

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, AT
NEW DELHI.

OA NO 912 OF 2022

IN THE MATTER OF:

MANAV SEWA SANSTHAN AND ANR.

...APPLICANTS

VERSUS

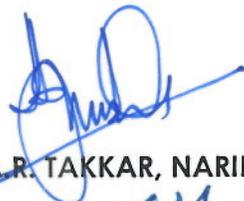
UNION OF INDIA & ORS.

...RESPONDENTS

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THROUGH

 A.R. TAKKAR, NARINDER KR VERMA, SHRIYA TAKKAR, TEJASVI CHAUDHRY,

  
KAPIL BAKSHI, HIMANI BHADAURIA AND BHARGAVA RAVI KUMAR
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OA NO 912 OF 2022

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UNION OF INDIA & ORS.

...RESPONDENTS

SHORT REPLY ON BEHALF OF RESPONDENT NO. 4, BALRAMPUR CHINI MILLS
LTD. THROUGH SUBHASHISH GHOSH ITS AUTHORIZED OFFICER.

MOST RESPECTFULLY SHOWETH:

1. That the Respondent No. 4 industry is filing these short submissions/reply at this stage and prays for liberty from this Hon'ble Tribunal to file a detailed one if so required, or directed by this Hon'ble Tribunal at a later stage after a detailed inspection of the industry is carried out in terms of order dated 8th August 2023 by the Joint Inspection Committee.
2. To give a brief insight into the background, Balrampur Chini Mill Ltd. (BCML) at Balrampur was established in the year 1932 during British Period and it was owned by British India Corporation with a crushing capacity of 600 tons per day. Subsequently, Balrampur Chini Mills Limited ("BCML") was incorporated in 1975 under the Companies Act as a wholly owned subsidiary company of Balrampur Sugar Company Limited. The Balrampur Mill started with a crushing capacity of 800 TCD (Metric Tonnes crushed per day) in 1975 and has since been expanded to its present capacity of 12,000 TCD. M/s

Balrampur Chini Mills Ltd. (Chemical Division) installed a distillery unit (molasses based) with capacity of 60 KLD in 1995-96, which was expanded to 100 KLD and then to 160 KLD in phases. The major products of distillery unit were Rectified spirit, extra neutral alcohol; absolute alcohol, but currently the Industry is manufacturing Ethanol only. The unit obtained prior EC for expansion in 2006 vide no. J-11011/151/2006-IA(I) dt. 20.06.2006 which was subsequently amended vide no. J-11011/151/2006-IA(I) dt. 21.12.2015 for installation of incineration system. As of now it operates for 330 days and is a **Zero Discharge Unit** with effect from 01.01.2016 by adopting concentration and incineration treatment along with energy recovery in the form of 6.0 MW power. The chimney is fitted with ESP (Electrostatic Precipitator) and is duly achieving the UP-PCB norms and has been granted regular consents by U.P. Pollution Control Board without gap. Pursuant to guidelines issued by CGWA in respect of existing units for drawl of ground water in November 2015, the unit applied for NOC on 14.07.2016 and thereafter from time to time renewed it and the current NOC is valid till 27.12.2026 and as per the criteria of CGWA, the area falls in safe zone for ground water extraction. The industry is not producing any hazardous material during its manufacturing process except for minor quantity of waste oil and lubricants from the sub-station. The entire solid waste (bagasse) generated during sugar cane crushing from the sister concern i.e. Sugar Unit is a resource for the distillery and which is used for generation of electricity together with slop (concentrated spent wash) produced from distillery unit MEE and other bagasse fired boiler for co-generation. The remaining bottom ash and fly ash is used as manure after processed by Granulation Plant as it has high potash content (14-22%) for which demand is

always there. Absolute Alcohol storage permission from Ministry of Commerce, Chief Controller of Explosives as envisaged under manufacture, storage and import of Hazardous chemical Rules, 1989 was accorded to the industry on 16.05.2016. The industry as such does not fall in any buffer zone or eco-sensitive zone or flood plain, forest area, etc. That in the year 2022 the Respondent Industry, Chemical Division expanded its capacity to 330 KLD along with 8.50 MW co-gen power. This unit at present is manufacturing Ethanol only.

3. As detailed in the body of this short reply, the contents of which are not being reproduced here for the sake of brevity, it is submitted that the industry all through has been operating with consents obtained from the State Pollution Control Board under the Water (Prevention and Control of Pollution) Act, 1974 as well as the Air (Prevention and Control of Pollution) Act, 1981 and all other requisite permissions and authorisations including EC as required under various Statutes/Acts and the Rules etc. Despite being one of the oldest industries established since British period, the industry has all through implemented and incorporated the latest technology available with a view to implement and comply with various pollution control laws. The industry has established adequate and appropriate ETP / APCD and other pollution control devices. The industry has added the **Concentration Incineration System** to achieve Zero liquid discharge, which has been installed at a cost of Rs.50.39 crores and is fully operational. The industry has also from time to time engaged various consultants for advising it on pollution control methodologies and better management technique.
4. That the facts stated hereinabove would show that the chemical division i.e. the distillery unit is a completely Zero Liquid Discharge

unit contrary to the allegations raised by the Applicants the instant O.A. Reference in this regard can be made to the grant of Environmental Clearance dated 14th March 2022 by the Government of India, Ministry of Environment, Forest and Climate Change whereby the industry was accorded EC for proposed expansion of existing distillery unit capacity from 160 KLD (C- Heavy Molasses) to 330 KLD (B- Heavy Molasses/Sugar Syrup) along with 8.5 MW Co-Generation Power at village Bishunipur, tehsil and district Balrampur, Uttar Pradesh by M/s Balrampur Chini Mills Ltd. , Chemical division unit – Balrampur, under the provisions of the EIA notification, 2006. A copy of this Environmental Clearance already stands attached with the instant OA as Annexure A-4. This distillery unit of the Answering Respondent industry has always been operating as a Zero Liquid Discharge unit, a fact duly verified by the revised Joint Committee report dated 3rd August 2023 filed in this Hon'ble Tribunal. The Joint Committee aforesaid appointed by this Hon'ble Tribunal post detailed inspection of the distillery unit during operation has conclusively reported that the same is working on the principle of Zero Liquid Discharge. Thus, the allegations regarding discharge of trade effluent by the distillery unit of Respondent No. 4 made by the Applicants are misconceived and hold no water. Even for the sake of repetition it is reiterated that there is no discharge of trade effluent, treated or untreated by the distillery unit and the same is successfully working on the basis of ZLD. The distillery unit further has a valid Consent to Operate and a copy of the consolidated Consent to Operate and Authorisation under Section 25 of the Water Act and 21 of the Air Act dated 17th November 2022 already stands Annexed as Annexure-F with the joint committee report dated 3rd August 2023 at running Page 432 of the paper

book. This Consent to Operate/Authorisation is valid till 31st December 2024. The industry is duly following and complying with all the conditions of the aforesaid Consent to Operate/Authorisation meticulously.

