of Molasses	=	5176
Molasses Consume	=	7745
Molasses Distilled	=	12991
closing Balance of Molasses	=	0.0
Opening Balance of wash	=	1203736
Wash prepared	=	1805664
Wash Distilled	=	3009340
closing Balance of wash	=	NIL
Production in BL	=	299477.50
Production in A.L	=	284503.50
Recovery in BL	=	23.18
Recovery in AL	=	22.02

गारी आबकारी अधि
लक्सर आसवनी
हरिद्वार

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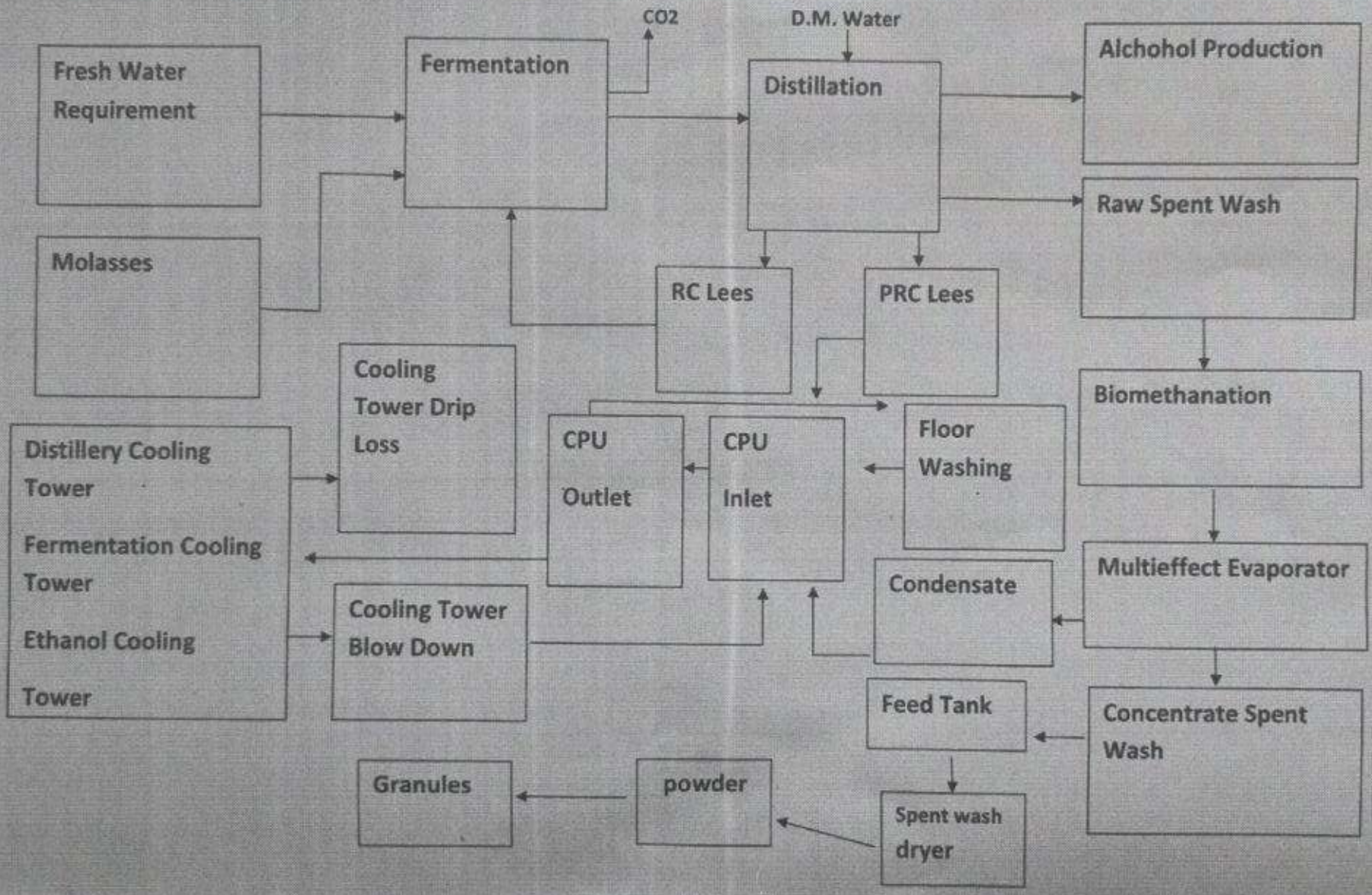
MST of THE Month of - Dec. 24

opening Balance of molasses	=	4716
Molasses Consume	=	102678
Molasses Distilled	=	101659
closing Balance of Molasses	=	5735
opening Balance of wash	=	1203736
wash prepared	=	2617850
wash Distilled	=	2587652
closing Balance of wash	=	1503834
Production in B.L	=	2955708.80
Production in A.L	=	2949797.10
Recovery in B.L	=	29.07
Recovery in A.L	=	29.01

प्रभारी आबकारी अधिकारी
लक्सर आसपनी
हरिद्वार

R.B.N.S.SUGAR MILLS LAKSAR (HARIDWAR) DISTILLERY DIVISION

Manufacturing Process Flow Chart



1674

Annexure-5

Annexure-6

Rai Bahadur Narain Singh Sugar Mills Ltd., Laksar (Hardwar)

Date	Time	Spent Wash Generation Mass Flow Meter Reading Initial (Kg.)	Final (Kg.)	Production (Kg.)	Feed to MEE (Inlet) Mass Flow Meter Reading Initial (Kg.)	Final (Kg.)	Production (Kg.)	Outlet From MEE Mass Flow Meter Reading Initial (Kg.)	Final (Kg.)	Production (Kg.)	Remarks
01/02/2024	9:00AM	473319847	473625837	305990	482691450	482997328	305878	157541588	157632158	90570	Average of Raw spent wash Generation
02/02/2024	9:00AM	473625837	473930506	304669	482997328	483292003	304675	157632158	157722281	90123	from 01/02/2024 to 29/02/2024
03/02/2024	9:00AM	473930506	474236377	305871	483292003	483597882	305879	157722281	157812484	90203	9500371/29 = 327599
04/02/2024	9:00AM	474236377	474537284	300907	483597882	483898888	301006	157812484	157901310	88826	
05/02/2024	9:00AM	474537284	474840404	303120	483898888	484201816	302928	157901310	157990916	89606	Average of Feed to MEE from
06/02/2024	9:00AM	474840404	475147465	307061	484201816	484508808	306992	157990916	158081632	90716	01/02/2024 to 29/02/2024
07/02/2024	9:00AM	475147465	475503294	305829	484508808	484814559	305751	158081632	158172164	90532	9500086/29 = 327589
08/02/2024	9:00AM	475503294	475806999	303705	484814559	485118208	303649	158172164	158261831	89667	
09/02/2024	9:00AM	475806999	476111913	304914	485118208	485423511	305303	158261831	158352170	90339	Average of Outlet from MEE from
10/02/2024	9:00AM	476111913	476419642	307729	485423511	485731123	307612	158352170	158443899	91729	01/02/2024 to 29/02/2024
11/02/2024	9:00AM	476419642	476729842	310200	485731123	486041318	310195	158443899	158536926	93027	2817265/29 = 97147
12/02/2024	9:00AM	476729842	477041489	311647	486041318	486352864	311546	158536926	158629704	92778	
13/02/2024	9:00AM	477041489	477351899	310410	486352864	486663259	310395	158629704	158722170	92466	
14/02/2024	9:00AM	477351899	477663205	311306	486663259	486974257	310998	158722170	158814660	92490	
15/02/2024	9:00AM	477663205	477973883	310678	486974257	487285002	310745	158814660	158907603	92943	
16/02/2024	9:00AM	477973883	478289427	315544	487285002	487600457	315455	158907603	159001640	94037	
17/02/2024	9:00AM	478289427	478602474	313047	487600457	487913706	313249	159001640	159094643	93003	
18/02/2024	9:00AM	478602474	478914376	311902	487913706	488225848	312142	159094643	159187380	92737	
19/02/2024	9:00AM	478914376	479226221	311845	488225848	488537394	311546	159187380	159279846	92466	
20/02/2024	9:00AM	479226221	479537109	310888	488537394	488847942	310548	159279846	159371737	91891	
21/02/2024	9:00AM	479537109	479846820	309711	488847942	489157948	310006	159371737	159463653	91916	
22/02/2024	9:00AM	479846820	480157439	310619	489157948	489468563	310615	159463653	159555967	92314	
23/02/2024	9:00AM	480157439	480466523	309084	489468563	489777559	308996	159555967	159647924	91957	
24/02/2024	9:00AM	480466523	480790537	324014	489777559	490101455	323896	159647924	159744445	96521	
25/02/2024	9:00AM	480790537	481113427	322890	490101455	490424559	323104	159744445	159840794	96349	
26/02/2024	9:00AM	481113427	481435701	322274	490424559	490746728	322169	159840794	159936639	95845	
27/02/2024	9:00AM	481435701	481913494	477793	490746728	491224876	478148	159936639	160076975	140336	26/02/2024 Production on C-Heavy base Molasses
28/02/2024	9:00AM	481913494	482391910	478416	491224876	491703278	478402	160076975	160217720	140745	
29/02/2024	9:00AM	482391910	482870318	478408	491703278	492181536	478258	160217720	160358853	141133	

Manish Rathi
DGM (Distillery)
RBNS Sugar Mills Laksar

Rai Bahadur Narain Singh Sugar Mills Ltd., Laksar (Hardwar)

Date	Time	Spent Wash Generation Mass Flow Meter Reading Initial (Kg.)	Final (Kg.)	Production (Kg.)	Feed to MEE (Inlet) Mass Flow Meter Reading Initial (Kg.)	Final (Kg.)	Production	Outlet From MEE Mass Flow Meter Reading Initial (Kg.)	Final (Kg.)	Production (Kg.)	Remarks
01/03/2024	9.00 AM	492817320	[illegible]	478440	492181536	492659951	478415	160358853	160499219	140366	Average of Spent wash Generation from
02/03/2024	9.00 AM	493298558	493822021	478463	492659951	493138746	478795	160499219	160640367	141148	01/03/2024 to 31/03/2024
03/03/2024	9.00 AM	[illegible]	[illegible]	478768	493138746	493617445	478699	160640367	160781966	141599	10022979/31
04/03/2024	9.00 AM	[illegible]	[illegible]	478136	493617445	494095434	477989	160781966	160922685	140719	= 323321
05/03/2024	9.00 AM	[illegible]	485259542	475017	494095434	494570430	474996	160922685	161062048	139363	
06/03/2024	9.00 AM	485259542	485558538	298976	494570430	494869546	299116	161062048	161150466	88418	05/03/2024 Production on B-Heavy Molasses
07/03/2024	9.00 AM	485558538	485876301	317763	494869546	495187195	317649	161150466	161244521	94055	
08/03/2024	9.00 AM	485876301	486125286	248989	495187195	495486436	299241	161244521	161333455	88934	Average of feed to MEE from
09/03/2024	9.00 AM	486175286	486503078	327817	495486436	495814433	327997	161333455	161431132	97677	01/03/2024 to 31/03/2024
10/03/2024	9.00 AM	486503078	486825916	322378	495814433	496137335	322902	161431132	161527066	95934	10023173/31
11/03/2024	9.00 AM	486825936	487138370	312401	496137335	496449486	312151	161527066	161620055	92989	= 323328
12/03/2024	9.00 AM	487138377	487452081	313704	496449486	496763482	313996	161620055	161713657	93602	
13/03/2024	9.00 AM	487452081	487765818	313747	496763482	497077030	313548	161713657	161806592	92935	Average of Outlet from MEE from
14/03/2024	9.00 AM	487765828	488081865	316037	497077030	497393167	316137	161806592	161900136	93544	01/03/2024 to 31/03/2024
15/03/2024	9.00 AM	488081865	488396072	314207	497393167	497707690	314523	161900136	161993800	93664	2967777/31
16/03/2024	9.00 AM	488396072	488708521	312449	497707690	498019686	311996	161993800	162086119	92319	= 95734
17/03/2024	9.00 AM	488708521	489021701	313180	498019686	498332845	313159	162086119	162178469	92350	
18/03/2024	9.00 AM	489021701	489338539	316836	498332845	498649808	316963	162178469	162272099	93630	
19/03/2024	9.00 AM	489338539	489625513	286974	498649808	498936951	287143	162272079	162357417	85338	
20/03/2024	9.00 AM	489625513	489919189	293676	498936951	499229940	292989	162357417	162444258	86841	
21/03/2024	9.00 AM	489919189	490206258	287069	499229940	499517399	287459	162444258	162529374	85116	
22/03/2024	9.00 AM	490206258	490511172	304914	499517399	499822538	305139	162529374	162619847	90473	
23/03/2024	9.00 AM	490511172	490785690	274518	499822538	500097031	274493	162619847	162701343	81496	
24/03/2024	9.00 AM	490785690	491060698	275008	500097031	500371913	274882	162701343	162783037	81694	
25/03/2024	9.00 AM	491060698	491335766	275068	500371913	500646911	274998	162783037	162864381	81344	Manish Rathi DGM (Distillery)
26/03/2024	9.00 AM	491335766	491610798	275032	500646911	500921906	274995	162864381	162945889	81508	RBNS Sugar Mills Laksar
27/03/2024	9.00 AM	491610798	491885334	274536	500921906	501196541	274635	162945889	163027565	81676	
28/03/2024	9.00 AM	491885334	492169730	284396	501196541	501480840	284299	163027565	163111546	83981	
29/03/2024	9.00 AM	492169730	492408906	239176	501480840	501720018	239178	163111546	163182653	71107	
30/03/2024	9.00 AM	492408906	492650850	241944	501720018	501962166	242148	163182653	163254619	71966	
31/03/2024	9.00 AM	492650850	492893297	242447	501962166	[illegible]	[illegible]	163254619	163326630	72011	

Rai Bahadur Narain Singh Sugar Mills Ltd., Laksar (Hardwar)

Date	Time	Spent Wash Generation Mass Flow Meter Reading			Feed to MEE (Inlet) Mass Flow Meter Reading			Outlet From MEE Mass Flow Meter Reading			Remarks
		Initial (Kg.)	Final (Kg.)	Production (Kg.)	Initial (Kg.)	Final (Kg.)	Production	Initial (Kg.)	Final (Kg.)	Production (Kg.)	
01/12/2024	9:00 AM	501751536	501838000	86464	511063169	511149567	86398	165944466	165974489	30023	Distillery started [illegible] midnight
02/12/2024	9:00 AM	501838000	502143368	299753	511149567	511459429	309862	165974489	166070670	96181	
03/12/2024	9:00 AM	502143368	502469619	321251	511459429	511780577	321148	166070670	166167303	96633	Average of Raw spent wash Generated
04/12/2024	9:00 AM	502469619	502743849	274230	511780577	512055609	275032	166167303	166249427	82124	from 01/12/2024 to 31/12/2024
05/12/2024	9:00 AM	502743249	503037479	294230	512055609	512329753	274144	166249427	166331013	81586	8838260/31
06/12/2024	9:00 AM	503037479	503299036	276602	512329753	512605967	276214	166331013	166413654	82641	= 285105
07/12/2024	9:00 AM	503299036	503591535	297499	512605967	512902961	296994	166413654	166502306	88652	
08/12/2024	9:00 AM	503515725	503806266	294631	512902961	513196099	293138	166502306	166590218	87912	Average of feed to MEE (Inlet)
09/12/2024	9:00 AM	503886266	504175357	289551	513196099	513486982	290883	166590218	166677715	87497	from 01/12/2024 to 31/12/2024
10/12/2024	9:00 AM	504175357	504473597	298240	513486982	513785131	298149	166677715	166766533	88818	8837920/31
11/12/2024	9:00 AM	504473597	504749011	275014	513785131	514060726	275595	166766533	166848991	82458	= 285094
12/12/2024	9:00 AM	504749011	505021872	272861	514060726	514333495	272769	166848991	166930439	81448	
13/12/2024	9:00 AM	505021872	505320330	298458	514333495	514631794	298299	166930439	167019003	88564	Average of outlet from MEE
14/12/2024	9:00 AM	505320330	505619377	299047	514631794	514930790	298996	167019003	167108163	89160	from 01/12/2024 to 31/12/2024
15/12/2024	9:00 AM	505619373	505907119	287742	514930790	515217308	286518	167108163	167193803	85640	2642795/31
16/12/2024	9:00 AM	505907119	506191719	284600	515217308	515501903	284595	167193803	167278783	84980	= 85251
17/12/2024	9:00 AM	506191719	506478723	287004	515501903	515788899	286996	167278783	167363418	84635	
18/12/2024	9:00 AM	506478723	506754525	275802	515788899	516065194	276295	167363418	167445532	82114	
19/12/2024	9:00 AM	506754525	507033169	278644	516065194	516343740	278546	167445532	167528233	82701	
20/12/2024	9:00 AM	507033169	507315233	282064	516343740	516625915	282175	167528233	167612349	84116	
21/12/2024	9:00 AM	507315233	507608133	292900	516625915	516918833	292918	167612349	167699609	87260	
22/12/2024	9:00 AM	507608133	507902301	294168	516918833	517212828	293995	167699609	167787278	87669	
23/12/2024	9:00 AM	507902301	508193945	291644	517212828	517504572	291744	167787278	167874538	87260	
24/12/2024	9:00 AM	508193945	508492036	298091	517504572	517802470	297898	167874538	167962656	88118	
25/12/2024	9:00 AM	508492036	508791425	299389	517802470	518101855	299385	167962656	168051603	88947	
26/12/2024	9:00 AM	508791425	509092230	300805	518101855	518402760	300905	168051603	168141242	89639	
27/12/2024	9:00 AM	509092230	509391200	298970	518402760	518701865	299105	168141242	168230285	89043	
28/12/2024	9:00 AM	509391200	509690301	299101	518701865	519001924	300059	168230285	168319762	89477	
29/12/2024	9:00 AM	509690301	509989803	299502	519001924	519301359	299435	168319762	168408843	89081	
30/12/2024	9:00 AM	509989803	510289335	299532	519301359	519600918	299559	168408843	168497841	88998	
31/12/2024	9:00 AM	510289335	510589806	300471	519600918	519901089	300171	168497841	168587261	89420	

