



भारत सरकार  
Government of India  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
Ministry of Environment, Forest & Climate Change  
क्षेत्रीय कार्यालय, लखनऊ  
Regional Office, Lucknow



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File No. XXI/ENV/NGT/CC/126/2023/46

Dated: 23.04.2024

**BY-EMAIL**

To,

The Registrar General,  
Principal Bench,  
Hon'ble National Green Tribunal,  
Copernicus Marg,  
New Delhi-110001  
Email: [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in)

**Subject: Submission of Joint Committee Report in O.A. No. 12 of 2023,  
Alok Kumar Mishra & Anr. Vs State of U.P. & Ors**

Sir,

In compliance of the direction dated 05.02.2024 passed by this Hon'ble National Green Tribunal in O.A. No. 12/2023, Alok Kumar & Anr. Vs State of U.P. & Ors.

I am directed to enclose hereby the Joint Committee Report with a request to put up before Hon'ble Tribunal for kind perusal and consideration

**Encl: As above**

Yours Sincerely

(Dr.(Ms) Satya)  
Scientist 'E'

23-04-24

Copy to for information and further necessary action.

1. Ravinder Kumar Gupta, Advocate, Counsel of MoEF&CC. Email:  
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**JOINT INSPECTION REPORT**

**OF**

**“M/s Balrampur Chini Mills Limited (Sugar & Distillery), Village  
& Post- Datauli, Mankapur, Gonda, U.P”**

**in compliance to**

**Hon’ble NGT order dated 05.02.2024**

**in the matter of**

**Alok Kumar Mishr & Anr**

**Vs**

**State of UP [O.A No. 12/2023]**

**PREPARED BY**

**JOINT COMMITTEE OF**

**MINISTRY OF ENVIRONMENT, FOREST & CLIMATE**

**CHANGE (MoEF&CC)**

**CENTRAL POLLUTION CONTROL BOARD (CPCB)**

**CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH**

**(IITR)**

**Joint inspection report of “M/s Balrampur Chini Mills Limited (Sugar & Distillery), Village & Post- Datauli, Mankapur, Gonda, U.P” in compliance to Hon’ble NGT order dated 05.02.2024 in the matter of Alok Kumar Mishr & Anr Vs State of UP [O.A No. 12/2023]**

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## **1.0 INTRODUCTION:**

The Hon’ble NGT, Principal Bench, New Delhi during the hearing on 05.02.2024 stated and directed the following:

*“3. A perusal of the report reveals that a complete analysis of samples relating to discharge of liquid and solid waste from the unit as also the ground water analysis has not been done. Hence report submitted by the Joint Committee on 29.01.2024 in this regard is deficient in following:*

- (i) The press mud generation is around 70789 qtls. (16.11.2023 to 10.12.2023). Hence during kane crushing season huge quantity of press mud will be generated. It is mentioned that press mud that is generated is used for “making pallets”. It is not clear as to what are these pallets where it is utilized/how disposed.*
  - (ii) Further with regard to boiler ash is mentioned that the ash is being utilized in “granulation plant”. No details of such plant and the consequence of such utilization of boiler ash is provided.*
  - (iii) It is also mentioned that ETP sludge is disposed of on land. Soil analysis of ETP sludge application including the ferti- irrigation carried out on land is not provided.*
  - (iv) The water quality analysis of ETP outlet has also not been provided.*
  - (v) The ETP water quality analysis indicating all parameters including heavy metal concentration be provided.*
  - (vi) The water quality Bishui River both upstream and downstream show high level of total coliform and fecal coliform. The reasons for such high bacterial count is on account of sewage discharge from village Kudasan. Pollution Control Board had not suggested any measures for controlling the untreated sewage discharge.*
- 4. Hence, we deem it proper to constitute a new Joint Committee comprising of an expert nominated by Industrial Toxicology Research Centre (ITRC), Lucknow, Member Secretary, Central Pollution Control Board (CPCB), a representative of Ministry of Environment, Forests and Climate Change (MoEF&CC) and Regional Officer, MoEF&CC, Lucknow. The RO, MoEF&CC, Lucknow will act as coordinating agency in the Committee. The Joint Committee will collect the samples of solid and liquid discharge from the unit in question and carry out complete analysis of those samples in all respect and also collect the ground water samples and get the analysis done and submit a factual report before the Tribunal at least one week before the next date of hearing by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in)*

*preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF”.*

In this regards, the joint Committee conducted meetings on 20.02.2024 and 04.03.2024 and finalized the visit plan of M/s Balrampur Chini Mills Limited (Sugar and Distillery Division), Village & Post- Datauli, Mankapur, Gonda, U.P. The Minute of the meeting is annexed at **Annexure-I**.

Subsequently, joint inspection of M/s Balrampur Chini Mills Limited (Sugar and Distillery Division), Village & Post- Datauli, Mankapur, Gonda, U.P. was carried out by a joint team comprising officials from MoEF&CC, Delhi, CPCB-Delhi, Regional Office, MoEF&CC, Lucknow and CSIR-IITR-Lucknow on 05.03.2024 and also visited surrounding area outside the industry premises on 19.03.2024 and nearby villages (Kudasan, Datauli).

**M/s Balrampur Chini Mills Limited (Sugar and Distillery) was inspected by the joint team on March 05, 2024 and Site visit of the surrounding areas (Command area of ferti-irrigation/land application, nearby villages, River Bisuhi etc.) on March 19, 2024.**

In compliance of Hon’ble NGT order dated 05.02.2024, the joint team inspected the Units on 05.03.2024 & surrounding areas on 19.03.2024 and also conducted sampling as given below:

1. **M/S BALRAMPUR CHINI MILLS LIMITED (SUGAR UNIT)**
2. **M/S BALRAMPUR CHINI MILLS LIMITED (DISTILLERY UNIT)**
3. GROUNDWATER SAMPLING WITHIN THE UNIT AND OUTSIDE THE UNIT.
4. SOIL & EFFLEUNT SAMPLING AT COMMAND AREA / FERTI-IRRIGATION SITE
5. ETP SLUDGE AND GRANUEL SAMPLING IN SUGAR MILL /GRANULATION PLANT.
6. DRAIN SAMPLING
7. SAMPLING OF UPSTREAM & DOWNSTREAM OF BISUHI RIVER.

During the joint team visit, both industrial units i.e. Molasses based distillery plant (100 KLPD) and Sugar plant (8000 TCD) of M/s **Balrampur Chini Mills Limited (Sugar and Distillery)** were found operational. Both the Units have separate Consent to Operate (CTO) with validity upto 31.12.2025 for both Molasses based distillery & Sugar plant. Both the Units were found operational on the day of inspection.

Both the Unit (Sugar & Distillery) are located next to each other and on the bank of River Bisuhi. The salient feature, observations and recommendations of the joint team based on the inspection on 05.03.2024 and 19.03.2024 are given below:

## **2.0 INSPECTION OF M/S BALRAMPUR CHINI MILLS LIMITED (SUGAR UNIT), VILLAGE & POST- DATAULI, MANKAPUR, GONDA, U.P**

The joint team carried out detailed inspection of the Units w.r.t Effluent management, solid waste management, ferti-irrigation of treated effluent, analysis of Soil at command area and ground water quality in and around the Unit and other regulatory permission such as Consents to Operate/Consolidated Consent & Authorization (CCA) under Water & Air Act and No ObjectionCertificates (NOC) for ground water withdrawal. The Unit has installed Cogen. Plant

of capacity of 37 MW at Sugar plant to meet out the captive requirement and 6.6 MW power generation plant is installed with slope fired boiler at Distillery.

The joint team collected relevant documents such as copy of CTO/CCA under Air, Water and Authorization under Hazardous Waste Rules issued by UPPCB, NOC issued by Uttar Pradesh Ground Water Department (UPGWD), Copies of logbooks for spent-wash generation, alcohol production, freshwater consumption etc.

<b>A. GENERAL INFORMATION</b>					
<b>1.</b>	<b>Name of the unit and Address</b>	<b>M/s Balrampur Chini Mills Ltd. (Sugar Mill),</b> Unit: Mankapur, Village & P. O : Datauli, Tehsil : Mankapur, Distt: Gonda, Uttar Pradesh- 271306			
<b>2.</b>	<b>Name, Designation and Contact person No. and E-mail</b>	Sri Neeraj Bansal (C.G.M.) Mobile No.-7080402301 Email: neeraj.bansal@bcml.in  Ashok Kumar Tripathi (Manager Q.C.) Mobile No.-9453980006 Email : ak.tripathi@bcml.in			
<b>3.</b>	Year of Comm.	2006			
<b>4.</b>	Cane crushing capacity (Consented)	8000 TCD			
<b>5.</b>	Production	Sugar, Molasses , Press mud			
<b>6.</b>	<b>Month wise production</b>				
	<b>Month</b>	<b>Cane crushed</b>	<b>Sugar</b>	<b>Molasses</b>	<b>Press mud</b>
	<b>November</b> (*16.11.2023)	954700	80565	39380	38188
	<b>December</b>	2315197.94	257692	110800	96293.60
	<b>January</b>	2246102.06	259637	96140	96861.05
	<b>February</b>	2123300	253609	99160	93706.05
	<b>March</b> (upto 5.3.2024)	240900	29480	11440	11081.40
	<b>Average per day production</b>	6304.16 TCD	704.786 Ton	285.536 Ton	268.904 Ton
	All Unit are in Ton ; TCD is Tones of cane crushed per day				
<b>7.</b>	<b>Average actual crush rate (TCD)</b>	6304.16 TCD			
<b>8.</b>	<b>Consent status&amp; its Validity with date</b> (Expired/Applied for renewal/First time applied/Never applied) Air Consent Water consent Hazardous Waste Authorization	Consolidated Consent to Operate (CTO) and Authorization valid up to <b>31.12.2025.</b>			
<b>9.</b>	<b>NOC from CGWA/ State GWD &amp; its Validity</b> (Expired/Applied for renewal/First	NOC is Valid up to 2026. (UP Groundwater Department)			

	time applied/Never applied)	
<b>B</b>	<b>OPERATIONAL STATUS</b>	
<b>10.</b>	<b>Start period of crushing season</b>	*16/11/2023
<b>11.</b>	<b>Operational status during visit</b> (operational/ closed/ temporary closed/ permanent closed)	Operational
<b>12.</b>	<b>Sources of fresh water</b>	
	a. Bore well/Tube well/ Any other & its No's	Bore well (03 nos.) (Installed within the Sugar premises)
	b. Flow meter Installation at borewells	Yes
	c. Any Logbook maintained (Yes/No)	Yes,
	d. Quantity of water withdrawal (KLD)	1624 KLD- (As per logbook data for the month of Jan, Feb and March 2024).
	<b>Fresh water consumption (KLD)- 1624 KLD (Average)</b>	
<b>13.</b>	<b>Waste water (Effluent) generated, KLD</b>	1441 KLD
<b>14.</b>	<b>Specific effluent discharge, L/t of cane</b>	<b>180 L/t of cane</b>
<b>15.</b>	<b>Detail of ETP (KLD)</b>	Bar and Screen Chamber → Oil & Grease Trap Chamber → Rotary screen → Equalization Tank → Micro Settler No.01 → Primary Clarifier → Aeration Tank → Secondary Clarifier → Micro Settler No.02 → Multigrade Sand Filter (MGF) → Activated Carbon Filter (ACF). Treated effluent storage lagoons (01 nos. with capacity-18000 m <sup>3</sup> ) for 15 days. Sludge Drying beds and Centrifuge system or Sludge management.
<b>16.</b>	<b>Storage of treated Effluent</b>	
	a. No. & size of lagoons	01 nos. Size: 18000 m <sup>3</sup>
	b. Storage time	15 Days
	c. Lagoon type-permeable/impermeable	Impermeable
<b>17.</b>	<b>Sludge Handling Process (Yes/No), gives details.</b>	
	a. Sludge Drying Process	Sun drying beds and Centrifuge system /Decanter
	b. Final Disposal of Sludge	The ETP sludge is dewatered through Centrifuge /Decanter and sent to 'Granulation plant' for utilizing in making Granules. The Granules production detail is given in Distillery section.

	c. Whether mechanical sludge handling system installed (Yes/No)	Yes; Centrifuge device /Decanter for sludge dewatering.
18.	<b>Any Hazardous Substances (Yes/No), if yes, give details. (Quantity &amp; way of Disposal)</b>	Yes, Used Oil, empty barrel/container contaminated cotton rags. The used oil is sold to authorized recyclers
19.	Status of Grant of authorization of Hazardous Waste	Authorization is valid upto 11.04.2028.
20.	<b>Details of irrigation system &amp; treated effluent used quantity</b>	
	1. Details of treatment of effluent before ferti-irrigation	The effluent is treated in ETP (Based on ASP with tertiary treatment facility)
	2. Command area for irrigation (available land area)	506 Acre (Farmers Land-497 Acre and Factory Land-09 Acre)
	3. System of transportation of treated effluent upto field.	Through HDPE Pipeline
	4. Formal agreements with farmers for using treated effluent	Yes
	5. Storage facility available for treated effluent during low demand period	Treated effluent is stored in 01 lagoon (Capacity 18000 KL)
	6. Average number of working days for Irrigation annually	165 days (Sugar Mill is seasonal industry)
	7. Crop area under effluent application	Sugarcane, Wheat, Mustard, Eucalyptus plants , greenery etc.
21.	Mode of disposal of treated effluent	Treated effluent is stored in the lagoon and utilized in the land within and outside the premises.
	<b>Air Pollution and its Control</b>	
22.	Sources of Air Pollution	Boilers – 2 Nos. (2 x 90 TPH)
23.	Emission control system or Air Pollution Control Device (APCD) installed	Yes, Multi-cyclone and ESP at a stack of height 65 meter.
24.	Status of Consent under the Air Act- 1981	Valid till <b>31.12.2025</b>
25.	<b>Ash Details:</b>	
	Quantity of ash generated MT/day	Fly Ash = 16.64 TPD Bottom Ash= 7.13 TPD Total Ash= 23.77 TPD
	Method of disposal of Ash	Ash is used in Granulation plant (located in Sugar Mill)

## 2.1 OBSERVATIONS OF JOINT INSPECTING TEAM:

1. The Unit (Sugar Unit) is engaged in production of Sugar with consented capacity of 8,000 TCD using Sugarcane as raw material. The Unit started its crushing season 2023-24 on November 16<sup>th</sup>, 2023.

2. As per data provided by the Unit, average Cane crushing from 16.11.2023 to 04.03.2024 is found to be 6304.2 TCD, which is under the consented capacity of 8,000 TCD.
3. UPPCB has issued Consent to Operate under the “Water (Prevention & Control of Pollution) Act, 1974” and under the “Air (Prevention & Control of Pollution) Act, 1981” which is valid up to 31.12.2025 and copy of the same is annexed at **Annexure-2**.
4. The Authorization under the “Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016” is valid upto 11.04.2028 and copy of the same is annexed as **Annexure-3**).
5. The Unit has install an environmental data display board at the entrance of the main gate and the data has been updated by the industry.
6. The Unit has not maintained the logbook record of the Hazardous waste generated and disposed by the industry as per the Hazardous & Other Waste Rules, 2016. The Unit has not provided the manifest of Hazardous Waste as per Hazardous & Other Waste Rules, 2016.

#### **Water Consumption**

7. The Unit is meeting its freshwater demand through three (03) borewells. Electromagnetic flow meter is installed at all the bore wells and log books are maintained by the Unit. As per logbook records, average groundwater abstraction from bore well is measured as 1624 KLD.
8. The Unit has obtained NOC (**Annexure-4**) from Uttar Pradesh Groundwater Department, Govt. of Uttar Pradesh for groundwater abstraction, which is valid up to the year 2026 for extraction of groundwater.

#### **Effluent Management:**

9. The Unit has ETP for the treatment effluent generated from Sugar mill and also installed a Sulphate Removal System (SRS) for spray pond overflow effluent treatment.
10. The ETP is comprised of Bar and Screen Chamber, Oil & Grease Trap Chamber, Rotary screen, Equalization Tank, Chemical Dosing Tank, Micro settler No.01, Primary Clarifier, Aeration Tank, Nutrient Dosing Tank, Secondary Clarifier, Micro settler No.02, Multigrade Sand Filter (MGF, Activated Carbon Filter (ACF).
11. Flowmeter is installed at inlet of ETP and outlet of ETP to measure the effluent quantity. Flow meter reading at ETP inlet was 22.50m<sup>3</sup>/hr (Totalizer-63024.16 m<sup>3</sup>) and ETP outlet was 39.0 m<sup>3</sup>/hr (Totalizer-130708 m<sup>3</sup>) during visit.

12. Waste Water Samples were taken by the joint Committee. The influent/Inlet of ETP, Aeration tank and final treated effluent (after tertiary treatment) sample were collected and preserved in an ice container at 4oC. All the samples were analyzed as per Standard Methods (APHA, 2005). During inspection, ETP was found operational.

**Table 1: Lab analysis results of ETP (inlet, outlet of ETP & aeration tank)**

Sample Locations	Sample Code	pH	BOD	COD	TSS	TDS	O&G	MLSS	MLVSS
ETP Inlet	BS-1	6.30	1437	2478	220	2644	BDL		
Aeration Tank	BS-2							9021	4894
ETP outlet (after tertiary treatment)	BS-3	7.50	19	73	13	1440	BDL		
Discharge Standards (land application)#		5.5-8.5	100	--	100	2100	10	--	--

\* all the parameters are in mg/l except pH and BDL means below detection limit.  
 # Discharge Standards (For disposal on land) as per the Environment (Protection) Rules, 1986 and GSR 35(E) notification dated 14.01.2016  
 The Lab analysis report is annexed at (refer **Annexure-5**).

**Table 2: Heavy metal analysis for ETP inlet and ETP treated effluent**

Heavy metal	ETP Inlet effluent (BS-1)	ETP Outlet (treated effluent) (BS-3)
As	BDL	BDL
Cd	BDL	BDL
Cr	0.015	BDL
Cu	0.022	BDL
Ni	0.012	BDL
Fe	8.737	0.168
Mn	0.142	0.008
Pb	0.016	BDL
Zn	BDL	BDL

All values are in mg/l ; BDL - below detection limit.  
 The Lab analysis report is annexed at (refer **Annexure-5**).

13. The lab analysis results of sample collected from the final outlet of ETP (pH- 7.5, COD- 73 mg/l, BOD- 19 mg/l, TSS - 13 mg/l, TDS - 1440 mg/l, Oil & Grease- BDL mg/l) indicates that the treated effluent from the **ETP is complying** w.r.t. the notified standards for land application.
14. The Unit has installed Online Continuous Effluent Monitoring System (OCEMS) at ETP. OCEMS reading w.r.t. flow – 39.0 m<sup>3</sup>/hr, pH- 7.46, COD- 50.6 mg/l, BOD- 5.6 mg/l and TSS- 5.27 mg/l were recorded during joint inspection.
15. Samples were collected from the lagoon installed for the storage of treated effluent of ETP (Sugar mill) and Lab analysis results are given below:

**Table 3: Analysis result of Lagoon water quality**

Sample Location	pH	BOD	COD	TSS	TDS	SAR
Lagoon (Code-BSIR)	7.6	34	100	19	1388	0.70
Standard#	5.5-8.5	100	--	100	2100	--
<i>all the parameters are in mg/l except pH &amp; SAR</i>						
<i>#Standards For disposal on land as per GSR 35(E), dated 14.01.2016</i>						

It is evident from the results that treated effluent stored in lagoon is meeting the effluent standards for land application/ ferti-irrigation.

16. The Unit has installed Sulphate Recovery System (SRS) for treatment of spray pond overflow/ cooling tower overflow. The SRS comprises of Flocculation, tank -1 &2, Micro plate settler. Effluent samples were collected from Sulphur Recovery Unit (SRS) for analysis during the visit. Lab Analysis results are presented below:

**Table 4: Lab analysis result of SRS plant**

Parameters	Inlet of SRS (BS4-S)	Outlet of SRS (BS4-SO)
pH	6.90	7.20
COD	1998	1623
BOD	1084	923
TSS	257	42
TDS	5312	5092
Sulphate	237	398

*All units are in mg/l except pH.*

The lab analysis results of sample from the outlet of SRS for physico-chemical analysis shows inlet Sulphate as 237 mg/l and outlet Sulphate- 398 mg/l i.e. Sulphate is increased by 67.9 % from inlet to outlet, **which indicate inefficient operation and maintenance of SRS system.**

17. The Unit has installed Sewage Treatment Plant (STP) with capacity 220 KLD for treatment of sewage. STP comprises of Stilling Chamber, Oil & Grease Chamber, Equalisation Tank, Aeration Tank, Chlorine contact tank, Sand Filter Unit and Carbon Filter Unit. During inspection, STP was operational. Treated sewage from STP is used for gardening/irrigation purpose inside the industrial campus. Sample was collected from inlet and outlet of STP.

**Table 5: Lab analysis results of STP (sewage treatment plant)**

S. No.	Parameters	Inlet of STP (Code-BS-SI)	Outlet of STP (Code-BS-SO)	Discharge Standard# (Standard as per	Discharge Standard [Notified under

				the Hon'ble NGT order dated 30.04.2019)	E(P) Rules, 1986] (applicable for all mode of disposal including land)
1.	pH	7.10	7.40	<b>5.5-9.0</b>	<b>6.5-9.0</b>
2.	TSS	43	BDL	<b>20</b>	<b>&lt;100</b>
3.	BOD	63	<b>14</b>	<b>10</b>	<b>30</b>
4.	COD	199	<b>60</b>	<b>50</b>	--
5.	NO <sub>2</sub> -N	BDL	0.44	-	--
6.	NO <sub>3</sub> -N	BDL	6.30	-	--
7.	TKN	38.0	7.0	-	--
8.	TP (Total Phosphorous)	5.50	<b>3.90</b>	<b>1.0</b>	--
9.	Total Coliform (MPN/100 ml)	24x10 <sup>4</sup>	790	--	--
10.	Fecal Coliform (MPN/100 ml)	34x10 <sup>3</sup>	78	<b>Desirable-100 Permissible-230</b>	<b>&lt;1000</b>

Note: All values are in mg/l except pH & TC/FC

#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).

The Lab analysis report is annexed at (refer **Annexure-5**).

It is evident from the lab analysis results that **BOD, COD & TP (Total Phosphorous)** value is higher in STP outlet than the prescribed standard indicating **STP non-complying** with the prescribed discharge standard (as per Hon'ble NGT order dated 30.04.2019).

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

### Irrigation of treated effluent

19. The Unit has prepared irrigation management plan (IMP) for utilization of treated effluent by own and the IMP is not prepared by Agriculture Scientist/Agricultural University for utilizing the treated effluent in irrigation as per the Guideline of utilization of treated effluent issued by CPCB. As per the IMP, the average number of working days for Irrigation annually is considered as 165 days.
20. It is observed that supply of treated effluent to farmer land is carried out through HDPE pipeline from the ETP of Sugar Mill. The HDPE pipeline passes through the Drain -1 (adjacent to Sugar mill boundary) and the Unit need to install permanent pipelines over and above the drain (not below the drain) so as to rule out the misuse of HDPE pipeline into the drain which ultimately onwards meets the River Bisuhi.
21. The drain is flowing adjacent to boundary wall of the Sugar mill and this drain for some distance travel inside the boundary of the Sugar mill and the Unit may resolve the issue with

the Gram Sabha so that the natural drain flows outside the boundary wall of the Unit. The effluent in this drain (Drain 1) during 05.03.2024 was found stagnated and sample were collected from the drain [before the Unit boundary wall and after the Unit boundary wall (exit from unit)] and no flow was observed in the downstream of the Unit. During the 19.03.2024, the Drain 1 (flowing along Sugar mill boundary) sample was collected at the downstream of the Sugar Unit (before the confluence to River Bisuhi) and no flow was observed at the upstream of the Drain. There was no other industrial effluent source in this Drain. The flow of the Drain 1 was very less at the downstream during 19.03.2024, however the drain is contributing organic load including TC & FC to the River Bisuhi.

22. Treated effluent of ETP is stored in a lagoon with capacity of 18000 m<sup>3</sup>. Treated effluent is used for ferti-irrigation in its own land as well as on farmer land outside the premises. The Sugar Unit has an Agreement with the farmers regarding ferti-irrigation of treated effluent.
23. The sample of treated effluent being used in the land (for irrigation) outside the premises were collected on 19.03.2024 by the joint team during the Survey of the command area site for ferti-irrigation including soil sampling, Drain and River sampling.

### **Air Pollution Control**

24. The Unit has Cogeneration plant with power generation capacity of 37 MW. The Unit has made provision of two venting system of flue gas after ESP. One venting system is with common stack of height 65 m., while another venting system is with bagasse dryers followed by multicyclone separator as APCD. The flue gas should be diverted through common stack of height 65 meter as per the Consent to Operate and the Unit should stop the diversion of flue gas through multicyclone separator.
25. As per the information provided by Unit representative that flue gas mixed with Bagasse in inlet chamber, where bagasse gets dried up by using hot air of the flue gas and then in second cyclone chamber flue gas and bagasse get separated and flue gas exit from the outlet of the cyclone chamber. However, the flue gas should be diverted from common stack or separate stack and UPPCB may examine the matter and take further necessary action and may incorporate the same in the CTO.
26. During inspection Fugitive emission of bagasse fine particles observed in and around the boiler and near bagasse storage area.

### **SOLID WASTE MANAGEMENT:**

27. The Unit has sludge drying beds (6 no.) having capacity of 245 m<sup>3</sup> and Decanter (Centrifuge system). ETP sludge is used in preparation of Granules at 'Granulation plant'. However, the Unit has not maintained the sludge disposal record.
28. The sludge samples collected from the drying beds were analyzed and the lab results are as follows:

**Table 6: Analysis result of Sludge generated from the ETP**

Parameters of Heavy metal, Unit*	Sludge of ETP from sludge drying beds (BS-4)	Sludge sample (being used for making Granules) BSPS	Concentration limit under H&OW(M&TM) Rules 2016; SCHEDULE II [See rule 3 (1) (17) (ii)]
<b>As</b>	BDL	BDL	5.0 mg/l
<b>Cd</b>	BDL	BDL	1.0 mg/l
<b>Cr</b>	0.004	BDL	5.0 mg/l
<b>Cu</b>	0.118	0.013	25 mg/l
<b>Ni</b>	0.028	BDL	20 mg/l
<b>Pb</b>	BDL	BDL	5.0 mg/l
<b>Zn</b>	0.384	0.026	250 mg/l
<b>Hg</b>	1.35 µg/l (0.00135 mg/l)	BDL	0.2 mg/l

All values are in mg/l except Hg which is in µg/l. The testing method is based on Toxicity Characteristic Leaching Procedure (TCLP).  
The Lab analysis report is annexed at (refer **Annexure-5**).

