उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड
UTTAR PRADESH POLLUTION CONTROL BOARD

Ref. No 40070/ /C-6/Sa-723/ O.A. No.12/2023 /2023 Dated 30-8-23

To,

The Registrar General,
Hon'ble, National Green Tribunal,
Principal Bench,
Faridkot House, Copernicus Marg,
New Delhi- 110001

Sub: Regarding submission of Joint Committee Report with respect to M/S Balrampur Chini Mills Limited (Distillery Division), Village & Post- Datauli, Mankapur, Gonda, UP in compliance of the order dated 30.05.2023 in O.A. No.12/2023 In the matter of Alok Kumar Mishr & Anr. Vs. State of U.P.

Sir,

Kindly refer to the subject mentioned above. In compliance of the order dated 30.05.2023 in O.A. No.12/2023 In the matter of Alok Kumar Mishr & Anr. Vs. State of U.P., The Joint Committee Report with respect to M/S Balrampur Chini Mills Limited (Distillery Division), Village & Post- Datauli, Mankapur, Gonda, UP is enclosed herewith for your kind perusal and further necessary action.

Sincerely Yours,

Enclosures: As above

(R.K. Singh)
Chief Environment Officer
(Circle-6)

Copy to: Following for information and further necessary action.

Shri Pradeep Misra Advocate, Supreme Court, B-235, Sector-XIX, Noida, District-GB Nagar, 201301.

Chief Environment Officer
(Circle-6)

T.C/12V, Vibhuti Khand Gomti Nagar, Lucknow – 226010
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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 12 OF 2023

IN THE MATTER OF

Alok Kumar Mishra & Anr. ….. Applicant

Versus

State of U.P. ….. Respondent(s)

INDEX

Place: Lucknow

Date: 30.08.2023

JOINT INSPECTION REPORT

OF
M/S BALRAMPUR CHINI MILLS LIMITED (DISTILLERY DIVISION), VILLAGE & POST- DATAULI, MANKAPUR, GONDA, U.P.

IN THE MATTER OF
Alok Kumar Mishra &Anr. Vs State of U.P. (O.A. No. 12 of 2023)

1.0 Background:

Hon'ble NGT, Principal Bench, New Delhi has passed order dated 30.05.2023 for joint inspection of M/s Balrampur Chini Mills Limited (Sugar, Distillery and Power Plant Division), Village & Post- Datauli, Mankapur, Gonda, U.P. in the matter of Alok Kumar Mishra & Anr. Vs State of U.P. (O.A. No. 12 of 2023). The relevant portion of the order is as below:

".....9. Ex facie we find that the report is not complete or reliable, hence we find it difficult to accept the report. We accordingly, constitute a new Committee comprising Regional Officer, MoEF&CC, Lucknow, an officer not below the rank of Regional Director/Scientist E of CPCB and Chief Environmental Officer, UPPCB, Lucknow.

10. Since, the Sugar Division of the unit is presently closed, the aforesaid committee shall visit the site of Distillery Division of the unit within two weeks. PCB need to ensure that the industry operate as ZLD system with complete recycling/reuse of recovered water and storage of spent water as to meet the prescribed guidelines. PCB may essentially monitor river Bisuhi, particularly during measures, to ensure that no waste from Distillery, deliberately or otherwise, is discharged for or for emptying the lagoons.

11. With regard to Sugar Division inspection shall be made later, when the unit commences its production in October, 2023.

12. The combined report shall be filed by 15th November, 2023.

13. The copy of the report shall also be served upon the proponent so as to give him an opportunity to submit comments/response in the present matter.

14. List this matter on 24th November, 2023."

Subsequently, joint inspection of M/s Balrampur Chini Mills Limited (Distillery Division), Village & Post- Datauli, Mankapur, Gonda, U.P. was carried out by a joint team comprising officials from MoEF & CC, CPCB, Regional Directorate, Lucknow, Chief Environmental Officer, UPPCB and Regional Officer, Regional Office, UPPCB, Ayodhya on 08.08.2023. During inspection, it was observed that separate power plant does not exist. 6.6 MW power generation was installed with distillery slope fired boiler.