R.B.N.S. Sugar Mills Ltd. LAKSAR

Rai Bahadur Narain Singh Suga Mills Ltd., Laksar (Hardwar)

Date	Time	Spent Wash Generation Mass Flow Meter Reading			Feed to MEE (Inlet) Mass Flow Meter Reading			Outlet From MEE Mass Flow Meter Reading			Remarks
		Initial (Kg.)	Final (Kg.)	Production (Kg.)	Initial (Kg.)	Final (Kg.)	Production (Kg.)	Initial (Kg.)	Final (Kg.)	Production (Kg.)	
01/02/2024	9 am	82702849	83010423	307574	84877811	85185250	307439	25263505	25355183	91678	Average of Raw Spent wash Generation
02/02/2024	9 am	83010423	83318381	307958	85185250	85493367	308117	25355183	25446846	91663	from 01/02/2024 to 29/02/2024
03/02/2024	9 am	83318381	83627239	308858	85493367	85804115	310753	25446846	25539201	92355	8145299/26 = 313280
04/02/2024	9 am	83627239	83938814	309575	85804115	86113566	309451	25539201	25631015	91814	
05/02/2024	9 am	83938814	84246730	307916	86113566	86421568	308002	25631015	25722245	91230	Average of feed to MEE from
06/02/2024	9 am	84246730	84551299	304569	86421568	86726131	304563	25722245	25812517	90272	01/02/2024 to 29/02/2024
07/02/2024	9 am	84551299	84856367	305068	86726131	87031243	305112	25812517	25903226	90709	8141882/26 = 313149
08/02/2024	9 am	84856367	85166642	309675	87031243	87341251	310008	25903226	25995608	92382	
09/02/2024	9 am	85166642	85475160	308518	87341251	87650373	309122	25995608	26087757	92149	Average of Outlet from MEE from
10/02/2024	9 am	85475160	85789128	313968	87650373	87964512	314149	26087757	26181310	93553	01/02/2024 to 29/02/2024
11/02/2024	9 am	85789128	86101491	312363	87964512	88276767	312255	26181310	26273984	92674	2418874/26 = 93033
12/02/2024	9 am	86101491	86412385	310894	88276767	88587862	311095	26273984	26366099	92115	
13/02/2024	9 am	86412385	86728066	315681	88587862	88903314	315452	26366099	26459737	93638	
14/02/2024	9 am	86728066	87044736	316670	88903314	89219863	316549	26459737	26553625	93888	
15/02/2024	9 am	87044736	87363147	318411	89219863	89538190	318327	26553625	26648199	94574	
16/02/2024	9 am	87363147	87686410	323263	89538190	89861336	323146	26648199	26744302	96103	
17/02/2024	9 am	87686410	88002608	316198	89861336	90178325	316989	26744302	26838511	94209	
18/02/2024	9 am	88002608	88317501	314893	90178325	90493331	315006	26838511	26931973	93462	
19/02/2024	9 am	88317501	88631726	314225	90493331	90807877	314546	26931973	27025361	93388	
20/02/2024	9 am	88631726	88943559	311833	90807877	91119556	311679	27025361	27117929	92568	
21/02/2024	9 am	88943559	89253694	310135	91119556	91429554	309998	27117929	27210091	92162	
22/02/2024	9 am	89253694	89563924	310230	91429554	91739550	309996	27210091	27302283	92192	
23/02/2024	9 am	89563924	89813223	309299	91739550	92047902	308352	27302283	27392469	90186	
24/02/2024	9 am	89813223	90139188	324965	92047902	92368048	325146	27392469	27488972	96503	
25/02/2024	9 am	90139188	90522280	324092	92368048	92692944	324896	27488972	27585498	96526	
26/02/2024	9 am	90522280	90848148	325868	92692944	93019693	326749	27585498	27682379	96881	Distillery stopped at 10:00 hrs for cleaning
27/02/2024											
28/02/2024											
29/02/2024											

Manish Rathi
DGM (Distillery)
RBNS Sugar Mills Laksar

1678

Rai Bahadur Narain Singh Sugar Mills Ltd., Laksar (Hardwar)

Date	Time	Spent Wash Generation Mass Flow Meter Reading Initial (Kg.)	Final (Kg.)	Production (Kg.)	Feed to MEE (Inlet) Mass Flow Meter Reading Initial (Kg.)	Final (Kg.)	Production (Kg.)	Outlet From MEE Mass Flow Meter Reading Initial (Kg.)	Final (Kg.)	Production (Kg.)	Remarks
01/03/2024											Average of Spent wash Generation from
02/03/2024											01/03/2024 to 31/03/2024
03/03/2024											7521479/26 = 289287
04/03/2024											
05/03/2024											Distillery start at 12:0 pm with RS to Production on B-Heavy Molasses
06/03/2024	9:00 Am	90848848	91123892	275044	93019693	93294797	275104	27632379	27764029	81650	
07/03/2024	9:00 Am	91123292	91439348	316156	93294797	93610793	315996	27764029	27857943	93914	Average of feed to MEE from
08/03/2024	9:00 Am	91439348	91738300	298952	93610793	93910764	299971	27857943	27947364	89421	01/03/2024 to 31/03/2024
09/03/2024	9:00 Am	91738300	92050626	312326	93910764	94224396	313632	27947364	28040387	93023	7524955/26
10/03/2024	9:00 Am	92050626	92361562	310936	94224396	94535540	311144	28040387	28132983	92596	= 289421
11/03/2024	9:00 Am	92361562	92673706	312144	94535540	94847685	312145	28132983	28225752	92769	
12/03/2024	9:00 Am	92673706	92985634	311929	94847685	95160683	312998	28225752	28318900	93148	Average of Outlet from MEE from
13/03/2024	9:00 Am	92985634	93298736	313102	95160683	95473788	313105	28318900	28411923	93023	01/03/2024 to 31/03/2024
14/03/2024	9:00 Am	93298736	93612899	314763	95473788	95788175	314387	28411923	28505044	93121	2233973/26
15/03/2024	9:00 Am	93612099	93923978	311079	95788175	96099170	310995	28505044	28597347	92303	= 85922
16/03/2024	9:00 Am	93923978	94239428	315450	96099170	96414529	315359	28597347	28690882	93535	
17/03/2024	9:00 Am	94239428	94552011	312583	96414529	96727126	312597	28690882	28783598	92716	
18/03/2024	9:00 Am	94552011	94864448	312437	96727126	97039372	312246	28783598	28876303	92705	
19/03/2024	9:00 Am	94864448	95151398	286950	97039372	97326282	286910	28876303	28961400	85097	
20/03/2024	9:00 Am	95151398	95438859	287461	97326282	97613641	287359	28961400	29046429	85029	
21/03/2024	9:00 Am	95438859	95724828	285969	97613641	97899387	285746	29046429	29131324	84895	
22/03/2024	9:00 Am	95724828	96029873	305045	97899387	98204437	305059	29131324	29221957	90633	
23/03/2024	9:00 Am	96029873	96294158	264285	98204437	98468625	264188	29221957	29300526	78569	
24/03/2024	9:00 Am	96294158	96557266	263108	98468625	98731870	263245	29300526	29378604	78078	
25/03/2024	9:00 Am	96557266	96821259	263993	98731870	98996094	264224	29378604	29457237	78633	
26/03/2024	9:00 Am	96821259	97087644	266385	98996094	99262392	266298	29457237	29536034	78797	
27/03/2024	9:00 Am	97087644	97352628	264984	99262392	99527638	265246	29536034	29614599	78565	
28/03/2024	9:00 Am	97352628	97636935	284307	99527638	99811943	284305	29614599	29698980	84381	
29/03/2024	9:00 Am	97636935	97876158	239223	99811943	100051168	239225	29698980	29769814	70834	
30/03/2024	9:00 Am	97876158	98123000	246842	100051168	100298013	246845	29769814	29843324	73510	
31/03/2024	9:00 Am	98123000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

Manish Rathi
DGM (Distillery)
RBNS Sugar Mills Laksar

Rai Bahadur Narain Singh Sugar Mills Ltd., Laksar (Hardwar)

Date	Time	Spent Wash Generation Mass Flow Meter Reading			Feed to MEE (Inlet) Mass Flow Meter Reading			Outlet From MEE Mass Flow Meter Reading			Remarks
		Initial (Kg.)	Final (Kg.)	Production (Kg.)	Initial (Kg.)	Final (Kg.)	Production (Kg.)	Initial (Kg.)	Final (Kg.)	Production (Kg.)	
01/12/2024	9:00 AM	104446288	104685623	239335	106616804	106855953	239149	31719888	31791704	71816	
02/12/2024	9:00 AM	104685623	104925277	239654	106855953	107095551	239598	31791704	31862960	71256	Average of Raw Spent wash Generation
03/12/2024	9:00 AM	104925277	105164275	238998	107095551	107334656	239105	31862960	31934356	71396	from 01/12/2024 to 31/12/2024
04/12/2024	9:00 AM	105164275	105437913	273638	107334656	107608365	273709	31934356	32016219	81863	8830990/31
05/12/2024	9:00 AM	105437913	105710254	272341	107608365	107880514	272149	32016219	32097455	81236	= 284870
06/12/2024	9:00 AM	105710254	105986503	276249	107880514	108156769	276255	32097455	32179668	82213	
07/12/2024	9:00 AM	105986503	106280563	294060	108156769	108450928	294159	32179668	32266915	87247	Average of Feed to MEE (Inlet)
08/12/2024	9:00 AM	106280563	106573069	292506	108450928	108744920	293992	32266915	32354495	87580	from 01/12/2024 to 31/12/2024
09/12/2024	9:00 AM	106573069	106868187	295118	108744920	109041731	296811	32354495	32443004	88509	8835620/31
10/12/2024	9:00 AM	106868187	107163951	295764	109041731	109337229	295498	32443004	32531221	88217	= 285020
11/12/2024	9:00 AM	107163951	107438905	274954	109337229	109613121	275892	32531221	32613547	82326	
12/12/2024	9:00 AM	107438905	107712920	274015	109613121	109888099	274978	32613547	32695793	82246	Average of Outlet from MEE
13/12/2024	9:00 AM	107712920	108011294	298374	109888099	110186572	298473	32695793	32784678	88885	from 01/12/2024 to 31/12/2024
14/12/2024	9:00 AM	108011294	108310425	299131	110186572	110485701	299129	32784678	32873848	89170	2632020/31
15/12/2024	9:00 AM	108310425	108596143	285718	110485701	110771292	285591	32873848	32958868	85020	= 84903
16/12/2024	9:00 AM	108596143	108884187	288044	110771292	111059484	288192	32958868	33044662	85794	
17/12/2024	9:00 AM	108884187	109169767	285580	111059484	111344627	285143	33044662	33129976	85314	
18/12/2024	9:00 AM	109169767	109448918	279151	111344627	111623886	279259	33129976	33213167	83191	
19/12/2024	9:00 AM	109448918	109727908	278990	111623886	111902861	278975	33213167	33296050	82883	
20/12/2024	9:00 AM	109727908	110006277	278369	111902861	112181553	278692	33296050	33378711	82661	
21/12/2024	9:00 AM	110006277	110300367	294090	112181553	112475544	293991	33378711	33466238	87527	
22/12/2024	9:00 AM	110300367	110592741	292374	112475544	112767693	292149	33466238	33553064	86826	
23/12/2024	9:00 AM	110592741	110884989	292248	112767693	113059676	291983	33553064	33640372	87308	
24/12/2024	9:00 AM	110884989	111183325	298336	113059676	113357974	298298	33640372	33729175	88803	
25/12/2024	9:00 AM	111183325	111479114	295789	113357974	113654122	296148	33729175	33817397	88222	
26/12/2024	9:00 AM	111479114	111779698	300584	113654122	113954606	300484	33817397	33906700	89303	
27/12/2024	9:00 AM	111779698	112079606	299908	113954606	114254762	300156	33906700	33995816	89116	
28/12/2024	9:00 AM	112079606	112377774	298168	114254762	114552817	298055	33995816	34084576	88760	
29/12/2024	9:00 AM	112377774	112677754	299980	114552817	114852729	299912	34084576	34173769	89193	
30/12/2024	9:00 AM	112677754	112976730	298976	114852729	115151478	298749	34173769	34262736	88967	
31/12/2024	9:00 AM	112976730	113277278	300548	115151478	115451824	300346	34262736	34351908	89172	

RBNS Sugar Mills Ltd. LAKSAR

RBNS SUGAR MILL LTD.
RAW SPENT WASH

Date	Raw Spent Wash					After Biomethansation				
	pH	Brix	VFA	COD	BOD	pH	Brix	VFA	COD	COD Reduction o/o
01/02/2024	4.62	12.3	2105	123946	31605	7.89	11.5	3609	37491	69.73%
02/02/2024	4.64	12.6	2609	124741	31308	7.86	11.0	3609	38316	69.84%
03/02/2024	4.67	12.4	2109	124337	31141	7.82	10.5	369	31872	69.53%
04/02/2024	4.58	12.7	2109	123672	31327	7.85	11.0	3911	37163	70.42%
05/02/2024	4.55	12.5	2609	125436	31605	7.82	11.0	3811	37459	69.98%
06/02/2024	4.51	12.2	2105	122072	31763	7.86	11.5	3811	37545	69.44%
07/02/2024	4.61	12.4	2105	124634	31989	7.82	11.0	3609	37434	69.96%
08/02/2024	4.59	12.6	2105	126218	32146	7.89	11.0	3609	37327	70.42%
09/02/2024	4.63	12.5	2609	125327	31969	7.85	11.0	3811	37818	69.82%
10/02/2024	4.65	12.3	2609	123472	31795	7.82	11.5	3811	37749	69.42%
11/02/2024	4.59	12.6	2609	126654	31552	7.86	11.5	3811	37457	70.42%
12/02/2024	4.68	12.4	2609	124336	31446	7.88	11.0	3609	37618	69.74%
13/02/2024	4.55	12.3	2105	123227	31228	7.92	11.0	3609	37982	69.17%
14/02/2024	4.65	12.5	2105	125645	30995	7.87	10.5	3609	38146	69.63%
15/02/2024	4.62	12.4	2105	124336	31145	7.82	11.0	3811	37818	69.59%
16/02/2024	4.54	12.5	2609	125445	31459	7.85	11.0	3811	37818	69.96%
17/02/2024	4.69	12.6	2609	126872	31546	7.89	11.5	3811	37705	70.28%
18/02/2024	4.58	12.4	2105	124836	31712	7.86	11.5	3609	37548	69.92%
19/02/2024	4.68	12.5	2105	125745	31892	7.80	11.0	3609	37249	70.37%
20/02/2024	4.57	12.5	2105	125345	32006	7.85	11.0	3609	37649	69.96%
21/02/2024	4.67	12.4	2609	124236	31996	7.87	10.5	3811	37872	69.51%
22/02/2024	4.56	12.6	2609	126554	31746	7.82	11.0	3811	37992	69.97%
23/02/2024	4.66	12.4	2609	124224	31649	7.88	11.0	3609	38146	69.29%
24/02/2024	4.62	12.3	2105	123927	31876	7.89	11.5	3609	37612	69.64%
25/02/2024	4.56	12.6	2105	126872	31548	7.86	11.5	3811	37554	70.40%
26/02/2024	4.55	12.5	2105	125645	31705	7.82	11.5	3811	37458	70.18%
27/02/2024	4.59	14.15	2571	151642	38109	7.89	11.5	3857	44804	70.42%
28/02/2024	4.68	14.6	2571	150743	38246	7.92	11.5	3857	44819	70.04%
29/02/2024	4.76	14.5	2571	149892	37988	7.95	11.0	3857	44773	70.12%

LAKSAR, DISTILLERY DIVISION
BIOMETHANSATION

BOD	BOD Reduction o/o	Biogas Production in hrs.	Biogas Production in day	Remarks
3760	88.10%	1171	28116	Avg of Raw cod from
3740	88.05%	1206	28946	01/02/24 to 29/02/24
3770	87.89%	1185	28461	= 2706693/29
3750	88.02%	1220	29291	= 1270117
3780	88.03%	1193	28632	Avg of Raw BOD from
3760	88.16%	1160	27854	01/02/24 to 29/02/24
3790	88.15%	1184	28430	936345/29
3770	88.27%	1212	29107	= 32297
3800	88.07%	1195	28684	Avg of After Biomethansation
3780	88.09%	1184	28438	cod from 1/2/24 to 29/2/24
3810	87.92%	1237	29706	111562/29
3790	87.94%	1200	28816	= 38471
3770	87.92%	1187	28489	Avg of After Biomethansation
3750	87.90%	1221	29326	BOD from 1/2/24 to 29/2/24
3740	87.99%	1209	29032	111560/29
3760	88.04%	1246	29925	= 3846
3780	88.01%	1247	29943	COD reduction
3790	88.04%	1216	29205	69.90%
3770	88.17%	1232	29571	BOD reduction
3750	88.28%	1214	29148	88.08%
3770	88.21%	1190	28574	Avg of Biogas Production
3740	88.21%	1222	29343	01/02/24 to 29/02/24
3720	88.24%	1184	28416	836211/29
3710	88.36%	1245	29901	= 28834
3750	88.11%	1284	30839	
3790	88.04%	1271	30506	
4570	88.00%	1134	27237	
4540	88.16%	1091	26201	
4560	87.99%	1086	26074	