5. Similarly, the sugar division of the Balrampur Chini Mills is duly operating after regularly (without any gap) obtaining Consent to Operate from the State Board and the CTO has been renewed from time to time and a latest copy of the same both under the Air Act as well as the Water Act, both dated 24th December 2021 stand annexed with the Joint Committee Report dated 3rd August 2023 at running Page 423 and 427 respectively. Both these consents to operate are valid till 31st December 2023. The sugar mill aforesaid is being operated strictly as per the conditions of consent. A perusal of the consent conditions under the Water Act would show that the industry has permission to discharge 120 KLD and 2400 KLD of treated domestic/trade effluent respectively into the drain after its due treatment. It is relevant to mention here that both the sugar division and the distillery division have a common STP. The industry has state of the art treatment facilities and an adequate and appropriate effluent treatment plant and the treated effluent duly meets with the prescribed standards established by law. Not only this, OCEMS system is fully operational duly connected with the servers of CPCB and UPPCB.
6. That the internal drain inside the sugar mill premises carrying the treated trade effluent meets the main drain passing outside the sugar mill alongside Gonda-Tulsipur road. This main Nala/drain already contains domestic effluent of various colonies and villages and after crossing the sugar mill, further on it collects domestic/commercial effluent from Hyundai/ Maruti

dealerships/service stations (none of these have any ETP), and then from Balrampur city, area of Bhagwati Ganj around where it meets Suwaon Nala which thereafter collects the domestic/commercial untreated effluent of Mahesh Bhari village, District Hospital, RTO office areas which have several car repair and service centers, basties nearby, meat shops et cetera. The domestic effluent from the villages around this area also enters this Nala and then the Suwaon Nala meets Machili talab and thereafter, falls into Chandu Taal and finally if there is any overflow than the same meets the rivulet Rabti. It is important to mention here that except for the rainy season part of the drain between Chandu Taal and rivulet Rabti mostly remains dry. Thus apart from the treated effluent from the sugar mill this drain in question carries the totally untreated domestic sewage and commercial effluent (which also carry oil and grease components). The industry submits that at any point during the operation of the industry when samples have been drawn of the treated effluent from the drain before it meets main Nala/ drain outside of the sugar mill, the same have confirmed to the parameters established by law. The industry is sanguine of the fact that even now if samples are drawn from the internal drain during the time when the industry is in operation, the same would confirm to the prescribed standards. The failure of the samples from the main Nala/ drain outside the sugar mill and beyond i.e. till Suwaon Nala and even thereafter till it meets Chandu Taal, shall never confirm to the prescribed standards as the entire domestic and commercial effluent carried by the main Nala/ drain of the colonies/villages/commercial establishments/hospitals/service stations/meat shops is untreated and there is no STP installed.

7. Therefore, the submissions made hereinabove would make it clear that the allegations raised by the Applicants in the instant OA against the Respondent No. 4 industry are misconceived, misleading and incorrect. The Joint Inspection Committee took samples of the drain at the confluence where it met the main Nala and some of the values were beyond the prescribed limits, which was for the reason that the industry was closed with water stagnant there in the drain and also because of mixing of dung and faecal matter lying in the open space next to the cane yard, (where bullock carts are parked for unloading of the sugarcane), with rainwater. It is important to mention here that complying with the order dated 8th August 2023 passed by this Hon'ble Tribunal as well as keeping in mind recommendations made by the Joint Inspection Committee in their revised Report dated 3rd August 2023, the industry in the interregnum has taken the following steps:

- i. To improve the treatment efficiency of the ETP further, the industry has installed one micro/plate type settler to further minimise TSS in the effluent water.
- ii. To further improve the water treatment efficiency, common dosing system has been organized.
- iii. The anaerobic digester stands modified to improve the water treatment efficiency by reducing COD in effluent before it goes for the aerobic treatment.
- iv. The internal drains having been fully cleaned, there is no possibility that the untreated effluent would by any chance whatsoever go to main Nala outside the sugar industry. The cleaning of drains is an ongoing exercise and would continue regularly.

- v. As per Government Notification dated 14th January 2016 the industry has to have 15 days storage facility for treated effluent, however, during crushing season when there is no demand in ferti-irrigation, the industry ensures that only treated effluent within the permissible limits is discharged.
- vi. It is reiterated that the industry as per the CPCB guidelines has already installed online effluent monitoring system (OCEMS) which remains connected with the CPCB/UPPCB servers 24/7 which ensures that the parameters and flow of treated effluent discharge adhere to the prescribed limits.
- vii. From time to time UPPCB/CPCB and other nodal agencies engaged by them have inspected the system and drawn samples, the analysis reports of the same have been found to be within the prescribed limits. The analysis report of some of these samples got tested from Environmental and Technical Research Centre (approved by MoEF) are attached hereto as **Annexure R-4/1 (Colly)**, the values of which are within the prescribed limits.
- viii. That the industry for the kind perusal of this Hon'ble Tribunal is attaching here to as **Annexure R-4/2** a tabulated chart qua Water Balance specifying as under:
 - a. The generation of water from various sources, its usage in discharge of treated effluent.
 - b. The industry as per CPCB norms and consent condition is allowed to discharge treated trade effluent in tune with 200 ltrs./per ton of cane and the Water Balance table shows that the same is being complied with.
 - c. About an average of 191 ltrs./per ton of cane water went to the ETP during crushing season 2022 – 23 for treatment and post-treatment the industry has used it in ferti-irrigation,

horticulture and sprinkling within the premises. Thereafter the excess duly treated effluent was discharged in drain which is in line with the parameters and limits as specified by CPCB/UPPCB and Notification dated 14th January 2016. It is important to mention here that there exist no agricultural fields for around 5 kms around the industry, hence the treated trade effluent can not be economically used for irrigation purposes. The industry has otherwise adopted ponds in the area for maintenance and upkeep apart from adopting Rainwater Harvesting System.

- ix. The industry is also attaching NSI audit reports for ETP adequacy and water balance for both the units i.e. sugar as well as chemical division as **Annexure R-4/3** and **R-4/4** respectively for the kind perusal of this Hon'ble Tribunal.
- x. The industry on its own has undertaken and cleaned the Nala/drain from the sugar plant till the Nala/drain meets with Suwaon Nala so that there is no stagnation and the same shall be carried out in future also on an ongoing basis. It is relevant to mention here that midway in this drain the volume of water/domestic effluent et cetera increases manifold due to addition of residential and commercial establishment's untreated effluent.
- xi. Regarding tree plantation, this year the industry has planted more than 40,000 trees at various places and the industry has in the past 3 years planted more than 2 lakh trees and would do the plantation near Suwaon Nala as well, once the District Administration coordinates with the industry in terms of this Hon'ble Tribunal's directions vide order dated 08.08.2023.