The salient, observations and recommendations based on the inspection of distillery division is as below:

2.0 M/s Balrampur Chini Mills Limited (Distillery Division), Mankapur:

	A: General Information	
1.	Name of the unit and Address	M/s Balrampur Chini Mills Limited (Distillery Division), Village & Post- Datauli, Mankapur, Gonda, U.P.
2.	Name of the Proprietor/ Contact person – Designation Contact No.	Mr. Neeraj Bansal (CGM) Mob.No.+91-7080402301
3.	Year of Commissioning.	2007
4.	Sector	Distillery
5.	Production capacity • Products • Consented Production Capacity • Present Production	100 KLD Rectified Spirit (RS)/ Extra Neutral Alcohol (ENA) / Absolute Alcohol (AA) 100 KLD 103 KLD (Avg. for May to July,2023)
6.	Raw materials & their requirement	Molasses- 4200 Qts. /Day
	B : Water Pollution and its Control	
1.	Water Supply Source Water Consumption (KLD) a. Industrial b. Domestic	Bore wells (02 no.) (Avg. for May to July ,2023) 632 10
2.	Waste Water Generation (KLD) a. Industrial	(Avg. for May to July ,2023) Spent wash-743 Spent Leese-130 Process condensate (MEE) -764

	b. Domestic	Cooling tower blow down-157 Boiler blow down-10 DM plant reject-15 Other (CPU RO Reject)-84 Other effluent-161 06
3.	Wastewater treated (KLD) a. Industrial b. Domestic	 Spent wash-743 Spent Leese-130 Process condensate (MEE) -764 Cooling tower blow down-157 Boiler blow down-10 DM plant reject-15 Other (CPU RO Reject)-84 Other effluent-161 06
4.	Details of ETP	For spent wash management: • Settling Tank • Multi Effect Evaporator • Lagoon-5600 m^3 • Slope Fired Boiler For other process effluent (Condensate Polishing Unit- CPU): • Equalization tank -1392 m3 • Buffer tank -300 m3 • UASBR- 2784 m3 • Aeration tank -1392 m3 • Secondary Clarifier- 203 m3 • Tertiary Clarifier 261 m3 • Clear Water Storage Tank 38 m3 • Multi Grade Filter (MGF) • Activated Carbon Filter (ACF) • Process Water Tank 58 m3 • UV System • Ultra-filtration • RO Plant

5.	Mode of disposal of treated effluent	Concentrated spent wash is incinerated in slope fired boiler whereas other process effluent is being treated in CPU and reused in Cooling Tower make up as well as in Fermentation.
6.	Flowmeter measuring device installed at outlet of ETP	Installed
7.	Status of Consent under the Water Act- 1974	Valid from 01.01.2022 to 31.12.2023
C: Air Pollution and its Control		
1.	Sources of Air Pollution	Slope fired boiler with capacity -45 TPH
2.	Type of Fuel used with consumption Stack details with APCS	Slope and bagasse (15.12 TPH and 9.0 TPH) Stack height 88 m is equipped with ESP as APCS.
3.	Status of Consent under the Air Act- 1981	Valid from 01.01.2022 to 31.12.2023.
D: Waste Management		
1.	Type of Waste Generated	Fermentation sludge: 10 MT/day Boiler Ash :60 MT/day Used oil:1.25 MT/Annum
2.	Facility of Storage/ Disposal	Fermentation sludge - Send to granular plant for making fertilizer Boiler Ash-Send to granular plant for making fertilizer Used Oil: Mixed with bagasse and burnt in boiler
3.	Disposal of waste	Fermentation sludge - Send to granular plant for making fertilizer Boiler Ash-Send to granular plant for making fertilizer Used Oil: Mixed with bagasse and burnt in boiler
4.	Status of Grant of authorization, if any	Valid upto 31.12.2024

3.0 Observations:

1. The unit has infrastructure for production of Rectified Spirit (RS)/ Extra Neutral Alcohol (ENA) / Absolute Alcohol (AA) with consented capacity of 100 KLD using molasses, yeast etc. as major raw material. During inspection, the unit was found operational.
2. The unit was granted consent under the Water (P&CP) Act, 1974 and the Air (P&CP) Act, 1981 on 24.12.2021, which is valid up-to 31.12.2023.
3. The unit was granted authorization under the provision of Hazardous Wastes Management Rules, 2016, which is valid up-to 31.12.2024.