RBNS LAKSAR

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Annexure-7

RBNS SUGAR MILL LTD.
RAW SPENT WASH

Date	Raw Spent Wash					After Biomethansation				
	pH	Brix	VFA	COD	BOD	pH	Brix	VFA	COD	COD Reduction o/o
01/03/2024	4.72	14.9	2142	151654	31872	7.80	11.0	3771	44988	70.33%
02/03/2024	4.69	14.8	2142	144935	31956	7.92	11.0	3771	45166	69.88%
03/03/2024	4.75	14.6	2511	148198	31778	7.95	11.0	3857	44791	69.76%
04/03/2024	4.78	14.4	2571	148546	31781	7.90	11.5	3857	44781	69.94%
05/03/2024	4.76	14.5	2571	148159	32146	7.86	11.5	3857	45157	69.69%
06/03/2024	4.46	12.6	2142	129813	31556	7.80	11.0	3771	41100	68.38%
07/03/2024	4.52	12.4	2105	124543	31886	7.90	11.0	3609	38141	69.37%
08/03/2024	4.51	12.6	2105	126149	31449	7.82	11.0	3609	37986	70.03%
09/03/2024	4.49	12.8	2105	127996	31672	7.85	11.0	3609	38151	70.19%
10/03/2024	4.55	12.6	2609	126293	31855	7.88	11.0	3811	37972	69.92%
11/03/2024	4.58	12.9	2609	129106	32141	7.92	11.0	3811	37872	70.66%
12/03/2024	4.61	12.7	2609	127451	31993	7.89	11.5	3811	38092	70.11%
13/03/2024	4.62	12.5	2105	125381	32146	7.86	11.5	3609	37996	69.67%
14/03/2024	4.59	12.3	2105	123456	31649	7.80	11.0	3609	37163	69.91%
15/03/2024	4.56	12.6	2105	126459	31442	7.86	11.0	3609	37892	70.28%
16/03/2024	4.59	12.7	2609	127945	31778	7.80	11.0	3811	38119	70.08%
17/03/2024	4.55	12.4	2609	124513	31996	7.86	10.5	3811	37996	69.48%
18/03/2024	4.58	12.6	2609	126753	32309	7.89	10.5	3811	37876	70.11%
19/03/2024	4.59	12.4	2105	124205	32139	7.86	11.0	3609	38159	69.30%
20/03/2024	4.57	12.6	2105	126112	31989	7.88	11.0	3609	37989	70.02%
21/03/2024	4.55	12.5	2105	125451	31996	7.85	11.5	3609	38143	69.59%
22/03/2024	4.59	12.6	2609	126453	32246	7.88	11.5	3811	37978	69.96%
23/03/2024	4.56	12.4	2609	124387	32148	7.89	11.0	3811	38305	69.20%
24/03/2024	4.57	12.6	2609	126542	31996	7.82	11.0	3811	38298	69.73%
25/03/2024	4.55	12.8	2105	128772	32146	7.85	10.5	3609	38182	70.35%
26/03/2024	4.58	12.3	2105	123291	31898	7.88	11.0	3609	37982	69.19%
27/03/2024	4.55	12.5	2105	125436	31995	7.89	11.5	3609	37946	69.82%
28/03/2024	4.58	12.3	2609	123461	32146	7.86	11.5	3811	37989	69.22%
29/03/2024	4.52	12.6	2609	126351	31992	7.82	11.5	3811	38146	69.81%
30/03/2024	4.59	12.8	2609	128195	32249	7.88	11.5	3811	38009	70.41%
31/03/2024	4.65	12.5	3609	125546	32159	7.88	11.5	3811	37989	

LAKSAR, DISTILLERY DIVISION
BIOMETHANSATION

BOD	BOD Reduction o/o	Biogas Production in hrs	Biogas Production in day	Remarks
4580	87.90%	1102	26468	Avg of R.S.W COD from
4560	87.98%	1084	26026	01/3/2024 to 31/3/2024
4540	87.98%	1073	25769	4027070/31
4520	88.19%	1051	25328	= 129905
4540	88.09%	1063	25523	Avg of R.S.W BOD from
4480	85.80%	1133	27205	01/3/2024 to 31/3/2024
4010	87.42%	1218	29235	1019606/31
3980	87.34%	1180	28329	= 32890
3920	87.62%	1278	30686	Avg of after Biomethansation
3810	88.03%	1244	29864	COD from 1/3/2424 to
3780	88.22%	1267	30422	31/03/2024
3760	88.24%	1243	29839	1216763/31
3740	88.21%	1217	29220	= 39250
3720	88.24%	1202	28850	Avg of after Biomethansation
3760	88.04%	1234	29639	BOD from 1/3/24 to
3790	88.07%	1247	29934	31/3/24
3760	88.24%	1204	28904	1220790/31 = 3938
3810	88.20%	1243	29848	Avg of Biogas Production
3780	88.23%	1099	26398	01/03/24 to 31/3/24
3760	88.24%	1147	27529	2411526/31
3790	88.15%	1112	26702	= 27146
3770	88.30%	1200	28802	
3750	88.35%	1031	24747	
3780	88.18%	1056	25346	
3760	88.34%	1085	26061	
3790	88.11%	1026	24644	
3770	88.21%	1050	25224	
3750	88.35%	1080	25939	
3780	88.18%	938	22523	
3760	88.34%	986	23668	

Sugar Mills Ltd. LAKSAR

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RBNS SUGAR MILL LTD.
RAW SPENT WASH

Date	Raw Spent Wash					After Biomethansation				
	pH	Brix	VFA	COD	BOD	pH	Brix	VFA	COD	COD Reduction o/o
01/12/2024	4.79	12.4	2609	124371	32346	7.92	10.5	1885	74221	39.04%
02/12/2024	4.76	12.8	2571	128746	31980	7.85	11.0	1885	74205	42.39%
03/12/2024	4.69	12.7	2571	127612	31959	7.82	11.0	1885	71326	44.10%
04/12/2024	4.65	12.5	2571	125459	31410	7.79	11.0	2057	69552	48.22%
05/12/2024	4.69	12.3	2571	123305	31548	7.81	11.0	2057	62129	49.20%
06/12/2024	4.54	12.6	2142	126745	31249	7.76	11.5	2057	61186	51.72%
07/12/2024	4.62	12.4	2142	124359	30988	7.83	11.5	2142	59098	52.92%
08/12/2024	4.58	12.3	2142	123873	30946	7.79	11.0	2142	55396	55.28%
09/12/2024	4.52	12.4	2105	124546	30996	7.82	11.0	2142	51316	58.79%
10/12/2024	4.59	12.2	2105	122456	31219	7.86	11.0	2228	48810	60.14%
11/12/2024	4.63	12.4	2105	124339	31438	7.81	11.5	2228	48226	61.22%
12/12/2024	4.69	12.6	2751	126744	31192	7.86	11.0	2228	47018	62.36%
13/12/2024	4.65	12.5	2751	125351	31243	7.89	10.5	2228	45916	63.37%
14/12/2024	4.68	12.3	2751	123407	31356	7.81	11.0	2485	43965	64.84%
15/12/2024	4.59	12.6	2571	126546	30988	7.85	10.5	2485	43998	65.63%
16/12/2024	4.62	12.4	2751	124318	30743	7.82	10.5	2485	41857	66.33%
17/12/2024	4.51	12.5	2609	125692	30898	7.85	11.0	2571	41126	67.28%
18/12/2024	4.55	12.3	2609	123452	30978	7.89	11.0	2571	39233	68.22%
19/12/2024	4.62	12.4	2609	124571	31292	7.92	10.5	2571	39414	68.36%
20/12/2024	4.59	12.6	2609	126763	31196	7.85	10.5	2571	39654	68.69%
21/12/2024	4.61	12.4	2571	124546	31392	7.82	11.0	2609	37818	69.93%
22/12/2024	4.64	12.6	2105	126318	31298	7.81	11.0	2609	38916	69.19%
23/12/2024	4.58	12.5	2571	125452	31146	7.86	11.0	2609	37546	70.07%
24/12/2024	4.59	12.3	2571	123379	31392	7.89	11.5	2914	37399	69.68%
25/12/2024	4.65	12.6	2571	126456	31146	7.82	11.5	2914	37605	70.26%
26/12/2024	4.61	12.4	2571	124548	31102	7.79	11.5	2914	37813	69.63%
27/12/2024	4.59	12.3	2609	123954	30999	7.82	11.0	3257	37982	69.33%
28/12/2024	4.62	12.5	2609	125545	30146	7.80	11.0	3257	38182	69.58%
29/12/2024	4.59	12.4	2609	124449	30992	7.80	10.5	3257	38299	69.22%
30/12/2024	4.65	12.3	2609	123446	31146	7.79	11.0	3257	38546	68.77%
31/12/2024	4.70	12.4	2571	124549	31349	7.86	11.5	3257	38446	69.13%

BARSAR, DISTILLERY DIVISION
BIOMETHANSATION

BOD	BOD Reduction o/o	Biogas Production in hrs	Biogas Production in day	Remarks
12875	60.19%	-	-	Avg of RSW COD for 01/12/24 to 31/12/24
12771	61.63%	-	-	3875265/31
11772	63.04%	-	-	=125008
11054	65.03%	-	-	
10264	67.65%			Avg of RSW BOD from 01/12/24 to 31/12/24
10068	67.78%	783	18797	969573/31
9541	69.20%	841	20190	= 31244
9189	70.11%	868	20848	
8923	71.21%	952	22851	Avg of COD after Biomethanation 01/12/24 to 31/12/24
8680	72.83%	972	23348	1471899/31
8320	73.53%	931	22347	= 47480
8020	74.28%	961	23072	
7690	75.38%	1054	25305	Avg of BOD after Biomethanation 01/12/24 to 31/12/24
7130	77.26%	1093	26245	2146727/31
6710	78.34%	1059	25422	=6923
6420	79.11%	1050	25211	
6170	80.03%	1076	25836	COD reduction 67.01%
5790	81.30%	1039	24946	
5430	82.64%	1055	25342	BOD reduction 77.84%
5110	83.61%	1085	26044	
4840	84.58%	1137	27289	
4470	85.71%	1140	27369	Avg of Biogas Production in Day
4050	86.99%	1141	27396	from 01/12/24 to
3800	87.81%	1140	27362	31/12/24
3790	87.83%	1176	28224	659980/26
3760	87.91%	1159	27830	=25345
3780	87.80%	1143	27447	
3150	87.80%	1160	27849	
3720	87.99%	1148	27564	
3760	87.92%	1130	27121	

Sugar Mills Ltd. BARSAR

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Annexure-8

Rai Bahadur Narain Singh Sugar Mills Ltd. (Distillery Division)
Laksar, Haridwar, Uttarakhand

OLD PLANT

Designed Technical Specifications of 6 Stage- Old Plant Multi Effect Evaporator (MEE)

S.No.	Particulars	Type	HTA (M^2)	OD of tubes (mm)	Length of tubes (mm)	Thickness of tubes (mm)	Thickness of shell (mm)
1	Falling Film Evaporator- 1	Falling Film	250	50.8	12000	1.2	4
2	Falling Film Evaporator- 2	Falling Film	250	50.8	12000	1.2	5
3	Falling Film Evaporator- 3	Falling Film	250	50.8	12000	1.2	5
4	Falling Film Evaporator- 4	Falling Film	250	50.8	12000	1.2	5
5	Forced Circulation Evaporator- 1	Forced Circulation	264	38.1	9000	1.6	5
6	Forced Circulation Evaporator- 2	Forced Circulation	264	38.1	9000	1.6	5
7	Surface Condenser		220	50.8	12000	1.2	5
8	Preheater-1		35	50.8	12000	1.2	5
9	Preheater-2		35	50.8	12000	1.2	5

RBNS SUGAR MILL LTD.
MEE

Date	Feed to MEE (Kg.)	Feed Brix	MEE Outlet (Kg.)	Brix Outlet
01/02/2024	305878	11.5	90570	37.5
02/02/2024	304295	11.0	90123	37.0
03/02/2024	305879	10.5	90203	36.5
04/02/2024	306026	11.0	89826	37.0
05/02/2024	302928	11.0	89606	37.0
06/02/2024	304992	11.5	90716	37.5
07/02/2024	304751	11.0	90532	37.0
08/02/2024	303549	11.0	89667	37.0
09/02/2024	305363	11.0	90389	37.0
10/02/2024	307612	11.5	91729	37.5
11/02/2024	310195	11.5	93027	37.5
12/02/2024	311546	11.0	92778	37.0
13/02/2024	310395	11.0	92466	37.0
14/02/2024	310998	10.5	92490	36.5
15/02/2024	310745	11.0	92942	37.0
16/02/2024	315455	11.0	94037	37.0
17/02/2024	313249	11.5	93003	37.5
18/02/2024	312142	11.5	92737	37.5
19/02/2024	311546	11.0	92466	37.0
20/02/2024	310548	11.0	91891	37.0
21/02/2024	310006	10.5	91916	36.5
22/02/2024	310615	11.0	92314	37.0
23/02/2024	309996	11.0	91957	37.0
24/02/2024	323996	11.5	96521	37.5
25/02/2024	323104	11.5	96349	37.5
26/02/2024	322169	11.5	95845	37.5
27/02/2024	478948	11.5	140336	37.5
28/02/2024	478402	11.5	140745	37.5
29/02/2024	478258	11.0	140133	37.0

LAKSAR, DISTILLERY DIVISION
PERFORMANCE

Process Condensate (Kg.)	Working Efficiency	Remarks
215308	70.39%	Average of feed to MEE
214552	70.41%	from 01/02/24 to 29/02/2024
215676	70.51%	RSC = 86/29
212180	70.49%	= 327599
213322	70.42%	
216276	70.45%	Average of MEE Outlet
215219	70.39%	from 01/02/24 to 29/02/2024
213987	70.47%	2817265/29
214964	70.41%	= 97147
215883	70.18%	
217168	70.01%	Average of Process Condo
218767	70.21%	consate from 01/02/2024
217929	70.21%	to 29/02/2024
218508	70.26%	6682821/29
217802	70.09%	= 230442
221418	70.19%	
220246	70.31%	Working Efficiency
219405	70.29%	
219080	70.32%	70.34%
218657	70.41%	
218090	70.35%	
218301	70.28%	
217039	70.24%	
227375	70.20%	
226755	70.18%	
226324	70.25%	
337812	70.55%	Manish Rathi
337657	70.58%	DGM (Distillery)
337125	70.49%	RBNS Sugar Mills Laksar

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Annexure-9

RBNS SUGAR MILL LTD.

MEE

Date	Feed to MEE (Kg.)	Feed Brix	MEE Outlet (Kg.)	Brix Outlet
01/03/2024	478415	11.0	140366	37.0
02/03/2024	478795	11.0	141148	37.0
03/03/2024	478699	11.0	141599	37.0
04/03/2024	477989	11.5	140719	37.5
05/03/2024	474996	11.5	139363	37.5
06/03/2024	299116	11.0	88418	37.0
07/03/2024	317649	11.0	94055	37.0
08/03/2024	299241	10.5	88934	36.5
09/03/2024	327997	11.0	97677	37.0
10/03/2024	322902	11.0	95934	37.0
11/03/2024	312151	11.0	92999	37.0
12/03/2024	313996	11.5	93602	37.5
13/03/2024	313548	11.5	92935	37.5
14/03/2024	316139	11.0	93544	37.0
15/03/2024	314523	11.0	93684	37.0
16/03/2024	311996	11.0	92319	37.0
17/03/2024	313159	10.5	92350	36.5
18/03/2024	316963	10.5	93630	36.5
19/03/2024	287143	11.0	85338	37.0
20/03/2024	292989	11.0	86841	37.0
21/03/2024	287459	11.5	85116	37.5
22/03/2024	305139	11.5	90473	37.5
23/03/2024	274493	11.0	81496	37.0
24/03/2024	274882	11.0	81694	37.0
25/03/2024	274998	10.5	81344	36.5
26/03/2024	274995	11.0	81508	37.0
27/03/2024	274635	11.5	81616	37.5
28/03/2024	294299	11.5	83981	37.5
29/03/2024	239178	11.5	71107	37.5
30/03/2024	242148	11.5	71961	37.5

LAKSAR, DISTILLERY DIVISION

PERFORMANCE

Process Condensate (Kg.)	Working Efficiency	Remarks
338049	70.66%	Avg of feed to MEE
337647	70.52%	01/03/2024 to 31/03/2024
337160	70.42%	10023173/31
337270	70.56%	= 323330
335633	70.66%	
210698	70.44%	Avg. of MEE Outlet
223593	70.38%	01/03/2024 to 31/03/2024
210307	70.28%	2967777/31
230320	70.22%	= 95734
226968	70.29%	
219162	70.21%	Avg of Process Condens-
220394	70.19%	-ate from
220613	70.36%	01/03/2024 to 31/03/2024
222593	70.41%	
220859	70.22%	7055396/31
219677	70.41%	= 227593
220809	70.51%	
223333	70.46%	Working Efficiency
201805	70.28%	
206148	70.35%	70.39%
202343	70.39%	
214666	70.35%	
192997	70.31%	
193188	70.28%	
193654	70.42%	
193487	70.36%	Manish Rathi
192959	70.26	DGM (Distillery)
200318	70.46%	RBNS Sugar Mills Laksar
168071	70.27%	
170182	70.28%	

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RBNS SUGAR MILL B.D.