PRAYER

In view of the submissions made in the paragraphs herein above, it is respectfully prayed that the instant original Application may kindly be dismissed with exemplary heavy costs in the interest of justice and fair play;

It is further prayed that this Hon'ble Tribunal may kindly be pleased to pass any such or further orders as deemed fit and proper by this Hon'ble Tribunal in the peculiar facts and circumstances of this case in favour of the Answering Respondent.

THROUGH**A.R. TAKKAR, NARINDER KR VERMA, SHRIYA TAKKAR, TEJASVI CHAUDHRY,****KAPIL BAKSHI, HIMANI BHADAURIA AND BHARGAVA RAVI KUMAR
ADVOCATES****M/S ARTLO****A-25/12, DEODAR MARG DLF PHASE 1,****GURGAON-122002****MOB: 8826200005****EMAIL ID: ARTAKKAR@ARTLO.IN**

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH AT NEW DELHI

Original Application No. 912 Of 2022

IN THE MATTER OF:

Manav Sewa Sansthan & Anr

...Applicants

VERSUS

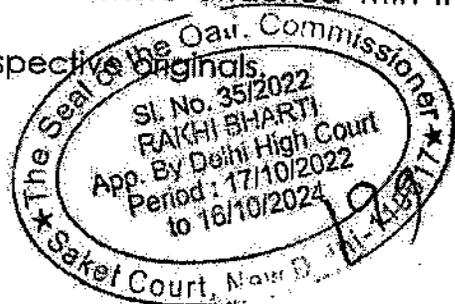
Union of India & ors.

...Respondents

Affidavit of Mr. Subhashish Ghosh , S/o Sh.Prabir Ghosh , aged about 42 years, Authorised Signatory of M/S BALRAMPUR CHINI MILLS LTD., 213, Rectangle One, D-4, District Centre , Saket, N.Delhi (the Respondent 4 herein)

I, the above named deponent do hereby solemnly affirm and state as under:

1. That the above titled Reply has been drafted under the authority and instructions of the deponent and after perusing its contents, the deponent has duly signed it, and the contents of paragraph Nos. 1 to 7 thereof are true and correct to the knowledge of the deponent, and the same may be read as contents of this affidavit also, which are not being reproduced for the sake of brevity. No part of it is false and nothing material has been kept concealed therefrom.
2. That the annexure attached with the Reply are true copy of their respective originals.



Subhashish Ghosh
DEPONENT

31 OCT 2022

VERIFICATION:

31 OCT 2023

Verified at New Delhi on 31st day of October, 2023 that the contents of para 1 and 2 of my affidavit are true and correct to my knowledge. No part of it is false and nothing material has been kept concealed therefrom.

Handwritten signature
I, the deponent
has signed in my presence

31 OCT 2023

Subhashish Ghosh

DEPONENT



Certified that the deponent
Shri..... *Subhashish Ghosh*
So Shri.....
Identified By Shri..... *Prince*
has solemnly affirmed before me at New
Delhi on..... that the contents
of the affidavit which has been read over and
explained to him are true and correct to his knowledge
Oath Commissioner, New Delhi



498 ANNEXURE R4/1 COLLY 13 ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, Vishwas Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web: www.etrccindia.com

ISO 9001:2015, ISO 14001 : 2015, OHSAS 18001 : 2007

An Approved Laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

ETRC/PM14/TE/REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/2212/11101/2022	Date of Report: 22/12/2022
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur Sugar Division P.O.: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1	Water/ Waste Water	Waste Water	5	Packing Condition	Sealed
2	Sample Description	ETP Effluent (Before treatment)	6	Sample Collected By	ETRC
3	Sample received date	16.12.2022	7	Analysis Start Date	16.12.2022
4	Sample Quantity	2.0 liters	8	Analysis End Date	21.12.2022

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	15.0	5 - 100
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative
3	pH	-	APHA 23 rd Ed. 2017-4500H ⁺	6.9	1 - 14
4	Total Suspended Solid (TSS)	mg/l	APHA 23 rd Ed. 2017-2540 D	924.0	5.0 - 20000
5	Bio chemical Oxygen Demand (BOD)	mg/l	IS 3025 (Part-44): 1993 Reaffirmed: 2019	395.0	1.0 - 150000
6	Chemical Oxygen Demand (COD)	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2017	1204.0	2.0 - 600000
7	Oil & Grease	mg/l	APHA 23 rd Ed. 2017-5520 A+D	17.3	5.0 - 200

..... END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



499 ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE 14

Office & Laboratory: 2/261, Vishwas Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web: www.etrclndia.com

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ETRC/PM14/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/2212/11102/2022	Date of Report: 22/12/2022
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur Sugar Division P.O.: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1	Water/ Waste Water	Waste Water	5	Packing Condition	Sealed
2	Sample Description	ETP Effluent (After treatment)	6	Sample Collected By	ETRC
3	Sample received date	16.12.2022	7	Analysis Start Date	16.12.2022
4	Sample Quantity	2.0 liters	8	Analysis End Date	21.12.2022

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	5 - 100
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative
3	pH	-	APHA 23 rd Ed. 2017-4500H ⁺	7.6	1 - 14
4	Total Suspended Solid (TSS)	mg/l	APHA 23 rd Ed. 2017-2540 D	19.0	5.0 - 20000
5	Bio chemical Oxygen Demand (BOD)	mg/l	IS 3025 (Part-44): 1993 Reaffirmed: 2019	15.0	1.0 - 150000
6	Chemical Oxygen Demand (COD)	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2017	64.0	2.0 - 600000
	Oil & Grease	mg/l	APHA 23 rd Ed. 2017-5520 A+D	BDL	5.0 - 200

BDL = Below Detection Limit

..... END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
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- All disputes subject to Lucknow jurisdiction.
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- Complain register is available in our laboratory.