4. The unit is meeting its fresh water requirement through two (02) borewells. Electromagnetic flow meter is installed at the bore wells and log books are maintained by the unit.
5. The unit has obtained NOC from Groundwater Department, Ministry of Jal Shakti, Govt. of Uttar Pradesh for groundwater abstraction, which is valid upto 11.10.2026 for extraction of upto1000 KLD.
6. The unit extracting 712 KLD fresh water from two borewell to fulfill the requirement of different process in unit i.e. 632 KLD for Industrial use, 70 KLD for Bottling plant and 10 KLD for Domestic use. The unit withdrawal fresh water @ 6.81 KL/KL of alcohol production.
7. The unit is generating spent wash @ 7.21 KL/KL of alcohol production. The avg. spent wash generation for the month of May to July, 2023 is 743 KLD. Flow meter is installed at analyser column for measurement of spent wash generation and log book is maintained.
8. Spent wash is collected in settling tanks (800 KL). After settling, spent wash is fed to Multi Effect Evaporator (MEE) plant (Five Effect Forced Circulation) having capacity of 1500 m^3/day. It was found operational during inspection and sample was collected from MEE feed, MEE concentrate and MEE condensate. Analysis result is presented below:

Parameter	**Unit**	**MEE Inlet**	**MEE Concentration**	**MEE Condensate**
pH	--	4.40	5.10	2.94
Total Solids	mg/L	130092	595497	--
SS	mg/L	--	--	<2.5
TDS	mg/L	--	--	215
COD	mg/L	129922	559690	4547
BOD	mg/L	64800	215000	2758

9. Concentrated spent wash is send to lagoon which is having capacity of 5600 m^3. Concentrated spent wash from lagoon is fed to slope fired incinerator which is having capacity of 45 TPH using slope as primary fuel (60%) and bagasse (40%) as secondary fuel.
10. The slope fired boiler is having co-gen turbine which is having capacity of 6.6 MW power generation. Emission from slope fired boiler is vented out through stack (height approx.88 m) having Bag Filter as APCD.

11. The unit has installed Condensate Polishing Unit (CPU) which is having capacity of 1392 m^3/day for treatment of other process waste such as spent lees, process condensate, cooling tower blow down, boiler blow down etc. CPU comprises of following units:

    a. Equalization tank -1392 m^3
    b. Buffer tank -300 m^3
    c. UASBR- 2784 m^3
    d. Aeration tank -1392 m^3
    e. Secondary Clarifier- 203 m^3
    f. Tertiary Clarifier 261 m^3
    g. Clear Water Storage Tank 38 m^3
    h. Multi Grade Filter (MGF)
    i. Activated Carbon Filter (ACF)
    j. Process Water Tank 58 m^3
    k. UV System
    l. Ultra-filtration
    m. RO Plant

12. During inspection, CPU was found operational. Sample was collected from CPU Inlet, Aeration Tank, CPU Outlet, RO Outlet & RO Reject. Analysis result is presented below:

Parameters	**Unit**	**CPU Inlet**	**CPU Aeration Tank**	**CPU Outlet**	**RO Outlet**	**RO Reject**
pH	--	3.88	--	7.65	7.19	7.88
BOD	mg/L	2253	--	20.6	6.05	59.5
COD	mg/L	3501	--	52.9	19.5	141
SS	mg/L	<2.5	--	10.0	<2.5	6.04
TDS	mg/L	271	--	485	305	1209
MLSS	mg/L	--	5998	--	--	--
MLVSS	mg/L	--	4898	--	--	--