MEE

Date	Feed to MEE (Kg.)	Feed Brix	MEE Outlet (Kg.)	Brix Outlet
01/12/2024	85398	10.5	90023	36.5
02/12/2024	309862	11.0	96181	37.0
03/12/2024	321118	11.0	96633	37.0
04/12/2024	275832	11.0	82124	37.0
05/12/2024	274849	11.0	81586	37.0
06/12/2024	276209	11.5	82641	37.5
07/12/2024	296994	11.5	88652	37.5
08/12/2024	293138	11.0	87912	37.0
09/12/2024	290883	11.0	87497	37.0
10/12/2024	298149	11.0	88818	37.0
11/12/2024	225595	11.5	82458	37.5
12/12/2024	272769	11.0	81448	37.0
13/12/2024	298299	10.5	88564	36.5
14/12/2024	298996	11.0	89160	37.0
15/12/2024	286518	10.5	85640	36.5
16/12/2024	284595	10.5	84980	36.5
17/12/2024	286996	11.0	84635	37.0
18/12/2024	276295	11.0	82114	37.0
19/12/2024	278546	10.5	82701	36.5
20/12/2024	282175	10.5	84116	36.5
21/12/2024	292918	11.0	87260	37.0
22/12/2024	293995	11.0	87619	37.0
23/12/2024	291744	11.0	87260	37.0
24/12/2024	297898	11.5	88116	37.5
25/12/2024	299385	11.5	88947	37.5
26/12/2024	302905	11.5	89639	37.5
27/12/2024	299105	11.0	89043	37.0
28/12/2024	300059	11.0	89477	37.0
29/12/2024	299435	10.5	89081	36.5
30/12/2024	299559	11.0	88998	37.0

LAKSAR, D.STILLERY DIVISION

PERFORMANCE

Process Condensate (Kg.)	Working Efficiency	Remarks
56375	65.25%	Average of feed to MEE
213691	68.96%	from 01/12/2024 to 31/12/24
224515	69.91%	2083920/31
192908	70.14%	= 285094
192563	70.24%	
193547	70.07%	Average of MEE Outlet
208342	70.15%	from 01/12/2024 to 31/12/2024
205226	70.01%	2642795/31
203386	69.92%	= 85251
209331	70.21%	
193137	70.08%	Average of Process Conde-
191321	70.14%	-nsate from 01/12/2024
209735	70.31%	to 31/12/2024
209836	70.18%	6195125/31
200878	70.11%	= 199842
199615	70.14%	
202361	70.51%	Working Efficiency
194181	70.28%	
195845	70.30%	70.09%
198059	7019%	
205658	70.21%	
206326	70.18%	
204484	70.09%	
209780	70.42%	
210438	70.29%	
211266	70.21%	
210067	70.23%	
210582	70.18%	
210354	70.25%	
210561	70.29%	

RBNS Sugar Mills Ltd. LAKSAR

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Annexure-10

Rai Bahadur Narain Singh Sugar Mills Ltd. (Distillery Division)
Laksar, Haridwar, Uttarakhand

NEW PLANT

Designed Technical Specifications of 3 Stage- Integrated Multi Effect Evaporator (MEE)

S.No.	Particulars	Type	HTA (M^2)	OD of tubes (mm)	Length of tubes (mm)	Thickness of tubes (mm)	Thickness of shell (mm)
1	Falling Film Evaporator- 1	Falling Film	410	50.8	12000	1.2	4
2	Falling Film Evaporator- 2	Falling Film	410	50.8	12000	1.2	5
3	Falling Film Evaporator- 3	Falling Film	300	50.8	12000	1.2	5
4	Surface Condenser		185	50.8	12000	1.2	5

Designed Technical Specifications of 4 Stage- Standalone Multi Effect Evaporator (MEE)

S.No.	Particulars	Type	HTA (M^2)	OD of tubes (mm)	Length of tubes (mm)	Thickness of tubes (mm)	Thickness of shell (mm)
1	Falling Film Evaporator- 1	Falling Film	450	50.8	9000	1.2	4
2	Falling Film Evaporator- 2	Falling Film	450	50.8	9000	1.2	5
3	Forced Circulation Evaporator- 1	Forced Circulation	650	38.1	9000	1.6	5
4	Forced Circulation Evaporator- 2	Forced Circulation	650	38.1	9000	1.6	5
5	Surface Condenser		275	50.8	12000	1.2	5

RBNS SUGAR MILLS LTD. — LAKSAR DISTILLERY DIVISION

MEE PERFORMANCE

Date	Feed to MEE (Kg.)	Feed Brix	MEE Outlet (Kg.)	Brix Outlet	Process Condensate (Kg.)	Working Efficiency	Remarks
01/02/2024	308429	11.5	91678	38.5	215761	70.18%	Avg of feed to MEE
02/02/2024	308112	11.0	91663	38.0	216449	70.25%	from 01/02/24 to 26/02/24
03/02/2024	310153	10.5	92355	37.5	218398	70.28%	8141882/26
04/02/2024	309451	11.0	91914	38.0	217637	70.33%	= 312149
05/02/2024	309012	11.0	91230	38.0	216772	70.38%	
06/02/2024	304563	11.5	90272	38.5	214291	70.36%	Avg of MEE Outlet from
07/02/2024	305113	11.0	90709	38.0	214403	70.27%	01/02/24 to 26/02/24
08/02/2024	310008	11.0	92387	38.0	217628	70.20%	2418874/26
09/02/2024	309127	11.0	92149	38.0	216973	70.19%	= 93033
10/02/2024	314149	11.5	93553	38.5	220596	70.22%	
11/02/2024	312245	11.5	92674	38.5	219571	70.32%	Avg of Forexx Condensate
12/02/2024	311095	11.0	92115	38.0	218980	70.39%	01/02/24 to 26/02/24
13/02/2024	315453	11.0	93638	38.0	221814	70.31%	= 723008/26
14/02/2024	316549	10.5	93888	37.5	222661	70.34%	= 220115
15/02/2024	318309	11.0	94574	38.0	223753	70.29%	
16/02/2024	323146	11.0	96103	38.0	227043	70.26%	Working Efficiency
17/02/2024	316989	11.5	94209	38.5	222780	70.28%	
18/02/2024	315006	11.5	93463	38.5	221544	70.33%	70.29%
19/02/2024	311546	11.0	93398	38.0	221158	70.31%	
20/02/2024	311679	11.0	92568	38.0	219111	70.30%	
21/02/2024	309998	10.5	92162	37.5	217836	70.27%	
22/02/2024	309996	11.0	92192	38.0	217804	70.26%	
23/02/2024	309352	11.0	90186	38.0	213166	70.27%	
24/02/2024	325146	11.5	96503	38.5	228643	70.32%	Manish Rathi
25/02/2024	324996	11.5	96526	38.5	228370	70.29%	DGM (Distillery)
26/02/2024	326749	11.5	96881	38.5	229868	70.35%	RBNS Sugar Mills Laksar
27/02/2024							
28/02/2024							
29/02/2024							

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Annexure-II

RBNS SUGAR MILL LTD. — LAKSAR DISTILLERY DIVISION

MEE

Date	Feed to MEE (Kg.)	Feed Brix	MEE Outlet (Kg.)	Brix Outlet
01/03/2024				
02/03/2024				
03/03/2024				
04/03/2024				
05/03/2024				
06/03/2024	275164	11.0	81650	38.0
07/03/2024	315996	11.0	93914	38.0
08/03/2024	299971	10.5	89421	37.5
09/03/2024	313632	11.0	93023	38.0
10/03/2024	311144	11.0	92596	38.0
11/03/2024	312145	11.0	92769	38.0
12/03/2024	312998	11.5	93148	39.5
13/03/2024	313105	11.5	93023	38.5
14/03/2024	314387	11.0	93121	38.0
15/03/2024	310995	11.0	92303	38.0
16/03/2024	315359	11.0	93535	38.0
17/03/2024	312597	10.5	92716	37.5
18/03/2024	312246	10.5	92705	37.5
19/03/2024	285910	11.0	85097	38.0
20/03/2024	287359	11.0	85029	38.0
21/03/2024	285746	11.5	84895	38.5
22/03/2024	305059	11.5	90633	38.5
23/03/2024	264188	11.0	78569	38.0
24/03/2024	263245M	11.0	78078	38.0
25/03/2024	264224	10.5	78633	37.5
26/03/2024	266298	11.0	78797	38.0
27/03/2024	265246	11.5	78565	38.5
28/03/2024	284305	11.5	84381	38.5
29/03/2024	239225	11.5	70834	38.5
30/03/2024	246845	11.5	73516	38.5
31/03/2024	246635	11.5		

PERFORMANCE

Process Condensate (Kg.)	Working Efficiency	Remarks
		Avg. of feed to MEE 01/03/2024 to 31/03/2024
		7524955/26
		= 289421
193454	70.32%	Avg. of Outlet from
222082	70.28%	MEE from
210550	70.19%	01/03/2024 to 31/03/2024
220609	70.34%	2233973/26
218548	70.24%	= 85922
219376	70.28%	
219850	70.24%	Process Condensate
220082	70.29%	from 01/03/2024 to
221266	70.38%	31/03/2024
218692	70.32%	5390982/26
221824	70.34%	= 207345
219881	70.34%	
219541	70.31%	Working Efficiency
201813	70.34%	
202330	70.41%	71.64%
200851	70.29%	
214426	70.29%	
185619	70.26%	
185167	70.34%	
185591	70.24%	
187501	70.41%	Manish Rathi DGM (Distillery) RBNS Sugar Mills Laksar
186681	70.38%	
199924	70.32%	
168391	70.39%	
173335	70.21%	
	70.39%	

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MEE PERFORMANCE

Date	Feed to MEE (Kg.)	Feed Brix	MEE Outlet (Kg.)	Brix Outlet	Process Condensate (Kg.)	Working Efficiency	Remarks
01/12/2024	238149	10.5	71916	37.0	167333	69.97%	
02/12/2024	238598	11.0	71256	37.5	168342	70.26%	Average of feed to MEE from 01/12/2024 to 31/12/2024
03/12/2024	238185	11.0	71396	37.5	167709	70.14%	
04/12/2024	237269	11.0	71866	37.5	191843	70.09%	8935020/31
05/12/2024	232149	11.0	71236	37.5	190913	70.15%	= 285010
06/12/2024	236255	11.5	72213	38.0	190042	6979%	
07/12/2024	239159	11.5	72747	38.0	206912	70.34%	
08/12/2024	293791	11.0	73580	37.5	206412	70.21%	Average cost out put of MEE from 01/12/2024 to 31/12/2024
09/12/2024	296911	11.0	73509	37.5	208302	70.18%	
10/12/2024	295490	11.0	73117	37.5	207301	70.18%	2632020/31
11/12/2024	275891	11.5	72326	38.0	193566	70.16%	= 94903
12/12/2024	274978	11.0	72246	37.5	192732	7008%	
13/12/2024	298472	10.5	73885	37.0	209508	70.22%	Average of Process Condensate to form
14/12/2024	299129	11.0	73170	37.5	209959	70.19%	
15/12/2024	285591	10.5	75020	37.0	200571	7023%	01/12/2024 to 31/12/2024
16/12/2024	288192	10.5	75794	37.0	202398	70.23%	6203000/31
17/12/2024	295143	11.0	75214	37.5	199829	7008%	= 200096
18/12/2024	299259	11.0	73191	37.5	196068	7021%	
19/12/2024	298975	10.5	72883	37.0	196092	70.29%	Working Efficiency
20/12/2024	298892	10.5	72661	37.0	196031	70.33%	
21/12/2024	293991	11.0	77527	837.5	205464	70.22%	70.20%
22/12/2024	292149	11.0	76826	37.5	205323	70.28%	
23/12/2024	291983	11.0	77308	37.5	204675	70.09%	
24/12/2024	298298	11.5	78803	38.0	209495	70.23%	
25/12/2024	296149	11.5	78222	38.0	207926	70.21%	
26/12/2024	300494	11.5	79303	38.0	211181	70.28%	
27/12/2024	300156	11.0	78116	37.5	211040	70.31%	
28/12/2024	298055	11.0	78716	37.5	209295	70.22%	
29/12/2024	299913	10.5	79193	37.0	210719	70.26%	
30/12/2024	298749	11.0	78967	37.5	209782	70.22%	
31/12/2024	300346	11.5	79172	38.0	211134	70.31%	

Sugar Mills LAKSAR

1691

Annexure-12

Exempted 3719 2812 3365

Rai Bahadur Narain Singh Sugar Mills Ltd.,Laksar ,Distt. Haridwar
(Distillery Division)
Govt. of India/State Deptt. of GST of Uttarakhand
GST Invoice as per Rule 46 of CGST Rules 2017

Original for Buyer
Duplicate for Transporter
Triplicate for Supplier

GSTIN : 05AAACR0924M1ZH
CIN : U74899DL1932PLC000298
PAN No. AAACR0924M
TAN No. MRTR00841D
Address : Laksar-24/663,Uttarakhand

Invoice No. 2425PWD031100136
Details of Receiver (Billed To)
Code: 0702070001020S
CMSORGANIX PRIVATE LIMITED
BASEDI ROAD MUKTI DHAM LAKSAR
NEAR HOLLY ANGEL SCHOOL LAKSAR
LAKSAR
State Code : 05
State Name : UTTARAKHAND
GSTIN/UIN : 05AALCC3653K1ZH
PAN : AALCC3653K
Place of Supply : UTTARAKHAND

Invoice Dt : 28/01/2025
Details of Consignee (Delivered To)
Code: 0702070001020S
CMSORGANIX PRIVATE LIMITED
BASEDI ROAD MUKTI DHAM LAKSAR
NEAR HOLLY ANGEL SCHOOL LAKSAR
LAKSAR
State Code : 05
State Name : UTTARAKHAND
GSTIN/UIN : 05AALCC3653K1ZH

Description	Unit	Quantity	Rate(Rs.)	Amount(Rs.)
Distilling Waste-Bio Methanated Powder (5%) (2303)	KG	10050	2.5	25125.00
Packing Charges	BAGS	358	9.00	3222.00

HSN Code : 23033000

Freight	0.00
Taxable Value	28347.00
CGST @2.5 %	708.68
SGST @2.5 %	708.68

1.Payment Detail :
2.Sale Advice No. :
3.O.O./LOI/P.O. No.:
4.Permit No. :
5.Tender No. :
6.Mode of Transport: By Road
7.Vehicle No. : UK08CB-4152

TCS @0 %	0.00
Total Amount	29764.36
Total Amount(Round off)	29764.00

Rs. Twenty-Nine Thousand Seven Hundred Sixty-Four Only

Certified that the particulars given above are true & correct & the amount indicated represents the Price actually charged and that there is no flow of additional consideration directly or indirectly from the buyer.

For. Rai Bahadur Narain Singh Sugar Mills Ltd.

Prepared & Checked By
Place - Laksar

Signature of Assesse / Authorised Signatory

Eway bill 3419 2875 2933

Rai Bahadur Narain Singh Sugar Mills Ltd.,Laksar ,Distt. Haridwar
(Distillery Division)
Govt. of India/State Deptt. of GST of Uttarakhand
GST Invoice as per Rule 46 of CGST Rules 2017

Original for Buyer
Duplicate for Transporter
Triplicate for Supplier

GSTIN : 05AABCR0924M1ZH
CIN : U74899DL1932PLC000298
PAN No. AABCR0924M
TAN No. MRTR008418
Address : Laksar-247663,Uttarakhand

Invoice No. 2425PWD031100137
Invoice Dt : 29/01/2025

Details of Receiver(Billed To)
Code: 07020/000101/5
M/S GREEN LAND AGRI MARKETING INDIA PRI
KHASRA NO 457 MEERUT ROAD
BEGRAJPUR MUZAFFARNAGAR
MUZAFFAR NAGAR
State Code : 09
State Name : UTTAR PRADESH
GSTIN/UIN : 09AADCG7571Q1ZS
PAN : AADCG7571Q
Place of Supply : UTTAR PRADESH

Details of Consignee(Delivered To)
Code: 07020/000101/5
M/S GREEN LAND AGRI MARKETING INDIA PRI
KHASRA NO 457 MEERUT ROAD
BEGRAJPUR MUZAFFARNAGAR
MUZAFFAR NAGAR
State Code : 09
State Name : UTTAR PRADESH
GSTIN/UIN : 09AADCG7571Q1ZS

Description	Unit	Quantity	Rate(Rs.)	Amount(Rs.)
Distilling Waste-Bio Methanated Powder (5%) (2303)	KG	15790	2.5	39475.00
Packing Charges	BAGS	563	9.00	5067.00

HSN Code : 23033000

Freight	0.00
Taxable Value	44542.00
IGST @5 %	2227.10

1.Payment Detail :
2.Sale Advice No. :
3.P.O./LOI/P.O. No.:
4.Permit No. :
5.Tender No. :
6.Mode of Transport: By Road
7.Vehicle No. : UP21AT-5677

TCS @0 %	0.00
Total Amount	46769.10
Total Amount(Round off)	46769.00

Rs. Forty-Six Thousand Seven Hundred Sixty-Nine Only

Certified that the particulars given above are true & correct & the amount indicated represents the Price actually charged and that there is no flow of additional consideration directly or indirectly from the buyer.

Prepared & Checked By
Place - Laksar

For. Rai Bahadur Narain Singh Sugar Mills Ltd.

Signature of Assesse / Authorised Signatory

"ai Bahadur Narain Singh Sugar Mills Ltd.,Laksar ,Distt. Haridwar
(Distillery Division)
Govt. of India/State Deptt. of GST of Uttarakhand
GST Invoice as per Rule 46 of CGST Rules 2017

GSTIN : 05AAACR0924M1ZH
CIN : U74899DL1932PLC000298
PAN No. AAACR0924M
TAN No. MRTR00841B
Address : Laksar-247663,Uttarakhand

Original for Buyer
Duplicate for Transporter
Triplicate for Supplier

Invoice No. 2425PWR033100001
Details of Receiver(Billed To)
Code: 07020700010214
FARMER SALE BHUMI POWER POTASH
LAKSAR HARIDWAR U.K.