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM

BALRAMPUR CHINI MILLS UNIT - BALRAMPUR

ANNEXURE - R - 4/2

		12.10.2023			
WATER BALANCE SEASON 2022-23					
	Particulars	Unit	Quantity	Remarks	
	Licence Capacity	TCD	12000		
	Average Crushing Capacity	TCD	10481	Season 2022-23	
	Crushing Capacity	TCH	437	per 24 hrs.	
(A)	Source of water Input				
(i)	Through Cane	KL/Day	6801	64.89 % Water in cane	
(ii)	Through Tubewell TOTAL	KL/Day	2178		
	IN SUGAR	KL/Day	123		
	IN POWER	KL/Day	587		
	Domestic Purpose	KL/Day	1468		
	Total	KL/Day	7511		
	Total Water use in sugar plant	KL/Day	7511		
(B)	Source Of Water Losses through products				
(i)	Through Bagasse Moisture	KL/Day	1788.71	bag%cane=34.47,Moist%=49.51	
(ii)	Through Press Mud Moisture	KL/Day	362.98	FC% =4.81, Moist% = 72	
(iii)	Through Final Molasses	KL/Day	55.52	FM%=4.01, Brix%=86.79	
(iv)	Through Sugar	KL/Day	0.14	Rec % = 6.51%, MOISTURE 0.02%	
	Total	KL/Day	2207.35		
(C)	Water Loss in Atmosphere				
(i)	Through Sugar Cooling Tower Evaporation / drift	KL/Day	2448	Cap.CT =10200 M3/Hr,loss 1.0%	
(ii)	Through cold UGR tank cap 1500 M3(Evaporation / drift)	KL/Day	360	Cap.CT =1500 M3/Hr,loss 1.0%	
	Through Cooling tower (Two stages) for excess hot condensate (Temp. from 80 °C to 40°C)	KL/Day	24.0	Cap.CT =400 M3/Hr,loss 2%	
(iii)	Through Wet Scrubbers	KL/Day	471.6	4.5% on cane	
	Total	KL/Day	3304		
(D)	Water to ETP	KL/Day	2000	191	Ltr/T Cane

(C)	Source Of Effluent Generation (To be treated in ETP)			
(a)	Mill House			
(i)	Floor Washing	KL/Day	210	2 % on cane
(ii)	Bearing Cooling water	KL/Day	0	Recycled through cold UGR
(iii)	All Other (leakge from pumps gland, seepage etc)	KL/Day	105	1 % on cane, because of two milling tandem
	Total		314	
(b)	Boiling House			
(i)	Floor Washing	KL/Day	105	1 % on cane
(ii)	Gland cooling / Leakage	KL/Day	105	1 % on cane, because of more no. of equipments in mill, boiler & BH
(iii)	Equipment cleaning (JS,SS) TUBE CLG.(JH,EVAP & PANS)	KL/Day	262	2 % on cane
(iv)	Lab	KL/Day	52	0.50 % on cane
	Total		524	
(c)	Boiler			
(i)	Blow down	KL/Day	86	Used at wet scrubber @ 2 % of steam generation
(ii)		KL/Day		
(iii)		KL/Day		
(d)	Cooling Tower / Spray Pond			
	Water overflow from cooling tower (through vapour condensation)	KL/Day	1038	
	Total effluent going to ETP	KL/Day	1962	187
				Ltr/T Cane

Note:

ANNEXURE R - 4/3

ETP VALIDATION REPORT

इ. टी. पी. वेलिडेशन रिपोर्ट

(During Season 2022-23)

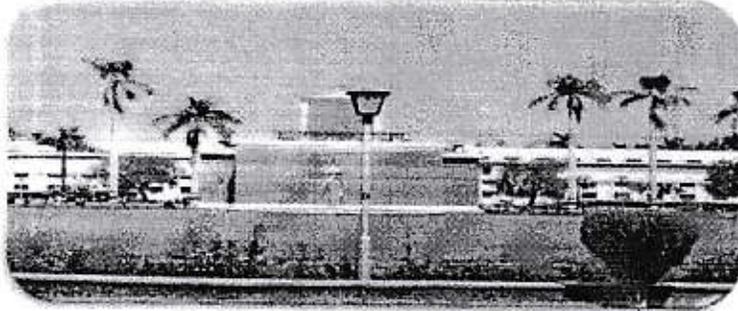
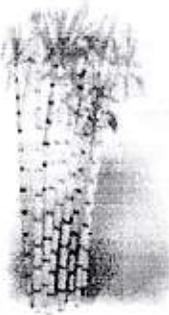
(वर्ष 2022-23)

FOR

W/s BALRAMPUR CHINI MILLS LTD. BALRAMPUR UTTAR PRADESH	मेसर्स बलरामपुर चीनी मिल्स लिमिटेड बलरामपुर उत्तर प्रदेश
--	--

PREPARED BY:

द्वारा निर्मित :

**NATIONAL SUGAR INSTITUTE**

राष्ट्रीय शर्करा संस्थान

Government of India

भारत सरकार

Ministry of Consumer Affairs, Food & Public Distribution

उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण

Department of Food & Public Distribution

खाद्य एवं सार्वजनिक वितरण विभाग

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VISIT TO SUGAR FACTORY DURING SEASON 2022-23

TO VALIDATE EFFLUENT TREATMENT PLANT

1. GENERAL INFORMATION

1	Name and address of the factory	Balrampur Chini Mills Ltd., Balrampur, Uttar Pradesh	
2	License capacity of Plantation White sugar factory /Backended sugar refinery (TCD)	12000 TCD Refined Sugar	
3	Average actual crush rate (TCD)	10590 TCD	
4	Co-generation plant capacity (MW)	19.5MW	
5	ETP installed capacity (KLPD)	2600KLD	
6	Period of visit	16-03-2023 to 17-03-2023	
7	NSI officials visited	Designation	Contact No & e-mail
	1. Shri Vinay Kumar	Asstt. Professor (Sugar Engg.)	7925020853, vinay_ind@yahoo.com
	2. Shri Ashish Kumar	Sr. Tech. Assistant	
8	Factory officials interacted	Designation	Contact No & e-mail
	1.Sh. Udayveer singh	DGM(QC)	8077968998
	2.Sh. S D Pandey	ADM(P)	8630204499