The lab analysis result of the **ETP sludge shows that the heavy metals concentration is below the concentration limit** prescribed in 'List of waste constituents with concentration limits' in SCHEDULE II [See rule 3 (1) (17) (ii)] under Hazardous Rules, 2016.

29. The Unit has made Agreement with M/s Pitambara Biofuels Industry for manufacturing Briquettes/Pellets for the season 2023-24 from the press mud. The plant is located in old Bio-compost site (bio-compositing operation closed since 2016). The press mud generation is about 2689 Qtls per day (average of per day press mud generation till date).
30. The team visited the Briquette manufacturing plant on 05.03.2024 and 19.03.2024 located outside the Unit premises near old bio-compost yard (bio-composting operation closed since 2016) and found operational. It was informed that about 1500-2000 Qtl. per day of press mud is received from the Unit and producing 300-400 quintal of Briquettes. The Briquettes is sold to Brick kiln unit by this Briquette plant owner.

31. The Consent to Operate has no mention of press mud utilisation, therefore the Unit shall apply the CTO for the utilisation of press mud in the consent to operate issued by the UPPCB.
32. The Unit is also selling Press mud to the Farmers and as per the record available with Unit, the Unit has sold 34,414.62 Quintal of press mud to the Farmers @ Rs. 21/quintals.



**Pic. 1 - Briquette Plant** (outside the Unit)



**Pic. 2 - Press mud drying in sunlight at Briquetted plant**

33. The Unit has Granulation plant located within the premises of Sugar mill for producing Granules from the potash rich ash (of incineration boiler), Ash of bagasse fired boiler, Sludge of ETP and Fermenter sludge. The sample of Granules were collected for analysis and lab analysis result are given below.

**Table 7: Analysis of Granules produced in Granulation plant.**

Parameters of Heavy metal	Granule sample from Granulation plant (BSF)	H&OW(M&TM) rules 2016 SCHEDULE II [See rule 3 (1) (17) (ii)]
As	BDL	5.0 mg/l
Cd	BDL	1.0 mg/l
Cr	BDL	5.0 mg/l
Cu	0.049	25 mg/l
Ni	BDL	20 mg/l
Pb	BDL	5.0 mg/l
Zn	0.025	250 mg/l
Hg	BDL	0.2 mg/l

All values are in mg/l except Hg (in µg/l). The testing method is based on Toxicity Characteristic Leaching Procedure (TCLP).

The Lab analysis report is annexed at (refer Annexure-5).

The lab analysis result of the **Granules shows that the heavy metals concentration is below the concentration limit** prescribed in 'List of waste constituents with concentration limits' in SCHEDULE II [See rule 3 (1) (17) (ii)] under Hazardous Rules, 2016.

34. As per the data, the Sugar Unit generates total Ash of 23.77 TPD and Distillery Unit generates potash Ash - 33.52 TPD and the same is utilized in Granulation plant installed within the Sugar Unit. The Granules production is about 72.29 TPD (Included sister Unit Babhnan Ash Granules).
35. The CTO issued by UPPCB has no mention of uses of ash, sludge etc. in Granulation plant. The Unit shall apply for the CTO regarding uses of Ash, sludge, fermenter sludge for manufacturing of Granules in the Granulation plant.
36. The Unit informed that they have dispatched about 4843 Ton of granules (from 01.01.2024 to 05.03.2024) to Standard Agri Solutions Pvt. Ltd. (Mankapur, Rauzagaon, Babhanan, Haidargarh, Akbarpur), IFFCO E-Bazar, Om Agro India Organic and Green Industries. The Unit informed that they are distributing the Granules to cane growers at nominal cost. The Agriculture Department may further examine the characteristic of the Granules with regard to suitability of the Granules for use as Soil nutrient/fertiliser.

### Groundwater Sampling

37. Samples were collected from the bore wells to assess the groundwater quality during the visit. Analysis results of the groundwater are given in Table below.

**Table 8. Lab analysis results of groundwater samples collected from Bore wells within the Unit premises and outside the premises.**

Parameters	Handpump near Deeh Baba Mandir (D/s of the industry; outside the plant) (Code-BGD)	Handpump within the Unit premises (in front of Godwon-1) (BGI)	Hand pump in front of Sugar Mill Gate (BGG)	Hand pump in Kudasan village (House of Raja ram Jaiswal) (GWK)	BIS IS 10500:2012 (Acceptable Limit)	BIS IS 10500:2012 (Permissible limit in absence of alternative source)
pH	7.80	7.50	7.50	6.4	6.5-8.5	6.5-8.5
Colour	9.0	BDL	BDL	BDL	05	15
TDS	296	500	510	370	500	2000
Total Hardness	186	328	265	263	200	600
Total Alkalinity	242	412	407	315	200	600
Conductivity	452	850	837	560	--	--
Chloride as Cl <sup>-</sup>	4.0	12.0	6.0	10.0	250	1000
Fluoride as F <sup>-</sup>	0.53	0.74	0.53	0.26	1.0	1.5
Sulphate as	BDL	47.0	30.0	BDL	200	400

SO <sub>4</sub> <sup>2-</sup>						
Turbidity	1.0	BDL	1.0	<b>6.0</b>	1.0	5
Nitrate as NO <sub>3</sub> -N	BDL	BDL	BDL	0.85	45	45
COD	BDL	BDL	BDL	2.0	--	--
As	BDL	BDL	BDL	BDL	0.01	0.05
Cd	BDL	BDL	BDL	BDL	0.003	No relaxation
Cr	BDL	BDL	BDL	BDL	0.05	No relaxation
Cu	BDL	0.015	BDL	0.01	0.05	1.5
Fe	<b>0.768</b>	0.302	<b>0.562</b>	<b>2.335</b>	0.3	No relaxation
Mn	0.092	0.137	0.155	0.124	0.1	0.3
Ni	BDL	BDL	BDL	BDL	0.02	No relaxation
Pb	BDL	BDL	BDL	BDL	0.01	No relaxation
Zn	0.793	0.034	0.047	0.051	5	15

*Note: All values are in mg/l except pH, colour, turbidity and conductivity. The GW Lab analysis result is annexed at **Annexure-5**.*

38. The concentrations of heavy metals in the groundwater samples taken from the borewells revealed that the concentrations of general parameters and heavy metals are within the acceptable limits for drinking water except for Fe. However, the groundwater sample of bore well (located in Kudasan village) showed exceedance of parameters for pH marginally, turbidity and iron norms.

## 2.2 Conclusions and Recommendations

- The Unit has valid consent to operate under Water and Air Act and Authorization under Hazardous Waste Rule.
- The Unit has installed ETP, STP and SRS (sulphate recovery system) system for effluent management and during the visit the ETP was found complying with the prescribed discharge standard for land application.
- The STP treated effluent was found non-complying with the prescribed discharge standard by the Hon'ble NGT w.r.t BOD, COD and total Phosphorus (TP)
- The SRS treated effluent showing increase in Sulphate content by 67.9 % (from inlet to outlet), which indicate inefficient operation & maintenance of SRS system.

- The treated effluent of ETP is being used in the land as ferti-irrigation and meeting the prescribed standard for land application. However, the Unit has not prepared comprehensive irrigation management plan (IMP) in consultation with Agricultural Scientist or Agricultural University/Institute as per the CPCB guidelines.
- It was observed that a part of the flue gas of the boiler is being diverted and released through the second cyclone chamber venting system and the Unit should stop the diversion of flue gas through venting system of multi-cyclone separator into the ambient environment as the consent has permission for only one stack for flue gas emission.
- The Condensate Polishing Unit (CPU) and MEE of distillery is located in Sugar mill and during the visit the CPU was found not being properly operated and treated water is not suitable for recycling in cooling tower make up.
- The ETP sludge and Granule sample analysis result shows the heavy metal concentration are within the limit. The Unit has Agreement with a Briquette manufacturing plant for manufacturing of Briquettes/Pellets from the Press mud and the Briquettes is sold to Brick Kiln Unit by the plant owner.
- The Drain-1 is passing through the Sugar Unit premises and it is observed that the MEE (for treatment of distillery effluent/spent-wash) and CPU plant (for treatment of MEE condensate of distillery) is located within the Sugar mill premises and distillery Unit has issued Consent for ZLD condition.

### **Recommendations.**

1. The Unit should optimize the performance of its STP so as to meet the prescribed standard.
2. The Unit should prepare comprehensive irrigation management plan by engaging an Agricultural Scientist or Agricultural University/Institute as per the CPCB guidelines titled "Guideline for Utilization of treated effluent in irrigation" and submit the same to SPCB which shall verify the same while issuing Consent to the Unit. Further, UPPCB, may incorporate the recommendations of the Irrigation Management Plan as conditions of Consent to Operate granted to the Unit, as per CPCB's Guidelines.

3. The Unit should install permanent structure over and above the drain (not below the drain) for taking the ETP treated effluent to command area so as to rule out any misuse of HDPE pipeline for bypass of effluent into the drain. The Unit should also clean the drain along the boundary wall.
4. The Unit should ensure proper operation & maintenance of SRS unit, so that Sulphate may be efficiently removed from the effluent.
5. The Unit should ensure regular water sprinkling and also take other necessary measures in and around the boiler and near bagasse storage area to minimize the bagasse dust dispersion in the ambient environment.
6. The Unit should maintain proper logbook record of Hazardous and other waste and maintain the manifest for hazardous & other waste (Form 10 [See rule 19 (1)]). Further record of ETP sludge generation and use should also be maintained.
7. The Unit should provide easy ladder (spiral /scaffold type) ladder at stacks instead of monkey ladder to ensure safe access to sampling port for emission monitoring as per CPCB Emission Regulations Part-III.
8. The flue-gas of boiler should be diverted and released through common stack or separate stack with the permission of UPPCB and UPPCB may examine the matter and take further necessary action and may incorporate the same in the CTO.
9. The Unit should apply for the CTO regarding uses of Ash, sludge, fermenter sludge for manufacturing of Granules in the 'Granulation plant' and also for the uses of press mud for Briquette manufacturing.
10. The Drain-1 is passing through the Sugar Unit premises, therefore UPPCB should examine the issue as per the land records in consultation with land revenue department and irrigation department and take appropriate action so as to rule out any possible effluent discharge through the Drain in their premises.

### 3.0 INSPECTION OF M/S BALRAMPUR CHINI MILLS LIMITED (DISTILLERY DIVISION), MANKAPUR, GONDA, UP

A	General Information	
1.	Name of the unit and Address	<b>M/s Balrampur Chini Mills Limited (Distillery Division)</b> , Village & Post- Datauli, Mankapur, Gonda, U.P.
2.	Name of the Proprietor/ Contactperson – Designation Contact No.	Mr. Neeraj Bansal (CGM) Mob.No.+91-7080402301
3.	Year of Commissioning.	2007
4.	Sector	Distillery
5.	Production capacity	100 KLD
	• Products	Rectified Spirit (RS)/ Extra Neutral Alcohol(ENA) / Absolute Alcohol (AA)
	• Consented Production Capacity	100 KLD
	• Actual production	109 KLD (As per Jan to March 2024 logbook data)
6.	Raw materials requirement	Molasses- 4200 Qts. /Day
<b>B : Water Pollution and its Control</b>		
1.	Water Supply Source Water Consumption (KLD) a. Industrial b. Domestic	Bore wells (02 no.) Within the distillery premises.  607 KLD (Avg. from Jan to 04.3.2024 logbook data) 10
2.	Waste Water Generation (KLD) a. Industrial	Spent wash (to MEE) -763 KLD (Avg. for Jan to 04.3.2024) Spent Leese -130 KLD Process condensate – 659 KLD Cooling tower blow down – 163KLD Boiler blow down – 09 KLD DM plant reject- 15 KLD Other (CPU RO Reject)- 81 KLD Fermenter and floor washing–53KLD
	b. Domestic	06

3.	Details of ETP installed	For spent wash management Unit has installed Collection Tank, Multi Effect Evaporator (MEE) and Slope Fired Boiler. The Unit has one Lagoon-5600 m <sup>3</sup> capacity.  For other process effluent Unit has installed Condensate Polishing Unit (CPU) which comprises of Equalization tank, Buffer tank, UASBR, Aeration tank, Secondary Clarifier, Tertiary Clarifier, Clear Water Storage Tank, Multi Grade Filter (MGF), Activated Carbon Filter (ACF), UV System, Ultra-filtration and RO Plant
4.	Mode of disposal of treated effluent	Concentrated spent-wash after MEE is incinerated in slope fired boiler whereas other process effluent is treated in CPU and treated reused/recycled in Cooling Tower make up as well as in Fermentation as reported by the Unit.
5.	Flowmeter measuring device installed at outlet of ETP	Installed
6.	Status of Consent under the Water Act- 1974	Valid from 01.01.2024 to 31.12.2025 ( <b>Annexure-6</b> )
<b>C: Air Pollution and its Control</b>		
1.	Sources of Air Pollution	Slope fired boiler with capacity - 45 TPH
2.	Type of Fuel used with consumption, Stack details with APCS	Slope (MEE Concentrate) and bagasse (during visit 11.5 TPH and 7.3 TPH)  Stack height 88 m is equipped with ESP as APCS.
3.	Status of Consent under the Air Act- 1981	Valid upto to 31.12.2025 ( <b>Annexure-6</b> )
<b>D: Waste Management</b>		
1.	Type of Waste Generated	Boiler Ash (Potash Ash):33.52MT/day Used oil:1.25 MT/Annum Empty drum /container: Sent to local recycler. Fermentation sludge: 4.78 MT/day (as per logbook for Jan 2024 to 04.03.2024)
2.	Facility of Storage/ Disposal	Boiler Ash-Send to granular plant for making Granules. Used Oil: Mixed with bagasse and burnt in boiler
3.	Disposal of waste	Boiler Ash and Fermentation sludge is send to granulation plant for making Granules. Used Oil: Mixed with bagasse and burnt in boiler Drum /containers - to local recycler.
4.	Status of Grant of authorization,if any	Valid upto 31.12.2024

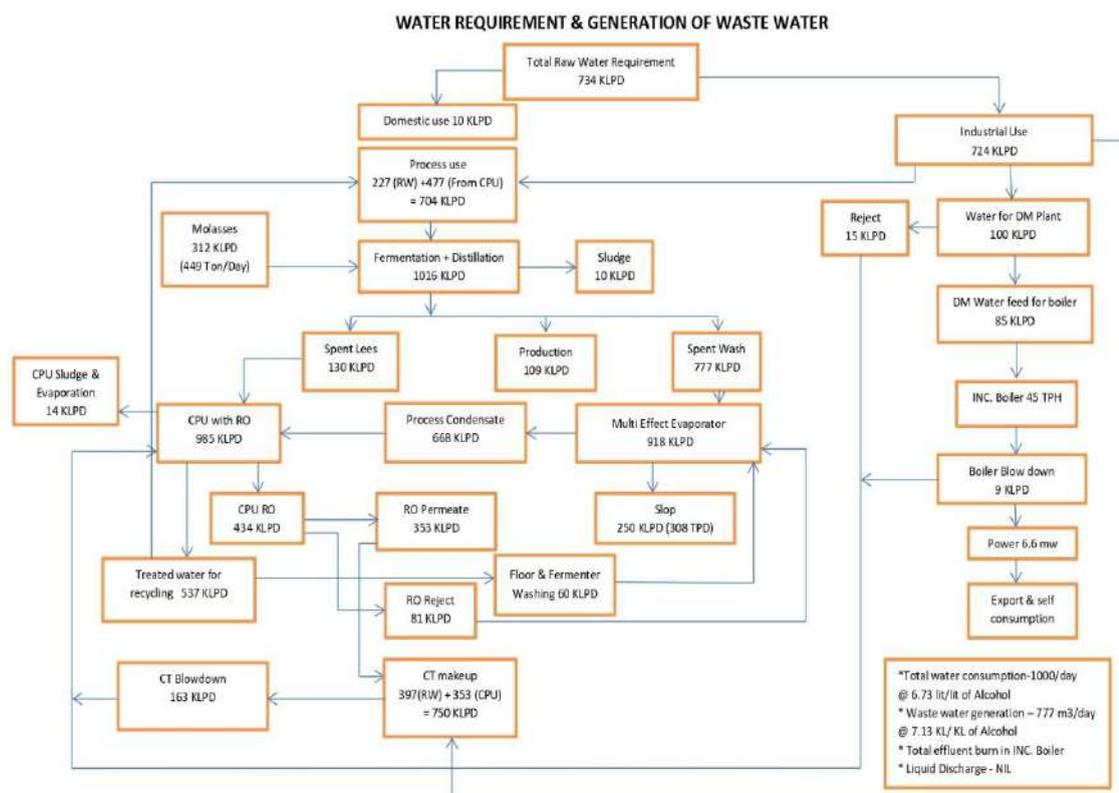
### 3.1 Observations during the visit of the distillery Unit on 05.03.2024.

1. The Unit is engaged in the production of Rectified Spirit (RS)/ Extra Neutral Alcohol

(ENA) / Absolute Alcohol (AA) with consented capacity of 100 KLD using molasses as raw material. During inspection, the Unit was found operational.

2. UPPCB has issued Consent to Operate under the “Water (Prevention & Control of Pollution) Act, 1974” and under the “Air (Prevention & Control of Pollution) Act, 1981” which is valid up to 31.12.2025 and copy of the same is annexed at **Annexure-6**.
3. The Authorization under the “Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016” is valid upto 31.12.2024 and copy of the same is annexed as **Annexure-7**).
4. The Unit has install an environmental data display board at the entrance of the main gate however the data has not been updated by the industry.
5. The average alcohol production of the Unit is 109.25 KLD against the consented permitted capacity of 100 KLD. The Unit alcohol production exceeds the consented production permitted by UPPCB and EC issued by MoEF&CC.
6. The Unit is meeting its freshwater demand through two (02) borewells. Electromagnetic flow meter is installed at the bore wells and log books is maintained by the Unit.
7. The Unit has obtained NOC from UP Groundwater Department, Govt. of Uttar Pradesh for groundwater abstraction, which is valid up to 11.10.2026 for extraction of groundwater upto 1000 KLD.
8. As per the logbook provided by the Unit, average freshwater abstraction for the month of January to March 4<sup>th</sup>, 2024 from two borewells is approx. 607 KLD.
9. The Unit is generating spent-wash @ 6.98 KL/KL of alcohol production. The avg. spent wash generation for the month of January to March (upto 4.3.2024) is 763 KLD. A flow-meter is installed at analyzer column for measurement of spent-wash generation and log book record is maintained by the Unit.

**Fig1: Water Balance of Distillery Plant**



## Effluent Management

10. The Spent-wash is collected in 02 settling tanks (total capacity - 800 KL). The spent-wash is stored in lagoon having capacity of 5600 m<sup>3</sup>. Sample were taken from the lagoon for lab analysis during the visit. Analysis results are presented below:

**Table 9: Analysis of spent-wash stored in lagoon**

Parameter	Lagoon for storage of Spent wash
pH	4.10
Total Solids	157840
COD	177120
BOD	76350

*All values are in mg/l except pH*

11. The Unit is permitted for storage of maximum 07 days spent-wash generated in the lagoon. The Unit informed that they have demarcated the lagoon with permitted level, however the demarcation line is not visible in Lagoon during the visit.
12. After settling, spent wash is fed to Multi Effect Evaporator (MEE) plant (Five Effect Forced

Circulation). The MEE was found operational during inspection and sample was collected from MEE feed, MEE concentrate and MEE condensate. During the visit, the flow meter reading of MEE inlet showed [totalizer reading- 2210724; flow rate – 39.71 TPH] and MEE Condensate flow meter reading showed as flow rate – 30.02 TPH (Totalizer – 1622605.67) and MEE Concentrate showed flow rate – 39.07 TPH (totalizer – 494389.53).

**Table 10: Analysis of raw spent-wash, inlet feed to MEE and MEE concentrate (slope) and MEE condensate**

Parameter	RSW	MEE Inlet	MEE Concentration	MEE Condensate
pH	4.90	4.50	4.60	3.10
Total Solids (TS)	201540	189360	666800	3000
COD	223200	232960	824800	4498
BOD	106439	110445	347290	2561
TDS	--	--	--	604
All values are in mg/l except pH				

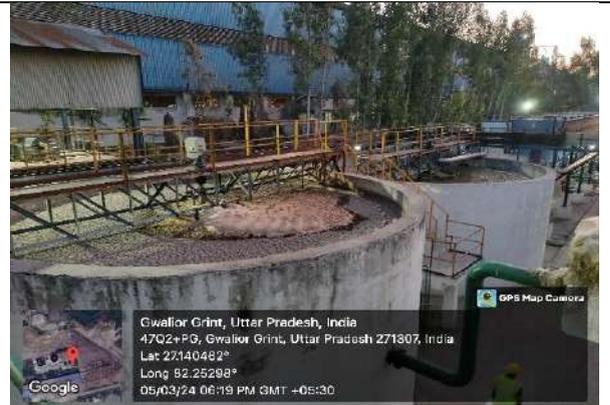
13. The spent-wash and other effluent such as fermenter washing, floor washing and RO reject is sent to MEE for treatment.
14. The concentrated spent wash is fed to slope fired incineration boiler which is having capacity of 45 TPH using slope (MEE Concentrate) as primary fuel (60%) and bagasse (40%) as secondary fuel. During the visit, slope fired boiler was operational.

### Condensate Polishing Unit (CPU)

15. The Unit has installed Condensate Polishing Unit (CPU) for treatment of other process waste such as spent lees, process condensate, cooling tower blow down, boiler blow down etc. During inspection, CPU was found operational. CPU comprises of Equalization tank → UASB reactor → Aeration tank → Secondary clarifier → Tertiary Clarifier → Multi Grade Filter → Activated Carbon Filter → Process Water Tank → UV system → Ultra-filtration → RO Plant. The CPU treated effluent is used for cooling tower makeup water and in process (molasses dilution).
16. During the visit at CPU, foaming in the aeration tank and dry foam deposition in Secondary & Tertiary Clarifier was observed (Pic no. 3&4) indicating inefficient operation of Condensate polishing treatment system.



Pic no.3- Foam formation in Aeration Tank and overflowing from the tank.



Pic no. 4- Dry foam deposit in Secondary & Tertiary Clarifier

17. Sample was collected from CPU Inlet, Aeration Tank, CPU Outlet, RO Outlet & RO Reject to ascertain the performance of CPU. Analysis result is presented below:

**Table 11: Analysis result of effluent (at various location) at CPU.**

Parameters	CPU Inlet	(Aeration Tank of CPU)	CPU Outlet (after tertiary treatment)	RO Outlet (RO Permeate)	RO Reject
pH	3.20		7.20	7.30	7.30
BOD	1601		397	390	357
COD	2480		815	811	770
TSS	12		202	196	229
TDS	416		832	932	664
MLSS		5415			
MLVSS		1775			
Sulphate	52		31	36	40

**High Foam formation was observed in the Aeration tank and dry foam deposited on surface of the secondary and tertiary clarifier. The CPU is not being operated properly and RO water result also shows it is not functioning properly.**

18. It is evident from the lab analysis report that operation & maintenance and functioning of the CPU is not efficient. Analysis result of sample collected from the outlet of CPU shows pH- 7.2, COD – 815 mg/l, BOD – 397 mg/l, TSS-202 mg/l and Total Dissolved Solid - 832 mg/l. Analysis result of sample collected from the RO plant i.e. RO treated water /RO Outlet (permeate of RO) shows pH- 7.3, COD – 811 mg/l, BOD – 390 mg/l, TSS-196 mg/l and Total Dissolved Solid - 932 mg/l and which indicates that RO treated water of CPU is not suitable to be used in cooling tower makeup due to high BOD-, COD-, TDS – 932 mg/l.
19. During inspection the inspecting team also found that the CPU and MEE was installed in Sugar

mill premises and was found operational. In this context, necessary action shall be taken by UP Pollution Control Board (UPPCB) for the use of Condensate Polishing Unit (CPU) and MEE in Sugar plant in the CTO.

20. The slope fired boiler has co-gen turbine having capacity of 6.6 MW power generation. The Emission from slope fired boiler is vented out through stack having Bag Filter as APCD. The stack has monkey ladder which is unsafe for stack monitoring.
21. The Unit has installed Online Continuous Emission Monitoring System (OCEMS) at boiler stack and during the visit online PM reading of boiler showed 9.09 mg/Nm<sup>3</sup>. The OCEMS is connected with CPCB Server.
22. The Unit has stopped the bio-composting operation since 2016 for spent wash management and switch over to Incineration boiler. The Unit has two lagoons with capacity 15272 m<sup>3</sup> and 17254 m<sup>3</sup> for storage of spent-wash for use in making bio-compost. No bio-composting is being performed at present and a Briquette plant is installed at old bio-compost yard. During inspection, both the lagoons were found empty and dry (Pic no. 35).

### Groundwater quality

23. Groundwater samples were collected from (i) Handpump near Lagoon within the Distillery premise, (ii) Handpump near old bio-compost yard /Briquette plant and (iii) Handpump near Vijayapur village, Datauli outside the Unit premise (Downstream from the Unit). Analysis result is presented below:

**Table 12: Groundwater analysis result for physical parameters and heavy metal**

Parameters	Handpump near Lagoon within the Unit premises (BDGW1)	Handpump near Vijayapur village, Datauli, Mankapur (BGO)	Hand pump near Briquette plant/old bio-compost yard (GWL)	BIS 10500:2012 Standard (Acceptable Limit)	BIS IS 10500:2012 (Permissible limit in absence of alternative source)
pH	7.7	7.6	7.6	6.5-8.5	6.5-8.5
Colour	06	12	BDL	05	15
TDS	298	372	370	500	2000
Total Hardness (TH)	199	248	227	200	600
Total Alkalinity	318	322	315	200	600
Cond.	548	604	560		
Chloride as Cl <sup>-</sup>	09	13	10.0	250	1000
Fluoride as F <sup>-</sup>	<b>1.65</b>	0.6	0.31	1.0	1.5

Sulphate as SO <sub>4</sub> <sup>2-</sup>	BDL	BDL	BDL	200	400
Turbidity	14	BDL	BDL	1.0	5
Nitrate as NO <sub>3</sub> -N	BDL	BDL	0.83	45	No relaxation
COD	BDL	BDL	2.0	--	--
Arsenic	0.011	BDL	BDL	0.01	0.05
Cadmium	BDL	BDL	BDL	0.003	No relaxation
Chromium	BDL	BDL	BDL	0.05	No relaxation
Copper	BDL	0.011	0.01	0.05	1.5
Iron	1.451	1.928	0.167	0.3	No relaxation
Lead	BDL	BDL	BDL	0.01	No relaxation
Manganese	0.051	0.112	0.035	0.1	0.3
Nickel	BDL	BDL	BDL	0.02	No relaxation
Zinc	0.019	0.196	0.015	5	15

*All values are in mg/l except pH, conductivity, color and turbidity.*

It is evident from the above analysis report that all the parameters from all above sampling locations are within BIS IS 10500:2012 (Permissible limit in absence of alternative source) except for the parameters Fluoride, Turbidity and Iron from the hand pump near Lagoon of the Unit.