LAKSAR
State Code : 05
State Name : UTTARAKHAND
GSTIN/UIN :
PAN :
Place of Supply : UTTARAKHAND

Invoice Dt : 31/01/2025
Details of Consignee(Delivered To)
Code: 07020700010214
FARMER SALE BHUMI POWER POTASH
LAKSAR HARIDWAR U.K.

LAKSAR
State Code : 05
State Name : UTTARAKHAND
GSTIN/UIN :

Description	Unit	Quantity	Rate(Rs.)	Amount(Rs.)
Potash drived from Molasses(Bhumi Power Potash)	BAG	3848	333.33	1282653.84

HSN Code : 31010099

Freight	0.00
Taxable Value	1282653.84
CGST @2.5 %	32066.35
SGST @2.5 %	32066.35

1. Payment Detail :
2. Sale Advice No. :
3. D.O./LOI/P.O. No. :
4. Permit No. :
5. Tender No. :
6. Mode of Transport: By Road
7. Vehicle No. : TROLLY

TCS @0 %	0.00
Total Amount	1346786.54
Total Amount(Round off)	1346787.00

Rs. Thirteen Lakh Forty-Six Thousand Seven Hundred Eighty-Seven Only

Certified that the particulars given above are true & correct & the amount indicated represents the Price actually charged and that there is no flow of additional consideration directly or indirectly from the buyer.

For. Rai Bahadur Narain Singh Sugar Mills Ltd

Prepared & Checked By
Place - Laksar

Signature of Assesse / Authorised Signatory

Annexure-13

RAJ BAHADUR NARAIN SINGH SUGAR MILLS LTD. LAKSAR (DISTT. HARIDWAR)

Date	Mee Feed	Brix of Mee Feed	Mee Outlet	Brix of Mee Outlet	Feed in Dryer	Rest to Biocompost	Powder Production of Dryer	Opening Balance of Production	Sale of Powder	Closing Balance of Production	Remark
01/02/2024	613317	11.5	182248	38.5	182248		71597	159931	61022 F	170506	
02/02/2024	612797	11.0	181786	38.0	181786		70488	170506	64518 F	176476	Avg. of MEE Feed
03/02/2024	616632	10.5	182558	37.5	182558		69856	176476	64934 F	181398	01/02/24 to 29/02/24
04/02/2024	610457	11.0	180640	38.0	180640		70044	181398	67140 F	184302	17641960/29
05/02/2024	610930	11.0	180836	38.0	180836		70120	184302	62012 F	192410	= 608343
06/02/2024	611555	11.5	180988	38.5	180988		71102	192410	60992 F	202520	Avg. of MEE Outlet
07/02/2024	610863	11.0	181241	38.0	181241		70277	202520	61824 F 10910 T	200063	01/02/24 to 29/02/24
08/02/2024	613657	11.0	182649	38.0	182649		70823	200063	60550 F 17970 T	192366	5236139/29
09/02/2024	614425	11.0	182488	38.0	182488		70760	192366	64774 F 9960 T	188392	= 180556
10/02/2024	621761	11.5	185282	38.5	185282		73162	188392	60154 F 10220 T	191180	Avg. of Powder
11/02/2024	622440	11.5	185701	38.5	185701		72953	191180	60092 F 10920 T	193121	Production
12/02/2024	622641	11.0	184893	38.0	184893		71693	193121	62618 F 9950 T	192246	01/02/24 to 29/02/24
13/02/2024	625847	11.0	186104	38.0	186104		72532	192246	61340 F	202438	2038812/29
14/02/2024	627547	10.5	186378	37.5	186378		71318	202438	64031 F	210725	= 70305 Kg.
15/02/2024	629072	11.0	187517	38.0	187517		73083	210725	62726 F	221082	
16/02/2024	638601	11.0	190140	38.0	190140		73727	221082	62934 F	231875	Sale for Indus-
17/02/2024	630238	11.5	187212	38.5	187212		73547	231875	63610 F	241812	tries use
18/02/2024	627148	11.5	186199	38.5	186199		73149	241812	65802 F	249159	901160 Kg
19/02/2024	626092	11.0	185854	38.0	185854		72065	249159	63688 F	257536	
20/02/2024	622227	11.0	184459	38.0	184459		71524	257536	63230 F	265830	Sale for Farmers
21/02/2024	620004	10.5	184078	37.5	184078		70438	265830	63802 F 9080 T	263386	2029628 Kg
22/02/2024	620611	11.0	184506	38.0	184506		71543	263386	61508 F	273421	
23/02/2024	617348	11.0	182143	38.0	182143		70626	273421	62576 F	281471	
24/02/2024	649042	11.5	193024	38.5	193024		75445	281471	65132 F 10000 T	281784	Sale for Industry
25/02/2024	648000	11.5	192875	38.5	192875		76553	281784	106834 F	251503	98760 Kg.
26/02/2024	648910	11.5	192726	38.5	192726		76494	251503	107066 F	220931	[signature]
27/02/2024	478148	11.5	140336	37.5	140336		54253	220931	116243 F	158941	
28/02/2024	478402	11.5	140745	37.5	140745		54411	158941	106054 F	107298	
29/02/2024	478258	11.0	141133	37.0	141133		55289	107298	82418 F 9750 T	70419	

Manish Rathi
DGM (Distillery)
RBNS Sugar Mills Laksar

RAI BAHADUR NARAIN SINGH SUGAR MILLS LTD. LAKSAR (DISTT. HARIDWAR)

Date	Mee Feed	Brix of Mee Feed	Mee Outlet	Brix of Mee Outlet	Feed in Dryer	Rest to Biocompost	Powder Production of Dryer	Opening Balance of Production	Sale of Powder	Closing Balance of Production	Remark
01/03/2024	478415	11.0	140366	37.0	140366		53541	70419	55638f	68322	Agg of Feed Mee
02/03/2024	478795	11.0	141148	37.0	141148		53839	68322	55634f	66527	01/03/24 to 31/03/24
03/03/2024	478699	11.0	141599	37.0	141599		54011	66527	55498f	65940	17549129/31
04/03/2024	477989	11.5	140719	37.5	140719		54401	65940	55470f	64871	= 566069
05/03/2024	474996	11.5	139363	37.5	139363		53877	64871	55368f	63380	Agg of Mee outlet
06/03/2024	574326	11.0	170068	38.0	170068		66624	63380	95214 f	34790	01/03/24 to 31/03/2024
07/03/2024	633645	11.0	187969	38.0	187969		73637	34790	94338 f 9870 [illegible]	4219	5201750/31
08/03/2024	594212	10.5	178355	37.5	229231		88620	4219	104924f	—	= 167799
09/03/2024	641629	11.0	190700	38.0	244743		94418	—	92754f	1664	Agg of Feed in Dryer
10/03/2024	634046	11.0	188530	38.0	243249		95293	1664	91348f	5609	01/03/24 to 31/03/24
11/03/2024	624296	11.0	185758	38.0	244192		95662	5609	96580	4691	6781645/31
12/03/2024	626994	11.5	186750	38.5	244073		97195	4691	93230f	19106	= 218762
13/03/2024	626653	11.5	185958	38.5	244755		97145	19106	79912f	36339	Agg of Powder Prodn
14/03/2024	620524	11.0	186665	38.0	244543		95800	36339	83931f	48208	01/03/24 to 31/03/24
15/03/2024	625510	11.0	185967	38.0	244456		95766	48208	82802f	61172	2705534/31
16/03/2024	627355	11.0	185954	38.0	244218		95673	61172	91850f	64995	= 87276
17/03/2024	625756	10.5	185066	37.5	244303		94447	64995	81510f	77932	
18/03/2024	629209	10.5	186335	37.5	244146		94386	77932	90894f	81424	Sale of Powder
19/03/2024	574053	11.0	170435	38.0	244743		95682	81424	85088f	92018	for Industrial
20/03/2024	580348	11.0	171870	38.0	243948		95567	92018	74424f	113161	use
21/03/2024	573205	11.5	170011	38.5	244151		96905	113161	84162f	125904	@ 200 kg
22/03/2024	610198	11.5	181106	38.5	244302		96965	125904	85764f	137105	
23/03/2024	538681	11.0	160065	38.0	244188		95661	137105	84992f	147774	Sale of Powder
24/03/2024	539127	11.0	159712	38.0	244283		95698	147774	84396f	159076	for Commerce
25/03/2024	539222	10.5	159977	37.5	244146		94386	159076	85328f	168094	2542692
26/03/2024	541293	11.0	160305	38.0	244085		95620	168094	84918f	178796	kg
27/03/2024	539881	11.5	160241	38.5	244133		96898	178796	92964 f 10090 I	182640	[signature]
28/03/2024	548604	11.5	168362	38.5	244249		96944	182640	84970 f 10190 I	184424	
29/03/2024	478407	11.5	141941	38.5	244176		96915	184424	87890 f	193449	Manish Rathi DGM (Distillery) RBNS Sugar Mills Laksar
30/03/2024	488993	11.5	145476	38.5	244473		97033	193449	88204 f 10000 I	192278	
31/03/2024	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	

RAI BAHADUR NARAIN SINGH SUGAR MILLS LTD. LAKSAR (DISTT. HARIDWAR)

Date	Mee Feed	Brix of Mee Feed	Mee Outlet	Brix of Mee Outlet	Feed in Dryer	Send Powder Rest to Biocompost Manure	Powder Production of Dryer	Opening Balance of Production	Sale of Powder	Closing Balance of Production	Remark
01/12/2024	325547	10.5	161839	37.0	161839	—	38845	764838	61546	742137	Avg of MEE Feed
02/12/2024	549460	11.0	167437	37.0	167437	—	63867	742137	61608	744396	01/12/24 to 31/12/24
03/12/2024	560253	11.0	168029	37.5	168029	—	64626	744396	63132	745890	17672940/31
04/12/2024	548741	11.0	163990	37.5	163898	—	63036	745890	64080	744846	= 570094
05/12/2024	546298	11.0	162822	37.5	162822	—	62623	744846	63596 / 640 I	733413	Avg of MEE Outlet
06/12/2024	552464	11.5	164854	38.0	164854	—	63922	733413	61184	736151	01/12/24 to 31/12/24
07/12/2024	591153	11.5	175899	38.0	175899	—	68205	736151	64182	740174	5274815/31
08/12/2024	587130	11.0	175492	37.5	175492	—	67496	740174	62408	745262	= 170155
09/12/2024	587694	11.0	176006	37.5	176006	—	67694	745262	66588	746368	Avg. Feed in
10/12/2024	593647	11.0	176935	37.5	176935	—	68051	746368	60822	753597	Dryer 01/12/24
11/12/2024	551487	11.5	164784	38.0	164784	—	63895	753597	60459	757033	to 31/12/24
12/12/2024	547747	11.0	163694	37.5	163694	—	62959	759033	61705	758287	5274815/31
13/12/2024	596772	10.5	177449	37.0	177449	—	67684	758287	66028 / 17210 I	742735	= 170155
14/12/2024	598125	11.0	178330	37.5	178330	—	68588	742735	63766	747557	Avg of Powder
15/12/2024	572109	10.5	170660	37.0	170660	—	65097	747557	61538 / 16520 I	734596	Production
16/12/2024	572787	10.5	170774	37.0	170774	—	65140	734596	66896	732840	01/12/24 to 31/12/24
17/12/2024	572139	11.0	169949	37.5	169949	—	65365	732840	61142	737063	2028765/31
18/12/2024	555554	11.0	165305	37.5	165305		63578	737063	62210	738431	= 65444
19/12/2024	557521	10.5	165584	37.0	165584		63166	738431	60172	741419	Avg of [illegible]
20/12/2024	560867	10.5	166777	37.0	166777	2500	63615	741419	26550	775984	[illegible]
21/12/2024	586909	11.0	174787	37.5	174787	3500	61225	775984	61678	778031	[illegible]
22/12/2024	586144	11.0	174495	37.5	174495	5000	67113	778031	61438	778706	
23/12/2024	583727	11.0	174568	37.5	174568	7500	67141	778706	62519 / 9990 I	765839	[illegible]
24/12/2024	596196	11.5	176921	38.0	176921	10000	68602	765839	145254	679187	[illegible]
25/12/2024	595533	11.5	177169	38.0	177169	12500	68698	679187	60230 / 18360 I	656793	Sale for [illegible]
26/12/2024	601389	11.5	178942	38.0	178942	12500	69385	656793	61696	651982	[illegible]
27/12/2024	599261	11.0	178159	37.5	178159	15000	68522	651982	202648	502856	Sale for [illegible]
28/12/2024	599114	11.0	178237	37.5	178237	15000	68552	502856	233660	323348	2505790
29/12/2024	599347	10.5	178274	37.0	178274	12500	69382	323348	269122	109508	
30/12/2024	599308	11.0	177965	37.5	177965	12500	68448	109508	64172 / 27690 I	73594	
31/12/2024	601517	[illegible]	[illegible]	[illegible]	[illegible]	12500	[illegible]	73594	63459	61844	

R.B.N.S. Sugar Mills Ltd. LAKSAR

RAI BAHADUR NARAIN SINGH SUGAR MILL

Date	Initial	Final	Consumption Biocompost	Initial	Final
01/02/2024				54696.046	54778.058
02/02/2024				54778.058	54861.680
03/02/2024				54861.680	54944.623
04/02/2024				54944.623	55025.115
05/02/2024				55025.115	55107.162
06/02/2024				55107.162	55190.585
07/02/2024				55190.585	55273.144
08/02/2024				55273.144	55356.234
09/02/2024				55356.234	55440.259
10/02/2024				55446.259	55526.976
11/02/2024				55526.976	55615.212
12/02/2024				55615.212	55701.724
13/02/2024				55701.724	55790.179
14/02/2024				55790.179	55879.009
15/02/2024				55879.009	55968.280
16/02/2024				55968.280	56059.544
17/02/2024				56059.544	56148.204
18/02/2024				56148.204	56236.288
19/02/2024				56236.288	56324.367
20/02/2024				56324.367	56411.280
21/02/2024				56411.280	56497.569
22/02/2024				56497.569	56583.933
23/02/2024				56583.933	56667.631
24/02/2024				56667.631	56763.013
25/02/2024				56763.013	56856.529
26/02/2024				56856.529	56951.263
27/02/2024				56951.263	57091.599
28/02/2024				57091.599	57232.344
29/02/2024				57232.344	57373.477

LAKSAR, HARIDWAR DISTILLERY DIVISION

Consumption in Old Dryer-1	Initial	Final	Consumption in New Dryer-2	Remarks
82.012	18758.666	18859.902	100.236	
83.622	18859.902	18957.066	99.164	
82.943	18957.066	19056.681	99.615	
80.492	19056.681	19156.829	100.148	
82.047	19156.829	19255.618	98.789	
83.423	19255.618	19353.183	97.565	
82.559	19353.183	19451.865	98.682	
83.090	19451.865	19551.424	99.559	
84.025	19551.424	19649.887	98.463	
86.717	19649.887	19748.452	98.565	
88.236	19748.452	19845.917	97.465	
86.512	19845.917	19944.298	98.381	
88.455	19944.298	20041.947	97.649	
88.830	20041.947	20139.495	97.548	
89.271	20139.495	20237.741	98.246	
91.264	20237.741	20336.617	98.876	
88.660	20336.617	20435.169	98.552	
88.084	20435.169	20533.284	98.115	
88.079	20533.284	20631.059	97.775	
86.913	20631.059	20728.605	97.546	
86.289	20728.605	20826.394	97.789	
86.364	20826.394	20924.536	98.142	
83.698	20924.536	21022.981	98.445	
94.392	21022.981	21121.623	98.642	
94.516	21121.623	21219.982	98.359	
94.734	21219.982	21317.974	97.992	
140.336	New Dryer	Stopped		
140.745	maintenance			
141.133				

Manish Rathi
DGM (Distillery)
RBNS Sugar Mills Laksar

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RAI BAHADUR NARAIN SINGH SUGAR MILL

Date	Initial	Final	Consumption Biocompost	Initial	Final
01/03/2024				57373.477	57513.843
02/03/2024				57513.843	57654.991
03/03/2024				57654.991	57796.59
04/03/2024				57796.59	57937.309
05/03/2024				57937.309	58076.672
06/03/2024				58076.672	58158.837
07/03/2024				58158.837	58247.613
08/03/2024				58247.613	58346.709
09/03/2024				58346.709	58445.817
10/03/2024				58445.817	58544.812
11/03/2024				58544.812	58643.958
12/03/2024				58643.958	58744.742
13/03/2024				58744.742	58844.051
14/03/2024				58844.05	58943.502
15/03/2024				58943.502	59042.654
16/03/2024				59042.654	59141.970
17/03/2024				59141.970	59241.115
18/03/2024				59241.115	59340.213
19/03/2024				59340.213	59439.332
20/03/2024				59439.332	59538.578
21/03/2024				59538.578	59637.686
22/03/2024				59637.686	59736.895
23/03/2024				59736.895	59836.079
24/03/2024				59836.079	59935.235
25/03/2024				59935.235	59934.376
26/03/2024				59934.376	59933.504
27/03/2024				59933.504	60032.622
28/03/2024				60032.622	60131.731
29/03/2024				60131.731	60230.974
30/03/2024				60230.974	60330.419
31/03/2024				60330.419	60429.975