2. OPERATIONAL INFORMATION

S. NO.	PARTICULAR	STATUS/ QUANTITY	REMARK
1	Fresh water abstraction		
	a. No & capacity of bore well	4 no of borewell	
	b. Installation of flow meters	Yes	
	c. Recording & maintaining of log books of water abstraction	Yes	
	d. Measurement facility of fresh water used in sugar plant & maintaining of log books	Yes, 87 KLD	
	e. Measurement facility of fresh water used at co-generation & maintaining of log books	Yes, 484 KLD	
	f. Measurement facility of fresh water used for human needs, residential buildings & maintaining of log books	Yes, 1509 KLD	
	(photocopy of log books to be enclosed)	Yes	•Annexure - 2
2	Measurement of Cold water usage		
	a. Power turbine	Yes, 4235 KLD	
	b. Fibrizer & other cane preparatory devices	Yes, 2680 KLD	
	c. Mills & drives		
	d. Compr./pumps gland cooling		
	e. DM/RO plant at boilers	Yes, 454	
	f. Cooling towers of co-generation	Yes, 1200KLD	
	g. SO ₂ gas cooling	N/A	
	h. B & C massecuite cooling	Yes, Nil water reported to be used as the desired purity achieved with natural cooling and higher retention.	
	i. Final molasses cooling	Some part of the RO reject is used.	
	j. As make up water at process spray pond/CT and at any other unit operation	N/A (Not Applicable)	
	k. Any other	--	
	(photocopy of log books to be enclosed)		Annexure - 2
3	Measurement of hot water usage		

	a. Imbibition water at mills	Yes, 6213 KLD	
	b. Filter cake wash water	Yes, 501 KLD	
	c. Pan boiling, molasses conditioning	Yes, 764 KLD	
	d. Sugar melting	-	
	e. Wash water at centrifugals	Yes, 390 KLD	
	f. Any other (photocopy of log books to be enclosed)		Annexure - 2
4	Measurement of effluent generation		
	a. From mill house	942 KLD	
	b. From boiling house		
	c. From steam generation		
	d. Spray pond/ Cooling tower over flow	898 KLD	
	e. Gross effluent generation at ETP inlet	1840 KLD	
	(photocopy of log books to be enclosed)		Annexure - 3
5	Cooling arrangement & recirculation of cooling water		
	a. at Power turbine	3660 KLD	
	b. at Mill drives & mill bearings	1272 KLD	
	c. at Fibrizer & other cane preparatory devices		
	d. at SO ₂ gas coolers	N/A being refinery	
	e. at B & C Masecuite cooling		
	f. Surplus condensate		
6	Construction of small pits near various pumps to collect gland cooling water for recirculation	Yes	
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	Hydro jet Cleaning	
8	Installation of CPU (Condensate Polishing Unit) and circulation of polished condensate to co-generation plant cooling towers as a makeup water for more than 45kg/cm ² working pressure boilers	Yes, 727 KLD	

	and to other purposes		
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	Yes	
10	Closed loop hot and cold water circulation systems	Yes	Annexure - 14
11	Sulphate removal system installed for spray pond/ process CT over flow. (system details with flow diagram to be enclosed)	N/A	
12	Retention/contact time in various units of ETP (Annexure – 8)	Volume/area	Retention time (@174 lt/ton of cane crushed for the licenced capacity of 12000 TCD)
	a. Bar screen chamber	67 m ³	47 min
	b. Oil & grease trap chamber	87 m ³	60 min
	c. Equalization tank with aeration	450 m ³	10 hr 54 min
	d. pH correction tank	--	Available
	e. Primary clarifier	155 m ³ micro settlers and 1650 m ³ anaerobic Digester	01 hr 30 min 19 hr
	f. Aeration tank	2540 m ³	29 hr
	g. Secondary clarifier	1150 m ³	13 hr
	h. Multi grade filter	37 m ³	21 min
	i. Activated carbon filter	37 m ³	21 min
	j. Sludge drying bed or Centrifuge or Filter press	100 m ² 2 m ³ / hr	- -
13	ETP Analysis (performance parameters), average value	As per record (Annexure – 3)	As per sample taken during the visit (Annexure – 4)
A	ETP Inlet		
	a. Effluent flow rate (m ³ /hr)	75	77
	b. Sulphur (mg/L)	-	-
	c. pH	7.5	6.82
	d. COD (mg/L)	1800	1160
	e. BOD (mg/L)	196	635
	f. TSS (mg/L)	206	238
	g. TDS (mg/L)	1900	880
B	ETP Outlet		
	a. Treated effluent flow rate (m ³ /hr)	72	75
	b. Sulphur (mg/L)		
	c. pH	7.1	8.24

	d. COD (mg/L)	120	130
	e. BOD (mg/L)	08	15
	f. TSS (mg/L)	10	22
	g. TDS (mg/L)	900	940
C	ETP Analysis (other parameters), average value		
	a. MLSS (mg/L)	4200	2400
	b. DO (mg/L)	2.2	-
D	Sulphate removal system analysis	N/A as not required in refinery process	
	Inlet	--	
	a. Effluent flow rate((m ³ /hr)	--	
	b. Sulphur (mg/L)	--	
	outlet	--	
	a. Effluent flow rate((m ³ /hr)	--	
	b. Sulphur (mg/L)	--	
14	Condensate Polishing Unit (CPU) Analysis		
	Inlet		
	TDS (mg/L)	316	340
	BOD (mg/L)		40
	Outlet		
	TDS (mg/L)	218	210
	BOD (mg/L)		20
15	Storage of treated effluent		
	a. No & size of lagoons	2 no 7568 m ³ +5765m ³	07 day retention time
	b. Lagoon type-permeable/impermeable	Impermeable	
16	Recirculation of treated effluent in sugar plant		
	consumption points	Quantity consumed (m³/hr)/ % cane	Measured/Estimated
	a. Co-gen CT	46 m ³ /hr	Measured
	b. In house for cleaning, washing, etc.	15 m ³ /hr	
	c. Boiler (DM water), wet scrubber	21 m ³ /hr	
17	Operation and maintenance staff of ETP (shift wise)		
	Name & designation	Qualification & ETP training (Enclose training certificate)	Remark
		STATUS	REMARK
18	Analytical facility (laboratory)	yes	

19	Adoption of rainwater harvesting system	yes	
20	Dry cleaning of factory floors etc. using bagasse	Dry cleaning using bagasse	

3. OBSERVATIONS & CONCLUSION:

1. The effluent generation is of the extent of 174 litre/ton of cane and the existing system is considered to be adequate for the licenced capacity of 12000 TCD.
2. Flow meters have been installed at various consumption points and at inlet/outlet of ETP and recording in log book is found to be maintained. However, the factory should get the EPT flowmeters/sensors calibrated as the validity of the calibration certificate was found to be expired at the time of visit.
3. Factory has installed a Condensate Polishing Unit and the treated water is used as make-up water for the cooling tower of co-generation and distillery.
4. 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.

4. ANNEXURES

- Annexure-1 : DMR for period from 09/03/2023 to 15/03/2023.
- Annexure-2 : Photocopy of data recorded on log books of fresh water abstraction and consumption.
- Annexure-3 : Recorded laboratory Analysis Report of ETP & sulphate removal system operational Parameters carried out by the factory.
- Annexure-4 : ETP analysis report carried out as per sample taken during the visit.
- Annexure-5 : ETP performance report, if analysis is carried out by external laboratory.
- Annexure-6 : OCEMS recorded data e.g., flow rate, pH, COD, BOD, TSS etc. sent on CPC server during the visit.
- Annexure-7 : ETP details with flow diagram.
- Annexure-8 : Water balance calculation submitted by the factory.
- Annexure-9 : Evaporator configuration
- Annexure-10 : Form-I (1)
- Annexure-11 : ETP inlet/outlet flow meter calibration certificate.
- Annexure-12 : Air/water/waste hazard consent.
- Annexure-13 : CGWA consent.