24. During the visit on 05.03.2024 and 19.03.2024, the main drain (Drain 2) in front of the main gate of distillery Unit was found dry and this Drain does not pass through industry premises.

### 3.2 Conclusion and Recommendations

The Unit has valid consent to operate (CTO) under Water and Air Act and Authorization under Hazardous Waste Rules. The Unit was operational during the visit. The Unit alcohol production is more (109 KLD against 100 KLD) than the consented production capacity permitted by UPPCB and EC issued by MoEF&CC. The spent-wash was being treated through MEE and thereafter incinerated in slope fired boiler. The ash of the boiler is sent to 'Granulation plant' (located in Sugar mill) for Granule manufacturing. The CPU (installed for the treatment of MEE condensate, spent lees, blow down) located within Sugar mill premise, was not being operated properly and quality of CPU (RO treated) treated effluent is not suitable for recycling and reuse in cooling tower makeup water. The Unit needs to take corrective measures in CPU and RO plant for its suitability to use in the cooling tower make up water as it may lead to scaling, microbial growth/fouling etc. The groundwater quality within and outside the premises was found meeting the BIS standard except fluoride and iron parameter which are not related to operation of industry under reference.

### **Recommendations**

1. The Unit should not exceed the alcohol production and adhere alcohol production as consented capacity permitted by UPPCB and prescribed under the EC (Environment Clearance).
2. The Unit should properly operate & maintain the Aeration Tank and Clarifiers (secondary and tertiary) of CPU and accordingly rectify the problem at the earliest.
3. The Unit should properly operate & maintain the CPU and enhance the performance of CPU and RO so as to meet the desired water quality for reuse & recycle of the treated effluent with the process.
4. The Unit should provide a demarcation line in the Lagoon and should store the spent-wash below the demarcation line.
5. The Unit shall dismantle the additional two lagoons provided at old bio-compost yard and thereafter level them accordingly under the supervision of UPPCB.
6. The Unit should provide easy ladder (spiral /scaffold type) at the stack to ensure safe access to sampling port for emission monitoring as per CPCB Emission Regulations Part-III .
7. The Unit should apply for the CTO regarding uses of Ash (slop fired boiler), fermenter sludge for manufacturing of Granules in the 'Granulation plant'.
8. SPCB should ensure strict surveillance of the Drain and ensure that no industrial wastewater is discharged into the drain/river.

#### **4.0 MONITORING OF FERTI-IRRIGATION SITE, DRAINS, BISUHI RIVER AND VILLAGE SURVEY.**

In compliance to Hon'ble NGT order, the joint team has collected samples from the following location outside the Unit premises:

- (i) Soil and effluent sampling from the land / ferti-irrigation site.
- (ii) Sampling of Drain-1 at (i) Upstream of Drain (ii) Drain after exit from Sugar Unit boundary wall and (iii) Drain (Downstream of Unit) just before the confluence to River Bisuhi.
- (iii) Sampling of River Bisuhi water from (i) Upstream and (ii) Downstream of the Unit.
- (iv) Survey of village Datauli and Kudasani village.

#### 4.1 Ferti-irrigation site visit and Sampling of Soil & effluent at the site.

The joint inspecting team visited the agricultural field within the irrigation command area of the Sugar Unit where treated effluent was being used for land application /ferti-irrigation. The team collected sample of the water (treated water of Sugar mill) being used in the command area and also collected Soil samples from the command area. Soil sample from upstream of the Unit was also collected as background /controlled sample wherein no treated effluent was used for irrigation. Samples were collected on 19.03.2024.

Analysis result of treated water from Sugar mill being used on land is presented below.

**Table 13: Analysis result of treated water being used in the Crop during 19.03.2024**

Sample Locations	Sample Code	pH	BOD	COD	TSS	TDS	SAR
Treated Water being used in Land at Murdaiyya village Mankapur Gonda	FI-2	7.4	42	134	10	1792	0.60
Treated Water being used in Land at Chamrouti village Mankapur Gonda	FI-1	7.5	35	118	BDL	1716	0.40
<b>Discharge Standards#</b>		<b>5.5-8.5</b>	<b>100</b>	<b>--</b>	<b>100</b>	<b>2100</b>	<b>---</b>
* All the parameters are in mg/l except pH. BDL is below detection limit. #Standards (For disposal on land) as per notification GSR 35(E), dated 14.01.2016.							

**Table 14: Heavy metal analysis of treated effluent being used on land**

Sample Locations	Sample Code	As	Cd	Cr	Cu	Fe	Mn	Ni	Pb	Zn
Treated Water being used in Land at Murdaiyya village Mankapur Gonda	FI-2	BDL	BDL	BDL	BDL	0.048	0.008	BDL	BDL	BDL
Treated Water being used in Land at Chamrouti village Mankapur Gonda	FI-1	BDL	BDL	BDL	BDL	0.288	0.016	BDL	BDL	BDL

It is evident from the results that treated effluent used for ferti-irrigation is complying with effluent discharge standards for being used in ferti-irrigation/disposal on land.

The soil samples have been collected from the Agricultural field outside the Unit premises at two vertical depths, namely, 15 cm and 30 cm from the surface (Table 15) in order to ascertain the quality of the soil. The soil sample were analyzed for various physico-chemical characteristics and heavy metal concentrations.

**Table 15: Soil sampling locations, code and parameter analyzed:**

S.No.	Sample Name	Locations of Sample	depth	Code	Parameter to be analyzed
1	Soil	Agricultural field of Sh. Faujdar Yadav at at Chamrouti village Mankapur Gonda (Downstream of the Unit)	15 cm	BS -1 (15)	General parameters and Heavy metal
			30 cm	BS -1 (30)	
2		Agricultural field of Sh. Ramdev Verma at Murdaiyya village, Mankapur (Downstream of the Unit)	15 cm	BS -2 (15)	
			30 cm	BS -2 (30)	
3		Agricultural field of Sh. Raja Ran Jaiswal at village Kudasan (upstream of Unit); (for reference /control sample)	15 cm	BS -3 (15)	
			30 cm	BS -3 (30)	

**Table 16 Physico-chemical Characteristics of Soil and parameter analyzed.**

S.N	Code of the sample	pH	Parameters								Chloride	Sulphate
			Cond. (µmho/cm)	Org. Carbon (%)	Exchangeable Na (mg/100g)	Exchangeable K (mg/100g)	Exchangeable Ca (mg/100g)	Exchangeable Mg (mg/100g)	CEC Meq/100g	SAR		
	BS -1 (15)	7.3	163	0.34	12.42	10.61	99.40	11.70	6.73	0.16	45.50	789.8
	BS -1 (30)	7.2	87	0.14	11.31	10.28	105.01	16.37	7.34	0.14	52.01	993.3
	BS -2(15)	7.3	101	0.32	12.73	10.87	102.60	16.67	7.32	0.15	45.50	1503.9
	BS -2 (30)	7.5	88	0.55	11.43	10.79	112.87	7.99	7.06	0.14	45.50	1423.9
	<b>BS -3(15)</b>	8.0	230	0.49	14.34	17.81	114.49	13.06	7.87	0.17	39.00	1059.8
	<b>BS -3 (30)</b>	7.9	268	0.17	14.89	14.46	130.98	12.77	8.60	0.17	45.50	1215.1
			<b>Heavy metal* [in mg/l except Hg (in µg /l)]</b>									
			As	Cd	Cr	Cu	Pb	Ni	Zn	Hg	*Hg in BS-3 (15) was 1.045 µg/l i.e. 0.001045 mg/l (after conversion).	
	BS -1 (15)		BDL	BDL	BDL	0.006	BDL	0.007	0.11	BDL		
	BS -1 (30)		BDL	BDL	BDL	0.01	BDL	0.005	0.126	BDL		
	BS -2 (15)		BDL	BDL	0.004	0.013	0.01	0.01	0.447	BDL		
	BS -2 (30)		BDL	BDL	BDL	0.026	BDL	0.028	0.119	BDL		
	<b>BS -3(15)</b>	Control sample	BDL	BDL	BDL	BDL	BDL	0.016	0.151	0.001045*		
	<b>BS -3 (30)</b>		BDL	BDL	0.006	BDL	BDL	0.01	0.133	BDL		

\*All heavy metal Unit are in mg/l; BS-3 samples (control sample) are from control site sample where no effluent is being utilized and fresh water is being used.

No significant variation in Soil quality was observed with reference to control area sample (BS-3).

#### 4.2 Drain and River Water quality.

It was observed that two drains (Drain 1 and 2) are passing through the boundary of the industry under reference and one of the Drains i.e. Drain-1 partly pass through the inside periphery of the industry in south side. Drain-2 flows in north side boundary (of distillery unit), both these drains meet the River Bisuhi as shown in Fig-2. Drain-1 passes through Datauli village and followed along the boundary wall of Sugar Unit on southern side before confluence with River Bisuhi. Drain-1 also receives small amount of sewage from the nearby

residential houses/shops along the State Highway prior to traversing along with the industry boundary wall.

During the visit on 05.03.2024, there was no flow observed in Drain -1 and only stagnant water observed. The team was informed that there was rainfall in the area on 04.03.2024.

**Fig 2: Map of River and Drain**



During the visit on 05-03-2024, stagnant wastewater samples of Drain-1 were collected from two locations (KD1 and KD2) shown in the map (Fig-2) as there was no flow observed in the Drain.

During the subsequent visit on 19.03.2024, there was no flow in the upstream of the Drain-1. However minor flow was observed at the downstream drain of the industry and team has collected the effluent sample from location (KD) shown in the map (Fig-2). The HDPE pipeline passes through the Drain -1 (adjacent to Sugar mill boundary) which is emanating from the boundary wall of Sugar Unit and is upstream of the sampling point i.e. KD (in the map).

Drain-2 at the north side boundary of Distillery Unit was found dry during the visits on 05.03.2024 and 19.03.2024, hence no sample were collected.

The lab analysis result of the Drain is given below:

**Table 17. Analysis results of samples collected from Drain during 05.03.2024 and 19.03.024**

Parameters	Drain sample location		
	Drain 1 (Up-stream) behind the Sugar mill boundary wall (during 05.03.2024) (sample code-KD1)	Drain 1 (after the boundary wall /Outside the Sugar mill boundary) (during 05.03.2024) (KD2)	Drain 1 (downstream of Unit) before confluence to River Bisuhi (during 19.03.2024) (KD)
pH	7.3	7.4	7.3
Colour	8	15	BDL
Total Suspended Solid	348	54	24
TDS	324	524	<b>1112</b>
Chloride as Cl <sup>-</sup>	48	54	95
Sulphate as SO <sub>4</sub> <sup>2-</sup>	78	88	78
Nitrate as NO <sub>3</sub> -N	BDL	BDL	3.2
PO <sub>4</sub> -P	3.47	4.03	8.4
Potassium as K <sup>+</sup>	54	82	34
Ammonical Nitrogen (NH <sub>3</sub> -N)	22	24	---
COD	<b>804</b>	<b>216</b>	<b>440</b>
BOD	<b>239</b>	<b>53</b>	<b>189</b>
SAR	6.0	6.0	0.80
Total Coliform (MPN/100 ml)			<b>21X10<sup>6</sup></b>
Fecal Coliform (MPN/100 ml)			<b>18X10<sup>5</sup></b>
Flow	Stagnant water / No visible flow		No flow prior to industry and minor flow in downstream at point KD (fig-2)

Analysis result of sample collected from Drain-1 on 19-03-2024 at sampling location 'KD' (Fig-2) before confluence to River Bisuhi has COD and BOD levels at 440 mg/l and 189 mg/l respectively. The higher BOD and COD and TC&FC along with high concentration of TDS revealed that the discharge is mix of sewage and industrial effluent (untreated /partially treated).

### River Bisuhi water quality

Sample of River Bisuhi water was also collected from upstream and downstream of the Unit on 05.03.2024 and 19.03.2024.

The team was informed that there was rainfall in the area on 04.03.2024 and there was higher flow observed in the River Bisuhi during visit on 05.03.2024 compared to the flow on 19.03.2024.

The analysis results are presented below:

**Table 18: Lab result of River Bisuhi water quality during 05.03.2024**

Parameters	River Bisuhi at U/s of BCML, Mankapur (Code-BRU)	River Bisuhi at D/s of BCML, Mankapur (Code-BRD)
pH	8.40	7.80
Colour	10	BDL
Conductivity	448	493
TDS	234	288
K <sup>+</sup>	2	3
Chloride as Cl <sup>-</sup>	7.0	8.0
Sulphate as SO <sub>4</sub> <sup>2-</sup>	BDL	BDL
Dissolve Oxygen (DO)	11.2	<b>3.98</b>
Turbidity	2	BDL
COD	3.0	16
BOD	BDL	5
SAR	0.72	0.70
Total Coliform MPN/100 ml	490	--
Fecal Coliform MPN/100 ml	78	--

During the visit on 19.03.2024, cattle of local villagers were bathing (in between upstream & downstream sampling location of the River) in the River Bisuhi. It was also observed that some villagers were using nets for catching the fish at the upstream of River Bisuhi.

**Table 19: Lab result of River Bisuhi water quality during 19.03.2024**

Parameters	R. Bisuhi at upstream of BCML Unit, Mankapur (Code-RB-1)	R. Bisuhi at Downstream of BCML, Unit, Mankapur (Code-RB-2)
pH	8.0	7.6
Colour	BDL	33.0
Conductivity	451	771
TDS	238	514
K <sup>+</sup>	3.0	4.0

Chloride as Cl <sup>-</sup>	17.0	27.0
Sulphate as SO <sub>4</sub> <sup>2-</sup>	5.0	<b>87.0</b>
Dissolve Oxygen (DO)	8.2	<b>1.0</b>
Turbidity	BDL	2.0
COD	6.0	<b>65</b>
BOD	2.70	<b>32</b>
SAR	0.68	0.72
Total Coliform MPN/100 ml	27X10 <sup>4</sup>	<b>34X10<sup>4</sup></b>
Fecal Coliform MPN/100 ml	14X10 <sup>4</sup>	<b>11X10<sup>4</sup></b>

During the visit on 19.03.2024, water quality at downstream of the river Bisuhi at sampling location “RB2” (Fig-2) was found deteriorated with **BOD-32** mg/l (against 2.70 mg/l at upstream location “RB1”), **TDS-514** mg/l (against 234 mg/l at “RB1”) and **DO – 01** mg/l (against 8.2 mg/l at “RB1”). As there is no known source of wastewater with high TDS levels nearby, the possible of intermittent discharge from the industry could not be ruled out.

#### 4.3 Survey of Datauli and Kudasan village.

During the inspection, the Joint Committee carried out the survey of Datauli and Kudasan villages & also collected the data about the village by interacting with local people in the concerned villages:

As per the data collected, the total population of Datauli village is about approx. 6000-6500. The Kudasan village population is about approx. 5000-6000. There is no proper drainage system in both the villages for discharge of sewage to River, however, sewage water from some village household are collected in local small ponds/pits. It was also informed that Soak pits have mostly been constructed in the villages for greywater disposal. As informed by the local residents, the Drain-1 (along Sugar mill boundary) located in Datauli village receives sewage discharge from the nearby residential houses/shops across the highway and finally meet to River Bisuhi after traversing along the industry (Sugar mill) boundary wall and partly inside the industry. The Drain passes through the Sugar mill premises for some distance (short stretch), and then exit from the Unit premises and finally reaches the River Bisuhi. The other Drain-2 near the main gate of distillery Unit was found dry during both days of visit.

The Joint Committee suggest that so as to ensure that no untreated sewage is discharged into

the Drains / to the River either through both the villages or from villages at upstream of the River, the concerned Jila Parishad should implement best feasible practices for sewage management as per the manuals on 'Sewerage and Sewage Treatment Systems' published by CPHEEO (Central Public Health and Environmental Engineering Organization) under the Ministry of Housing Urban affairs (MoHUA), GOI. Also, UPPCB shall monitor the progress of installation periodically in this regard.

## **5.0 Recommendations of the Committee**

Based on observations made in preceding paras of this report, the following recommendations are made:

### **(A) Effluent Management**

#### **a. Sugar Unit**

- (i) The Unit should optimize the performance of its STP so as to meet the prescribed standard. [refer para 2.2]
- (ii) The Unit should prepare comprehensive irrigation management plan by engaging an Agricultural Scientist or Agricultural University/Institute as per the CPCB guidelines titled "Guideline for Utilization of treated effluent in irrigation" and submit the same to SPCB which shall verify the same while issuing Consent to the Unit. Further, UPPCB, may incorporate the recommendations of the Irrigation Management Plan as conditions of Consent to Operate granted to the Unit, as per CPCB's Guidelines. [refer para 2.2]
- (iii) The Unit should install permanent structure over and above the drain (not below the drain) for taking the ETP treated effluent to command area so as to rule out any misuse of HDPE pipeline for bypass of effluent into the drain. The Unit should also clean the drain along the boundary wall. [refer para 2.2]
- (iv) The Unit should ensure proper operation & maintenance of SRS unit, so that Sulphate may be efficiently removed from the effluent. [refer para 2.2]

#### **b. Distillery Unit**

- (i) The Unit should not exceed the alcohol production and adhere alcohol production as consented capacity permitted by UPPCB and prescribed under the EC (Environment Clearance). [refer para 3.2]
  - (ii) The Unit should properly operate & maintain the Aeration Tank and Clarifiers (secondary and tertiary) of CPU and accordingly rectify the problem at the earliest. [refer para 3.2]
  - (iii) The Unit should properly operate & maintain the CPU and enhance the performance of CPU and RO so as to meet the desired water quality for reuse & recycle of the treated effluent with the process. [refer para 3.2]
  - (iv) The Unit should provide a demarcation line in the Lagoon and should store the spent-wash below the demarcation line. [refer para 3.2]
  - (v) The Unit shall dismantle the additional two lagoons provided at old bio-compost yard and thereafter level them accordingly under the supervision of UPPCB. [refer para 3.2]
- c. The presence of higher concentration of TDS in the downstream of the River and at the downstream of the Drain-1 reveals the possibility of intermittent discharge by the industry as there is no other TDS contributing source in the area. Further, BOD/COD concentration is also higher in downstream of the drain/river. Therefore, SPCB should ensure strict periodical surveillance of the industries/drains and ensure no industrial wastewater discharge into the drains/river. [refer para 2.2, 3.2 & 4.2]

**(B) Air Pollution Control Measures**

**(a) Sugar Unit**

- (i) The Unit should ensure regular water sprinkling and also take other necessary measures in and around the boiler and near bagasse storage area to minimize the bagasse dust dispersion in the ambient environment. [refer para 2.2]
- (ii) The Unit should provide easy ladder (spiral /scaffold type) ladder at stacks instead of monkey ladder to ensure safe access to sampling port for emission monitoring as per CPCB Emission Regulations Part-III. [refer para 2.2]
- (iii) The flue gas of boiler should be diverted and released through common stack or separate stack with the permission of UPPCB and UPPCB may examine the matter and take further necessary action and may incorporate the same in the CTO. [refer para 2.2]

**(b) Distillery Unit**

- (i) The Unit should provide easy ladder (spiral /scaffold type) at the stack to ensure safe access to sampling port for emission monitoring as per CPCB Emission Regulations Part-III. [refer para 3.2]

**(C) Waste Management****(a) Sugar Unit**

- (i) The Unit should maintain proper logbook record of Hazardous and other waste and maintain the manifest for hazardous & other waste (Form 10 [See rule 19 (1)]). Further, record of ETP sludge generation and use should also be maintained. [refer para 2.2]
- (ii) The Unit should apply for the CTO regarding uses of Ash, ETP sludge, fermenter sludge for manufacturing of Granules in the 'Granulation plant' and also for the uses of press mud for Briquette manufacturing. [refer para 2.2]

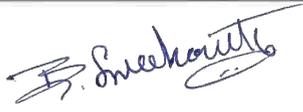
**(D) Sewage Wastewater Management in the villages**

The Joint Committee suggest that so as to ensure that no untreated sewage is discharged into the Drains / to the River either through both the villages or from villages at upstream of the River, the concerned Jila Parishad should implement best feasible practices for sewage management as per the manuals on 'Sewerage and Sewage Treatment Systems' published by CPHEEO (Central Public Health and Environmental Engineering Organization) under the Ministry of Housing Urban affairs (MoHUA), GOI. Also, UPPCB shall monitor the progress of installation periodically in this regard. [refer para 4.3]

**(E) Recommendations for UPPCB**

- (i) SPCB should ensure strict periodical surveillance of the industries/drains and ensure no industrial wastewater discharge into the drains/river. [refer para 2.2, 3.2 & 4.2]
- (ii) The Drain-1 is passing through the Sugar Unit premises, therefore UPPCB should examine the issue as per the land records in consultation with land revenue department and irrigation department and should take appropriate action so as to rule out any possible

- effluent discharge through the Drain in their premises. [refer para 2.2]
- (iii) UPPCB should incorporate the recommendations of the Irrigation Management Plan (IMP) submitted by the Sugar Unit as conditions of Consent to Operate granted to the Unit, as per CPCB's Guidelines. [refer para 2.2]
- (iv) The flue gas of boiler installed at Sugar Unit should be diverted and released through common stack or separate stack with the permission of UPPCB and therefore, UPPCB may examine the matter and take further necessary action and may incorporate the condition in this regard in the CTO. [refer para 2.2]
- (v) The CPU and MEE of the Distillery Unit is installed in Sugar mill premises. In this context, necessary action shall be taken by UP Pollution Control Board (UPPCB) for the use of Condensate Polishing Unit (CPU) and MEE in Sugar plant in the CTO.
- (vi) UPPCB should supervise the dismantling of the additional two lagoons provided at old bio-compost yard and thereafter leveling of the same by the Distillery Unit. [refer para 3.2]

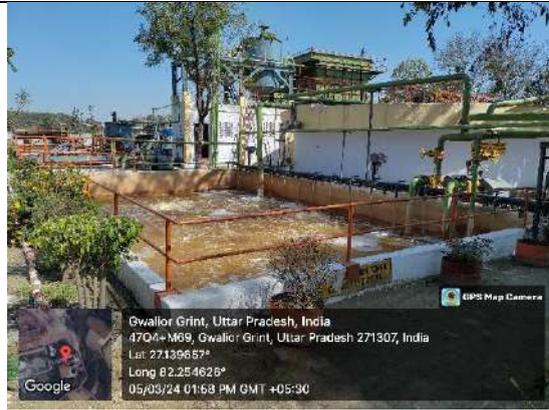
1.	Dr. Vivek Saxena, DDG, MoEF&CC, RO, Lucknow	
2.	Sh. Bharat Kumar Sharma, Member Secretary, CPCB	
3.	Dr. Satya, Scientist 'E', MoEF&CC, RO, Lucknow	
4.	Sh. Kamlesh Singh, Scientist 'E', CPCB, Delhi	
5.	Dr. Priti Singh, Scientist 'D', MoEF&CC, Delhi	
6.	Dr. Sreekanth Bojjagani, Sr. Scientist, CSIR-IITR-Lucknow	

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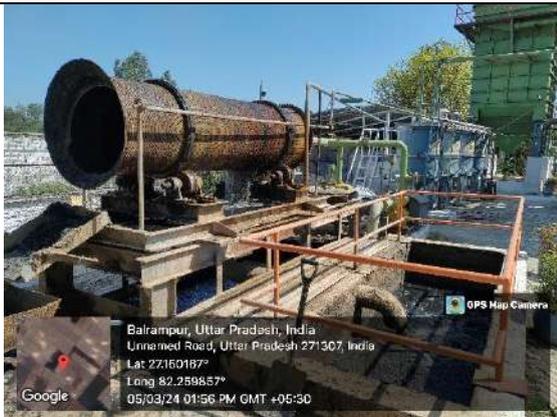
**Photographs taken during the Joint inspection of M/s Balrampur Chinni Mills, Mankapur, Gonda, Uttar Pradesh (Sugar, Distillery Unit and Surrounding areas) on 05.03.2024 & 19.03.2024**



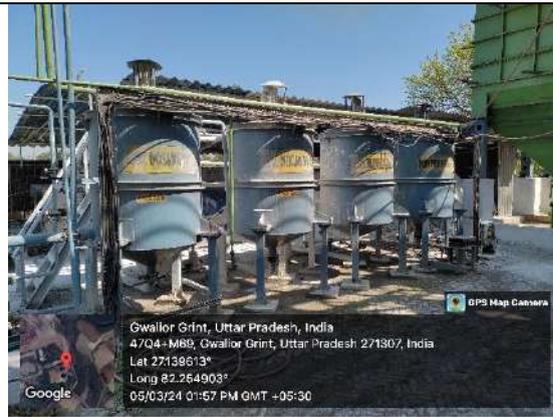
**Photo no. 5-Sugar Unit Main gate**



**Photo no.6 -Equalization Tank**



**Photo no.7- Thickener at ETP (Sugar mill)**



**Photo no.8-Lime dosing tank, Lime mixing tank, Flocculent Dosing tank**



**Photo no.9-Aeration tank of Sugar Mill**



**Photo no.10-Secondary Clarifier (Sugar mill)**



Photo no.11-Micro Plate Settler of SRU



Photo no.12-Decanter at ETP



Photo no. 13- MGF & ACF at ETP



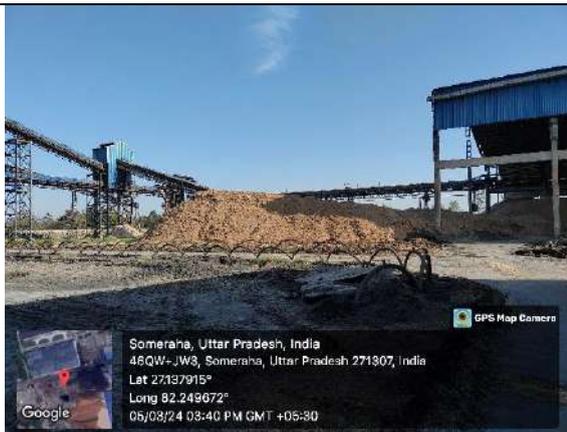
Photo no.14 -OCEMS installed at Sugar ETP outlet