LAKSAR, HARIDWAR DISTILLERY DIVISION

Consumption in Old Dryer-1	Initial	Final	Consumption in New Dryer-2	Remarks
140.366				
141.148				
141.599				
140.719				
139.363				
82.165	21317.974	21405.877	87.903	
88.776	21405.877	21505.070	99.193	
99.096	21505.070	21635.205	130.135	
99.108	21635.205	21780.840	145.635	
98.995	21780.840	22015.094	144.254	
99.146	22015.094	22160.140	145.046	
99.216	22160.140	22305.797	145.657	
99.309	22305.797	22451.243	145.446	
99.451	22451.243	22596.335	145.092	
99.152	22596.335	22741.639	145.304	
99.316	22741.639	22886.541	144.902	
99.145	22886.541	23031.699	145.158	
99.098	23031.699	23179.747	148.048	
99.119	23179.747	23324.871	145.124	
99.246	23324.871	23469.573	144.702	
99.108	23469.573	23614.616	145.043	
99.209	23614.616	23759.709	145.093	
99.184	23759.709	23904.713	145.004	
99.154	23904.713	24049.840	145.127	
99.141	24049.840	24194.845	145.005	
99.128	24194.845	24339.802	144.957	
99.118	24339.802	24484.817	145.015	
99.109	24484.817	24629.957	145.140	
99.248	24629.957	24774.896	144.933	
99.445	24774.896	24919.918	145.028	
99.556	24919.918	25064.689	144.771	

Manish Rathi
DGM (Distillery)
RBNS Sugar Mills Laksar

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RAI BAHADUR NARAIN SINGH SUGAR MILL

Date	Initial	Final	Consumption Biocompost	Initial	Final
01/12/2024				62456.420	62558.277
02/12/2024				62558.277	62725.714
03/12/2024				62725.714	62893.743
04/12/2024				62893.743	63057.638
05/12/2024				63057.638	63220.46
06/12/2024				63220.460	63385.314
07/12/2024				63385.314	63561.213
08/12/2024				63561.213	63736.705
09/12/2024				63736.705	63912.711
10/12/2024				63912.711	63981.961
11/12/2024				63981.961	64047.245
12/12/2024				64047.245	64111.476
13/12/2024				64111.476	64177.297
14/12/2024				64177.297	64245.994
15/12/2024				64245.994	64315.359
16/12/2024				64315.359	64384.313
17/12/2024				64384.313	64452.634
18/12/2024				64452.634	64520.618
19/12/2024				64520.618	64588.742
20/12/2024				64588.742	64657.309
21/12/2024				64657.309	64726.852
22/12/2024				64726.852	64796.976
23/12/2024				64796.976	64867.214
24/12/2024				64867.214	64939.04
25/12/2024				64939.04	65010.298
26/12/2024				65010.298	65081.643
27/12/2024				65081.643	65153.792
28/12/2024				65153.792	65225.684
29/12/2024				65225.684	65297.807
30/12/2024				65297.807	65369.796
31/12/2024				65369.796	65440.461

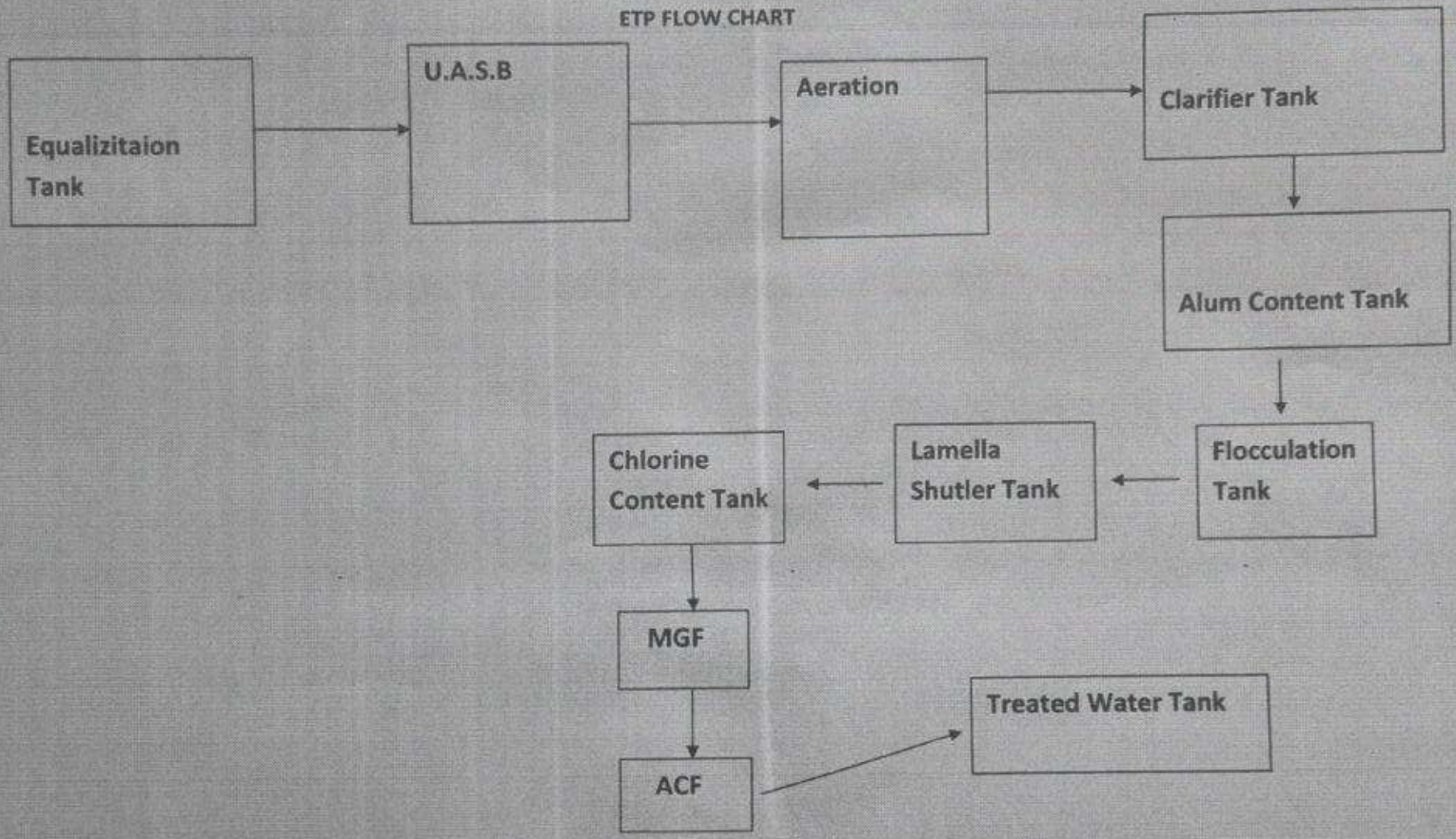
DISTILLERY DIVISION

Consumption in Old Dryer-1	Initial	Final	Consumption in New Dryer-2	Remarks
101.839				
167.437				
168.029				
163.895				
162.822				
164.854				
175.899				
175.492				
176.006				
69.25	27712.602	27820.287	107.685	
65.294	27820.297	27919.787	99.500	
64.231	27919.787	28019.250	99.463	
65.821	28019.250	28130.878	111.628	
60.697	28130.878	28240.511	109.633	
69.365	28240.511	28341.806	101.295	
60.954	28341.806	28443.626	101.820	
69.321	28443.626	28545.254	101.628	
67.984	28545.254	28642.575	97.321	
68.124	28642.575	28740.035	97.460	
68.567	28740.035	28838.245	98.210	
69.543	28838.245	28943.489	105.244	
70.124	28943.489	29047.860	104.371	
70.238	29047.860	29152.190	104.330	
71.826	29152.190	29257.285	105.095	
71.259	29257.285	29363.196	105.911	
71.345	29363.196	29470.793	107.597	
72.149	29470.793	29576.803	106.010	
71.892	29576.803	29683.148	106.345	
72.123	29683.148	29789.299	106.151	
71.989	29789.299	29895.274	105.975	
70.615	29895.274	30003.201	107.927	

1700

R.B.N.S.SUGAR MILLS LAKSAR (HARIDWAR) DISTILLERY DIVISION

ETP FLOW CHART



1701

Annexure-4

RBNS SUGAR MILL LTD, LAKSAR, DISTILLERY DIVISION

CPU PERFORMANCE

Date	Inlet Characteristic					Outlet Characteristic					Tube Well Reading			Energy Consumption			Sugar Mill Condensate		
	Flow	pH	BOD	COD	TDS	Flow	pH	BOD	COD	TDS	Initial	Final	Consumption	Initial	Final	Energy Consumption	Initial	Final	Sugar Mill Condensate
01/02/2024	735	7.98	1070	2310	700	735	7.20	20	100	70	252359	252596	258	191.63	192.04	0.41	34318	34368	50
02/02/2024	729	7.97	1050	2290	700	729	7.18	20	150	70	252596	252855	259	192.04	192.46	0.42	34368	34419	51
03/02/2024	738	7.95	1080	2270	700	738	7.21	20	95	75	252855	253117	262	192.46	192.88	0.42	34419	34468	49
04/02/2024	732	7.96	1060	2250	705	732	7.19	25	95	75	253117	253382	265	192.88	193.31	0.43	34468	34518	50
05/02/2024	739	7.98	1040	2280	705	739	7.17	25	100	70	253382	253638	256	193.31	193.74	0.43	34518	34568	50
06/02/2024	736	7.92	1070	2260	700	736	7.19	20	95	70	253638	253895	257	193.74	194.17	0.43	34568	34617	49
07/02/2024	731	7.94	1030	2290	700	731	7.22	20	100	75	253895	254153	258	194.17	194.61	0.44	34617	34665	48
08/02/2024	728	7.96	1090	2250	695	728	7.20	25	95	70	254153	254413	260	194.61	195.05	0.44	34665	34714	49
09/02/2024	730	7.98	1020	2300	700	730	7.21	20	95	70	254413	254678	265	195.05	195.48	0.43	34714	34763	49
10/02/2024	735	7.96	1040	2260	700	735	7.20	20	95	70	254678	254942	264	195.48	195.91	0.43	34763	34813	50
11/02/2024	739	7.98	1080	2290	700	739	7.18	20	100	75	254942	255204	262	195.91	196.35	0.44	34813	34864	51
12/02/2024	744	7.99	1030	2240	695	744	7.16	25	100	70	255204	255465	261	196.35	196.78	0.43	34864	34914	50
13/02/2024	751	7.98	1070	2280	695	751	7.19	25	100	75	255465	255725	260	196.78	197.21	0.43	34914	34963	49
14/02/2024	758	7.97	1050	2230	700	758	7.22	20	100	70	255725	255990	265	197.21	197.65	0.44	34963	35013	50
15/02/2024	766	7.95	1060	2270	700	766	7.20	20	95	75	255990	256255	265	197.65	198.08	0.43	35013	35064	51
16/02/2024	775	7.94	1080	2220	705	775	7.23	20	95	70	256255	256517	262	198.08	198.51	0.43	35064	35114	50
17/02/2024	780	7.96	1050	2260	705	780	7.21	20	100	70	256517	256777	260	198.51	198.94	0.43	35114	35164	50
18/02/2024	789	7.92	1070	2210	700	789	7.22	25	105	70	256777	257038	261	198.94	199.38	0.44	35164	35215	51
19/02/2024	782	7.95	1090	2250	700	782	7.25	25	105	75	257038	257302	264	199.38	199.82	0.44	35215	35264	49
20/02/2024	776	7.99	1030	2220	700	776	7.22	20	100	70	257302	257565	263	199.82	200.25	0.43	35264	35313	49
21/02/2024	772	7.98	1050	2260	705	772	7.21	20	100	70	257565	257827	262	200.25	200.69	0.44	35313	35353	40
22/02/2024	778	7.92	1040	2230	705	778	7.25	20	105	70	257827	258092	265	200.69	201.13	0.44	35353	35401	48
23/02/2024	762	7.95	1070	2270	700	762	7.22	20	95	75	258092	258351	259	201.13	201.57	0.44	35401	35449	48
24/02/2024	766	7.96	1060	2240	700	766	7.24	25	95	70	258351	258622	271	201.57	202.01	0.44	35449	35498	49
25/02/2024	769	7.92	1080	2280	705	769	7.19	25	100	70	258622	258893	271	202.01	202.44	0.43	35498	35548	50
26/02/2024	773	7.88	1090	2250	700	773	7.21	20	100	75	258893	259165	272	202.44	202.88	0.44	35548	35599	51
27/02/2024	730	7.89	1070	2230	700	730	7.22	20	100	75	259165	259314	149	202.88	203.29	0.41	35599	35649	50
28/02/2024	650	7.91	1050	2260	700	650	7.25	20	100	70	259314	259469	155	203.29	203.69	0.40	35649	35699	50
29/02/2024	630	7.93	1020	2220	700	630	7.22	20	100	70	259469	259621	152	203.69	204.09	0.40	35699	35748	49

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Annexure-15

R.B.N.S. Sugar Mills Ltd. LAKSAR

RBNS SUGAR MILL LTD
CP LAKSAR, DISTILLERY DIVISION
PERFORMANCE

Date	Inlet Characteristic					Outlet Characteristic					Tube Well Reading			Energy Consumption MIA			Sugar Mill Condansate		
	Flow	pH	BOD	COD	TDS	Flow	pH	BOD	COD	TDS	Initial	Final	Consumption	Initial	Final	Energy Consumption	Initial	Final	Sugar Mill Condensate
01/03/2024	635	7.90	1020	2240	700	635	7.20	25	95	70	259621	259774	153	264.09	264.48	0.39	35798	35798	50
02/03/2024	640	7.92	1050	2260	700	640	7.21	25	95	70	259774	259929	155	264.48	264.86	0.38	35798	35947	49
03/03/2024	641	7.95	1030	2540	700	641	7.19	20	100	70	259929	260083	154	264.86	265.25	0.39	35947	35995	48
04/03/2024	639	7.90	1060	2270	700	639	7.22	25	95	70	260083	260241	158	265.25	265.66	0.41	35995	35942	47
05/03/2024	645	7.92	1080	2280	705	645	7.19	25	100	75	260241	260397	156	265.66	266.05	0.39	35942	35988	46
06/03/2024	651	7.98	1060	2240	705	651	7.20	20	100	75	260397	260643	246	266.05	266.46	0.41	35988	36036	48
07/03/2024	745	7.89	1090	2190	700	745	7.22	20	100	70	260643	260909	266	266.46	266.85	0.39	36036	36085	49
08/03/2024	748	7.86	1070	2160	700	748	7.18	20	95	70	260909	261168	259	266.85	267.26	0.41	36085	36135	50
09/03/2024	769	7.89	1020	2090	700	769	7.22	20	95	70	261168	261437	269	267.26	267.65	0.39	36135	36184	49
10/03/2024	771	7.86	1040	2070	695	771	7.20	25	95	70	261437	261703	266	267.65	268.03	0.38	36184	36234	50
11/03/2024	768	7.82	1060	2120	695	768	7.19	25	95	70	261703	261996	263	268.03	268.42	0.39	36234	36283	49
12/03/2024	765	7.80	1080	2090	700	765	7.22	25	95	75	261996	262260	264	268.42	268.83	0.41	36283	36331	48
13/03/2024	762	7.82	1090	2120	700	762	7.21	20	100	75	262260	262521	261	268.83	269.25	0.42	36331	36380	49
14/03/2024	765	7.88	1070	2090	700	765	7.20	20	100	75	262260	262784	263	269.25	269.68	0.43	36380	36430	50
15/03/2024	762	7.86	1090	2140	700	762	7.23	20	100	70	262784	263044	260	269.68	270.10	0.42	36430	36477	47
16/03/2024	766	7.89	1110	2180	705	766	7.22	25	100	75	263044	263306	262	270.10	270.51	0.41			
17/03/2024	768	7.90	1080	2160	700	768	7.21	25	95	75	263306	263571	265	270.51	270.93	0.42			
18/03/2024	762	7.86	1060	2190	695	762	7.19	25	100	70	263571	263833	262	270.93	271.34	0.41			
19/03/2024	728	7.88	1090	2180	695	728	7.22	20	100	70	263833	264074	241	271.34	271.73	0.39			
20/03/2024	725	7.84	1110	2160	700	725	7.20	20	100	70	264074	264315	241	271.73	272.15	0.42			
21/03/2024	732	7.82	1080	2170	700	732	7.18	20	100	75	264315	264558	243	272.15	272.55	0.40			
22/03/2024	710	7.85	1060	2150	700	710	7.22	25	95	75	264558	264812	254	272.55	272.98	0.43			
23/03/2024	690	7.88	1080	2130	705	690	7.19	25	95	70	264812	265037	225	272.98	273.39	0.41			
24/03/2024	658	7.92	1110	2160	700	658	7.21	20	90	70	265037	265262	225	273.39	273.83	0.44			
25/03/2024	665	7.86	1090	2140	700	665	7.22	20	95	70	265262	265485	223	273.83	274.25	0.42			
26/03/2024	665	7.89	1100	2170	705	665	7.18	25	100	75	265485	265708	223	274.25	274.66	0.41			
27/03/2024	660	7.90	1080	2190	700	660	7.20	25	105	75	265708	265933	225	274.66	275.10	0.44			
28/03/2024	650	7.98	1060	2180	700	650	7.22	20	100	70	265933	266166	239	275.10	275.52	0.42			
29/03/2024	648	7.92	1040	2160	700	648	7.18	25	100	70	266166	266365	199	275.52	275.94	0.42			
30/03/2024	631	7.98	1020	2180	700	631	7.16	25	100	70	266365	266566	201	275.94	276.37	0.43			
31/03/2024																			