- Annexure-14 :** Hot and cold-water arrangement
Annexure-15 : Sugar process flow diagram, material balance


(Vinay Kumar)

Asstt. Professor of Sugar Engineering

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Ministry of Consumer Affairs, Food & Public Distribution
Department of Food & Public Distribution
Kanpur- 208 017

VALIDATION REPORT OF ZERO LIQUID DISCHARGE

शून्य तरल निर्वहण की वैलिडेशन रिपोर्ट

25

(Crushing Season 2022-23)

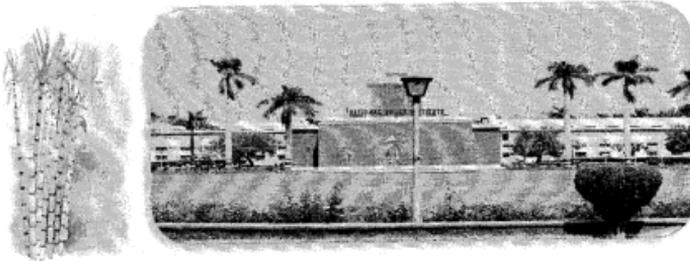
(फाई सत्र 2022-23)

FOR

M/s Balrampur Chini Mills Ltd. (Chemical
Division) Post & Distt. Balrampur-
271201

मेसर्स बलरामपुर चीनी मिल्स लिमिटेड (केमिकल डिवीजन)
पोस्ट और जिला-बलरामपुर-
271201

PREPARED BY:
निर्मित द्वारा :



NATIONAL SUGAR INSTITUTE

राष्ट्रीय शर्करा संस्थान

Government of India

भारत सरकार

Ministry of Consumer Affairs, Food & Public Distribution

उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण

Department of Food & Public Distribution

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REPORT ON VISIT TO DISTILLERY FOR VALIDATION OF ZERO LIQUOR DISCHARGE

26

1. GENERAL INFORMATION

1	Name and address of the factory	Balrampur Chini Mills Ltd. Chemical Division, Balrampur Post & Dist.: Balrampur - 271201
2	Period of visit	31 May 2023 to 01 June 2023
3	NSI officials visited	Designation Contact No & e-mail
	1. Mr. Jitendra Singh	Consultant (Sugar Technology) 9415483751
	2. Mr. Mohit Kumar	Sr. Tech. Asst. (Sugar Technology) 8840440227
	Factory officials interacted	Designation Contact No & e-mail
	1. M.K. Agrawal	General. Manager (Chemical & Cogen) 9651992777
	2. OPS Yadav	Asst.General Manager 9415641196
	3. Nishkam Gupta	Chief General Manager 7895003383
4	Year of Commissioning	1995
5	Manufacturing Process	The Ethanol is being produced through Fed-batch Fermentation, MPR Distillation and De-hydration Process.
6	Licensed capacity of Distillery (KLPD)	330 KLD
	Present Production in KLPD	330 KLD
	Products Manufacture KLPD	
	RS	-
	ENA	-
	Absolute Alcohol/Ethanol	330 KLPD
7	Raw Material requirement per day Molasses (in Qtls)	10500 Qtls/Day (B Heavy Molasses)
8	Status of consents and authorization (Validity/applied)	Air Consent valid up to- 31.12.2023 Annexure-I Water Consent Valid up to- 31.12.2023 Annexure-II Hazardous Waste consent valid up to -31.12.2024 Annexure-III
9	Estimated no. of operating days during the season	350 Days
10	Process Details (attach mass balance, water balance & process flow diagram)	Annexure-IV

2. WATER POLLUTION AND ITS CONTROL

(From 01.03.2023 to 31.05.2023)

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1.	Water Supply Source	Bore Wells		
2.	No. of Bore wells	04		
3.	Water consumption (KLD)	1357.83 KLD		
4.	Log Book Maintained Yes/No	Yes	Annexure-V	
5.	One day reading -	Initial (31.05.23 -8.00AM)	Final (01.06.2023-8.00AM)	Total Consumption
	Tnbe well 3 (m³)	966836	967586	750
6.	CGWA Permission	Valid up to 03.10.2023	Annexure -VI	

3. WASTE WATER GENERATION (KLD)

(From 01.05.2023 to 31.05.2023) – Annexre-VII

1.	Stream/section	Quantity, m³/day	Disposal/utilization
2.	Spent wash gcueration	1950 KLD	MEE
3.	Spent lees	450 KLD	CPU
4.	Fermenter washing	236 KLD	MEE
5.	Process condensate	1571 KLD	CPU
6.	Floor washing	Not available	MEE
7.	Cooling tower & Boiler blow down	278 KLD	CPU
8.	DM & RO Plant regeneration water	Not available	MEE
9.	Others (CO₂ Plant + RO Reject water)	173 KLD	MEE

4. WASTE MANAGEMENT

	Detail	Quantity (TPD)	Disposal/utilization
1.	Sludge (Slurry fermentation)	10	Used in Granulation plant
2.	Boiler Ash	50 TPD	Used in Granulation Plant
3.	Log book maintained, Yes /No	No	

5. INFORMATION REGARDING MEE

- Settling tank capacity before MEE = 900 m³
- Year of installation/establishment & commissioning of MEE plant: 2015, 2019 & 2022
- Type of technology of MEE. – Falling & Force circulation
- Number of Effects with their HTA and MOC. Number of stand-by bodies and degasser provided.

MEE	Effect	HTA	MOC	Designed feed capacity	Evaporation Duty
I (2015)	(5+1) Forced circulation & (1+1) finisher forced	3870 m ²	SS-304 & 316	60 m ³ /hr.	45 m ³ /hr.
II (2019)	(3+1) Falling film & (2+1) Forced effect	1985 m ²	SS-304 & 316	20 m ³ /hr.	14 m ³ /hr.
III (2022)	(4+1) Falling film & (2+1) Forced	3300 m ²	SS-304 & 316	50 m ³ /hr.	40 m ³ /hr.

No of Stand-by Body – Available with each MEE as mention in table.