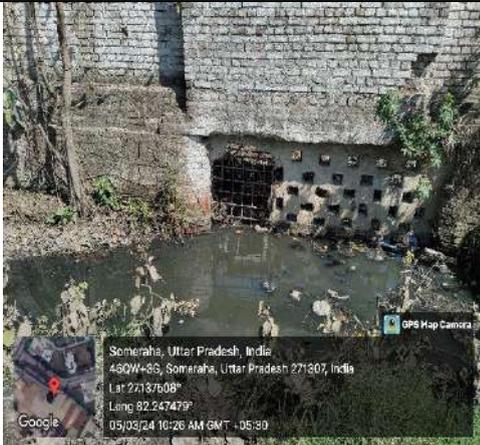
Photo no.15- Flow meter installed at Sugar ETP outlet



Photo no.16-Bagasse dryer and Boiler stack at Sugar unit



**Photo no.17-Bagasse storage area in sugar unit**



**Photo no.19- Drain-1 (with stagnant effluent) before the Sugar mill boundary wall**



**Photo no. 21- HDPE pipe (carrying treated water of Sugar Unit) for Ferti-Irrigation through Drain-1 behind Sugar Unit**



**Photo no.23-River Bisuhi Adjacent to the Unit Boundary wall (before meeting point of Drain-1)**



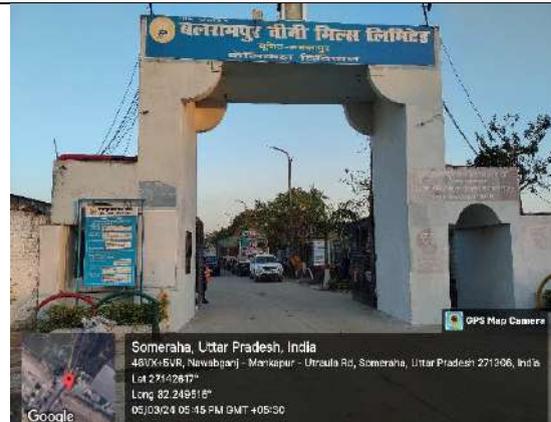
**Photo no.18- Drain-1 Adjacent to Sugar Unit Boundary Wall**



**Photo no.20 – Drain-1 (after the Sugar mill boundary wall)**



**Photo no.22 - Outlet of the HDPE pipe (in agricultural field) carrying treated water from Sugar Unit for Ferti-Irrigation**



**Photo no.24- Distillery Unit Main Gate**



**Photo no.25-Drain-2 near distillery unit boundary wall (found completely dry during inspection)**



**Photo no.26-Flow meter installed at Distillery MEE**



**Photo no.27-Flow meter installed at Distillery MEE Concentrate line**



**Photo no.28-UASB Reactor**



**Photo no. 29-MGF& ACF Filters**



**Photo no.30 - RO Plant (Distillery)**



**Photo no. 31 - Sampling of MEE condensate**



**Photo no.32- Sampling of RSW at MEE Inlet**

during inspection



Photo no.33 - Spent wash Storage Lagoon

during inspection



Photo no.34- Monkey ladder with Stack at Boiler of distillery unit



Photo no.35- Two Lagoons (Dry and empty) for Distillery spent-wash storage at old Bio-compost site



Photo no.36- Groundwater Sample collection from Handpump near Briquette Plant/old bio-compost site



Photo no.37- Handpump near Kudasan Village



Photo no.38- Treated effluent (Sugar mill) for land application/ferti-irrigation



**Photo no.39 - Treated effluent used in Sugarcane field**



**Photo no.40 - Soil Sampling from agricultural field**



**Photo no. 41- Drain-1 (downstream of Sugar Mill) Monitoring before confluence to River Bisuhi**



**Photo. No.42- Sampling from River Bisuhi (Downstream of the River)**



**Photo no.43- Sampling from River Bisuhi (Upstream of the River)**



भारत सरकार  
Government of India  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
Ministry of Environment, Forest & Climate Change  
क्षेत्रीय कार्यालय, लखनऊ  
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File No. XXI/ENV/NGT/CC/126/2023/488

Dated: 20.02.2024

**MINUTES OF THE FIRST MEETING OF THE JOINT COMMITTEE CONSTITUTED  
IN THE NGT MATTER IN O.A NO. 12 OF 2023 TITLED ALOK KUMAR MISHRA  
Vs STATE OF UTTAR PRADESH & ORS.**

Date: 20.02.2024 Time: 1100Hrs

Background :

Hon'ble NGT vide order dated 05.02.2024 has directed as follows:

"3. A perusal of the report reveals that a complete analysis of samples relating to discharge of liquid and solid waste from the unit as also the ground water analysis has not been done. Hence report submitted by the Joint Committee on 29.01.2024 in this regard is deficient in following respect:

- i. The press mud generation is around 70789 qtls. (16.11.2023 to 10.12.2023). Hence during cane crushing season huge quantity of press mud will be generated. It is mentioned that press mud that is generated is used for "making pallets". It is not clear as to what are these pallets where it is utilized/how disposed.
- ii. Further with regard to boiler ash is mentioned that the ash is being utilized in "granulation plant". No details of such plant and the consequence of such utilization of boiler ash is provided.
- iii. It is also mentioned that ETP sludge is disposed of on land. Soil analysis of ETP sludge application including the fertirrigation carried out on land is not provided.
- iv. The water quality analysis of ETP outlet has also not been provided.
- v. The ETP water quality analysis indicating all parameters including heavy metal concentration be provided.
- vi. The water quality Bishui River both upstream and downstream show high level of total coliform and fecal coliform. The reasons for such high bacterial count is on account of sewage discharge from village Kudasan. Pollution Control Board had not suggested any measures for controlling the untreated sewage discharge.

4. Hence, we deem it proper to constitute a new Joint Committee comprising of an expert nominated by Industrial Toxicology Research Centre (ITRC), Lucknow, Member Secretary, Central Pollution Control Board (CPCB), a representative of Ministry of Environment, Forests and Climate Change (MoEF&CC) and Regional Officer, MoEF&CC, Lucknow. The RO, MoEF&CC, Lucknow will act as coordinating agency in the Committee. The Joint Committee will collect the samples of solid and liquid discharge from the unit in question and carry out complete analysis of those samples in all respect and also collect the ground water samples and get the analysis done and submit a factual report before the Tribunal at least one week before the next date of hearing by e-mail at [judicial-ngt@yon.in](mailto:judicial-ngt@yon.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.

5. List on 24.04.2024."

**Follow-up Action:**

In compliance to directions of Hon'ble NGT in above said matter, first meeting of the committee was convened on 20.02.2024 in hybrid mode under the chairmanship of Deputy Director General. The List of the participants is annexed as **Annexure-A1**

Records of discussion are as follows:

At the onset, Dr. (Ms) Satya, Scientist 'E' welcomed the committee members and explained about directions of Hon'ble NGT in detail.

The matter was discussed thoroughly by the committee members and following decisions were taken:

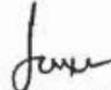
- i. Site inspection will be conducted on 05.03.2024 for an on-the-spot assessment of the direction of Hon'ble NGT & to collect the samples of solid, liquid discharge and of ground water.
- ii. CPCB will facilitate the committee with the logistic & staff support.
- iii. The IITR will analyse the samples in all respect by 15.03.2024.
- iv. The committee will again meet on 20.03.2024 at 11.30 A.M to deliberate on findings and finalization of the report.

The meeting ended with thanks to the Chair.

\*\*\*\*\*

**Encl:**

1. Joint committee report dated 29.01.2024
2. Hon'ble NGT order dated 05.02.2024

  
**Dr. Vivek Saxena**  
**(Deputy Director General)**

**Copy to:**

1. Dr. Manickam, Chief Scientist, Environment Toxicology, Group, CSIR-IITR. Email: [director@iitrindia.org](mailto:director@iitrindia.org)
2. Dr. (Ms). Satya, Scientist 'E', MoEF&CC, RO, Lucknow. Email: [satyasinghmocf@gmail.com](mailto:satyasinghmocf@gmail.com)
3. Dr. Pranay Misra, Assistant Inspector General, MoEF&CC, RO, Lucknow. Email: [goimocfrolko@gmail.com](mailto:goimocfrolko@gmail.com)
4. Dr. Priti Singh, Scientist 'D', MoEF&CC, New Delhi. Email: [priti.singha@gov.in](mailto:priti.singha@gov.in)
5. Dr. Runa Oran, Scientist 'D', CPCB, RD, Lucknow. Email: [rdlucknow-epcb@gov.in](mailto:rdlucknow-epcb@gov.in)

**ANNEXURE-A1****List of Participants**

S.No.	Name	Designation	Email & Phone No.
1.	Dr. Vivek Saxena	Deputy Director General, MoEF&CC, RO, Lucknow	<a href="mailto:roc.lko-mef@nic.in">roc.lko-mef@nic.in</a> 9999295320
2.	Dr. Manickam	Chief Scientist, Environment Toxicology, Group, CSIR-IITR	<a href="mailto:director@iitrindia.org">director@iitrindia.org</a> 9450110787
3.	Dr. (Ms). Satya	Scientist 'E', MoEF&CC, RO, Lucknow	<a href="mailto:satyasinghmoef@gmail.com">satyasinghmoef@gmail.com</a> 9453021374
4.	Dr. Pranay Misra	Assistant Inspector General, MoEF&CC, RO, Lucknow	<a href="mailto:goimoeffolko@gmail.com">goimoeffolko@gmail.com</a> 9450064090
5.	Dr. Priti Singh	Scientist 'D', MoEF&CC, New Delhi	<a href="mailto:priti.singh@gov.in">priti.singh@gov.in</a> 9811252982
6.	Dr. Runa Oran	Scientist 'D', CPCB, RD, Lucknow	<a href="mailto:rdlucknow.cpcb@gov.in">rdlucknow.cpcb@gov.in</a> , <a href="mailto:cpcb.lucknow@gmail.com">cpcb.lucknow@gmail.com</a> 9005229477

**Minutes of the Meeting of Joint Committee in compliance of the Hon'ble NGT order dated 05.02.2024 in the matter of O.A No. 12 of 2023 titled Alok Kumar Mishra Vs State of Uttar Pradesh & Ors.**

The aforesaid meeting was held on 04.03.2024 at 03:00PM through Video Conferencing to discuss the line of action for conducting joint inspection of M/s Balrampur Chini Mills Limited Unit Mankapur (Sugar and Distillery Division) on 05.03.2024 and adjoining areas in compliance of the Hon'ble NGT order dated 05.02.2024. The list of participants is annexed at **Annexure-I**.

Following is the record of discussion:

- 1.0 Deputy Director General (DDG) Forest Dr. Vivek Saxena welcomed the members of the Committee and proposed to discuss the line of action to be followed during inspection and monitoring of M/s Balrampur Chini Mills Limited Unit Mankapur (Sugar & Distillery Division).
- 2.0 Member Secretary, CPCB, Sh. Bharat Kumar Sharma, thanked all the members who joined the meeting and briefed about the matter. He asked to ensure complete compliance of the Hon'ble NGT order including analysis of the Groundwater and Soil in nearby concerned area or command area.
- 3.0 Sh. Kamlesh Singh, Scientist E, CPCB presented the detailed presentation before the members and briefed about the Hon'ble NGT order before the Committee. He described the detailed locations of the unit including tentative sampling locations from where the samples have to be collected for both Sugar and Distillery units and concerned areas as per Hon'ble NGT order. The parameters for which the samples need to be analyzed were also explained and discussed in the meeting.
- 4.0 Member from IITR (CSIR-Indian Institute of Toxicology Research), Lucknow also concurred with the locations and parameters for the sample collection and submitted that they will provide their technical support in the process of sampling including soil sampling. Member of ITRC informed that, the sample analysis is done at IITR only on payment basis as per the applicable charges. The Committee discussed about the analysis of all the samples and availability of laboratory facility for analysis of all the parameters.
- 5.0 After detailed discussion, following decision were taken by the Committee:
  1. The site inspection shall be conducted on 05.03.2024 by CPCB, Delhi, MoEF&CC, Lucknow and IITR, Lucknow.
  2. The samples (solid and liquid discharge from the concerned unit) including groundwater samples will be collected by the Committee as per the Hon'ble NGT order and the samples may be analyzed in all respect in the Laboratory of CPCB, Delhi. The tentative sampling locations & the parameters for which the samples are to be analyzed is attached as **Annexure-II** and the same be

followed, however, the inspection team may decide as per the field conditions.

3. The Committee shall also collect samples of Soil from the command area where ferti-irrigation is being employed by the unit and groundwater sampling in concerned area.
4. CPCB, Regional Directorate, Lucknow shall facilitate the logistic and staff support for the said inspection on 05.03.2024.

Meeting ended with vote of thanks.

#### Annexure-I

The following are members and list of participants attended the meeting.

1.	Dr. Vivek Saxena, Deputy Director General, MoEF&CC, RO, Lucknow
2.	Sh. Bharat Kumar Sharma, Member Secretary, CPCB
3.	Dr. Manickam, Chief Scientist, CSIR-Indian Institute of Toxicology Research (IITR), Lucknow
4.	Dr. DK Soni, Regional Director, CPCB, Lucknow
5	Dr. (Ms) Satya, Scientist E, MoEF&CC, RO, Lucknow
6	Sh. Kamlesh Singh , Scientist E CPCB, Delhi
7	Dr. Priti Singh, Scientist D, MoEF&CC, New Delhi, Lucknow
8.	Dr. Sreekanth Bojjagani, Senior Scientist, CSIR-Indian Institute of Toxicology Research (IITR), Lucknow

## ANNEXURE-II

SAMPLING LOCATIONS FOR SUGAR UNIT		PARAMETERS FOR WHICH SAMPLES ARE TO BE ANALYSED
1.	<b>ETP:</b> ETP Inlet , ETP Outlet, Aeration Tank	pH, TSS, TDS,BOD,COD,O & G,MLSS and MLVSS, Heavy metals (As, Cu, Cd, Fe, Cr, Zn, Ni, Pb), SAR,
2.	<b>Lagoon:</b> Treated Effluent Storage Lagoon	pH, TSS, TDS, BOD, COD & SAR
3.	<b>SRU:</b> Inlet and outlet of Sulphur Treatment Unit	pH, BOD, COD, TSS, TDS, Sulphate
4.	<b>STP:</b> Inlet and Outlet of STP	pH, TSS,BOD,COD, Total Phosphorous, Total Nitrogen, TC, FC
5.	<b>Groundwater:</b> i. Hand pump near Deeh Baba Mandir (D/s of the industry) (Old) ii. Hand pump within the Unit premises (One U/s and one D/s)	pH, TDS, Conductivity, Total Hardness, Total Alkalinity, Chloride, Fluoride, Sulphate, Nitrate and COD, Colour.
6.	<b>Bishui river:</b> Upstream and downstream of Bishui river.	pH, Colour, Conductivity, TDS, Sulphate, SAR, Dissolved Oxygen, COD, BOD, Total Coliform, F-Coliform
7.	<b>Soil (Command Area) and sludge(ETP)</b>	pH, Conductivity, Organic Carbon, CEC, Na, Potassium, Calcium, Magnesium, SAR. Heavy metals [As, Cu, Cd, Cr, Zn, Ni, Pb, Hg]
8.	<b>Emission Monitoring (PM)</b>	PM
SAMPLING LOCATIONS FOR DISTILLERY UNIT		PARAMETERS FOR WHICH SAMPLES ARE TO BE ANALYSED
1.	<b>ETP:</b> Raw spent wash, MEE Inlet, MEE Outlet (Concentrate), MEE Condensate	pH, TSS, TDS, COD, BOD, Total Solid.
2.	<b>CPU:</b> Condensate Polishing Unit (Inlet & Outlet) and RO outlet & RO Reject.	pH, TSS, TDS, COD, BOD, MLVSS & MLSS, Sulphate
3.	<b>Ground Water Analysis</b> 1. Borewell within industry premises BCML, Mankapur. 2. Handpump near Upadhayapur village, Datuli, Mankapur. 3. Handpump near Vijayapur village, Datuli, Mankapur	pH, Colour, TDS, Alkalinity, Cl-, F-, SO42+ COD, Nitrate as NO3-N, Total Hardness
4.	<b>STP:</b> Inlet and Outlet samples	pH, TSS,BOD,COD, Total Phosphorous , Total Nitrogen, TC, FC
5.	<b>Drain Monitoring</b> Drain near main gate of BCML & (ii) Drain near Kabristan behind BCML sugar Division ETP Boundary	pH, Colour, TSS, TDS, Chloride, Sulphate, Nitrate, Phosphate, Potassium, Ammonical Nitrogen, COD, BOD, SAR
6.	<b>River Bisuhi:</b> River Sample shall be collected from Upstream and Downstream of the Unit.	pH, Colour, Conductivity, TDS, Sulphate, SAR, Dissolved Oxygen, COD, BOD, Total Coliform, F-Coliform.
7.	<b>Emission Monitoring (PM)</b>	PM



### Uttar Pradesh Pollution Control Board

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.in, Website: www.uppcb.com

196280/UPPCB/Faizabad(UPPCBRO)/CTO/both/GONDA/2023

Date: 22/12/2023

To,

M/s

**BALRAMPUR CHINI MILLS LIMITED UNIT MANKAPUR SUGAR DIVISION**

village Datauli, Tehsil Mankapur, Distt Gonda (UP),GONDA,271302

Application Id-  
23455860

Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) 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

CCA is hereby granted to **BALRAMPUR CHINI MILLS LIMITED UNIT MANKAPUR SUGAR DIVISION** located at village Datauli, Tehsil Mankapur, Distt Gonda (UP),GONDA,271302. subject to the provisions of the Water Act, Air Act and the orders that may be made further and subject to following terms and conditions :-

1. This CCA BALRAMPUR CHINI MILLS LIMITED UNIT MANKAPUR SUGAR DIVISION granted for the period from 01/01/2024 to 31/12/2025 and valid for manufacturing of following products.

S No	Product	Quantity	Unit
1	Crystal Sugar	960	Metric Tonnes/Day
2	Power Co-generation	37	Megawatt

2. Conditions under Water(Prevention and Control of Pollution) Act -1974 as amended :-

- (i) The daily quantity of effluent discharge (KLD) :-

Kind of Effluent	Quantity(KLD)	Treatment facility	Discharge point
Domestic	200 KLD	STP	
Industrial	1600 KLD	ETP	

- (ii) Trade Effluent Treatment and Disposal :-The applicant shall operate Effluent Treatment Plant consisting of primary/secondary and tertiary treatment as is required with reference to influent quantity and quality.

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.

- (iii) The treated effluent shall be recycled to the maximum extent and should be reused within the premises for gardening etc. Quality of the treated effluent shall meet to the following general and specific standards as prescribed under Environment (Protection) Rules, 1986 and applicable to the unit from time-to-time :-

#### Industrial Effluent Quality Standard

S.No.	Parameter	Standard
1	pH	As per E(P)A Rules, 1986

2	BOD (mg/L)	As per E(P)A Rules, 1986
3	COD (mg/L)	As per E(P)A Rules, 1986
4	TSS (mg/L)	As per E(P)A Rules, 1986
5	Oil & Grease (mg/L)	As per E(P)A Rules, 1986

(iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality. 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.

(v) The treated sewage shall be reused in gardening as far as possible. The STP shall be maintained continuously so as to achieve the quality of the treated sewage to the following standards.

S No.	Parameters	Standards
1	pH	As per E(P)A Rules, 1986
2	BOD (mg/L)	As per E(P)A Rules, 1986
3	TSS (mg/L)	As per E(P)A Rules, 1986
4	Fecal Coliform (MPN/100ml)	As per E(P)A Rules, 1986

### 3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as 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.

#### Air Pollution Source Details

S No.	Air Pollution Source	Type of fuel	Stack no	Control Device	Height of Stack
1	02 Boilers having capacity 90 TPH Each	Baggasse	1	Particulate Matter	As per E(P)A Rules, 1986

#### Emmission Quality Standards

S No.	Stack no	Parameters	Standards
1	1	Particulate Matter	As per E(P)A Rules, 1986

In case of stoppage of functioning of air pollution control equipment, 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) The unit will not use any type of restricted fuel.

iii) 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, Commercial, Residential, Silence) which are as follows :-

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

Standards for Noise level in db(A) Leq	Industrial Area		Commercial Area		Residential Area		Silence Zone	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
	75	70	65	55	55	45	50	40

#### 4. Essential documents to be submitted by the Industry/Unit as Applicable :-

- (i) Environment Statement in Form-V of Environment (Protection) Rules, 1986.
  - (ii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.
5. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.
6. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will result in legal action under the aforesaid Acts and Rules.
7. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-<http://www.upecp.in/TrainingSession.aspx> for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of non-compliance of this direction, your consent will be revoked by the Board.
8. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

#### General Conditions:-

1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.
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 Industrial 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 within 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 house keeping. All valves/pipes/sewer/drains etc. must be leak-proof
6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.
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. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.

10. 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.

11. 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

12. The Board reserves the right to revoke/add/modify any stipulated condition issued along with CCA, as may be necessary.

**Specific Conditions:-**

1. This consent is valid for the production of 960 TPD Crystal Sugar by using 8000 TCD Sugar Cane Crushing and Power Cogeneration of 37 MW only.

2. The industry shall maintain strict supervision upon fluctuations in operating parameters with respect to each treatment unit of the Effluent treatment plant.

3. The E.T.P. unit operation line up Strengthening is to be maintained.

4. The industry shall ensure deployment of qualified to step up self monitoring mechanism on 24 × 7 Hours basis.

5. The industry should follow the directions issued by the Ministry of Environment Forest and Climate Change, Delhi vide Notification no. GSR 35(E) dated 14/01/2016.

6. The E.I.A. studies shall include comprehensive study of water & waste water balance in Addition to the adequacy studies of E.T.P. relating to pollution load reduction impacts after implementation of treatment technology & discharge of treated effluent completely for irrigation purposes in place of discharge on surface water body.

7. The industry shall deploy self monitoring task force to strictly observe & monitor treated effluent discharge restriction on surface water body located in its proximity.

8. The industry shall also explore treated effluent re-cycle mechanism in furtherance to the application of treated effluent on land as a significant alternative mode of re-cycle. This step shall in turn reduce hydraulic loading of effluent discharge as well as shall eliminate extraneous treated effluent discharge possibility elsewhere.

9. The Unit shall submit the point wise compliance report of the conditions imposed in the CTO issued by the Board for year 2022 and the audited balance sheet for the current year and the details of fees deposited within a month failing which consent would be deemed void.

10. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/process/fuel/ plant machinery failing which consent would be deemed void.

11. In compliance of the provisions of the Plastic Waste Management Rules 2016 as amended, the industry shall submit the Extended Producer Responsibility (EPR) for the disposal of Plastic waste generated within a

month failing which consent would be deemed void.

12. The overall noise levels in and around 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 level shall confirm to the standards under the Environment (Protection) Act 1986.

13. The orders passed by Hon'ble National Green Tribunal in O.A. No. 12/2023 in the matter of Alok Kumar Mishr & Ors Vs. State of Uttar Pradesh shall prevail on this CTO.

14. The Industry shall dispose the hazardous waste through authorized recyclers/TSDF and comply with the provisions of Hazardous and Other Wastes (Management and Trans-boundary Movement) Amendment Rules, 2016 and The Plastic Waste Management Rules, 2016 as amended.

15. If closure order is issued by CPCB or UPPCB against any defaulting unit, then CTO issued earlier will suspended during the pendency of the closure period and after ensuring the compliance and after revocation of closure order, the CTO will be deemed to be restore subject to the effective date of revocation of the closure order, with imposed conditions thereof.

16. 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 CTO and attract action under the provisions of Law.

**RAM**  
**KARAN**  
Chief Environmental Officer, Circle-6  
Digitally signed  
by RAM KARAN  
Date: 2024.01.17  
11:52:02 +05'30'

Copy to:

Regional Officer, U.P. Pollution Control Board, Ayodhya for information and necessary action.

**RAM**  
**KARAN**  
Chief Environmental Officer, Circle-6  
Digitally signed by  
RAM KARAN  
Date: 2024.01.17  
11:52:27 +05'30'



## UTTAR PRADESH POLLUTION CONTROL BOARD

TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831 Fax:0522-2720764 Email: info@uppcb.com Website: www.uppcb.com

Ref. No : 19890/UPPCB/Faizabad(UPPCBRO)/HWM/GONDA/2023

Dated :11/04/2023

To,

M/s BALRAMPUR CHINI MILLS LIMITED UNIT MANKAPUR SUGAR DIVISION  
village Datauli, Tehsil Mankapur, Distt Gonda (UP),GONDA,271302  
Tehsil :Mankapur  
District :GONDA

**Sub :-** Authorisation issued under the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

1. Number of authorization and date of issue 19890 and 11/04/2023 .
2. Reference of application (No. and date) 8540370 and 25/03/2023 .
3. Mr NEERAJ BANSAL of M/s BALRAMPUR CHINI MILLS LIMITED UNIT MANKAPUR SUGAR DIVISION is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, utilization, storage and disposal or any other use of hazardous or other wastes or both on the premises situated at village Datauli, Tehsil Mankapur, Distt Gonda (UP) .

### Details of Authorisation

S No.	Category of Hazardous Waste as per the Schedules I,II and III of these rules	Authorised mode of disposal or recycling or utilization or co-processing, etc.	Quantity(ton/annum)
1	Cat-5.1 (Used or Spent Oil)	Through TSDF	11.70 TPA
2	Cat-33.1 (Empty Barrels/containers/liners contaminated with hazardous chemical/wastes)	Through TSDF	0.3 TPA
3	Cat-33.2 (Contaminated cotton rags or other cleaning materials)	Through TSDF	2.5 TPA

1. The authorization shall be valid for a period of 11/04/2028 from the date of issue of this letter .
2. 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 authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under .
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution 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 authorisation .
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation 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 authorised 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 authorised 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 utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation .
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 authorisation 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 Changes 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 Unit will file the renewal application at least 2 months prior to the expiry of this Order.