13. Treated effluent from CPU is being reused in fermentation after UV and remaining treated effluent (RO permeate) is used in cooling tower make up. Characteristic of the wastewater and treated wastewater at different location MEE and CPU found in order of charter made for this sector.
14. Groundwater quality status in and around the unit carried out. Analysis result is presented below:

Parameters	**Unit**	**Ground water (borewell) within Industry premises BCML, Mankapur**	**Handpump near Upadhayapur Village, Datuli, Mankapur**	**Handpump near Vijaipur Village, Datuli, Mankapur**	**Drinking Water Standards as per IS 10500:2012 (Acceptable Limit)**
pH	--	6.94	7.11	7.16	6.5-8.5
Colour	Hazen	05	05	05	05
TDS	mg/L	373	275	287	500
Total Harness	mg/L	209	302	209	200
Alkalinity	mg/L	369	299	234	200
Calcium as Ca^{2+}	mg/L	69.3	62.1	60.5	75
Magnesium as Mg^{2+}	mg/L	8.75	35.7	14.0	30
Na^{+}	mg/L	26.0	13.0	17.5	--
K^{+}	mg/L	3.73	2.94	2.30	--
Chloride as Cl^{-}	mg/L	4.84	3.84	8.42	250
Floride as F^{-}	mg/L	<0.5	<0.5	<0.5	1
Sulphate as SO_4^{2-}	mg/L	17.3	17.9	18.5	200

Phosphate	mg/L	0.09	<0.06	0.19	--
Nitrate	mg/L	<2.2	<2.2	<2.2	45
COD	mg/L	<5	<5	<5	--

15. It is evident from analysis results that concentration of Total Hardness and alkalinity does not fell in the range of acceptable limit of drinking water standard in groundwater.
16. The unit has installed Online Continuous Emission Monitoring System (OCEMS) at boiler stack. The OCEMS is connected with CPCB Server and found operational during inspection.
17. During inspection, STP was operational. Treated sewage from STP is used for gardening purpose inside the campus. Sample was collected from inlet and outlet of STP. Analysis results are presented below:

S. No.	**Parameters**	**Unit**	**Inlet of STP**	**Outlet of STP**	**Standard[#]**
1.	pH	--	7.40	7.67	5.5-9.0
2.	SS	mg/L	54.5	4.28	20
3.	BOD	mg/L	13.9	<5	10
4.	COD	mg/L	45.8	9.23	50
5.	Total Phosphorous	mg/L	3.39	2.77	NS
6.	Total Nitrogen	mg/L	26.1	9.62	10

NS: Standard not specified for uses of treated sewage in gardening purpose.
[#]Discharge Standards as per Hon'ble NGT order dated 30.04.2019 in the matter of Original Application No. 1069/2018 Nitin Shankar Deshpande Vs Union of India & Ors. (Applicable to all mode of disposal), which is mentioned in Consent order.

18. The unit has installed separate energy meter for operation of STP and maintained logbook for operation of STP.

4.0 Monitoring of Drain & Bisuhi River:

River Bisuhi is passing adjacent to the Sugar and Distillery unit. River Bisuhi meets to Kuano River, further meet to River Rapti and ultimately meet River Ganga. During inspection, no industrial effluent was observed discharging into River Bisuhi from industry. However, two drain i.e. 1. Drain near main gate of BCML (distillery division) Mankapur, 2. Drain near Kabristan (behind BCML Sugar Division ETP boundary) were found meeting to River Bisuhi. Sample collected from both drains before meeting to River Bisuhi. Analysis results are presented below:

Parameters	**Unit**	**Drain near main gate of BCML (Distillery division) Mankapur**	**Drain near Kabristan (behind BCML Sugar Division ETP boundary)**
pH	--	7.06	7.70
Colour	Hazen	20	30
Suspended Solid	mg/L	45.8	8.0
TDS	mg/L	1163	875
Chloride as Cl^-	mg/L	8.78	35.0
Sulphate as SO_4^{2-}	mg/L	36.5	40.6
Nitrate as N	mg/L	2.57	4.70
Phosphate as P	mg/L	0.61	0.67
Sodium as Na^+	mg/L	42.6	47.2
Potassium as K^+	mg/L	9.58	27.3
Ammonical Nitrogen	mg/L	0.86	1.72
COD	mg/L	103	46.1
BOD	mg/L	24.0	9.53
SAR	--	1.29	1.18