- **Acceptable level of suspended solids, dissolved solids etc. in the feed.**
Suspended solids - 10000-20000 mg/l & dissolved solids - 150000- 230000 mg/l
- **No of days of operation** - Estimated 350 Days in this current year.
- **What is the frequency and duration of cleaning** – 15 days.
- **Log Book supporting MEE plant performance** – Annexure-VIII

6. FURTHER TREATMENT/DISPOSAL OF CONDENSATE/CONCENTRATE

1. Type-	Forced & FFE
2. Capacity	3870 m ² , 1985 m ² & 3300 m ²
3. No. of Effects	(5+1) force circulation & (1+1) finisher forced, (3+1) Falling film & (2+1) force effect, (4+1) Falling film & (2+1) force
4. MEE feed rate	95 m ³ /hr
5. Feed rate @ Sp.Gr.(Approximate)	100 MT/hr @ 1.050 sp. gravity
6. Solid content in feed/brix	15 - 16 Brix
7. Water evaporation rate (Minimum)	75000 Kg/hr.
8. Concentrate Generation	25000 Kg/hr.
9. Solid content in concentrate Generation/Brix	58 -59
10. Steam required for water evaporation	20.2 Ton/Hour
11. Cooling water circulation rate	3500 m ³ /hour
12. Power consumption for Evaporation	1250 KWH
13. Feed temperature	45-50-degree C
14. Steam pressure/temperature	1.50 Kg/cm ² and 125-degree C
15. Operation hour	24 Hours
16. Frequency of CIP	15 days
17. Quantity of CIP effluent	20 KL
18. Quantity of process condensate	75 m ³ /Hour
19. MEE Feed	
pH	pH - 4.50
TSS	TSS - 0.16 w/w
TDS	TDS- 0.2% w/w
	BOD - 20000 ppm

514		COD – 100000 ppm
20. Concentrate	Colour Temp pH TSS TDS	Dark Brown 65-degree C 4.5 to 5.0 25-30 gram/Ltr Not determine
21. Condensate	Colour Temp pH TSS TDS COD	Colourless 70-degree C 2.5 to 3.0 Nil 150-200 4000-5000
22. Whether MEE achieving design efficiency		Yes
23. Whether MEE operated continuously		Yes
24. Details of online flow measuring device installed for MEE inlet		1.Make- ABB 2.Sr. No- 244392239/X004/000798 3.Model No-FCB430- Y0Y0080R0D4A1A1D1G2A.L2M5
25. Details of online flow measuring device installed for MEE outlet		1.Make- Endress + Hauser 2.Sr. No- S70C3A20000 3.Model No-Promass 300
26. Utilisation of MEE condensate		CPU to fermenter dilution & cooling tower make up
27. Utilisation of MEE concentrate		Incineration Boiler.

7. MEE OUTPUT CHARACTERISTICS

Particulars	Conc. spent wash	Process Condensate
Quantity	432.54 MT/day	1571 m ³ /day
pH	4.5	3.2
Temperature, degree C	50	55-60
BOD, ppm	-	4500
COD, ppm	-	5500
Total solids, %	-	-
Total dissolved solids,mg/l	-	150
Total suspended solids,mg/l	-	0
Ammonical Nitrogen (asN), ppm	-	-

8. INFORMATION REGARDING CPU

1	Capacity	3730 m ³ /day
2	Sources of effluent coming into CPU	MEE condensate, spent lees, cooling tower blow down, DM water blow down, floor washing and boiler blow down
3	Quantity coming /day	2299 m ³ /Day

4	Inlet characteristics	Colourless, pH-3.0, COD-5500, BOD-4500
5	Out let characteristics	Colourless, pH-7.5, COD-10, BOD-4
6.	Quantity Utilized per day	2299 m ³ /Day

Date of installation of CPU unit - CPU Plant installed in Oct - 2022.

Name of plant/technology supplier - M/s Lars Enviro Pvt Ltd. Nagpur

Type of technology of CPU plant - Aerobic + anaerobic followed by UV & RO

Design capacity of CPU unit - 3730 (m³/day)

Feed characteristics considered.

Sl.	Parameter	
1.	pH	3.0
2.	BOD	4500
3.	COD	5500
4.	TDS	150
5.	TSS	<10 ppm

Low strength effluents treated through CPU & their quantities -

	Stream/section	Quantity, m ³ /day	Disposal/utilization
1.	Spent lees	450	CPU
2.	Process condensate	1571	CPU
3.	Cooling tower & Boiler blow down	278	CPU
4.	DM & RO Plant regeneration water	Not available	CPU
	Total	2299	CPU

Recovery (%) and characteristics of treated water and its further utilization details -
Recover - 92.47 %

UV Outlet - In Fermentation process

RO Outlet - In Cooling Tower makeup

Is there any reject generated and how it is disposed- 173 KLPD and FEED through MEE.

Total fresh water consumption after reuse of treated low strength effluents. - 1357 KLPD

9. CPU PERFORMANCE

Particulars	Mixed Influent	Treated effluent
Quantity, M3/day	2299	2126
Colour	Colorless	Colorless
pH	3.0	7.5
Temperature, degree C	52-degree C	32-degree C
BOD, ppm	4500	3
COD, ppm	5500	16
Total solids, %	ND	ND
Total dissolved solids, ppm	150-200	<100
Total suspended solids %	-	ND

516	2000 PPM	Nil
Volatiles Acids	Nil	1000 ppm
Total Alkalinity		

Log Book records supporting CPU performance Annexre-IX

10. INFORMATION REGARDING AIR POLLUTION/INCINERATION BOILER

- **Date of installation** Year 2015: 40 TPH Year 2019: 20 TPH
Design basis: Slop and subsidiary fuel ratio, calorific values and feed rates considered to finalize capacity and other details Subsidiary fuel ratio –Bagasse to Slop (40:60), Calorific Value of Bagasse – 2000-2100 Kcal/Kg, Calorific Value of Slope – 1500-1700 Kcal/Kg
- **Boiler/Technology Supplier details and type of boiler**–ISGEC Make Slop fired boiler
- **Boiler capacity, pressure, temperature and other details** –
 Capacity – 40 & 20 TPH
 Working Pressure – 45 kg pressure & 400° Temp Temp – 400°
- **Boiler performance details: Including slop and subsidiary fuel actual ratio achieved, no of working days, shut down days-cleaning period required, steam generation (MT/hr), steam pressure & temperature etc.** Annexre -X
 Slop feed – 431 TPD
 Bagasse Feed – 287 TPD
 Fuel Ratio (Bagasse to Slop) – 40:60
 No of Working days – 350 Days
 Cleaning Period Required – After 3-4 Months
 Steam Generation – 892 TPD
 Steam Pressure – 45 Kg/cm²
 Temp –400 Degree
- **Emission control system installed, its details, analysis report.** Annexure-XI
 SPM Analyser is installed
- **Problems faced in operation and maintenance of Boiler -**
 No problem.
- **Quantity of ash generated (MT/day), its characteristics and method of disposal etc.**
 Ash Generation – 50 MT/day
 Characteristics – Dry ASH
 Method of Disposal – Granulation plant
- **Log Book records supporting incineration boiler performance.** Annexre-X