## **B Specific Conditions of Authorization**

1. The authorization shall be valid upto dated 11.04.2028, if not suspended or cancelled earlier.
2. The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers / bags shall be provided with a general label. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.
3. The authorized person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorization has been requested. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.
4. It is brought to your notice that as per the order dated 14-11-2003 passed by the Hon'ble Supreme Court in W.P. (c) No. 657 of 1995, no industry covered under Hazardous and other Wastes (Management and Tran boundary Movement) Rules, 2016 shall be allowed to operate without valid authorization. It is also provided in the same orders that industries which are not complying with the conditions of authorization shall not be allowed to operate. Hence in case you fail to apply for authorization, before its expiry or fail to comply with conditions of the earlier authorization issued to you, closure order shall be issued against your industry without any further notice.
5. The applicant must file returns on prescribed Form- 4 along with a compliance report of this letter and should also maintain records on Form 3 and present it to Board's inspecting officials.

6. In case of occurrence of an accident, complete details on form must be sent to U.P. Pollution Control Board at the earliest along with details of mitigate and remedial measures taken.
7. The authorized person/agency shall not receive, collect, or store any hazardous waste from any unauthorized occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorization of the Board.
8. In no case any hazardous wastes shall be disposed off on land, in any drain or stream. All spillages of hazardous chemicals, used containers, of hazardous chemicals such as flammable corrosive, explosive and toxic nature must be safely collected and stored. Non-compatible wastes must be suitably and safely handled.
9. It is within the powers and functions of the U.P. Pollution Control Board to modify / revoke the terms and conditions of the authorization/Registration issued under the Rule – 7 of Hazardous and Other Wastes (Management and Tran boundary Movement) Rules, 2016.
10. You are directed to display on-line data/display board outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within 15 days of receipt of this letter.
11. It is the mandatory duty of the authorized person/agency to comply with the guidelines for transportation of hazardous waste in accordance with rule 18 of Hazardous and Other Waste (Management and Tran boundary Movement) Rules, 2016.
12. It should be ensured that hazardous wastes shall be properly collected and packed in HDPE bags and then temporarily stored in a lined RCC tank/pit with suitable shed.
13. An ETP sludge test report of a laboratory approved under E.P. Act shall be submitted along with compliance of this letter of this office.
14. Used oil shall be sold only to recyclers registered with U.P. Pollution Control Board. The record shall be maintained.
15. The occupier, transporter and operator of a facility shall be liable for damages caused to the environment resulting due to improper handling and disposal of hazardous waste listed in schedule 1,2, and 3 and shall be liable to pay a fine as levied by the State Pollution Control Board under the rules.
16. Details of raw material (which is Hazardous waste) and product along with quantity shall be sent within a month.
17. You shall become the member of any common TSDF for S.L.F. which has been authorized by UPPCB and send the stored hazardous wastes for final disposal to the TSDF and report back to U.P.P.C.B. with the required manifesto (document of proof) within one/three month of this letter.
18. The unit shall ensure that H.W. is regularly sent to Authorized common TSDF and shall not store for more than 90 days in accordance with under rule 8 of HOWM Rules, 2016.
19. Emission from the Common/Captive incinerator stack shall meet the prescribed standards under Environmental Protection Act. 1986.
20. Copies of Hazardous Waste Manifest in Form-10 shall be sent regularly to UPPCB for each category of waste sent to TSDF/Incinerator.
21. This authorization/Registration is valid till the industry is having valid consent as per the provisions of Air(Prevention and Control of Pollution) Act 1981 and Water (Prevention and Control of Pollution) Act, 1974.
22. Industry shall comply the provisions of EP Act, 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended and E-waste (Management and Handling) Rules, 2016.

23. The authorized actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorization.
24. The industry shall submit copy of logbook of mixing the hazardous waste with bagasse and incinerated in boilers within 15 days.
25. The industry shall submit the colored photo graph of display board within 15 days.
26. The industry shall submit the form-10 within 15 days for disposal of hazardous waste.
27. 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 authorization and attract action under the provisions of Law.

**( Authorized Signatory )**  
**ATULESH** Digitally signed by  
**YADAV** ATULESH YADAV  
Date: 2023.04.13  
07:48:44 -04'00'  
**UTTAR PRADESH POLLUTION CONTROL BOARD**

Copy to: To the Regional Officer, U.P.Pollution Control Board, Ayodhya for information and necessary action .

**ATULESH** Digitally signed by  
**YADAV** ATULESH YADAV  
Date: 2023.04.13  
07:48:53 -04'00'  
**CEO/EE, I/C Circle** \_\_\_\_\_



## GROUND WATER DEPARTMENT

(Namami Gange &amp; Rural Water Supply Department)

Ministry of Jal Shakti

Government of Uttar Pradesh

## Annexure-4

## Form 8 (E)

[See rules 15(2)]

(RENEWAL OF AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER)

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: REG039696

VALID FROM 20/11/2021 TO 19/11/2026

Registration No.: 202110000447

Name of the Owner	KISHORE KUMAR SAXENA		
Address of the Applicant	Mankapur Chini mills Ltd, village Post Dataull	Application Form Serial No.	GND41021RIN0028
Date of Submission	26/10/2021	Specimen Signature	
Company Name	BALRAMPUR CHINI MILLS LTD, UNIT MANKAPUR SUGAR DIV	Company Address	Village Dataull, Tehsil Mankapur, Distt Gonda (UP)
<b>Location Particulars</b>			
District	Gonda	Block	MANKAPUR
Plot No./Khasra No.	Existing Land document attached,	Municipality/Corporation	No
Ward No./Holding No.			NA
<b>Particular of the Existing Well and Pumping Device</b>			
Date of Construction/Sinking of the Well	01/04/2005		
Type of Well	Tube Well/Boring	Depth of the Well (In meter)	112.80
Purpose of well	Industrial	Assembly Size(For Tube Well)	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	H.P. of the Pump	25.00
Operational Device	Electric Motor	Rate of Withdrawal (m <sup>3</sup> /hr.)	108.00
Date of Energization (In Case of Electric Pump)		01/04/2005	
Maximum Allowable Rate of Withdrawal (m <sup>3</sup> /hr.):	108.00	Maximum Allowable Running Hours Per Day:	7.00
Maximum Allowable Annual Extraction of Ground Water:			151200
Reason for renewal of N.O.C. एन.ओ.सी. के नवीनीकरण का कारण	CGWA/NOC/IND/REN/1/2019/5571 is valid up to 6/11/2021.		
Against Case			

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at Sl. (3) for extraction of ground water at a rate not exceeding that as shown at Sl. (3j), for Running Hours per day as shown at Sl. (3k), and for maximum allowable annual extraction of ground water as shown at Sl. (3k) and is valid subject to the observance of the conditions stated overleaf.

#### Conditions

- (1) In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- (2) No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization.
- (3) For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- (4) The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands.
- (5) In case of any change of ownership of the existing well, fresh registration has to be obtained.
- (6) No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at Sl. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration.
- (7) In case, any of the particulars / information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage, this registration is liable for cancellation.
- (8) The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- (9) Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis.
- (10) Guidelines for Installation of Piezometers and their Monitoring
- Piezometer is a borewell /tube well used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing whenever needed. General guidelines for installation of piezometers are as follows for compliance of NOC:
  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4" to 6".
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometer are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No. of piezometers required	Monitoring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

- The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter up to two decimals.
- For measurement of water level sounder or automatic water level recorder (AWLR) Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
- The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
- All the details regarding coordinates, reduced level (with respect to mean level), depth, zone tapped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
- The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lit. capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
- A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.
- Any other site-specific requirement regarding safety and access for measurement may be taken care of.
- (11) Any other condition(s) that may be imposed by the concerned Authority.
- (12) In case, any of the particulars / information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
- **SPECIFIC CONDITIONS:**
  - (A) **For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
    - i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
    - ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
    - iii) All industries abstracting ground water in excess of 100 m<sup>3</sup>/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department, Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
    - iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m<sup>3</sup>/day of ground water and, Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
    - v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
    - vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
    - vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
  - (B) **Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
    - i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
    - ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m<sup>3</sup> /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc.



## GROUND WATER DEPARTMENT

(Namami Gange & Rural Water Supply Department)  
Ministry of Jal Shakti  
Government of Uttar Pradesh

Form 8 (E)

[See rules 15(2)]

(RENEWAL OF AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF EXISTING WELL FOR INDUSTRIAL/  
COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER)

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: REG012611

VALID FROM 12/10/2021 TO 11/10/2026

Registration No.: 202109000527

Name of the Owner	KISHORE KUMAR SAXENA		
Address of the Applicant	Mankapur Chini mills Ltd, village Post Datauli	Application Form Serial No.	GNDAA0921RIN0024
Date of Submission	20/09/2021	Specimen Signature	
Company Name	BALRAMPUR CHINI MILLS LTD, UNIT MANKAPUR SUGAR DIV	Company Address	village Datauli, Tehsil Mankapur, Distt Gonda (UP)
<b>Location Particulars</b>			
District	Gonda	Block	MANKAPUR
Plot No./Khasra No.	Existing Land details attached	Municipality/Corporation	No
Ward No./Holding No.			NA
<b>Particular of the Existing Well and Pumping Device</b>			
Date of Construction/Sinking of the Well	01/04/2005		
Type of Well	Tube Well/Boring	Depth of the Well (in meter)	112.80
Purpose of well	Industrial	Assembly Size(For Tube Well)	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	H.P. of the Pump	25.00
Operational Device	Electric Motor	Rate of Withdrawal (m <sup>3</sup> /hr.)	100.00
Date of Energization (In Case of Electric Pump)	01/04/2005		
Maximum Allowable Rate of Withdrawal (m <sup>3</sup> /hr.):	100.00	Maximum Allowable Running Hours Per Day:	4.00
Maximum Allowable Annual Extraction of Ground Water:	120000		
Reason for renewal of N.O.C. एन.ओ.सी. के नवीनीकरण का कारण	CGWA/NOC/IND/REN/1/2019/5571 is valid 6/11/2021.		
Against Case			



This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at Sl. (3) for extraction of ground water at a rate not exceeding that as shown at Sl. (3k), for Running Hours per day as shown at Sl. (3k), and for maximum allowable annual extraction of ground water as shown at Sl. (3k) and is valid subject to the observance of the conditions stated overleaf.

#### Conditions

- (1) In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- (2) No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization.
- (3) For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- (4) The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands.
- (5) In case of any change of ownership of the existing well, fresh registration has to be obtained.
- (6) No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at Sl. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration.
- (7) In case, any of the particulars / information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage, this registration is liable for cancellation.
- (8) The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- (9) Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis.
- (10) Guidelines for Installation of Piezometers and their Monitoring
- Piezometer is a borewell / tube well used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing whenever needed. General guidelines for installation of piezometers are as follows for compliance of NOC:
  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4" to 6".
  - The depth of the piezometer should be same as in case of the pumping well from which ground water is being abstracted. If, more than one piezometer are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No. of piezometers required	Monitoring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

- The measuring frequency should be monthly and accuracy of measurement shall be up to cm. the reported measurement should be given in meter up to two decimals.
- For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
- The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
- All the details regarding coordinates, reduced level (with respect to mean level), depth, zone tapped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
- The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt. capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
- A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.
- Any other site-specific requirement regarding safety and access for measurement may be taken care of.
- (11) Any other condition(s) that may be imposed by the concerned Authority.
- (12) In case, any of the particulars / information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
- **SPECIFIC CONDITIONS:**
  - (A) For Industrial User: No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
    - i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
    - ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
    - iii) All industries abstracting ground water in excess of 100 m<sup>3</sup>/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department, Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
    - iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m<sup>3</sup>/day of ground water and, Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
    - v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
    - vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
    - vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
  - (B) Infrastructural User: The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
    - i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
    - ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m<sup>3</sup> /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc.



# GROUND WATER DEPARTMENT

(Namami Gange & Rural Water Supply Department)

Ministry of Jal Shakti

Government of Uttar Pradesh

## Form 8 (E)

[See rules 15(2)]

(RENEWAL OF AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER)

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: REG018924

VALID FROM 12/10/2021 TO 11/10/2026

Registration No.: 202109000367

Name of the Owner	KISHORE KUMAR SAXENA		
Address of the Applicant	Mankapur Chini mills Ltd, village Post Dataull	Application Form Serial No.	GNDAD921RIN0023
Date of Submission	13/09/2021	Specimen Signature	
Company Name	BALRAMPUR CHINI MILLS LTD. UNIT MANKAPUR SUGAR DIV	Company Address	Village Dataull, Tehsil Mankapur, Distt Gonda (UP)
<b>Location Particulars</b>			
District	Gonda	Block	MANKAPUR
Plot No./Khasra No.	Existing Land details attached	Municipality/Corporation	No
Ward No./Holding No.			NA
<b>Particular of the Existing Well and Pumping Device</b>			
Date of Construction/Sinking of the Well	01/04/2005		
Type of Well	Tube Well/Boring	Depth of the Well (In meter)	112.80
Purpose of well	Industrial	Assembly Size(For Tube Well)	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	H.P. of the Pump	25.00
Operational Device	Electric Motor	Rate of Withdrawal (m <sup>3</sup> /hr.)	108.00
Date of Energization (In Case of Electric Pump)		01/04/2005	
Maximum Allowable Rate of Withdrawal (m <sup>3</sup> /hr.):	108.00	Maximum Allowable Running Hours Per Day:	8.00
Maximum Allowable Annual Extraction of Ground Water:			155520
Reason for renewal of N.O.C. एन.ओ.सी. के नवीनीकरण का कारण	CGWA/NOC/IND/REN/1/2019/5571 is upto 8/11/2021.		
Against Case			

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at Sl. (3) for extraction of ground water at a rate not exceeding that as shown at Sl. (3), for Running Hours per day as shown at Sl. (3k), and for maximum allowable annual extraction of ground water as shown at Sl. (3k) and is valid subject to the observance of the conditions stated overleaf.

#### Conditions

- (1) In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- (2) No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization.
- (3) For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- (4) The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands.
- (5) In case of any change of ownership of the existing well, fresh registration has to be obtained.
- (6) No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at Sl. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration.
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- (8) The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- (9) Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis.
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  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No. of piezometers required	Monitoring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

- The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter up to two decimals.
- For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
- The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
- All the details regarding coordinates, reduced level (with respect to mean level), depth, zone tapped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
- The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt. capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
- A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.
- Any other site-specific requirement regarding safety and access for measurement may be taken care of.
- (11) Any other condition(s) that may be imposed by the concerned Authority.
- (12) In case, any of the particulars / information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
- **SPECIFIC CONDITIONS:**
  - (A) For Industrial User: No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
    - i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
    - ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
    - iii) All industries abstracting ground water in excess of 100 m<sup>3</sup>/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department, Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
    - iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m<sup>3</sup>/day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
    - v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
    - vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
    - vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
  - (B) Infrastructural User: The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
    - i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
    - ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m<sup>3</sup>/day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc.

## Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

ULR No: TC772324500000141F

Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : WATER/WW/2324/SR00088, 07/03/2024 Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि : WATER/2324/WW/00141.03/04/2024

Analysis Request Division/Organization विश्लेषण अनुरोध प्रभाग/संगठन : IPC-III Report sent to (Name & Address of Indentor) आख्या किसे जारी की गयी (नाम एवं प्रभाग) : IPC-III

Sample Details नमूना विकरण : ETP STP Drain Sample Matrix नमूना मैट्रिक्स : Waste Water

Sample Collected by नमूने एकत्रित करने वाले का नाम : Kamlesh Singh, MoEF, IITR, DDG (MoEF) Date & Time of Sample Receipt नमूने प्राप्ति की तिथि एवं समय : 08/03/2024 11:47 AM

Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : Sampling Analysis Period नमूने के विश्लेषण की अवधि : 07/03/2024 to 15/03/2024

Report Status रिपोर्ट स्थिति : Final

203

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	pH	COD	BOD	TS	TSS	TDS	Cl-
1	05/03/2024	BS-1	6.30	2478	1437	-	220	2644	-
2	05/03/2024	BS-1 O&G	-	-	-	-	-	-	-
3	05/03/2024	BS-3	7.50	73	19	-	13	1440	-
4	05/03/2024	BS-3 o&g	-	-	-	-	-	-	-
5	05/03/2024	BSIR	7.60	100	34	-	19	1388	-
6	05/03/2024	BS-SI	7.10	199	63	-	43	-	-
7	05/03/2024	BS-SO	7.40	60	14	-	BDL	-	-
8	05/03/2024	KD1	7.30	804	239	-	348	324	48
9	05/03/2024	KD2	7.40	216	53	-	54	524	54
10	05/03/2024	BDRS	4.90	23200	106439	201540	ND	ND	-
11	05/03/2024	MI	4.50	232960	110445	189360	ND	ND	-

Analyst

Vinod Kumar , Vijay Laxmi

Supervisor & Reviewer

Syed M Bilal

Issued By (Lab InCharge)

Dr. K. Ranganathan

**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)**

Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

ULR No: TC772324500000141F

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	PO4-P	NO2-N	NO3-N	NH3-N	SO <sup>2-</sup>	K+	Oil & Grease
1	05/03/2024	BS-1	-	-	-	-	-	-	-
2	05/03/2024	BS-1 O&G	-	-	-	-	-	-	BDL
3	05/03/2024	BS-3	-	-	-	-	-	-	-
4	05/03/2024	BS-3 o&g	-	-	-	-	-	-	BDL
5	05/03/2024	BSIR	-	-	-	-	-	-	-
6	05/03/2024	BS-SI	-	BDL	BDL	-	-	-	-
7	05/03/2024	BS-SO	-	0.44	6.30	-	-	-	-
8	05/03/2024	KD1	3.47	-	BDL	22	78	54	-
9	05/03/2024	KD2	4.03	-	BDL	24	88	82	-
10	05/03/2024	BDRS	-	-	-	-	-	-	-
11	05/03/2024	MI	-	-	-	-	-	-	-

Analyst

Vinod Kumar , Vijay Laxmi

Supervisor & Reviewer

Syed M Bilal

Issued By (Lab InCharge)

Dr. K. Ranganathan



CENTRAL POLLUTION CONTROL BOARD केंद्रीय प्रदूषण नियंत्रण बोर्ड

HEAD OFFICE - DELHI

Parivesh Bhavan, East Arjun Nagar, Delhi - 110032



CPCB

Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

TC-7723

ULR No: TC772324500000141F

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	pH	COD	BOD	TS	TSS	TDS	Cl-
12	05/03/2024	MC	4.60	824800	347290	666800	ND	ND	-
13	05/03/2024	MO	3.10	4498	2561	3000	BDL	604	-
14	05/03/2024	BDPU-I	3.20	2480	1601	-	12	416	-
15	05/03/2024	BDPU-O	7.20	815	397	-	202	832	-
16	05/03/2024	BDP	7.30	811	390	-	196	932	-
17	05/03/2024	BDR	7.30	770	357	-	229	664	-
18	05/03/2024	BDLS	4.10	177120	76345	157840	ND	ND	-

\* END OF REPORT आख्या समाप्ति \*

BDL : Below Deduction Limit कटौती सीमा से नीचे

Remarks (if any) :

Note: All the concentrations are expressed in mg/l except pH and Conductivity (umho/cm). नोट : पीएच तथा चालकता (umho/cm) के अतिरिक्त सभी सांद्रता मिग्रा/ली. में व्यक्त की गई हैं।

Statement कथन :

1. The results relate only to the samples tested. परिणाम केवल जांचे गए नमूनों से संबंधित है।
2. The report shall not be reproduced except in full without written approval of the laboratory पूर्ण रिपोर्ट के अतिरिक्त प्रयोगशाला के लिखित अनुमोदन के बिना आख्या की आंशिक प्रतिकृति नहीं की जायेगी।
3. BDL & Test methods are mentioned on back side of this report. बी डी एल एवं परीक्षण विधि आख्या के अंत में दिए गए हैं।
4. Samples will be retained only for one Week after receipt of Report. संबंधित आख्या जारी होने के बाद नमूने केवल प्राप्ति के एक सप्ताह बाद तक ही सुरक्षित रखे जाएंगे।

Analyst

Vinod Kumar , Vijay Laxmi

Supervisor & Reviewer

Syed M Bilal

Issued By (Lab InCharge)

Dr. K. Ranganathan

Doc: CB/CL/QR/7.4/WWL-1

Issue No.:3

Revision No :3

Issue Date:19/02/2014

Revision Date: 18/09/2020

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**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)**

Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

ULR No: TC772324500000141F

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	PO4-P	NO2-N	NO3-N	NH3-N	SO <sup>2-</sup>	K+	Oil & Grease
12	05/03/2024	MC	-	-	-	-	-	-	-
13	05/03/2024	MO	-	-	-	-	-	-	-
14	05/03/2024	BDPU-I	-	-	-	-	52	-	-
15	05/03/2024	BDPU-O	-	-	-	-	31	-	-
16	05/03/2024	BDP	-	-	-	-	36	-	-
17	05/03/2024	BDR	-	-	-	-	40	-	-
18	05/03/2024	BDLS	-	-	-	-	-	-	-

**Analyst**

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**Supervisor & Reviewer**

Syed M Bilal

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**Revision Date: 18/09/2020**

**Page No. : 4/5**

**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्य)**

**Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने**

ULR No: TC772324500000141F

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
pH	APHA 4500 H+ - B, 23rd Ed.: 2017		2	
COD	APHA 5220 B, 23rd Ed.: 2017	mg/l	5	
BOD	APHA 5210 B, 23rd Ed. 2017, 4500 OC (5 days at 20C). IA - 3025 part 44: 1993 BOD (3 days at 27 C): 2017	mg/l	1	
TS	APHA 2540 B, 23rd Ed.: 2017	mg/l	10	
TSS	APHA 2540 D, 23rd Ed.: 2017	mg/l	10	
TDS	APHA 2540 C, 23rd Ed.: 2017	mg/l	10	
Cl-	APHA 4500 - Cl B, 23rd Ed.: 2017	mg/l	5	
PO4-P		mg/l	0.05	
NO2-N			0.03	
NO3- N	APHA 4500 - NO3 D 23rd Ed.: 2017	mg/l	0.5	
NH3-N	APHA 4500 NH3-N- B & C, 23rd Ed.: 2017	mg/l	1	
SO <sub>4</sub> <sup>2-</sup>			5	
K+	APHA 3500 K - B, 23rd Ed.: 2017	mg/l	1	
Oil & Grease	APHA 5520 B, 23rd Ed.: 2017	mg/l	5	

**Analyst**

Vinod Kumar , Vijay Laxmi

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**Issue Date:19/02/2014**

**Revision Date: 18/09/2020**

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CENTRAL POLLUTION CONTROL BOARD  
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Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : WATER/WW/2324/SR00088, 07/03/2024 Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि : WATER/2324/WW/00141.03/04/2024

Analysis Request Division/Organization विश्लेषण अनुरोध प्रभाग/संगठन : IPC-III Report sent to (Name & Address of Indentor) आख्या किसे जारी की गयी (नाम एवं प्रभाग) : IPC-III

Sample Details नमूना विकरण : ETP STP Drain Sample Matrix नमूना मैट्रिक्स : Waste Water

Sample Collected by नमूने एकत्रित करने वाले का नाम : Kamlesh Singh, MoEF, IITR, DDG (MoEF) Date & Time of Sample Receipt नमूने प्राप्ति की तिथि एवं समय : 08/03/2024 11:47 AM

Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : Sample Analysis Period नमूने के विश्लेषण की अवधि : 07/03/2024 to 15/03/2024

Report Status रिपोर्ट स्थिति : Final

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	MLSS	MLVSS	Color	TKN	TP	SAR
1	05/03/2024	BS-1	-	-	-	-	-	0.60
2	05/03/2024	BS-2	9021	4894	-	-	-	-
3	05/03/2024	BS-3	-	-	-	-	-	0.50
4	05/03/2024	BSIR	-	-	-	-	-	0.70
5	05/03/2024	BS-SI	-	-	-	5.50	-	-
6	05/03/2024	BS-SI (tkn)	-	-	-	38	-	-
7	05/03/2024	BS-SO	-	-	-	07	3.90	-
8	05/03/2024	KD1	-	-	08	-	-	06
9	05/03/2024	KD2	-	-	15	-	-	06
10	05/03/2024	BDAT	5415	1775	-	-	-	-

\* END OF REPORT आख्या समाप्ति \*

Analyst Vinod Kumar , Vijay Laxmi Supervisor & Reviewer Syed M Bilal Issued By (Lab InCharge) Dr. K. Ranganathan

Doc: CB/CL/QR/7.4/WWL-1

Issue No.:3

Revision No :3

Issue Date:19/02/2014

Revision Date: 18/09/2020

Page No. : 1/2

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CENTRAL POLLUTION CONTROL BOARD केंद्रीय प्रदूषण नियंत्रण बोर्ड

HEAD OFFICE - DELHI

Parivesh Bhavan, East Arjun Nagar, Delhi - 110032

Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

BDL : Below Deduction Limit कटौती सीमा से नीचे

Remarks (if any) :

Note: All the concentrations are expressed in mg/l except pH and Conductivity ( $\mu\text{mho/cm}$ ). नोट : पीएच तथा चालकता ( $\mu\text{mho/cm}$ ) के अतिरिक्त सभी सांद्रता मिग्रा/ली. में व्यक्त की गई हैं।

Statement कथन :

1. The results relate only to the samples tested. परिणाम केवल जांचे गए नमूनों से संबंधित है।
2. The report shall not be reproduced except in full without written approval of the laboratory पूर्ण रिपोर्ट के अतिरिक्त प्रयोगशाला के लिखित अनुमोदन के बिना आख्या की आंशिक प्रतिकृति नहीं की जायेगी।
3. BDL & Test methods are mentioned on back side of this report. बी डी एल एवं परीक्षण विधि आख्या के अंत में दिए गए हैं।
4. Samples will be retained only for one Week after receipt of Report. संबंधित आख्या जारी होने के बाद नमूने केवल प्राप्त के एक सप्ताह बाद तक ही सुरक्षित रखे जाएंगे।

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
MLSS			10	
MLVSS			10	
Color	APHA 2120 C Spectrophotometric Method, 23rd Ed.: 2017	Hazen	5	
TKN	4500 Inorganic B Macro kjeldahl method, 23rd Ed.: 2017	mg/l	1	
TP	4500 P D Stannous Chloride method as P, 23rd Ed.: 2017	mg/l	0.1	
SAR			0.01	