RBNS Sugar Mills Ltd. LAKSAR

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RBNS SUGAR MILL LTD
LAKSAR, DISTILLERY DIVISION
PERFORMANCE

Date	Inlet Characterstic					Outlet Characterstic				
	Flow	pH	BOD	COD	TDS	Flow	pH	BOD	COD	TDS
01/12/2024	465	7.92	1090	2565	780	465	7.25	25	130	80
02/12/2024	450	7.83	1080	2340	775	450	7.23	25	125	75
03/12/2024	461	7.79	1060	2290	770	461	7.19	25	120	75
04/12/2024	465	7.96	1050	2310	765	465	7.22	20	115	70
05/12/2024	455	7.93	1070	2280	760	455	7.21	20	110	70
06/12/2024	451	7.96	1050	2290	755	451	7.18	20	105	70
07/12/2024	493	7.98	1030	2310	750	493	7.19	25	100	70
08/12/2024	489	7.96	1050	2280	745	489	7.22	20	100	75
09/12/2024	490	7.95	1060	2260	740	490	7.23	25	100	70
10/12/2024	499	7.98	1090	2290	735	499	7.26	25	95	70
11/12/2024	430	7.92	1070	2250	730	430	7.25	25	95	75
12/12/2024	435	7.96	1060	2270	725	435	7.22	20	95	75
13/12/2024	481	7.92	1040	2290	720	481	7.29	20	95	75
14/12/2024	478	7.89	1080	2310	715	478	7.25	20	90	70
15/12/2024	532	7.82	1060	2290	710	532	7.26	20	90	70
16/12/2024	552	7.79	1090	2260	705	552	7.22	25	90	70
17/12/2024	568	7.86	1110	2250	700	568	7.20	25	95	75
18/12/2024	590	7.82	1080	2280	705	590	7.22	20	90	70
19/12/2024	620	7.79	1090	2260	700	620	7.21	25	100	70
20/12/2024	638	7.83	1060	2240	705	638	7.19	20	95	75
21/12/2024	650	7.89	1080	2260	700	650	7.21	20	95	75
22/12/2024	680	7.91	1050	2290	695	680	7.26	20	100	75
23/12/2024	688	7.88	1070	2280	700	688	7.22	20	100	75
24/12/2024	695	7.89	1060	2250	700	695	7.25	25	100	75
25/12/2024	720	7.85	1050	2230	700	720	7.20	20	100	70
26/12/2024	712	7.82	1040	2260	700	712	7.22	25	100	70
27/12/2024	700	7.86	1060	2280	700	700	7.20	25	95	75
28/12/2024	705	7.89	1080	2260	700	705	7.22	25	95	75
29/12/2024	708	7.92	1070	2240	705	708	7.20	20	90	70
30/12/2024	710	7.88	1080	2290	705	710	7.22	20	90	70
31/12/2024	706	7.92	1060	2250	700	706	7.20	20	90	70

Tube Well Reading			Energy Consumption			Sugar Mill Condensate		
Initial	Final	Consumption	Initial	Final	Energy Consumption	Initial	Final	Sugar Mill Condensate
272152	272242	90	240.97	241.42	0.45			
272242	272399	157	241.42	241.88	0.46			
272399	272535	136	241.88	242.33	0.45			
272535	272689	154	242.33	242.78	0.45			
272689	272848	159	242.78	243.24	0.46			
272848	273002	154	243.24	243.70	0.46			
273002	273171	169	243.70	244.17	0.47			
273171	273337	166	244.17	244.64	0.47	36477	36526	49
273337	273506	169	244.64	245.11	0.47	36526	36574	48
273506	273672	166	245.11	245.58	0.47	36574	36621	47
273672	273841	169	245.58	246.06	0.48	36621	36669	48
273841	273998	157	246.06	246.54	0.48	36669	36718	49
273998	274163	165	246.54	247.02	0.48	36718	36766	48
274163	274330	67	247.02	247.50	0.48	36766	36813	47
274330	274483	153	247.50	247.99	0.49	36813	36861	48
274483	274648	165	247.99	248.48	0.49	36861	36910	49
274648	274805	157	248.48	248.98	0.50	36910	36960	50
274805	274974	169	248.98	249.48	0.50	36960	37011	51
274974	275150	176	249.48	249.97	0.49	37011	37061	50
275150	275318	168	249.97	250.47	0.50	37061	37112	51
275318	275479	161	250.47	250.97	0.50	37112	37162	50
275479	275659	180	250.97	251.47	0.50	37162	37211	49
275659	275808	149	251.47	251.96	0.49	37211	37261	50
275808	275972	164	251.96	252.46	0.50	37261	37310	49
275972	276138	166	252.46	252.97	0.51	37310	37360	50
276138	276304	166	252.97	253.48	0.51	37360	37409	49
276304	276474	170	253.48	253.99	0.51	37409	37457	48
276474	276633	159	253.99	254.49	0.50	37457	37504	47
276633	276821	188	254.49	255.00	0.51	37504	37553	49
276821	276980	179	255.00	255.5	0.50	37553	37603	50
276980	277164	184	255.50	256.01	0.51	37603	37654	51

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RBNS Sugar Mills Ltd. LAKSAR

Water Consumption of

Date	Initial	Final	CPU Inlet	CPU Outlet	Fermentation	Floor Using	Cooling Tower Makeup	Remarks
01/03/2024	501598	502233	635	635	341	80	254	
02/03/2024	502233	502873	640	640	308	81	253	
03/03/2024	502873	503514	641	641	313	80	254	
04/03/2024	503514	504153	639	639	345	81	259	
05/03/2024	504153	504798	645	645	347	81	264	
06/03/2024	504798	505449	651	651	351	81	273	
07/03/2024	505449	506194	745	745	349	80	357	
08/03/2024	506194	506942	748	748	342	79	363	
09/03/2024	506942	507711	769	769	346	78	390	
10/03/2024	507711	508482	771	771	340	79	387	
11/03/2024	508482	509250	768	768	339	80	381	
12/03/2024	509250	510015	765	765	332	77	377	
13/03/2024	510015	510777	762	762	329	78	375	
14/03/2024	510777	511542	765	765	325	80	373	
15/03/2024	512304	512304	762	762	322	80	369	
16/03/2024	512304	513070	766	766	318	81	372	
17/03/2024	513070	513838	768	768	308	80	372	
18/03/2024	513838	514600	762	762	306	81	369	
19/03/2024	514600	515328	728	728	305	82	341	
20/03/2024	515328	516053	725	725	310	80	336	
21/03/2024	516053	516785	732	732	312	80	340	
22/03/2024	516785	517495	710	710	306	80	332	
23/03/2024	517495	518185	690	690	309	81	372	
24/03/2024	518185	518843	658	658	305	81	380	
25/03/2024	518843	519508	665	665	308	80	381	
26/03/2024	519508	520173	665	665	310	81	382	
27/03/2024	520173	520833	660	660	318	82	330	
28/03/2024	520833	521483	650	650	316	80	254	
29/03/2024	521483	522131	648	648	303	81	246	
30/03/2024	522131	522762	631	631				
31/03/2024	522762	523384	622	622				

Sugar Mills Ltd., Laksar Haridwar Distillery Division

CPU Treated Water

Date	Initial	Final	CPU Inlet	CPU Outlet	Fermentation	Floor Using	Cooling Tower Makeup	Remarks
01/03/2024	501598	502233	635	635	301	81	253	
02/03/2024	502233	502873	640	640	306	80	254	
03/03/2024	502873	503514	641	641	301	81	259	
04/03/2024	503514	504153	639	639	299	80	260	
05/03/2024	504153	504798	645	645	301	80	264	
06/03/2024	504798	505449	651	651	298	80	273	
07/03/2024	505449	506194	745	745	308	80	357	
08/03/2024	506194	506942	748	748	306	79	363	
09/03/2024	506942	507711	769	769	301	78	390	
10/03/2024	507711	508482	771	771	305	79	387	
11/03/2024	508482	509250	768	768	308	78	382	
12/03/2024	509250	510015	765	765	311	77	377	
13/03/2024	510015	510777	762	762	309	78	375	
14/03/2024	510777	511542	765	765	312	80	373	
15/03/2024	512304	512304	762	762	315	80	367	
16/03/2024	512304	513070	766	766	313	81	372	
17/03/2024	513070	513838	768	768	316	80	372	
18/03/2024	513838	514600	762	762	312	81	369	
19/03/2024	514600	515328	728	728	305	82	341	
20/03/2024	515328	516053	725	725	307	81	337	
21/03/2024	516053	516785	732	732	300	80	344	
22/03/2024	516785	517495	710	710	319	80	311	
23/03/2024	517495	518185	690	690	278	81	331	
24/03/2024	518185	518843	658	658	283	79	296	
25/03/2024	518843	519508	665	665	285	78	302	
26/03/2024	519508	520173	665	665	289	81	295	
27/03/2024	520173	520833	660	660	285	80	295	
28/03/2024	520833	521483	650	650	303	79	268	
29/03/2024	521483	522131	648	648	258	81	309	
30/03/2024	522131	522762	631	631	259	80	292	
31/03/2024	522762	523384	622	622	257	80	285	

Sugar Mills Ltd. LAKSAR

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LAKSAR, DISTILLERY DIVISION

CPU TREATE

CPU WATER CONSUMPTION

Date	Initial	Final	CPU Inlet	Initial	Final	CPU Outlet	Fermentation Consumption	Floor Washing Consumption	Cooling Tower Make up	Remarks
	542120	542385	265	541665	541930	265	222	-	43	
	542385	542835	450	541930	542380	450	369	-	82	
	542835	543296	461	542380	542841	461	376	80	-	
	543296	543761	465	542841	543306	465	364	-	101	
	543761	544216	455	543306	543761	455	365	90	-	
	544216	544667	451	543761	544212	451	363	-	88	
	544667	545166	493	544212	544705	493	404	-	89	
	545166	545649	489	544705	545194	489	399	-	90	
	545649	546139	490	545194	545684	490	398	81	20	
	546139	546638	499	545684	546183	499	404	-	95	
	546638	547068	430	546183	546613	430	360	70	-	
	547068	547503	435	546613	547048	435	355	-	80	
	547503	547984	481	547048	547529	481	406	40	75	
	547984	548462	478	547529	548007	478	478	-	-	
	548462	548994	532	548007	548538	532	390	80	62	
	548994	549546	552	548538	549091	552	378	78	96	
	549546	550114	568	549091	549659	568	386	75	107	
	550114	550704	590	549659	550249	590	371	79	140	
	550704	551324	620	550249	550869	620	370	80	170	
	551324	551962	638	550869	551507	638	372	81	185	
	551962	552612	650	551507	552157	650	410	79	161	
	552612	553292	680	552157	552837	680	391	82	207	
	553292	553980	688	552837	553525	688	422	80	186	
	553980	554675	695	553525	554220	695	407	79	209	
	554675	555395	720	554220	554940	720	400	80	240	
	555395	556107	712	554940	555652	712	398	81	238	
	556107	556807	700	555652	556352	700	399	79	222	
	556807	557512	705	556352	557057	705	410	80	215	
	557512	558220	708	557057	557765	708	379	79	250	
	558220	558930	710	557765	558475	710	391	81	238	
	558930	559636	706	558475	559181	706	378	80	248	

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ECON LABORATORY & CONSULTANCY LLP

(ISO: 9001, 14001& 45001 Certified & MOEF & CC Recognized Laboratory)

Vill.: Khabarwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Client:		ULR No:	TC550724000010095OO
M/s.R.B.N.S.SUGAR MILLS LTD. Laksar,Shekhpuri,Uttarakhand Pin-247663		Reporting Date:	19/12/2024
		Date of Sampling:	16/12/2024
		Receipt Date:	16/12/2024
		Period of Testing:	16/12/2024-19/12/2024
		Sample Collected By:	Lab. Rep.
		Sampling Type:	Grab
Sample Description:	CPU Inlet	Preservation:	Refrigerated
Sampling Location:	CPU	Format No:	7.8-F-01
Sampling Protocol:	Lab/STP/Water	Party Reference No:	By Mail
Sample Quantity:	2.0 Ltr.	Parameter Required;	As per work order

TEST RESULTS

S. No.	Parameters	Results	Units	Protocol Used
1.	PH	6.20	-	IS 3025 (Part-11) 1983:2017
2.	COD	2560	mg/l	APHA 23rd Edi..5220B, Open Reflux Method
3.	BOD (3 Days at 27 ^{0}C)	1274.2	mg/l	IS-3025 (P-44)1993,RA2019
4.	Total Suspended Solid	317.8	mg/l	APHA 23rd Edi. -2540 B, Gravimetric Method

End of Report

CHECKED BY :

AUTHORISED SIGNATORY :

NOTE : 1. The results listed only to the tested sample & applicable parameters.
2. Total liabilities of our lab will be restricted to the invoice amount only.
3. The sample will be destroyed after retention time unless otherwise specified.
4. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without prior permission

ECON LABORATORY & CONSULTANCY LLP

(ISO: 9001, 14001& 45001 Certified & MOEF & CC Recognized Laboratory)
Vill.: Khabarwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Client:		ULR No:	TC55072-400001009501F
M/s.R.B.N.S.SUGAR MILLS LTD. Laksar,Shekhpuri,Uttarakhand Pin-247663		Reporting Date:	19/12/2024
		Date of Sampling:	16/12/2024
		Receipt Date:	16/12/2024
		Period of Testing:	16/12/2024-19/12/2024
		Sample Collected By:	Lab. Rep.
		Sampling Type:	Grab
Sample Description:	CPU Outlet	Preservation:	Refrigerated
Sampling Location:	CPU	Format No:	7.8-F-01
Sampling Protocol:	Lab/STP/Water	Party Reference No:	By Mail
Sample Quantity:	2.0 Ltr.	Parameter Required;	As per work order

TEST RESULTS

S. No.	Parameters	Results	Units	Protocol Used
1.	PH	7.86	-	IS 3025 (Part-11) 1983:2017
2.	COD	56.0	mg/l	APHA 23rd Edi..5220B, Open Reflux Method
3.	BOD (3 Days at 27 ^{0}C)	21.2	mg/l	IS-3025 (P-44)1993,RA2019
4.	Total Suspended Solid	26.0	mg/l	APHA 23rd Edi. -2540 B, Gravimetric Method

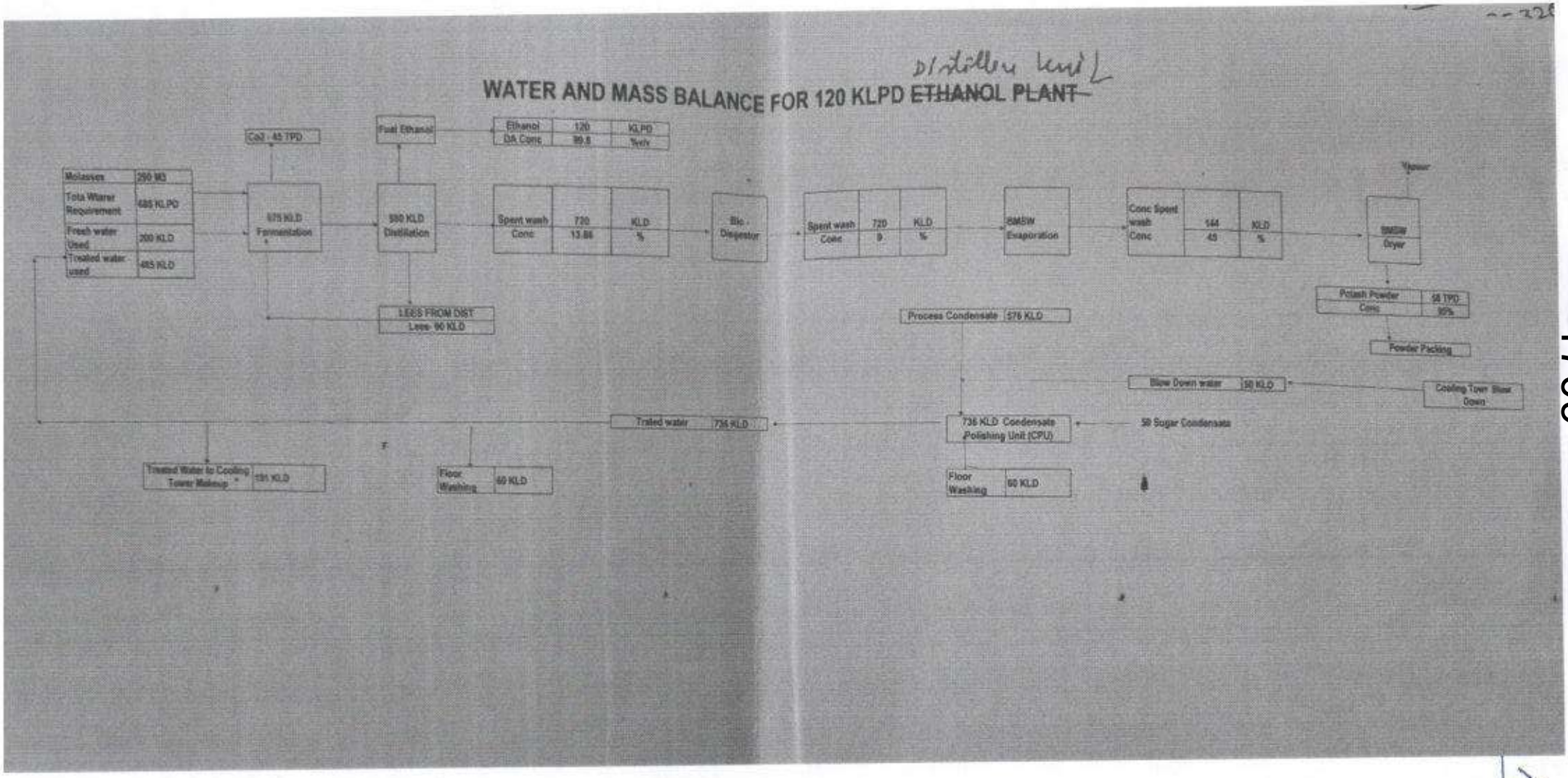
End of Report

CHECKED BY :

AUTHORISED SIGNATORY :

NOTE : 1. The results listed only to the tested sample & applicable parameters.
2. Total liabilities of our lab will be restricted to the invoice amount only.
3. The sample will be destroyed after retention time unless otherwise specified.
4. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without prior permission

WATER AND MASS BALANCE FOR 120 KLPD ~~ETHANOL~~ distillery unit PLANT



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Annexure-IC

Annexure-17

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Central Ground Water Authority (CGWA)
Application for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater (Save As Draft Application For Renewal of NOC)

Application Number : 21-4/733/UT/IND/2017

Applied For Renewal : 1st

(Scanned copy of this page after signature and seal should be attached at "Application with Signature and Seal" in attachment section before submission of application)

	Name of Industry:	RAI BAHADUR NARAIN SINGH SUGAR MILL LTD, LAKSAR
	Location Details of the Industrial Unit	
	Address Line 1 :	LAKSAR
	Address Line 2 :	
	Address Line 3 :	
	State:	UTTARAKHAND
	District:	HARIDWAR
	Sub-District:	LAKSAR
	Village/Town:	Laksar (NP)
	Net Ground Water(m3/day):	460.00
	Area Type Category :	Safe

INDUSTRIAL USE- Self Declaration

I hereby certify that the data and information furnished above are true to the best of my knowledge and belief and I am aware that if any part of the data / information submitted is found to be false or misleading at any stage, the application will be rejected outright.