1	Capacity	40 & 20 TPH
2	Type of fuel used with consumption/day (Avg.)	Slop- 431 TPD Bagasse - 287 TPD
3	Stack details Height	72 Meters
4	ESP	Electrostatic precipitator with 4 fields of single stream type to limit the pollution level to 50 mg/nm ³ at the outlet of ESP for said fuels (with all fields in service) and complete with accessories including manually operated gates.
5	Stack monitored	Yes

1.	Actual Capacity of Lagoons*	Yes/No	Number	Dimensions (L×B×H)	Storage Capacity (m ³)	Approximate Volume found stored during Inspection (m ³)																				
	a. MEE Concentrate (for bio-composting)	NO	-	-	-	-																				
	b. MEE Concentrate (for Incineration)	NO	-	-	-	-																				
	c. Spent Wash	Yes	01	(124 x24.5 x4.5) - 200	13471	5000 (approx..)																				
2.	a. PTZ 360 cameras provided at Lagoon area b. Operating satisfactorily c. Connectivity to SPCB/CPCB	Yes Yes Yes		Details of Camera: <table border="1"> <thead> <tr> <th>Description</th> <th>Sr. No.</th> <th>Model</th> <th>Make</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>NVR</td> <td>1L04054PVTJBCO</td> <td>DH-NVR106H</td> <td>DAHUA</td> <td>-</td> </tr> <tr> <td>Camera-1</td> <td>2C05B0CPAN00132</td> <td>DH-S059120T-HN</td> <td>DAHUA</td> <td>Final Drain</td> </tr> <tr> <td>Camera-2</td> <td>2C05B0CPAN00074</td> <td>DH-S059120T-HN</td> <td>DAHUA</td> <td>Lagoon</td> </tr> </tbody> </table> User ID and Password for connectivity: URL : hitech.glensserver.com User Name : BCMLD Password : Bcmlid@789			Description	Sr. No.	Model	Make	Location	NVR	1L04054PVTJBCO	DH-NVR106H	DAHUA	-	Camera-1	2C05B0CPAN00132	DH-S059120T-HN	DAHUA	Final Drain	Camera-2	2C05B0CPAN00074	DH-S059120T-HN	DAHUA	Lagoon
Description	Sr. No.	Model	Make	Location																						
NVR	1L04054PVTJBCO	DH-NVR106H	DAHUA	-																						
Camera-1	2C05B0CPAN00132	DH-S059120T-HN	DAHUA	Final Drain																						
Camera-2	2C05B0CPAN00074	DH-S059120T-HN	DAHUA	Lagoon																						

12. ANNEXURES:

Sl.	Description	Remarks
1.	ETP analysis report carried out as per sample taken during the visit.	Annexure-XII
2.	ETP performance report, if any analysis is carried out by external laboratory.	NA
3.	ETP details with flow diagram. (CPU Flow Diagram)	Annexure -XIII
4.	Status of consents & authorization from CPCB/ SPCB.	Annexure-I to III
5.	Attach supporting documents /readings/analysis etc. as given above for a period of not less than thirty days.	Attached

- **Number and location of mass flow meters installed with photographs-Annexure-XIV**
 1. Spent wash Feed to MEE - 03 Nos
 2. On Concentrate MEE Plant - 01 Nos
 3. Concentrate feed to Boiler - 01 Nos
- **Number and location of cameras installed (minimum two) with photographs -Annexure -XV**
 1. Entry Gate
 2. PTZ Camera on Spent wash Lagoon
 3. On Mass flow meter at Boiler

- 518
- **Details of on-line emission (stack) monitoring system for boiler.**
Make: Instrument Sr.No 20250
 - **Date on which the online monitoring system was commissioned /connected to the server.**
Installation and connected to server date-
IP Address -<https://sepl.glensserver.com>
User ID -BCMIL, Pass: Bcmil@846
 - **Name and contact details of the vendor who has supplied and commissioned the on-line monitoring system - SPM-Neveco Engg. Pvt Ltd. 2015 SOx-NOx Steam Equipment Pvt. Ltd-2019**
 - **Problems faced in maintaining the continuity of on-line monitoring system -** Some time it faces the problem of connectivity due to network issue.
 - **Green belt surrounding bio-compost yard (Photographs).** N.A.
 - **Identification of recipient drains/rivulets and their n/s & d/s locations for monthly monitoring to ensure ZLD - NA**
 - **Material and mass balance of total distillery plant operations including ETPs showing ZLD - Annexure - IV**
 - **Also indicate how your distillery unit is achieving steam and power balance -Annexure - XVI**
 - **Environment Management Cell-Mo Ms and necessary documents -Annexure - XVII**
 - **EC, Consent to Operate, Directions received and related documents - Annexure -III**
 - **Water conservation measures taken report (rain water harvesting etc.). Annexure - XVIII**

13. Recommendations & Observation:

1. The unit has organic & inorganic effluent treatment plant in CPU unit to achieve Zero liquid discharge. The unit has newly installed CPU in the year 2022 and the working was found satisfactory. The factory has also a granulation plant in which ash of incineration boiler was being used as input feed material.
2. 03 Nos. of PTZ cameras were there at entry gate, spent wash lagoon & mass flow meter at boiler.
3. 03 Nos. of MEE plant were in operation and achieved the designed parameter to confer the CPCB norm.
4. CPU of capacity 3730 m³/day was installed whereas total average was 2299 m³/day which seems to be adequate.
5. Bagasse to slop ratio was recorded 40:60 including steam utilized from Co-gen boiler & incinerator boiler which seems to be adequate.
6. Third party analysis of CPU may be carried out at regular interval.


Jitendra Singh
Consultant (Sugar Technology)

PROOF OF SERVICE

Fw: MANAV SEWA SANSTHAN VS UOI REPLY ON BEHALF OF R-4 (OA/912/2023)

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Prince <prince@artlo.in>

Wed 11/1/2023 2:25 PM

To:info@uppcb.in <info@uppcb.in>;litigation.life@gmail.com <litigation.life@gmail.com>;hk9548707@gmail.com <hk9548707@gmail.com>

 1 attachments (5 MB)

FINAL REPLY RESPONDENT NO 4.pdf;

Dear sir

please find attached herewith the scanned copy of the Reply alongwith annexures on behalf of Respondent No 4 i.e. Balrampur Chinni Mills Ltd, in OA No 912/2023 case titled as Manav Sewa Sansthan and anr vs Union Of India and Ors. pending before the Hon'ble National Green Tribunal, Principal Bench, New Delhi.