Analyst

Vinod Kumar , Vijay Laxmi

Supervisor & Reviewer

Syed M Bilal

Issued By (Lab InCharge)

Dr. K. Ranganathan

Doc: CB/CL/QR/7.4/WWL-1

Issue No.:3

Revision No.:3

Issue Date:19/02/2014

Revision Date: 18/09/2020

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**CENTRAL POLLUTION CONTROL BOARD**  
केंद्रीय प्रदूषण नियंत्रण बोर्ड  
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**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)**

**Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने**

ULR No: TC772324500000133F

TC-7723

**Samples Registration No. & Date नमूने की** : WATER/WW/2324/SR00089, 07/03/2024  
**पंजीकरण सं. एवं तिथि**

**Analysis Request Division/Organization** : IPC-III  
**विश्लेषण अनुरोध प्रभाग/संगठन**

**Sample Details नमूना विकरण** : ETP SRU plant  
**Sample Matrix नमूना मैट्रिक्स**

**Sample Collected by** : Kamlesh Singh, MoEF, IITR, DDG(MoEF)  
**नमूने एकत्रित करने वाले का नाम**

**Sampling Plan Preference** :  
**नमूनाकरण योजना प्राथमिकता**

**Report Status रिपोर्ट स्थिति** : Final

**Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि** : WATER/2324/WW/00133,02/04/2024

**Report sent to (Name & Address of Indentor) आख्या किसे जारी की गयी (नाम एवं प्रभाग)** : IPC-III

**Sample Matrix नमूना मैट्रिक्स** : Waste Water

**Date & Time of Sample Receipt नमूने प्राप्ति की तिथि एवं समय** : 08/03/2024 11:53 AM

**Sample Analysis Period नमूने के विश्लेषण की अवधि** : 07/03/2024 to 19/03/2024

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	pH	COD	BOD	TSS	TDS	SO <sub>4</sub> <sup>2-</sup>
1	05/03/2024	BS4-S	6.90	1998	1084	257	5312	237
2	05/03/2024	BS4-SO	7.20	1623	923	42	5092	398

\* END OF REPORT आख्या समाप्ति \*

**BDL** : Below Deduction Limit कटौती सीमा से नीचे

**Remarks (if any)** :

Note: All the concentrations are expressed in mg/l except pH and Conductivity (umho/cm). नोट : पीएच तथा चालकता (umho/cm) के अतिरिक्त सभी सांद्रता मिग्रा/ली. में व्यक्त की गई हैं।

**Statement कथन** :

- The results relate only to the samples tested. परिणाम केवल जांचे गए नमूनों से संबंधित हैं।
- The report shall not be reproduced except in full without written approval of the laboratory पूर्ण रिपोर्ट के अतिरिक्त प्रयोगशाला के लिखित अनुमोदन के बिना आख्या की अधिक प्रतिकांति नहीं की जायेगी।
- BDL & Test methods are mentioned on back side of this report. बी डी एल एवं परीक्षण विधि आख्या के अंत में दिए गए हैं।
- Samples will be retained only for one Week after receipt of Report. संबंधित आख्या जारी होने के बाद नमूने केवल प्राप्ति के एक सप्ताह बाद तक ही सुरक्षित रखे जाएंगे।

**Analyst**

Vinod Kumar , Vijay Laxmi

**Supervisor & Reviewer**

Syed M Bilal

**Issued By (Lab InCharge)**

Dr. K. Ranganathan

**Doc: CB/CL/QR/7.4/WWL-1**

**Issue No.:3**

**Revision No :3**

**Issue Date:19/02/2014**

**Revision Date: 18/09/2020**

**Page No. : 1/2**

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**CENTRAL POLLUTION CONTROL BOARD**  
केंद्रीय प्रदूषण नियंत्रण बोर्ड  
HEAD OFFICE - DELHI  
Parivesh Bhavan, East Arjun Nagar, Delhi - 110032



**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)**

**Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने**

TC-7723

ULR No: TC772324500000133F

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
pH	APHA 4500 H+ - B, 23rd Ed.: 2017		2	
COD	APHA 5220 B, 23rd Ed.: 2017	mg/l	5	
BOD	APHA 5210 B, 23rd Ed. 2017, 4500 OC (5 days at 20C). IA - 3025 part 44: 1993 BOD (3 days at 27 C): 2017	mg/l	1	
TSS	APHA 2540 D, 23rd Ed.: 2017	mg/l	10	
TDS	APHA 2540 C, 23rd Ed.: 2017	mg/l	10	
SO <sub>4</sub> <sup>2-</sup>			5	

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**Analyst**  
Vinod Kumar , Vijay Laxmi

**Supervisor & Reviewer**  
Syed M Bilal

**Issued By (Lab InCharge)**  
Dr. K. Ranganathan

**Doc: CB/CL/QR/7.4/WWL-1**

**Issue No.:3**

**Revision No :3**

**Issue Date:19/02/2014**

**Revision Date: 18/09/2020**

**Page No. : 2/2**

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CPCB

CENTRAL POLLUTION CONTROL BOARD केंद्रीय प्रदूषण नियंत्रण बोर्ड

HEAD OFFICE - DELHI

Parivesh Bhavan, East Arjun Nagar, Delhi - 110032

INSTRUMENTATION LABORATORY (Analysis Report) उपकरणीय प्रयोगशाळा (विश्लेषण आख्या)

Heavy Metals(Excluding Mercury)

ULR No: TC772324300000047F



TC-772:

Report No. & Date of Issue आख्या सं एवं जारी करने : INSTR/2324/HM/00048,12/04/2024 Report sent to (Name,Mobile no. & Address of Indentor) आख्या किसे जारी की गयी (नाम एवं प्रभाग) : DH of Water Lab

Sample Collected by नमूने एकत्रित करने वाले का नाम : Gargi Gurtu, Gargi Gurtu Date & Time of Sample Receipt नमूने प्राप्ति की तिथि एवं समय : 22/03/2024

Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : INSTR/HM/2324/SR00245, 22/03/2024 Analysis Request Division/Organization विश्लेषण अनुरोध प्रभाग/संगठन : Water Lab

Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : Sample Analysis Period नमूने के विश्लेषण की अवधि : 10/04/2024 to 10/04/2024

Report Status रिपोर्ट स्थिति : Final Sample Details नमूना विवरण : Sludge(ETP) & Solid (Granules)

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	Sample Matrix नमूना मैट्रिक्स	Arsenic	Cadmium	Chromi um	Copper	Lead	Nickel	Zinc
1	08/03/2024	TCLP 151 BS-4 HM	Waste Water	BDL	BDL	0.004	0.118	BDL	0.028	0.384
2	08/03/2024	TCLP 152 BSPS HM	Waste Water	BDL	BDL	BDL	0.013	BDL	BDL	0.026
3	08/03/2024	TCLP 153 BSF HM	Waste Water	BDL	BDL	BDL	0.049	BDL	BDL	0.025

\* END OF REPORT आख्या समाप्ति \*

BDL : Below Deduction Limit न्यूनतम विश्लेषण की सीमा

Remarks (if any) :

Statement :

- The results relate only to the samples tested
- The report shall not be reproduced except in full, without the written approval of the laboratory.
- The parameter is under the scope of NABL accreditation, ISO-17025:2017 (Certificate No.TC-7723).
- The sample will be retained for 30 days from the date of issue of test report.

Analyst

Maneesh N

Supervisor & Reviewer

Yogita Kharayat

Approved By (DH Inst-Lab)

Dr. K. Ranganathan

Doc: CB/CL/QR/7.8/IL-5

Issue No.:05

Revision No :05

Issue Date:08/12/2020

Revision Date: 08/12/2020

Page No. : 1/2

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CPCB

## CENTRAL POLLUTION CONTROL BOARD केंद्रीय प्रदूषण निंत्रण बोर्ड

HEAD OFFICE - DELHI

Parivesh Bhavan, East Arjun Nagar, Delhi - 110032



TC-772

## INSTRUMENTATION LABORATORY (Analysis Report) उपकरणीय प्रयोगशाला (विश्लेषण आख्या)

Heavy Metals(Mercury)

ULR No: TC772324300000043F

Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि : INSTR/2324/HG/00044,10/04/2024 : DH of Water Lab

Sample Collected by नमूने एकत्रित करने वाले का नाम : Gargi Gurtu, Gargi Gurtu : 22/03/2024

Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : INSTR/HG/2324/SR00026, 22/03/2024 : Water Lab

Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : : 09/04/2024 to 09/04/2024

Report Status रिपोर्ट स्थिति : Final : Sludge(ETP) & Solid (Granules)

Report sent to (Name, Mobile no. & Address of Indentor) आख्या किसे जारी की गयी (नाम एवं प्रभा) : DH of Water Lab

Date & Time of Sample Receipt नमूने प्राप्ति की तिथि एवं समय : 22/03/2024

Analysis Request Division/Organization विश्लेषण अनुरोध प्रभा/संगठन : Water Lab

Sample Analysis Period नमूने के विश्लेषण की अवधि : 09/04/2024 to 09/04/2024

Sample Details नमूना विवरण : Sludge(ETP) & Solid (Granules)

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	Sample Matrix नमूना मैट्रिक्स	Mercury
1	08/03/2024	TCLP 152 BSPS Hg	Waste Water	BDL
2	08/03/2024	TCLP 151 BS-4 Hg	Waste Water	1.35
3	08/03/2024	TCLP 153 BSF Hg	Waste Water	BDL

• END OF REPORT आख्या समाप्ति •

BDL : Below Deduction Limit न्यूनतम विश्लेषण की सीमा

Remarks (if any) :

Statement :

- The results relate only to the samples tested
- The report shall not be reproduced except in full, without the written approval of the laboratory.
- The parameter is under the scope of NABL accreditation, ISO-17025:2017 (Certificate No.TC-7723).
- The sample will be retained for 30 days from the date of issue of test report.

Analyst

Laxmi Narayan Gupta

Supervisor &amp; Reviewer

B. K. Jena

Approved By (DH Inst-Lab)

Dr. K. Ranganathan

Doc: CB/CL/QR/7.8/IL-5

Issue No.:05

Revision No :05

Issue Date:08/12/2020

Revision Date: 08/12/2020

Page No. : 1/2

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# 214 CENTRAL POLLUTION CONTROL BOARD

केंद्रीय प्रदूषण नियंत्रण बोर्ड  
Parivesh Bhawan, East Arjun Nagar, Delhi-110032  
परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110032  
BIO-SCIENCE LABORATORY/ जैव-विज्ञान प्रयोगशाला



## Microbiological Analysis Report/ सूक्ष्म जैविक विश्लेषण रिपोर्ट

- |   |                                       |
|---|---------------------------------------|
| 1. Report no. & issue date/ रिपोर्ट सं. एवं जारी करने की तिथि                       | : Bio/Micro/191, 20.03.2024           |
| 2. Name of the project/ परियोजना का नाम   | : Hon'ble NGT Matter                  |
| 3. Sample matrix/ नमूना मैट्रिक्स   | : Waste Water                         |
| 4. Date & time of sample collection/नमूना संग्रहण करने की तिथि एवं समय              | : 05.03.2024; 01:45 PM                |
| 5. Samples collected by/ नमूना एकत्रित करने वाले का नाम                             | : Mr. Kamlesh Singh                   |
| 6. Date & time of sample receipt/ नमूना प्राप्ति की तिथि एवं समय                    | : 08.03.2024; 11:00 AM                |
| 7. Date of sample analysis/ नमूना विश्लेषण की तिथि                                  | : 08.03.2024                          |
| 8. Sample registration no. & date/ नमूना पंजीकरण सं. एवं तिथि                       | : Bio/196/MB/02/2024, 08.03.2024      |
| 9. Test method reference/ संदर्भित जांच पद्धति                                      | : APHA 24 <sup>th</sup> Edition, 2023 |
| 10. Report sent to (Name & Address)/ रिपोर्ट प्रेषित किए जाने वाले का (नाम एवं पता) | : DH, IPC-III                         |

S. No क्र.सं.	Sampling location नमूना स्थल	Lab Code लैब कोड	Analysis Results/ विश्लेषण परिणाम				
			Total Coliform MPN/100ml कुल कोलिफॉर्म एमपीएन/100एमएल	Fecal Coliform MPN/100ml फिकल कोलिफॉर्म एमपीएन/100एमएल	Fecal Streptococci MPN/100ml फिकल स्ट्रेप्टोकोकाई एमपीएन/100एमएल	Enterococcus MPN/100ml एन्ट्रोकोकस एमपीएन/100एमएल	E. coli MPN/100ml ई.कोलाई एमपीएन/100एमएल
1.	BS-SI	MB-1145	24X10 <sup>4</sup>	34X10 <sup>3</sup>	--	--	--
2.	BS-SO	MB-1146	790	78	--	--	--

### Statement/ विवरण:

- The results relate only to the samples tested, / परिणाम केवल परीक्षण किए गए नमूनों से संबंधित है।
- The report shall not be reproduced, without the written approval of laboratory. / प्रयोगशाला के लिखित अनुमोदन के बिना रिपोर्ट की प्रतिकृति नहीं की जाएगी।
- <1.8 MPN/100 ml indicates that the probability of presence of coliform in the sample is zero. / <1.8 एमपीएन/100 मिलीलीटर इंगित करता है कि नमूने में कोलिफॉर्म के होने की संभावना शून्य है।
- The sample will be retained for one week from the date of issue of this test report. / इस रिपोर्ट के जारी होने की तिथि से एक सप्ताह तक नमूनों को सुरक्षित रखा जाएगा।

*Dr. Annu Goel*  
20/3/24  
Analyst/ विश्लेषक  
(Dr. Annu Goel)

*Dr. Yashpal Yadav*  
21/03/2024  
Supervisor, Reviewer & Authorized Signatory  
पर्यवेक्षक, पुनर्विलोकक एवं प्राधिकृत हस्ताक्षरकर्ता  
(Dr. Yashpal Yadav)

*Dr. Z. Changsan*  
21/3/2024  
DH Bio-Science Lab  
प्रभाग प्रमुख, जैव प्रयोगशाला  
(Dr. Z. Changsan)

DOC: CB/CL/QR/7.8/BL-1 डीओसी: सीबी/सीएल/क्यूआर/7.8/बीएल-1	Issue No.: 04 जारी सं. 04	Amendment No.: 05 संशोधन सं. 05	Issue Date: 27.03.2014 जारी तिथि 27.03.2014	Amendment Date: 20.05.2022 संशोधन तिथि 20.05.2022	Page 01 of 01 पृष्ठ सं. 01 का 01
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**CENTRAL POLLUTION CONTROL BOARD**  
**केंद्रीय प्रदूषण नियंत्रण बोर्ड**  
**Parivesh Bhawan, East Arjun Nagar, Delhi-110032**  
**परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110032**  
**BIO-SCIENCE LABORATORY/ जैव-विज्ञान प्रयोगशाला**



**Microbiological Analysis Report/ सूक्ष्म जैविक विश्लेषण रिपोर्ट**

- |   |   |                                     |
|---|---|-------------------------------------|
| 1. Report no. & issue date/ रिपोर्ट सं. एवं जारी करने की तिथि                       | : | Bio/Micro/192, 20.03.2024           |
| 2. Name of the project/ परियोजना का नाम   | : | Hon'ble NGT Matter                  |
| 3. Sample matrix/ नमूना मैट्रिक्स   | : | Fresh Water                         |
| 4. Date & time of sample collection/ नमूना संग्रहण करने की तिथि एवं समय             | : | 05.03.2024; 01:57 PM                |
| 5. Samples collected by/ नमूना एकत्रित करने वाले का नाम                             | : | Mr. Kamlesh Singh                   |
| 6. Date & time of sample receipt/ नमूना प्राप्ति की तिथि एवं समय                    | : | 08.03.2024; 11:00 AM                |
| 7. Date of sample analysis/ नमूना विश्लेषण की तिथि                                  | : | 08.03.2024                          |
| 8. Sample registration no. & date/ नमूना पंजीकरण सं. एवं तिथि                       | : | Bio/197/MB/01/2024, 08.03.2024      |
| 9. Test method reference/ संदर्भित जांच पद्धति                                      | : | APHA 24 <sup>th</sup> Edition, 2023 |
| 10. Report sent to (Name & Address)/ रिपोर्ट प्रेषित किए जाने वाले का (नाम एवं पता) | : | DH, IPC-III                         |

S. No क्र.सं.	Sampling location नमूना स्थल	Lab Code लैब कोड	Analysis Results/ विश्लेषण परिणाम				
			Total Coliform MPN/100ml कुल कोलिफॉर्म एमपीएन/100एमएल	Fecal Coliform MPN/100ml फिकल कोलिफॉर्म एमपीएन/100एमएल	Fecal Streptococci MPN/100ml फिकल स्ट्रेप्टोकोकाई एमपीएन/100एमएल	Enterococcus MPN/100ml एन्ट्रोकोकस एमपीएन/100एमएल	E. coli MPN/100ml ई.कोलाई एमपीएन/100एमएल
1.	BRU	MB-1147	490	78	--	--	--

**Statement/ विवरण:**

- The results relate only to the samples tested. / परिणाम केवल परीक्षण किए गए नमूनों से संबंधित है।
- The report shall not be reproduced, without the written approval of laboratory. / प्रयोगशाला के लिखित अनुमोदन के बिना रिपोर्ट की प्रतिकृति नहीं की जाएगी।
- <1.8 MPN/100 ml indicates that the probability of presence of coliform in the sample is zero. / <1.8 एमपीएन/100 मिलीलीटर इंगित करता है कि नमूने में कोलिफॉर्म के होने की संभावना शून्य है।
- The sample will be retained for one week from the date of issue of this test report. / इस रिपोर्ट के जारी होने की तिथि से एक सप्ताह तक नमूनों को सुरक्षित रखा जाएगा।

*ANNU*  
20/3/24  
Analyst/ विश्लेषक  
(Dr. Annu Goel)

*यशपाल यादव*  
21/03/2024  
Supervisor, Reviewer & Authorized Signatory  
पर्यवेक्षक, पुनर्विलोकक एवं प्राधिकृत हस्ताक्षरकर्ता  
(Dr. Yashpal Yadav)

*जे. चांगसान*  
21/3/2024  
DH Bio-Science Lab  
प्रभाग प्रमुख, जैव प्रयोगशाला  
(Dr. Z. Changsan)

DOC:	Issue No.:	Amendment No.:	Issue Date:	Amendment Date:	Page
CB/CLQR/7.8/BL-1	04	05	27.03.2014	20.05.2022	01 of 01
डीओसी:	जारी सं.	संशोधन सं.	जारी तिथि	संशोधन तिथि	पृष्ठ सं.
सीबी/सीएल/क्वआर/7.8/बीएल-1	04	05	27.03.2014	20.05.2022	01 का 01

Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Fresh Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

ULR No: TC772324500000144F

Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : WATER/FW/2324/SR00065, 07/03/2024 Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि : WATER/2324/FW/00144,03/04/2024

Analysis Request Division/Organization विश्लेषण अनुरोध प्रभाग/संगठन : IPC-III Report sent to (Name & Address of Indentor) आख्या किसे जारी की गयी (नाम एवं प्रभाग) : IPC-III

Sample Details नमूना विवरण : Groundwater and River water samples Sample Matrix नमूना मैट्रिक्स : Fresh Water

Sample Collected by नमूने एकत्रित करने वाले का नाम : Kamlesh Singh, MoEF, IITR, DDG (MoEF) Date & Time of Sample Receipt नमूने प्राप्ति की तिथि एवं समय : 07/03/2024 17:40 PM

Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : : Sample Analysis Period नमूने के विश्लेषण की अवधि : 08/03/2024 to 03/04/2024

Report Status रिपोर्ट स्थिति : Final

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	pH	COD	BOD	TDS	Cond.	Cl-	TA
1	05/03/2024	BGD	7.80	BDL	-	296	452	04	242
2	05/03/2024	BGI	7.50	BDL	-	500	850	12	412
3	05/03/2024	BGG	7.50	BDL	-	510	837	06	407
4	05/03/2024	BDGWI	7.70	BDL	-	298	548	09	318
5	05/03/2024	BGO	7.60	BDL	-	372	604	13	322
6	05/03/2024	BRU	8.40	03	BDL	234	448	07	-
7	05/03/2024	BRD	7.80	16	05	288	493	08	-

\* END OF REPORT आख्या समाप्ति \*

BDL : Below Deduction Limit कटौती सीमा से नीचे

Remarks (if any) :

Note: All the concentrations are expressed in mg/l except pH and Conductivity ( $\mu\text{mho/cm}$ ). नोट : पीएच तथा चालकता ( $\mu\text{mho/cm}$ ) के अतिरिक्त सभी सांद्रता मिग्रा/ली. में व्यक्त की गई हैं।

Analyst

Pravin Kumar Gupta , Atul Sharma , Inder Mohan

Supervisor & Reviewer

B. Sasi Devi

Issued By (Lab InCharge)

Dr. K. Ranganathan



CENTRAL POLLUTION CONTROL BOARD  
HEAD OFFICE - DELHI  
Parivesh Bhavan, East Arjun Nagar, Delhi - 110032



TC-7723

Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Fresh Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

ULR No: TC772324500000144F

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Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	TH	NO3- N	F-	K+
1	05/03/2024	BGD	186	BDL	0.53	-
2	05/03/2024	BGI	328	BDL	0.74	-
3	05/03/2024	BGG	265	BDL	0.53	-
4	05/03/2024	BDGWI	199	BDL	1.65	-
5	05/03/2024	BGO	248	BDL	0.60	-
6	05/03/2024	BRU	-	-	-	02
7	05/03/2024	BRD	-	-	-	03

Analyst

Pravin Kumar Gupta , Atul Sharma , Inder Mohan

Supervisor & Reviewer

B. Sasi Devi

Issued By (Lab InCharge)

Dr. K. Ranganathan

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**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)**

**Fresh Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने**

ULR No: TC772324500000144F

**Statement कथन :**

1. The results relate only to the samples tested. परिणाम केवल जांचे गए नमूनों से संबंधित है।
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3. BDL & Test methods are mentioned on back side of this report. बी डी एल एवं परीक्षण विधि आख्या के अंत में दिए गए हैं।
4. Samples will be retained only for one Week after receipt of Report. संबंधित आख्या जारी होने के बाद नमूने केवल प्राप्ति के एक सप्ताह बाद तक ही सुरक्षित रखे जाएंगे।

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
pH	APHA 4500 H+ - B, 23rd Ed.: 2017		2	
COD	APHA 5220 B, 23rd Ed.: 2017	mg/l	2	
BOD	APHA 5210 B, 23rd Ed.: 2017, 4500 OC, (5 days at 20°C). IS-3025 part 44:1993 BOD (3 days at 27°C).	mg/l	01	
TDS	APHA 2540 C, 23rd Ed.: 2017	mg/l	5	
Cond.	APHA 2510 - B, 23rd Ed.: 2017	µS/cm	1	
Cl-	APHA 4500 - Cl B, 23rd Ed.: 2017	mg/l	2	
TA	2320 B Titration Method, 23rd Ed.: 2017	mg/l	5	
TH	APHA 2340 C, 23rd Ed.: 2017	mg/L	5	
NO3- N	APHA 4500 - NO3 B, 23rd Ed.: 2017	mg/l	0.5	
F-	APHA 4500 - F D, 23rd Ed.: 2017	mg/l	0.2	
K+	APHA 3500 K - B, 23rd Ed., 2018	mg/l	1	

**Analyst**

Pravin Kumar Gupta , Atul Sharma , Inder Mohan

**Supervisor & Reviewer**

B. Sasi Devi

**Issued By (Lab InCharge)**

Dr. K. Ranganathan

Doc: CB/CL/QR/7.4/FWL-1

Issue No.:3

Revision No :3

Issue Date:19/02/2014

Revision Date: 18/09/2020

Page No. : 3/3

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CENTRAL POLLUTION CONTROL BOARD  
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Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Fresh Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : WATER/FW/2324/SR00065, 07/03/2024 Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि : WATER/2324/FW/00144,03/04/2024

Analysis Request Division/Organization विश्लेषण अनुरोध प्रभाग/संगठन : IPC-III Report sent to (Name & Address of Indentor) आख्या किसे जारी की गयी (नाम एवं प्रभाग) : IPC-III

Sample Details नमूना विवरण : Groundwater and River water samples Sample Matrix नमूना मैट्रिक्स : Fresh Water

Sample Collected by नमूने एकत्रित करने वाले का नाम : Kamlesh Singh, MoEF, IITR, DDG (MoEF) Date & Time of Sample Receipt नमूने प्राप्ति की तिथि एवं समय : 07/03/2024 17:40 PM

Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : Sample Analysis Period नमूने के विश्लेषण की अवधि : 08/03/2024 to 03/04/2024

Report Status रिपोर्ट स्थिति : Final

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	SO <sub>4</sub> <sup>2-</sup>	Color	Turbidity	SAR
1	05/03/2024	BGD	BDL	09	01	-
2	05/03/2024	BGI	47	BDL	BDL	-
3	05/03/2024	BGG	30	BDL	01	-
4	05/03/2024	BDGWI	BDL	06	14	-
5	05/03/2024	BGO	BDL	12	BDL	-
6	05/03/2024	BRU	BDL	10	02	0.72
7	05/03/2024	BRD	BDL	BDL	BDL	0.70

\* END OF REPORT आख्या समाप्ति \*

BDL : Below Deduction Limit कटौती सीमा से नीचे

Remarks (if any) :

Note: All the concentrations are expressed in mg/l except pH and Conductivity ( $\mu\text{mho/cm}$ ). नोट : पीएच तथा चालकता ( $\mu\text{mho/cm}$ ) के अतिरिक्त सभी सांद्रता मिग्रा/ली. में व्यक्त की गई हैं।

Analyst

Pravin Kumar Gupta , Atul Sharma , Inder Mohan

Supervisor & Reviewer

B. Sasi Devi

Issued By (Lab InCharge)

Dr. K. Ranganathan

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Issue No.:3

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Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Fresh Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

**Statement कथन :**

1. The results relate only to the samples tested. परिणाम केवल जांचे गए नमूनों से संबंधित है।
2. The report shall not be reproduced except in full without written approval of the laboratory पूर्ण रिपोर्ट के अतिरिक्त प्रयोगशाला के लिखित अनुमोदन के बिना आख्या की आंशिक प्रतिकृति नहीं की जायेगी।
3. BDL & Test methods are mentioned on back side of this report. बी डी एल एवं परीक्षण विधि आख्या के अंत में दिए गए हैं।
4. Samples will be retained only for one Week after receipt of Report. संबंधित आख्या जारी होने के बाद नमूने केवल प्राप्ति के एक सप्ताह बाद तक ही सुरक्षित रखे जाएंगे।

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
SO <sub>4</sub> <sup>2-</sup>			5	
Color	APHA 2120 C Spectrophotometric Method, 23rd Ed.: 2017	Hazen	5	
Turbidity	2130 B Nephelometric Method, 23rd Ed.: 2017	NTU	1	
SAR			0.1	

**Analyst**

Pravin Kumar Gupta , Atul Sharma , Inder Mohan

**Supervisor & Reviewer**

B. Sasi Devi

**Issued By (Lab InCharge)**

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Issue No.:3

Revision No.:3

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TC-7723

INSTRUMENTATION LABORATORY (Analysis Report) उपकरणिय प्रयोगशाला (विश्लेषण आख्या)

Heavy Metals(Excluding Mercury)

ULR No: TC7723243000000048F

Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि : INSTR/2324/HM/00049,12/04/2024 : DH of IPC-III

Sample Collected by नमूने एकत्रित करने वाले का नाम : Kamlesh Singh, MoEF, IITR, DDG (MoEF) : 08/03/2024

Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : INSTR/HM/2324/SR00229, 07/03/2024 : IPC-III

Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : : 10/04/2024 to 10/04/2024

Report Status रिपोर्ट स्थिति : Final : Groundwater

Report sent to (Name, Mobile no. & Address of Indentor) आख्या किसे जारी की गयी (नाम एवं प्रभाग) : DH of IPC-III

Date & Time of Sample Receipt नमूने प्राप्ति की तिथि एवं समय : 08/03/2024

Analysis Request Division/Organization विश्लेषण अनुरोध प्रभाग/संगठन : IPC-III

Sample Analysis Period नमूने के विश्लेषण की अवधि : 10/04/2024 to 10/04/2024

Sample Details नमूना विवरण : Groundwater

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	Sample Matrix नमूना मैट्रिक्स	Arsenic	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Nickel	Zinc
1	05/03/2024	BGD	Fresh Water	BDL	BDL	BDL	BDL	0.768	BDL	0.092	BDL	0.793
2	05/03/2024	BGI	Fresh Water	BDL	BDL	BDL	0.015	0.302	BDL	0.137	BDL	0.034
3	05/03/2024	BGG	Fresh Water	BDL	BDL	BDL	BDL	0.562	BDL	0.155	BDL	0.047
4	05/03/2024	BDGW1	Fresh Water	0.011	BDL	BDL	BDL	1.451	BDL	0.051	BDL	0.019
5	05/03/2024	BGO	Fresh Water	BDL	BDL	BDL	0.011	1.928	BDL	0.112	BDL	0.196

\* END OF REPORT आख्या समाप्ति \*

BDL : Below Deduction Limit न्यूनतम विश्लेषण की सीमा

Remarks (if any) :

Statement :

- The results relate only to the samples tested
- The report shall not be reproduced except in full, without the written approval of the laboratory.
- The parameter is under the scope of NABL accreditation, ISO-17025:2017 (Certificate No.TC-7723).
- The sample will be retained for 30 days from the date of issue of test report.