I hereby declare that all the mandatory documents prescribed in the application form have been uploaded and no blank /irrelevant documents have been uploaded. I am also aware that any false/ wrong submission /uploading of document will lead to rejection of my application without any notice.

It is to certify that no case related to ground water withdrawal/ contamination is pending against the industry/ project/ unit as on date. Any such case filed against the company/ project/ unit in respect of ground water withdrawal/ contamination during the pendency of this application shall be immediately brought to the notice of CGWA.

I hereby undertake that in case any environmental compensation/ penalty is imposed on the firm by any statutory authority, I shall comply with the decision of such authority.

यह प्रमाणित करता हूं कि ऊपर प्रस्तुत किये गऐ आँकड़े और जानकारी मेरे ज्ञान और विश्वास के अनुसार सही हैं और मुझे पता है कि यदि प्रस्तुत आँकड़े / सूचना का कोई भी भाग किसी भी स्तर पर गलत या भ्रामक पाया जाता है, तो आवेदन बिना किसी पूर्व सूचना के निरस्त कर दिया जाएगा।
मैं इसके द्वारा घोषित करता हूं कि आवेदन पत्र में निर्धारित सभी अनिवार्य दस्तावेजों को अपलोड किया गया है और कोई रिक्त / अप्रासंगिक दस्तावेज अपलोड नहीं किया गया है। मुझे यह भी पता है कि कोई भी गलत दस्तावेज अपलोड करने पर मेरे आवेदन को बिना किसी सूचना के निरस्त कर दिया जाएगा।
यह प्रमाणित करता हूँ कि उद्योग / परियोजना / इकाई के खिलाफ आज तक भूजल निकासी / प्रदूषण से संबंधित कोई भी मामला किसी भी न्यायालय में लंबित नहीं है। इस आवेदन की प्रक्रिया के दौरान भूजल निकासी / प्रदूषण के संबंध में कंपनी / परियोजना / इकाई के खिलाफ दायर किसी भी मामले को तुरंत के. भू. ज. प्राधिकरण के ध्यान में लाउंगा।
मैं इस बात का वचन देता हूं कि यदि किसी भी वैधानिक प्राधिकरण द्वारा फर्म पर कोई पर्यावरणीय क्षतिपूर्ति / जुर्माना लगाया जाता है,तो मैं प्राधिकरण के उस निर्णय का पालन करूंगा।

R.B.N.S. Sugar Mills Ltd. LAKSAR

Date :
Place :

Name & Signature of the applicant
(With official seal)

Associated User : rbns

* In case signed by any authorized signatory, the details of the signatory with the authorization shall be enclosed.

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)
NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Rai Bahadur Narain Singh Sugar Mill Ltd. Laksar		
Project Address:	Laksar		
Town:	Laksar (np)	Block:	Laksar
District:	Haridwar	State:	Uttarakhand
Pin Code:			
Communication Address:	Rai Bahadur Narain Singh Sugar Mill Ltd, Laksar, Laksar, Haridwar, Uttarakhand - 247663		
Address of CGWB Regional Office :	Central Ground Water Board Uttarakhand Region, 419-a, Kanwali Road, Baluwala , Near Urja Bhawan, Dehradun, Dehradun, Uttarakhand - 248001		

1. NOC No.: CGWA/NOC/IND/ORIG/2021/10108
2. Application No.: 21-4/733/UT/IND/2017
3. Category: (GWRE 2017) Safe
4. Project Status: Existing Project
5. NOC Type: New
6. Valid from: 29/12/2020
7. Valid up to: 28/12/2023
8. Ground Water Abstraction Permitted:

Fresh Water		Saline Water		Dewatering		Total	
m³/day	m³/year	m³/day	m³/year	m³/day	m³/year	m³/day	m³/year
594.00	77220.00						

9. Details of ground water abstraction /Dewatering structures

	Total Existing No.:1						Total Proposed No.:0					
	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
Abstraction Structure*	0	0	0	1	0	0	0	0	0	0	0	0

*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps

10. Ground Water Abstraction/Restoration Charges paid (Rs.): 463320.00
11. Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism.

No. of Piezometers	Monitoring Mechanism		
	Manual	DWLR**	DWLR With Telemetry
2	0	1	1

**DWLR – Digital Water Level Recorder

(Compliance Conditions given overleaf)

This is an auto generated document & need not to be signed.

Validity of this NOC shall be subject to compliance of the following conditions:

Mandatory conditions:

1) Installation of digital water flow meter (conforming to BIS/ IS standards) having telemetry system in the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate through the web-portal.

2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.

3) Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines . Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II.

4) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.

5) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.

6) In case of mining project the firm shall submit water quality report of mine discharge/ seepage from Govt. approved/ NABL accredited lab.

7) The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.

8) The firm shall submit the water audit report in case of water requirement is in excess of 100 m3/day through certified auditors within three months of completion of the same to CGWA.

9) Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986.

10) This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.

General conditions:

11) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).

12) The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).

13) Proponents shall install roof top rain water harvesting in the premise as per the existing building bye laws in the premise.

14) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises, failing which the firm shall be responsible for any consequences arising thereupon.

15) In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.

16) Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.

17) Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.

18) Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.

19) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 16 of Guidelines.

20) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.

21) The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.

22) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.

23) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)

Annexure -10

ECON LABORATORY & CONSULTANCY LLP

(ISO: 9001, 14001& 45001 Certified & MOEF & CC Recognized Laboratory)

Vill.: Khabarwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Client:		ULR No:	TC550724000010095021
M/s.R.B.N.S.SUGAR MILLS LTD. Laksar,hekhpuri,Uttarakhand Pin-247663		Reporting Date:	19/12/2024
		Date of Sampling:	16/12/2024
		Receipt Date:	16/12/2024
		Period of Testing:	16/12/2024-19/12/2024
		Sample Collected By:	Lab. Rep.
		Sampling Type:	Grab
Sample Description:	DRAIN WATER	Preservation:	Refrigerated
Sampling Location:	UP STREAM	Format No:	7.8-F-01
Sampling Protocol:	Lab/STP/Water	Party Reference No:	By Mail
Sample Quantity:	2.0 Ltr.	Parameter Required;	As per work order

TEST RESULTS

S. No.	Parameters	Results	Units	Protocol Used
1.	Color	Colorless	-	IS 3025 (Part-5) 2018
2.	PH	7.46	-	IS:(Part-11):1983:2017
3.	COD	36.0	mg/l	APHA 23rd Edi..5220B, Open Reflux Method
4.	BOD (3 Days at 27 ^{0}C)	10.6	mg/l	IS-3025 (P-44)1993,RA2019
5.	Total Suspended Solid	14.0	mg/l	APHA 23rd Edi. -2540 B, Gravimetric Method
6.	Total Dissolved Solids	487.0	mg/l	IS-3025 (P-16)
7.	Chloride(as Cl)	37.4	mg/l	IS 3025 (Part-32) .1988, RA 2019 Argentometric Method
8.	Nitrate(as NO_3)	8.42	mg/l	IS 3025 (P-34) 1988, RA 2019, (a)Chromotropic acid method
9.	Ammonical Nitrogen(as NH_3-N)	12.7	mg/l	APHA 23rd Edn.4500NH3B

End of Report

CHECKED BY :

AUTHORISED SIGNATORY :

NOTE : 1. The results listed only to the tested sample & applicable parameters.
2. Total liabilities of our lab will be restricted to the invoice amount only.
3. The sample will be destroyed after retention time unless otherwise specified.
4. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without prior permission

ECON LABORATORY & CONSULTANCY LLP

(ISO: 9001, 14001& 45001 Certified & MOEF & CC Recognized Laboratory)

Vill.: Khabarwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Client:		ULR No:	TC55072400001009503F
M/s.R.B.N.S.SUGAR MILLS LTD. Laksar,hekhpuri,Uttarakhand Pin-247663		Reporting Date:	19/12/2024
		Date of Sampling:	16/12/2024
		Receipt Date:	16/12/2024
		Period of Testing:	16/12/2024-19/12/2024
		Sample Collected By:	Lab. Rep.
		Sampling Type:	Grab
Sample Description:	DRAIN WATER	Preservation:	Refrigerated
Sampling Location:	DOWN STREAM	Format No:	7.8-F-01
Sampling Protocol:	Lab/STP/Water	Party Reference No:	By Mail
Sample Quantity:	2.0 Ltr.	Parameter Required;	As per work order

TEST RESULTS

S. No.	Parameters	Results	Units	Protocol Used
1.	Color	Colorless	-	IS 3025 (Part-5) 2018
2.	PH	7.47	-	IS:(Part-11):1983:2017
3.	COD	40.0	mg/l	APHA 23rd Edi..5220B, Open Reflux Method
4.	BOD (3 Days at 27 ^{0}C)	12.8	mg/l	IS-3025 (P-44)1993,RA2019
5.	Total Suspended Solid	16.0	mg/l	APHA 23rd Edi. -2540 B, Gravimetric Method
6.	Total Dissolved Solids	502	mg/l	IS-3025 (P-16)
7.	Chloride(as Cl)	35.0	mg/l	IS 3025 (Part-32) .1988, RA 2019 Argentometric Method
8.	Nitrate(as NO_3)	9.52	mg/l	IS 3025 (P-34) 1988, RA 2019, (a)Chromotropic acid method
9.	Ammonical Nitrogen(as NH_3-N)	11.6	mg/l	APHA 23rd Edn.4500NH3B

End of Report

CHECKED BY:

AUTHORISED SIGNATORY:

NOTE : 1. The results listed only to the tested sample & applicable parameters.
2. Total liabilities of our lab will be restricted to the invoice amount only.
3. The sample will be destroyed after retention time unless otherwise specified.
4. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without prior permission

RBNS SUGAR MILL
Diltillery
Fermentation

LAKSAR, HARIDWAR
Division
Sludge

Date	Sludge From Fermentation Discard (KL)	Sludge From Fermentation To Bio Comport (KL)	Remarks
01/02/2024	1226	1225	Avg. of Sludge
02/02/2024	1163	1165	from fermentation
03/02/2024	1356	1355	Discard from
04/02/2024	1282	1280	01/02/2024 to 29/02/24
05/02/2024	1405	1407	36721/29
06/02/2024	1345	1345	= 1266 kg
07/02/2024	1343	1342	
08/02/2024	1288	1290	Avg. of Sludge
09/02/2024	1228	1226	from fermentation
10/02/2024	1181	1180	to Biocompost
11/02/2024	1248	1250	from 01/02/2024
12/02/2024	1307	1305	to 29/02/2024
13/02/2024	1377	1380	36720/29
14/02/2024	1318	1318	= 1266 kg
15/02/2024	1321	1321	
16/02/2024	1277	1275	
17/02/2024	1258	1260	
18/02/2024	1378	1380	
19/02/2024	1189	1185	
20/02/2024	1245	1250	
21/02/2024	1363	1360	
22/02/2024	1303	1305	
23/02/2024	1360	1360	
24/02/2024	1362	1365	
25/02/2024	1293	1288	
26/02/2024	1296	1292	
27/02/2024	955	955	
28/02/2024	1004	1005	
29/02/2024	1052	1050	

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Annexure-19

RBNS SUGAR MILL

Diltillery

Fermentation

Division

Sludge

Date	Sludge From Fermentation Discard (KL)	Sludge From Fermentation To Bio Comport (KL)	Remarks
1/03/2024	1052	1051	Avg of sludge from fermentation Discard from 01/03/24 to 31/3/24 35467/31 = 1150 kg
2/03/2024	909	910	
3/03/2024	957	955	
4/03/2024	908	910	
5/03/2024	902	900	
6/03/2024	1205	1206	
7/03/2024	1204	1205	
8/03/2024	1136	1135	
9/03/2024	1216	1215	Avg of sludge from fermentation to Biocompost 01/03/24 to 31/3/24 35467/31 = 1150 kg
10/03/2024	1267	1270	
11/03/2024	1373	1371	
12/03/2024	1313	1315	
13/03/2024	1253	1250	
14/03/2024	1324	1325	
15/03/2024	1188	1190	
16/03/2024	1318	1317	
17/03/2024	1188	1185	
18/03/2024	1321	1325	
19/03/2024	1147	1150	
20/03/2024	1220	1219	
21/03/2024	1260	1255	
22/03/2024	1219	1220	
23/03/2024	1023	1025	
24/03/2024	1130	1125	
25/03/2024	1078	1075	
26/03/2024	1191	1195	
27/03/2024	1132	1135	
28/03/2024	1080	1080	
29/03/2024	1052	1055	
30/03/2024	1026	1025	
31/03/2024	1075	1073	

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RBNS SUGAR MILL
Diltillery
Fermentation

LAKSAR, HARIDWAR
Division
Sludge

Date	Sludge From Fermentation Discard (KL)	Sludge From Fermentation To Bio Compost (KL)	Remarks
01/12/2024	684	695	Dy of Sludge from fermenter Discard 01/12/2024 to 31/12/2024 369@1/31 = 1192 kg
02/12/2024	1208	1207	
03/12/2024	1176	1175	
04/12/2024	1096	1095	
05/12/2024	1148	1150	
06/12/2024	1216	1215	
07/12/2024	1183	1184	
08/12/2024	1232	1230	
09/12/2024	1286	1288	Dy of Sludge from fermenter to Biocompost or granules 01/12/2024 to 31/12/2024 369@1/31 = 1192 kg.
10/12/2024	1247	1245	
11/12/2024	1099	1100	
12/12/2024	1148	1150	
13/12/2024	1253	1254	
14/12/2024	1315	1315	
15/12/2024	1089	1089	
16/12/2024	1202	1200	
17/12/2024	1145	1145	
18/12/2024	1109	1110	
19/12/2024	1171	1170	
20/12/2024	1176	1176	
21/12/2024	1232	1232	
22/12/2024	1290	1290	
23/12/2024	1226	1228	
24/12/2024	1192	1192	
25/12/2024	1309	1310	
26/12/2024	1323	1323	
27/12/2024	1258	1255	
28/12/2024	1313	1313	
29/12/2024	1198	1200	
30/12/2024	1316	1315	
31/12/2024	1141	1141	

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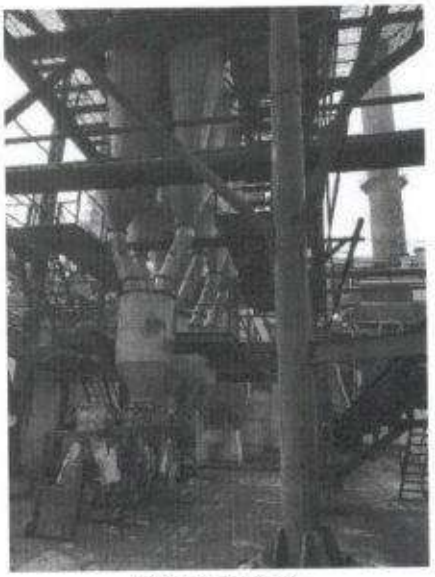
Annexure-20

SITE PHOTOGRAPHS: M/s R.B.N.S Sugar Mill Ltd. (Distillery Division) Laksar, Haridwar, Uttarakhand

MEE Feed Mass Flow Meter

MEE Concentrated Mass Flow Meter

PTZ Camera at Lagoon Area

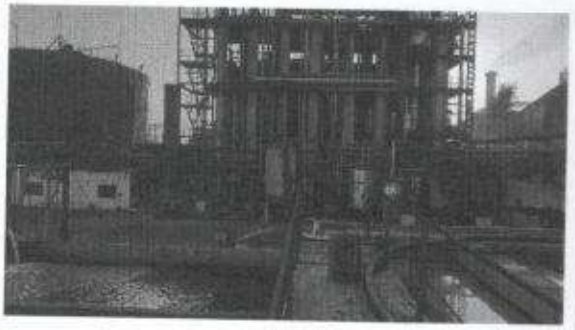


Spray Dryer

Lagoon

CPU

Granulation Unit



MEE