Sample of River Bisuhi is also collected from upstream and downstream of the unit. Analysis results are presented below:

Parameters	**Unit**	**R. Bisuhi at U/s of BCML, Mankapur**	**R. Bisuhi at D/s of BCML, Mankapur**
pH	--	7.01	6.86
Colour	Hazen	20	15
Conductivity	µS/cm	214	209
Na^+	mg/L	4.22	3.0
K^+	mg/L	2.04	2.20
Chloride as Cl^-	mg/L	3.57	3.66
Sulphate as SO_4^{2-}	mg/L	21.0	21.8
Dissolve Oxygen	mg/L	7.5	7.0
COD	mg/L	9.71	9.23
BOD	mg/L	2.20	2.08

It is evident from above analysis, no signature of industrial discharge noticed meeting into River Bisuhi.

5.0 Recommendations:

The unit may be directed to comply with the following as preventive measures:

1. The unit should provide proper monitoring facilities on the stack as per CPCB guidelines.
2. The unit requires to improve housekeeping at CO_2 plant area as well as in Granulation plant area.
3. The unit should not discharge treated or untreated effluent into any drains which are meeting to River Bisuhi in the nearby area.
4. The unit should comply with the all consented condition under Air Act, Water Act and Authorization for handling of Hazardous waste as well as charter made for distillery.

Inspecting Team:

Dr Amit Kumar Gupta, Scientist E, MoEF & CC, Regional Office, Lucknow	**Dr Devendra Kumar Soni**, Scientist E & Regional Director, CPCB, Lucknow.	**Er R. K. Singh**, Chief Environmental Officer, UPPCB, Lucknow.

Photographs taken during inspection

Photo 1: Main Gate of Industry (Chemical division)

Photo 2: Distillation plant

Photo 3: MEE Unit

Photo 4: Fermentation Plant

Photo 5: CO_2 Plant

Photo 6: Raw Spent wash lagoon

Photo 7: PTZ camera at lagoon

Photo 8: Stack attached with slope boilers

Photo 9: OCEMS installed at Stack

Photo 10: Granulation Plant

Photo 11: Sampling at MEE Feed

Photo 12: Sampling at MEE concentrate

Photo 13: Sample collected from MEE

Photo 14: CPU: Aeration Tank

Photo 15: CPU: Secondary Clarifier

Photo 16: CPU : Clear Water Tank

Photo 17: CPU: RO

Photo 18: STP: Inlet

Photo 19: STP: MBBR Tank

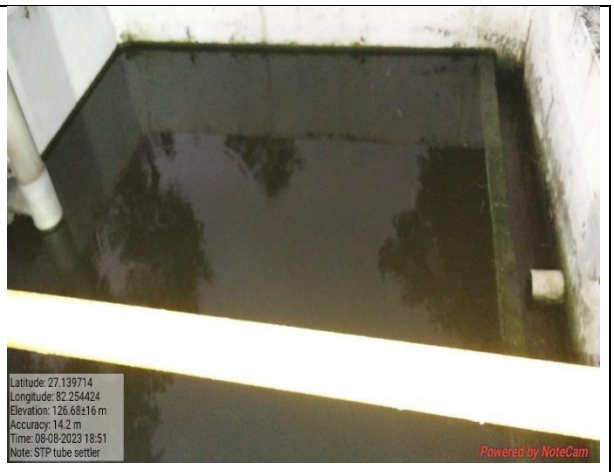

Photo 20: STP: Tube Settler

Photo 21: STP: DMF & ACF

Photo 22: Drain: Near main gate of BCML, distillery division

Photo 23: Drain: Near kabristan

Photo 24: Handpump at Uphadhyapur village, Datuali, Mankapur

Photo 25: River Bisuhi at U/s of Unit

Photo 26: River Bisuhi at D/s of Unit