Analyst

Dr. Nirmal Kumar Sharma

Supervisor & Reviewer

B. K. Jena

Approved By (DH Inst-Lab)

Dr. K. Ranganathan

Doc: CB/CL/QR/7.8/IL-5

Issue No.:05

Revision No :05

Issue Date:08/12/2020

Revision Date: 08/12/2020

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CENTRAL POLLUTION CONTROL BOARD केंद्रीय प्रदूषण नियंत्रण बोर्ड

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Parivesh Bhavan, East Arjun Nagar, Delhi - 110032



TC-7723

INSTRUMENTATION LABORATORY (Analysis Report) उपकरणीय प्रयोगशाला (विश्लेषण आख्या)

Heavy Metals(Excluding Mercury)

ULR No: TC772324300000048F

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
Arsenic	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00049	
Cadmium	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00042	
Chromium	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00035	
Copper	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00035	
Iron	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00067	
Lead	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00031	
Manganese	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00043	
Nickel	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00054	
Zinc	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00059	

222

Analyst  
Dr. Nirmal Kumar Sharma

Supervisor & Reviewer  
B. K. Jena

Approved By (DH Inst-Lab)  
Dr. K. Ranganathan

Doc: CB/CL/QR/7.8/IL-5

Issue No.:05

Revision No :05

Issue Date:08/12/2020

Revision Date: 08/12/2020

Page No. : 2/2

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**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)**

**Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने**

TC-7723

ULR No: TC772324500000140F

**Samples Registration No. & Date नमूने की** : WATER/WW/2324/SR00102, 20/03/2024 **Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि** : WATER/2324/WW/00140,03/04/2024

**Analysis Request Division/Organization विश्लेषण अनुरोध प्रभाग/संगठन** : IPC-III **Report sent to (Name & Address of Indentor) आख्या किसे जारी की गयी (नाम एवं प्रभाग)** : IPC-III

**Sample Details नमूना विकरण** : Water being used for irrigation/land application and drain sample **Sample Matrix नमूना मैट्रिक्स** : Waste Water

**Sample Collected by नमूने एकत्रित करने वाले का नाम** : Kamlesh Singh, MoEF&CC and IITR **Date & Time of Sample Receipt नमूने प्राप्ति की तिथि एवं समय** : 20/03/2024 16:53 PM

**Sampling Plan Preference नमूनाकरण योजना प्राथमिकता** : **Sample Analysis Period नमूने के विश्लेषण की अवधि** : 20/03/2024 to 03/04/2024

**Report Status रिपोर्ट स्थिति** : Final

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	pH	COD	BOD	TSS	TDS	CI-	PO4-P
1	19/03/2024	KD	7.30	440	189	24	1112	95	8.40
2	19/03/2024	FI-2	7.40	134	42	10	1792	-	-
3	19/03/2024	FI-1	7.50	118	35	BDL	1716	-	-

\* END OF REPORT आख्या समाप्ति \*

**BDL** : Below Deduction Limit कटौती सीमा से नीचे

**Remarks (if any) :**

Note: All the concentrations are expressed in mg/l except pH and Conductivity (umho/cm). नोट : पीएच तथा चालकता (umho/cm) के अतिरिक्त सभी सांद्रता मिग्रा/ली. में व्यक्त की गई हैं।

**Analyst**

Vinod Kumar , Vijay Laxmi , Nandan Sarkar

**Supervisor & Reviewer**

Syed M Bilal

**Issued By (Lab InCharge)**

Dr. K. Ranganathan

**Doc: CB/CL/QR/7.4/WWL-1**

**Issue No.:**3

**Revision No.:**3

**Issue Date:**19/02/2014

**Revision Date:** 18/09/2020

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TC-7723

**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)**

Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

ULR No: TC772324500000140F

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Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	NO3- N	SO <sub>4</sub> <sup>2-</sup>	K+
1	19/03/2024	KD	3.20	78	34
2	19/03/2024	F1-2	-	-	-
3	19/03/2024	F1-1	-	-	-

**Analyst**

Vinod Kumar , Vijay Laxmi , Nandan Sarkar

**Supervisor & Reviewer**

Syed M Bilal

**Issued By (Lab InCharge)**

Dr. K. Ranganathan

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**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)**

**Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने**

ULR No: TC772324500000140F

**Statement कथन :**

1. The results relate only to the samples tested. परिणाम केवल जांचे गए नमूनों से संबंधित है।
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3. BDL & Test methods are mentioned on back side of this report. बी डी एल एवं परीक्षण विधि आख्या के अंत में दिए गए हैं।
4. Samples will be retained only for one Week after receipt of Report. संबंधित आख्या जारी होने के बाद नमूने केवल प्राप्ति के एक सप्ताह बाद तक ही सुरक्षित रखे जाएंगे।

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
pH	APHA 4500 H+ - B, 23rd Ed.: 2017		2	
COD	APHA 5220 B, 23rd Ed.: 2017	mg/l	5	
BOD	APHA 5210 B, 23rd Ed.: 2017, 4500 OC (5 days at 20C). IA - 3025 part 44: 1993 BOD (3 days at 27 C): 2017	mg/l	1	
TSS	APHA 2540 D, 23rd Ed.: 2017	mg/l	10	
TDS	APHA 2540 C, 23rd Ed.: 2017	mg/l	10	
Cl-	APHA 4500 - Cl B, 23rd Ed.: 2017	mg/l	5	
PO4-P		mg/l	0.05	
NO3- N	APHA 4500 - NO3 D 23rd Ed.: 2017	mg/l	0.5	
SO <sub>4</sub> <sup>2-</sup>		mg/l	5	
K+	APHA 3500 K - B, 23rd Ed.: 2017	mg/l	1	

**Analyst**

Vinod Kumar , Vijay Laxmi , Nandan Sarthar

**Supervisor & Reviewer**

Syed M Bilal

**Issued By (Lab InCharge)**

Dr. K. Ranganathan



CENTRAL POLLUTION CONTROL BOARD केंद्रीय प्रदूषण नियंत्रण बोर्ड

HEAD OFFICE - DELHI  
Parivesh Bhavan, East Arjun Nagar, Delhi - 110032

Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : WATER/WW/2324/SR00102, 20/03/2024 : WATER/2324/WW/00140,03/04/2024

Analysis Request Division/Organization विश्लेषण अनुरोध प्रभाग/संगठन : IPC-III : IPC-III

Sample Details नमूना विवरण : Water being used for irrigation/land application and drain sample : Waste Water

Sample Collected by नमूने एकत्रित करने वाले का नाम : Kamlesh Singh, MoEF&CC and IITR : 20/03/2024 16:53 PM

Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : : Sample Analysis Period नमूने के विश्लेषण की अवधि : 20/03/2024 to 03/04/2024

Report Status रिपोर्ट स्थिति : Final

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	Color	SAR
1	19/03/2024	KD	BDL	0.80
2	19/03/2024	FI-2	-	0.60
3	19/03/2024	FI-1	-	0.40

\* END OF REPORT आख्या समाप्ति \*

BDL : Below Deduction Limit कटौती सीमा से नीचे

Remarks (if any) :

Note: All the concentrations are expressed in mg/l except pH and Conductivity ( $\mu\text{mho/cm}$ ). नोट : पीएच तथा चालकता ( $\mu\text{mho/cm}$ ) के अतिरिक्त सभी सांद्रता मिग्रा/ली. में व्यक्त की गई हैं।

Analyst

Vinod Kumar , Vijay Laxmi , Nandan Sarkar

Supervisor & Reviewer

Syed M Bilal

Issued By (Lab InCharge)

Dr. K. Ranganathan

Doc: CB/CL/QR/7.4/WWL-1

Issue No.:3

Revision No.:3

Issue Date:19/02/2014

Revision Date: 18/09/2020

Page No. : 1/2

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**CENTRAL POLLUTION CONTROL BOARD केंद्रीय प्रदूषण नियंत्रण बोर्ड**

HEAD OFFICE - DELHI

Parivesh Bhavan, East Arjun Nagar, Delhi - 110032

**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)**

**Waste Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने**

**Statement कथन :**

1. The results relate only to the samples tested. परिणाम केवल जांचे गए नमूनों से संबंधित है।
2. The report shall not be reproduced except in full without written approval of the laboratory पूर्ण रिपोर्ट के अतिरिक्त प्रयोगशाला के लिखित अनुमोदन के बिना आख्या की आंशिक प्रतिकृति नहीं की जायेगी।
3. BDL & Test methods are mentioned on back side of this report. बी डी एल एवं परीक्षण विधि आख्या के अंत में दिए गए हैं।
4. Samples will be retained only for one Week after receipt of Report. संबंधित आख्या जारी होने के बाद नमूने केवल प्राप्ति के एक सप्ताह बाद तक ही सुरक्षित रखे जाएंगे।

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
Color	APHA 2120 C Spectrophotometric Method, 23rd Ed.: 2017	Hazen	5	
SAR			0.01	

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**Analyst**

Vinod Kumar , Vijay Laxmi , Nandan Sarikar

**Supervisor & Reviewer**

Syed M Bilal

**Issued By (Lab InCharge)**

Dr. K. Ranganathan

Doc: CB/CL/QR/7.4/WWL-1

Issue No.:3

Revision No :3

Issue Date:19/02/2014

Revision Date: 18/09/2020

Page No. : 2/2

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INSTRUMENTATION LABORATORY (Analysis Report) उपकरणीय प्रयोगशाला (विश्लेषण आख्या)

Heavy Metals(Excluding Mercury)

ULR No: TC772324300000045F

Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि : INSTR/2324/HM/00046,12/04/2024 : DH of IPC-III  
Sample Collected by नमूने एकत्रित करने वाले का नाम : Kamlesh Singh, MoEF and IITR : 21/03/2024  
Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : INSTR/HM/2324/SR00239, 20/03/2024 : IPC-III  
Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : : 10/04/2024 to 10/04/2024  
Report Status रिपोर्ट स्थिति : Final : water bieng used for land application

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	Sample Matrix नमूना मैट्रिक्स	Arsenic	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Nickel	Zinc
1	19/03/2024	FI-1	Waste Water	BDL	BDL	BDL	BDL	0.288	BDL	0.016	BDL	BDL
2	19/03/2024	FI-2	Waste Water	BDL	BDL	BDL	BDL	0.048	BDL	0.008	BDL	BDL

\* END OF REPORT आख्या समाप्ति \*

BDL : Below Deduction Limit न्यूनतम विश्लेषण की सीमा

Remarks (if any) :

Statement :

1. The results relate only to the samples tested
2. The report shall not be reproduced except in full. without the written approval of the laboratory.
3. The parameter is under the scope of NABL accreditation, ISO-17025:2017 (Certificate No.TC-7723).
4. The sample will be retained for 30 days from the date of issue of test report.

Analyst  
Maneesh N

Supervisor & Reviewer  
Yogita Kharayat

Approved By (DH Inst-Lab)  
Dr. K. Ranganathan

Doc: CB/CL/QR/7.8/IL-5

Issue No.:05

Revision No :05

Issue Date:08/12/2020

Revision Date: 08/12/2020

Page No. : 1/2



CENTRAL POLLUTION CONTROL BOARD केंद्रीय प्रदूषण नियंत्रण बोर्ड

HEAD OFFICE - DELHI  
Parivesh Bhavan, East Arjun Nagar, Delhi - 110032



TC-7723

INSTRUMENTATION LABORATORY (Analysis Report) उपकरणीय प्रयोगशाला (विश्लेषण आख्या)

Heavy Metals(Excluding Mercury)

ULR No: TC772324300000045F

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
Arsenic	APHA, ICP-OES, 3120-B, 24th Edition, 2023	mg/L	0.015	
Cadmium	APHA, ICP-OES, 3120-B, 24th Edition, 2023	mg/L	0.0024	
Chromium	APHA, ICP-OES, 3120-B, 24th Edition, 2023	mg/L	0.0033	
Copper	APHA, ICP-OES, 3120-B, 24th Edition, 2023	mg/L	0.006	
Iron	APHA, ICP-OES, 3120-B, 24th Edition, 2023	mg/L	0.002	
Lead	APHA, ICP-OES, 3120-B, 24th Edition, 2023	mg/L	0.006	
Manganese	APHA, ICP-OES, 3120-B, 24th Edition, 2023	mg/L	0.001	
Nickel	APHA, ICP-OES, 3120-B, 24th Edition, 2023	mg/L	0.005	
Zinc	APHA, ICP-OES, 3120-B, 24th Edition, 2023	mg/L	0.0106	

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Analyst  
Maneesh N

Supervisor & Reviewer  
Yogita Kharayat

Approved By (DH Inst-Lab)  
Dr. K. Ranganathan

Doc: CB/CL/QR/7.8/IL-5

Issue No.:05

Revision No :05

Issue Date:08/12/2020

Revision Date: 08/12/2020

Page No. : 2/2

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CENTRAL POLLUTION CONTROL BOARD

केन्द्रीय प्रदूषण नियंत्रण बोर्ड

Parivesh Bhawan, East Arjun Nagar, Delhi-110032

परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110032

BIO-SCIENCE LABORATORY/ जैव-विज्ञान प्रयोगशाला

Microbiological Analysis Report/ सूक्ष्म जैविक विश्लेषण रिपोर्ट



1. Report no. & issue date/ रिपोर्ट सं. एवं जारी करने की तिथि : Bio/Micro/203, 05.04.2024
2. Name of the project/ परियोजना का नाम : Compliance of Hon'ble NGT Order
3. Sample matrix/ नमूना मैट्रिक्स : Fresh and Waste Water
4. Date & time of sample collection/ नमूना संग्रहण करने की तिथि एवं समय : 19.03.2024
5. Samples collected by/ नमूना एकत्रित करने वाले का नाम : Mr. Kamlesh Singh, MOEF&CC and IITR Officers
6. Date & time of sample receipt/ नमूना प्राप्ति की तिथि एवं समय : 20.03.2024; 02:30 PM
7. Date of sample analysis/ नमूना विश्लेषण की तिथि : 20.03.2024
8. Sample registration no. & date/ नमूना पंजीकरण सं. एवं तिथि : Bio/209/MB/03/2024, 20.03.2024
9. Test method reference/ संदर्भित जांच पद्धति : APHA 24<sup>th</sup> Edition, 2023
10. Report sent to (Name & Address)/ रिपोर्ट प्रेषित किए जाने वाले का (नाम एवं पता) : DH, IPC-III

S. No क्र. सं.	Sampling location नमूना स्थल	Lab Code लैब कोड	Analysis Results/ विश्लेषण परिणाम				
			Total Coliform MPN/100ml कुल कोलिफॉर्म एमपीएन/100एमएल	Fecal Coliform MPN/100ml फिकल कोलिफॉर्म एमपीएन/100एमएल	Fecal Streptococci MPN/100ml फिकल स्ट्रेप्टोकोकाई एमपीएन/100एमएल	Enterococcus MPN/100ml एन्ट्रोकोकस एमपीएन/100एमएल	E. coli MPN/100ml ई. कोलाई एमपीएन/100एमएल
1.	RC-1	MB-1208	27X10 <sup>4</sup>	14X10 <sup>4</sup>	--	--	--
2.	RC-2	MB-1209	34X10 <sup>4</sup>	11X10 <sup>4</sup>	--	--	--
3.	KD	MB-1210	21X10 <sup>6</sup>	18X10 <sup>5</sup>	--	--	--

## Statement/ विवरण:

1. The results relate only to the samples tested. / परिणाम केवल परीक्षण किए गए नमूनों से संबंधित है।
2. The report shall not be reproduced, without the written approval of laboratory. / प्रयोगशाला के लिखित अनुमोदन के बिना रिपोर्ट की प्रतिकृति नहीं की जाएगी।
3. <1.8 MPN/100 ml indicates that the probability of presence of coliform in the sample is zero. / <1.8 एमपीएन/100 मिलीलीटर इंगित करता है कि नमूने में कोलिफॉर्म के होने की संभावना शून्य है।
4. The sample will be retained for one week from the date of issue of this test report. / इस रिपोर्ट के जारी होने की तिथि से एक सप्ताह तक नमूनों को संरक्षित रखा जाएगा।

आनंद सोलवे  
- 08/04/2024  
Analyst/ विश्लेषक  
(Anand B. Salve)

यशपाल यादव  
08/04/2024  
Supervisor, Reviewer & Authorized Signatory  
पर्यवेक्षक, पुनर्विलोकक एवं प्राधिकृत हस्ताक्षरकर्ता  
(Dr. Yashpal Yadav)

डॉ. जगजित  
09/04/2024  
DH Bio-Science Lab  
प्रभाग प्रमुख, जैव प्रयोगशाला  
(Dr. Z. Changsan)

DOC:	Issue No.:	Amendment No.:	Issue Date:	Amendment Date:	Page
CB/CL/QR/7.8/BL-1 डीओसी:	04 जारी सं.	05 संशोधन सं.	27.03.2014 जारी तिथि	20.05.2022 संशोधन तिथि	01 of 01 पृष्ठ सं.
सीबी/सीएल/क्यूआर/7.8/बीएल-1	04	05	27.03.2014	20.05.2022	01 का 01



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TC-7723

Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Fresh Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

ULR No: TC772324500000156F

Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : WATER/FW/2324/SR00075, 20/03/2024 Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि : WATER/2324/FW/00156,10/04/2024

Analysis Request Division/Organization विश्लेषण अनुरोध प्रभाग/संगठन : IPC-III Report sent to (Name & Address of Indentor) आख्या किसे जारी की गयी (नाम एवं प्रभाग) : IPC-III

Sample Details नमूना विवरण : Sample from River and handpumps Sample Matrix नमूना मैट्रिक्स : Fresh Water

Sample Collected by नमूने एकत्रित करने वाले का नाम : Kamlesh Singh, MoEF&CC and IITR Date & Time of Sample Receipt नमूने प्राप्ति की तिथि एवं समय : 20/03/2024 16:30 PM

Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : : Sample Analysis Period नमूने के विश्लेषण की अवधि : 20/03/2024 to 26/03/2024

Report Status रिपोर्ट स्थिति : Final

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	pH	COD	BOD	TDS	Cond.	Cl-	TA
1	19/03/2024	RB-1	8	06	2.70	238	451	17	-
2	19/03/2024	RB-2	7.6	65	32	514	771	27	-
3	19/03/2024	GWK	6.4	02	-	330	627	15	337
4	19/03/2024	GWL	7.6	02	-	370	560	10	315

\* END OF REPORT आख्या समाप्ति \*

BDL : Below Deduction Limit कटौती सीमा से नीचे

Remarks (if any) :

Note: All the concentrations are expressed in mg/l except pH and Conductivity ( $\mu\text{mho/cm}$ ). नोट : पीएच तथा चालकता ( $\mu\text{mho/cm}$ ) के अतिरिक्त सभी सांद्रता मिग्रा/ली. में व्यक्त की गई हैं।

Analyst

Pravin Kumar Gupta , Atul Sharma

Supervisor & Reviewer

B. Sasi Devi

Issued By (Lab InCharge)

Dr. K. Ranganathan

Doc: CB/CL/QR/7.4/FWL-1

Issue No.:3

Revision No :3

Issue Date:19/02/2014

Revision Date: 18/09/2020

Page No. : 1/3

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**CENTRAL POLLUTION CONTROL BOARD**  
**केंद्रीय प्रदूषण नियंत्रण बोर्ड**  
 HEAD OFFICE - DELHI  
 Parivesh Bhavan, East Arjun Nagar, Delhi - 110032



**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)**

Fresh Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

ULR No: TC772324500000156F

TC-7723

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	TH	NO3- N	F--	K+
1	19/03/2024	RB-1	-	-	-	3
2	19/03/2024	RB-2	-	-	-	4
3	19/03/2024	GWK	263	0.85	0.26	-
4	19/03/2024	GWL	227	0.83	0.31	-

**Analyst**

Pravin Kumar Gupta , Atul Sharma

**Supervisor & Reviewer**

B. Sasi Devi

**Issued By (Lab InCharge)**

Dr. K. Ranganathan

Doc: CB/CL/QR/7.4/FWL-1

Issue No.:3

Revision No :3

Issue Date:19/02/2014

Revision Date: 18/09/2020

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**Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)**

**Fresh Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने**

ULR No: TC772324500000156F

**Statement कथन :**

1. The results relate only to the samples tested. परिणाम केवल जांचे गए नमूनों से संबंधित है।
2. The report shall not be reproduced except in full without written approval of the laboratory पूर्ण रिपोर्ट के अतिरिक्त प्रयोगशाला के लिखित अनुमोदन के बिना आख्या की आंशिक प्रतिकृति नहीं की जायेगी।
3. BDL & Test methods are mentioned on back side of this report. बी डी एल एवं परीक्षण विधि आख्या के अंत में दिए गए हैं।
4. Samples will be retained only for one Week after receipt of Report. संबंधित आख्या जारी होने के बाद नमूने केवल प्राप्ति के एक सप्ताह बाद तक ही सुरक्षित रखे जाएंगे।

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
pH	APHA 4500 H+ - B, 23rd Ed.: 2017		2	
COD	APHA 5220 B, 23rd Ed.: 2017	mg/l	2	
BOD	APHA 5210 B, 23rd Ed.: 2017, 4500 OC, (5 days at 20°C). IS-3025 part 44:1993 BOD (3 days at 27°C).	mg/l	01	
TDS	APHA 2540 C, 23rd Ed.: 2017	mg/l	5	
Cond.	APHA 2510 - B, 23rd Ed.: 2017	µS/cm	1	
Cl-	APHA 4500 - Cl B, 23rd Ed.: 2017	mg/l	2	
TA	2320 B Titration Method, 23rd Ed.: 2017	mg/l	5	
TH	APHA 2340 C, 23rd Ed.: 2017	mg/L	5	
NO3- N	APHA 4500 - NO3 B, 23rd Ed.: 2017	mg/l	0.5	
F-	APHA 4500 - F D, 23rd Ed.: 2017	mg/l	0.2	
K+	APHA 3500 K - B, 23rd Ed., 2018	mg/l	1	

**Analyst**

Pravin Kumar Gupta , Atul Sharma

**Supervisor & Reviewer**

B. Sasi Devi

**Issued By (Lab InCharge)**

Dr. K. Ranganathan

Doc: CB/CL/QR/7.4/FWL-1

Issue No.:3

Revision No :3

Issue Date:19/02/2014

Revision Date: 18/09/2020

Page No. : 3/3

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CENTRAL POLLUTION CONTROL BOARD  
HEAD OFFICE - DELHI  
Parivesh Bhavan, East Arjun Nagar, Delhi - 110032

Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Fresh Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : WATER/FW/2324/SR00075, 20/03/2024 Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि : WATER/2324/FW/00156,10/04/2024

Analysis Request Division/Organization विश्लेषण अनुरोध प्रभाग/संगठन : IPC-III Report sent to (Name & Address of Indentor) आख्या किसे जारी की गयी (नाम एवं प्रभाग) : IPC-III

Sample Details नमूना विवरण : Sample from River and handpumps Sample Matrix नमूना मैट्रिक्स : Fresh Water

Sample Collected by नमूने एकत्रित करने वाले का नाम : Kamlesh Singh, MoEF&CC and IITR Date & Time of Sample Receipt नमूने प्राप्ति की तिथि एवं समय : 20/03/2024 16:30 PM

Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : : Sample Analysis Period नमूने के विश्लेषण की अवधि : 20/03/2024 to 26/03/2024

Report Status रिपोर्ट स्थिति : Final

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	SO <sub>4</sub> <sup>2-</sup>	Color	Turbidity	SAR
1	19/03/2024	RB-1	05	BDL	BDL	0.68
2	19/03/2024	RB-2	87	33	2	0.72
3	19/03/2024	GWK	BDL	BDL	6	-
4	19/03/2024	GWL	BDL	BDL	BDL	-

\* END OF REPORT आख्या समाप्ति \*

BDL : Below Deduction Limit कटौती सीमा से नीचे

Remarks (if any) :

Note: All the concentrations are expressed in mg/l except pH and Conductivity ( $\mu\text{mho/cm}$ ). नोट : पीएच तथा चालकता ( $\mu\text{mho/cm}$ ) के अतिरिक्त सभी सांद्रता मिग्रा/ली. में व्यक्त की गई हैं।

Analyst  
Pravin Kumar Gupta , Atul Sharma

Supervisor & Reviewer  
B. Sasi Devi

Issued By (Lab InCharge)  
Dr. K. Ranganathan

Doc: CB/CL/QR/7.4/FWL-1

Issue No.:3

Revision No :3

Issue Date:19/02/2014

Revision Date: 18/09/2020

Page No. : 1/2

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CENTRAL POLLUTION CONTROL BOARD केंद्रीय प्रदूषण नियंत्रण बोर्ड

HEAD OFFICE - DELHI

Parivesh Bhavan, East Arjun Nagar, Delhi - 110032

Water Laboratory (ANALYSIS REPORT) जल प्रयोगशाला (विश्लेषण आख्या)

Fresh Water Samples for Physico-Chemical Analysis Report भौतिक-रासायनिक विश्लेषण रिपोर्ट के लिए नमूने

**Statement कथन :**

1. The results relate only to the samples tested. परिणाम केवल जांचे गए नमूनों से संबंधित है।
2. The report shall not be reproduced except in full without written approval of the laboratory पूर्ण रिपोर्ट के अतिरिक्त प्रयोगशाला के लिखित अनुमोदन के बिना आख्या की आंशिक प्रतिकृति नहीं की जायेगी।
3. BDL & Test methods are mentioned on back side of this report. बी डी एल एवं परीक्षण विधि आख्या के अंत में दिए गए हैं।
4. Samples will be retained only for one Week after receipt of Report. संबंधित आख्या जारी होने के बाद नमूने केवल प्राप्ति के एक सप्ताह बाद तक ही सुरक्षित रखे जाएंगे।

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
SO <sub>4</sub> <sup>2-</sup>			5	
Color	APHA 2120 C Spectrophotometric Method, 23rd Ed.: 2017	Hazen	5	
Turbidity	2130 B Nephelometric Method, 23rd Ed.: 2017	NTU	1	
SAR			0.1	

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**Analyst**

Pravin Kumar Gupta , Atul Sharma

**Supervisor & Reviewer**

B. Sasi Devi

**Issued By (Lab InCharge)**

Dr. K. Ranganathan

Doc: CB/CL/QR/7.4/FWL-1

Issue No.:3

Revision No :3

Issue Date:19/02/2014

Revision Date: 18/09/2020

Page No. : 2/2

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INSTRUMENTATION LABORATORY (Analysis Report) उपकरणीय प्रयोगशाला (विश्लेषण आख्या)

Heavy Metals(Excluding Mercury)

ULR No: TC772324300000044F

Report No. & Date of Issue आख्या सं एवं जारी करने की तिथि : INSTR/2324/HM/00045,10/04/2024 : DH of IPC-III  
Sample Collected by नमूने एकत्रित करने वाले का नाम : Kamlesh Singh, MoEF&CC and IITR : 21/03/2024  
Samples Registration No. & Date नमूने की पंजीकरण सं. एवं तिथि : INSTR/HM/2324/SR00240, 20/03/2024 : IPC-III  
Sampling Plan Preference नमूनाकरण योजना प्राथमिकता : : 10/04/2024 to 10/04/2024  
Report Status रिपोर्ट स्थिति : Final : Handpumps samples

Sr.No	Date of Sample Collection नमूना संग्रहण की तिथि	Field Code नमूना स्थल	Sample Matrix नमूना मैट्रिक्स	Arsenic	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Nickel	Zinc
1	19/03/2024	GWK	Fresh Water	BDL	BDL	BDL	0.01	2.335	BDL	0.124	BDL	0.051
2	19/03/2024	GWL	Fresh Water	BDL	BDL	BDL	0.01	0.167	BDL	0.035	BDL	0.015

\* END OF REPORT आख्या समाप्ति \*

BDL : Below Deduction Limit न्यूनतम विश्लेषण की सीमा

Remarks (if any) :

Statement :

1. The results relate only to the samples tested
2. The report shall not be reproduced except in full. without the written approval of the laboratory.
3. The parameter is under the scope of NABL accreditation, ISO-17025:2017 (Certificate No.TC-7723).
4. The sample will be retained for 30 days from the date of issue of test report.

Analyst

Dr. Nirmal Kumar Sharma

Supervisor & Reviewer

B. K. Jena

Approved By (DH Inst-Lab)

Dr. K. Ranganathan

Doc: CB/CL/QR/7.8/IL-5

Issue No.:05

Revision No :05

Issue Date:08/12/2020

Revision Date: 08/12/2020

Page No. : 1/2



CENTRAL POLLUTION CONTROL BOARD केंद्रीय प्रदूषण नियंत्रण बोर्ड

HEAD OFFICE - DELHI  
Parivesh Bhavan, East Arjun Nagar, Delhi - 110032



TC-7723

INSTRUMENTATION LABORATORY (Analysis Report) उपकरणीय प्रयोगशाला (विश्लेषण आख्या)

Heavy Metals(Excluding Mercury)

ULR No: TC772324300000044F

Parameter Name	Test Method	Unit	Limit of Detection	Uncertainty of Measurement
Arsenic	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00049	
Cadmium	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00042	
Chromium	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00035	
Copper	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00035	
Iron	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00067	
Lead	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00031	
Manganese	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00043	
Nickel	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00054	
Zinc	APHA, ICP-MS, 3125-B, 24th Edition, 2023	mg/L	0.00059	

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Analyst  
Dr. Nirmal Kumar Sharma

Supervisor & Reviewer  
B. K. Jena

Approved By (DH Inst-Lab)  
Dr. K. Ranganathan

Doc: CB/CL/QR/7.8/IL-5

Issue No.:05

Revision No :05

Issue Date:08/12/2020

Revision Date: 08/12/2020

Page No. : 2/2

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Central Pollution Control Board केंद्रीय प्रदूषण नियंत्रण बोर्ड  
Partivesh Bhavan, East Arjun Nagar, Delhi-110032

परिवेश भवन, ईस्ट अर्जुन नगर, दिल्ली-110 032

Water Laboratory (Soil & Solid Waste Section) जन प्रयोगशाला (मृदा एवं ठोस अपशिष्ट अनुभाग)

Analysis Report विश्लेषण आडवा

Report No.: आडवा सं : S & SW/67  
Issue Date: जारी करने की तिथि 12.04.2024

Source of sample: नमूने का स्रोत : IPC-III  
Samples collected by नमूने एकत्रित करने वाले का नाम : Sh. Kamlesh Singh, MoEF&CC and IITR  
Date & time of sample Collection नमूने एकत्रीकरण की तिथि एवं समय : 19.03.2024  
Date & time of sample receipt नमूने प्राप्ति की तिथि एवं समय : 20.03.2024  
Period of sample analysis नमूने के विश्लेषण की अवधि : Mar-Apr 2024  
Sample registration no. & date नमूने की पंजीकरण सं. एवं तिथि : Water/SSW/2324/SR000005  
Test method reference परीक्षण विधि का संदर्भ : Given overleaf पिछले पृष्ठ पर दी गई है  
Report sent to (Name & Division) आडवा किसे जारी की गयी (नाम एवं प्रभाग) : DH- IPC-III

S. No क्र.सं.	Sample Code नमूना कोड	S & SWL Sample No. मृदा एवं ठोस अपशिष्ट प्रयोगशाला नमूना सं.	SAR	Chloride (mg/100g)	Sulfate(mg/100g)
01	BS-1(15)	154	0.16	45.50	789.8
02	BS-1(30)	155	0.14	52.01	993.3
03	BS-2(15)	156	0.15	45.50	1503.9
04	BS-2(30)	157	0.14	45.50	1423.9
05	BS-3(15)	158	0.17	39.00	1059.8
06	BS-3(30)	159	0.17	45.50	1215.1

**Statement: कथन:**

- The results relate only to the samples tested. परिणाम केवल परीक्षण किए गए नमूनों से संबंधित हैं।
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*Geeta Gurbu*  
Geeta Gurbu (गर्गी गुरु)  
Analyst  
(विश्लेषक)

*Aklesh Kumar Tyagi*  
Aklesh Kumar Tyagi (अकेश कुमार त्यागी)  
Supervisor, Reviewer & Authorized Signatory  
(पर्यवेक्षक, पुनर्विचारक एवं अधिकृत हस्ताक्षरी)

*K. Ranganathan* 15/14/24  
Dr. K. Ranganathan (डॉ. के. रंगनाथन)  
DH- Water Lab  
(प्रधानाधिकारक- जन प्रयोगशाला)



Central Pollution Control Board केंद्रीय प्रदूषण नियंत्रण बोर्ड  
Parivesh Bhavan, East Arjun Nagar, Delhi-110032

परिवेश भवन, ईस्ट अर्जुन नगर, दिल्ली-110 032

Water Laboratory (Soil & Solid Waste Section) जल प्रयोगशाला (मृदा एवं ठोस अपशिष्ट अनुभाग)

Analysis Report विश्लेषण आख्या

NABL Accreditation: ISO/IEC 17025:2017, Certificate No: TC-7723



Source of sample: नमूने का स्रोत:

Samples collected by नमूने एकत्रित करने वाले का नाम

Date & time of sample Collection नमूने एकत्रीकरण की तिथि एवं समय

Date & time of sample receipt नमूने प्राप्ति की तिथि एवं समय

Period of sample analysis नमूने के विश्लेषण की अवधि

Sample registration no. & date नमूने की पंजीकरण सं. एवं तिथि

Test method reference परीक्षण विधि का संदर्भ

Report sent to (Name & Division) आख्या किये जारी की गयी (नाम एवं प्रभाग)

Report No.: आख्या सं : S & SW/67

Issue Date : जारी करने की तिथि 15.04.2024

: IPC-III

: Sh. Kamlesh Singh, MoEF&CC and IITR

: 19.03.2024

: 20.03.2024

: Mar-Apr 2024

: Water/SSW/2324/SR00005

: Given overleaf पिछले पृष्ठ पर दी गई है

: DH- IPC-III

S. No क्र सं	Sample Code नमूना कोड	S & SWL Sample No. मृदा एवं ठोस अपशिष्ट प्रयोगशाला नमूना सं	pH (1:2.5)	Cond. umho/cm (1:2)	OC%	Exchangeable Na mg /100g	Exchangeable K mg /100 g	Exchangeable Ca mg /100 g	Exchangeable Mg mg /100 g	CEC meq/100g
01	BS-1(15)	154	7.3	163	0.34	12.42	10.61	99.40	11.70	6.73
02	BS-1(30)	155	7.2	87	0.14	11.31	10.28	105.01	16.37	7.34
03	BS-2(15)	156	7.3	101	0.32	12.73	10.87	102.60	16.67	7.32
04	BS-2(30)	157	7.5	88	0.55	11.43	10.79	112.87	7.99	7.06
05	BS-3(15)	158	8.0	230	0.49	14.34	17.81	114.49	13.06	7.87
06	BS-3(30)	159	7.9	268	0.17	14.89	14.46	130.98	12.77	8.60

Statement: कथन:

- The results relate only to the samples tested. परिणाम केवल परीक्षण किए गए नमूनों से संबंधित हैं।
- The report shall not be reproduced except in full without written approval of the laboratory. पूर्ण रिपोर्ट के अनतिरिक्त प्रयोगशाला के लिखित अनुमोदन के बिना आख्या की आधिकारिक प्रतिकृति नहीं की जायेगी।

*Gargi Gurty*  
Gargi Gurty (गार्गी गुर्ती)  
Analyst  
(विवेशक)

*Aklesh Kumar Tyagi*  
Aklesh Kumar Tyagi (अक्लेश कुमार त्यागी)  
Supervisor, Reviewer & Authorized Signatory  
(पर्यवेक्षक, पुनर्विलोकक एवं अधिकृत हस्ताक्षरी)

*K. P. Ranganathan*  
15/4/24  
Dr. K. Ranganathan (डॉ. के. रंगनाथन)  
DH- Water Lab  
(प्रभागध्यक्ष- जल प्रयोगशाला)



### Uttar Pradesh Pollution Control Board

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppecb.in, Website: www.uppcb.com

196321/UPPCB/Faizabad(UPPCBRO)/CTO/both/GONDA/2023

Date: 30/11/2023

To,

M/s

**BALRAMPUR CHINI MILLS LIMITED UNIT MANKAPUR CHEMICAL DIVISION**

village Datauli, Tehsil Mankapur, Distt Gonda (Uttar Pradesh),GONDA,271302

Application Id-  
23460645

Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) 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

CCA is hereby granted to **BALRAMPUR CHINI MILLS LIMITED UNIT MANKAPUR CHEMICAL DIVISION** located at village Datauli, Tehsil Mankapur, Distt Gonda (Uttar Pradesh),GONDA,271302. subject to the provisions of the Water Act, Air Act and the orders that may be made further and subject to following terms and conditions :-

1. This CCA **BALRAMPUR CHINI MILLS LIMITED UNIT MANKAPUR CHEMICAL DIVISION** granted for the period from **01/01/2024 to 31/12/2025** and valid for manufacturing of following products.

S No	Product	Quantity	Unit
1	Rectified Spirit/Extra Neutral Alcohol/Ethanol	100	Kilo Liters/Day

2. Conditions under Water(Prevention and Control of Pollution) Act -1974 as amended :-

(i) The daily quantity of effluent discharge (KLD) :-

Kind of Effluent	Quantity(KLD)	Treatment facility	Discharge point
Domestic	200 KLD	Sister Sugar Unit STP	Sister Sugar Unit STP
Industrial	ZLD (Zero Liquid Discharge)	ETP	

(ii) Trade Effluent Treatment and Disposal :-The applicant shall operate Effluent Treatment Plant consisting of primary/secondary and tertiary treatment as is required with reference to influent quantity and quality.

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.

(iii) The treated effluent shall be recycled to the maximum extent and should be reused within the premises for gardening etc. Quality of the treated effluent shall meet to the following general and specific standards as prescribed under Environment (Protection) Rules, 1986 and applicable to the unit from time-to-time :-

#### Industrial Effluent Quality Standard



S.No.	Parameter	Standard
-------	-----------	----------

(iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality. 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.

(v) The treated sewage shall be reused in gardening as far as possible. The STP shall be maintained continuously so as to achieve the quality of the treated sewage to the following standards.

S No.	Parameters	Standards
1	pH	As per E(P)A Rules, 1986
2	BOD (mg/L)	As per E(P)A Rules, 1986
3	TSS (mg/L)	As per E(P)A Rules, 1986
4	Fecal Coliform (MPN/100ml)	As per E(P)A Rules, 1986
5	Remarks	06 KLD Treated Sewage

### 3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as 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.

#### Air Pollution Source Details

S No.	Air Pollution Source	Type of fuel	Stack no	Control Device	Height of Stack
1	45 TPH Slope Incineration Boiler	Baggasse (9.0 TPH) and Slope (15.12 TPH)	1	Particulate Matter	As per E(P)A Rules, 1986

#### Emission Quality Standards

S No.	Stack no	Parameters	Standards
1	1	Particulate Matter	As per E(P)A Rules, 1986

In case of stoppage of functioning of air pollution control equipment, 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) The unit will not use any type of restricted fuel.

iii) 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, Commercial, Residential, Silence) which are as follows :-

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

Standards for Noise level in db(A) Leq	Industrial Area		Commercial Area		Residential Area		Silence Zone	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time



	75	70	65	55	55	45	50	40
--	----	----	----	----	----	----	----	----

**4. Essential documents to be submitted by the Industry/Unit as Applicable :-**

- (i) Environment Statement in Form-V of Environment (Protection) Rules, 1986.
  - (ii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.
5. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.
6. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will result in legal action under the aforesaid Acts and Rules.
7. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-<http://www.upecp.in/TrainingSession.aspx> for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of non-compliance of this direction, your consent will be revoked by the Board.
8. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

**General Conditions:-**

1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.
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 Industrial 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 within 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 house keeping. All valves/pipes/sewer/drains etc. must be leak-proof
6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.
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. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
10. 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.
11. 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



12. The Board reserves the right to revoke/add/modify any stipulated condition issued along with CCA, as may be necessary.

**Specific Conditions:-**

1. This consent is valid for production of 100 KLD Rectified Spirit/Extra Neutral Alcohol/Ethanol while using B-Heavy Molasses/C-Heavy Molasses (450 MTD) as main raw material and 6.6 Megawatt Co-Generation Plant by BALRAMPUR CHINI MILLS LIMITED UNIT MANKAPUR CHEMICAL DIVISION at Village-Datauli, Tehsil-Mankapur, Distt-Gonda (Uttar Pradesh), 271302.
2. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharge outside the premises (applicable in case of the projects achieving the ZLD).
3. Industry shall operate and maintain the MEE systems to ensure Zero Liquid Discharge, failing which, this consent shall be treated as revoked.
4. The separated water from solid separation system such as condensate from evaporation concentration system such as MEE shall be reutilized in the process. If required, separated water and condensate may be treated before reutilization.
5. Industry shall operate and maintain measuring devices (water/flow meters) at required location (raw water consumption, solid separation system: feed, permeate and reject, evaporation concentration systems: feed concentrate and condensate, water reused in the process & concentrate utilized in drying system/equivalent technology) to record the water balance shortly without delay.
6. Maximum 07 days Spent Wash shall be stored in the Lagoon and ensured to send monthly reports regarding spent wash storage and details of water level in each lagoon constructed in industry.
7. The other effluent streams apart from spent wash including spent lees, plant washings, leakages, boiler blow down, etc. shall be used in process.
8. Industry shall operate and maintain the effluent treatment system effectively and regularly. All the effluent treatment system shall be kept in good running condition all the time and failure (if any), shall be immediately rectified without delay otherwise, similar alternate arrangement shall be made. In the event of any failure of any pollution control system adopted by the industry, the respective production unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Industry shall not discharge any treated / untreated effluent in to the river or any surface water bodies. No effluent shall be discharged outside of the factory premises in any circumstances; hence zero discharge condition shall be maintained at all the time.
9. Industry shall make proper arrangement for safe and scientific handling, storage, transportation and disposal of all solid wastes, sludge etc. generated.
10. The industry shall operate throughout the year (365 days).
11. Pollutant load like BOD, COD, TDS, and TSS in effluent and PM, NO<sub>2</sub> and SO<sub>2</sub> in stack emission shall not be changed/increased during B Heavy Molasses based operation.
12. Industry shall provide adequate arrangement for control of odour nuisance. All internal roads shall be



- made pucca. Industry shall maintain good housekeeping within factory premises, around effluent treatment facilities etc.
13. Industry must strictly comply all the directions issued by UPPCB, CPCB and Hon'ble NGT from time to time.
  14. The industry shall install roof top rain water harvesting system and Piezometer in the factory premises.
  15. The industry shall always connect the CCTV Camera with the server of CPCB and control room of UPPCB.
  16. Industry shall submit Environment Statement to this Board as per provision of Environment (Protection) amendment Rule, 1993 for the previous year ending 31st March on or before 30th September every year.
  17. Incase industry fails to comply with the directions issued by Board in a stipulated time schedule and/or fails to comply with any of the conditions stipulated in the consent / renewal, the consent to operate (CTO) / renewal of consent issued by Uttar Pradesh Pollution Control Board, Lucknow shall stand automatically withdrawn and manufacturing operations shall be close down without further notice.
  18. Construct 0.3 mtr free Board in each lagoon used for storing spent wash to prevent overflow.
  19. Audited Balance Sheet/ C.A. Certificate should be submitted within one month from the date of issue of this Certificate for verification of Consent fee payable.
  20. Percentages of solid concentration after MEE shall be analysed by NABL accredited lab and report will submitted within a month.
  21. The unit shall operate and maintain the Air Pollution Control Systems efficiently and continuously so as to satisfy the prescribed emission standards.
  22. The unit shall adhere to the ambient Air quality prescribed standards at all the times.
  23. The industry shall develop green belt as per the protocol attached with Board's office order dated 16.02.2018 which is available on Board's Website.
  24. The industry shall to submit stack emission monitoring report every quarter from NABL accredited laboratory.
  25. Industry shall strictly comply with conditions mentioned in the charter prepared by CPCB.
  26. The Industry shall install on line emission continuous monitoring system and shall ensure regular transmission of data of Continuous Online Emission Monitoring System for to the servers of CPCB and UPPCB. Industry shall submit regular stack monitoring report every month.
  27. Ash generated during production process must be disposed off in scientific manner as per guidelines of CPCB/MOEF. It is also mandatory that disposed ash will never affect the Health and Environment of nearby areas an residents.



28. The industry shall use at least 20% of total fuel as bio briquettes in boiler, as per availability.
29. The orders passed by Hon'ble National Green Tribunal in O.A. No. 12/2023 in the matter of Alok Kumar Mishr & Ors Vs. State of Uttar Pradesh shall prevail on this CTO.
30. If closure order is issued by CPCB or UPPCB against any defaulting unit, then CTO issued earlier will be suspended during the pendency of the closure period and after ensuring the compliance and after revocation of closure order, the CTO will be deemed to be restored subject to the effective date of revocation of the closure order, with imposed conditions thereof.
31. 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 CTO and attract action under the provisions of Environment (Protection) Act, 1986.

**RAM**  
**KARAN**  
 Chief Environmental Officer, Circle-6  
 Digitally signed  
 by RAM KARAN  
 Date: 2023.12.18  
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Copy to:

Regional Officer, U.P. Pollution Control Board, Ayodhya for information and necessary action.

Chief Environmental Officer, Circle-6  
**RAM**  
**KARAN**  
 Digitally signed  
 by RAM KARAN  
 Date:  
 2023.12.18  
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**UTTAR PRADESH POLLUTION CONTROL BOARD**

TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow-226010

**Ref. No : 11739/UPPCB/Faizabad(UPPCBRO)/HWM/GONDA/2020 Dated: 05/05/2020**

To,

M/s BALRAMPUR CHINI MILLS LIMITED UNIT MANKAPUR CHEMICAL DIVISION  
 village Datauli, Tehsil Mankapur, Distt Gonda (Uttar Pradesh), GONDA, 271302  
 Tehsil : Mankapur  
 District : GONDA

**Sub :-** Authorisation issued under the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

1. Number of authorization and date of issue 11739 and 05/05/2020 .
2. Reference of application (No. and date) 8328656 and 25/03/2020 .
3. Mr PRAVEEN GUPTA of M/s BALRAMPUR CHINI MILLS LIMITED UNIT MANKAPUR CHEMICAL DIVISION is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, utilization, storage and disposal or any other use of hazardous or other wastes or both on the premises situated at BALRAMPUR CHINI MILLS LIMITED, CHEMICAL DIVISION .

**Details of Authorisation**

S No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilization or co-processing, etc.	Quantity (ton/annum)
1	Cat. 5.1 of Schedule-1	Mixed with bagasse and burnt in boiler	1.250 MT/ANNUM

1. The authorization shall be valid for a period of 31/12/2024 from the date of issue of this letter .
2. 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 authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under .
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution 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 authorisation .
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation 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 authorised 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 authorised 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 utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation .
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 authorisation 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 Changes 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 .

#### **B Specific Conditions of Authorization**

1. This authorization is Valid for M/s Balrampur Chini Mills Limited, Chemical Division, Unit Balrampur.
2. The authorization shall be valid upto dated 31.12.2024, if not suspended or cancelled earlier.
3. The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers / bags shall be provided with a general label. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.
4. The authorized person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorization has been requested. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.
5. It is brought to your notice that as per the order dated 14-11-2003 passed by the Hon'ble Supreme Court in W.P. (c) No. 657 of 1995, no industry covered under Hazardous and other Wastes (Management and Tran boundary Movement) Rules, 2016 shall be allowed to operate without valid authorization. It is also provided in the same orders that industries which are not complying with the conditions of authorization shall not be allowed to operate. Hence in case you fail to apply for authorization, before its expiry or fail to comply with conditions of the earlier authorization issued to you, closure order shall be issued against your industry without any further notice.
6. The applicant must file returns on prescribed Form- 4 along with a compliance report of this letter and should also maintain records on Form 3 and present it to Board's inspecting officials.
7. In case of occurrence of an accident, complete details on form must be sent to U.P. Pollution Control Board at the earliest along with details of mitigative and remedial measures taken.
8. The authorized person/agency shall not receive, collect, or store any hazardous waste from any unauthorized occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorization of the Board.
9. In no case any hazardous wastes shall be disposed off on land, in any drain or stream.



spillages of hazardous chemicals, used containers, of hazardous chemicals such as flammable corrosive, explosive and toxic nature must be safely collected and stored. Non-compatible wastes must be suitably and safely handled.

10. It is within the powers and functions of the U.P. Pollution Control Board to modify / revoke the terms and conditions of the authorization/Registration issued under the Rule – 7 of Hazardous and Other Wastes (Management and Tran boundary Movement) Rules, 2016.
11. You are directed to display on-line data/display board outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within 15 days of receipt of this letter.
12. It is the mandatory duty of the authorized person/agency to comply with the guidelines for transportation of hazardous waste in accordance with rule 18 of Hazardous and Other Waste (Management and Tran boundary Movement) Rules, 2016.
13. It should be ensured that hazardous wastes shall be properly collected and packed in HDPE bags and then temporarily stored in a lined RCC tank/pit with suitable shed.
14. An ETP sludge test report of a laboratory approved under E.P. Act shall be submitted along with compliance of this letter of this office.
15. Used oil shall be sold only to recyclers registered with U.P. Pollution Control Board. The record shall be maintained.
16. The occupier, transporter and operator of a facility shall be liable for damages caused to the environment resulting due to improper handling and disposal of hazardous waste listed in schedule 1,2, and 3 and shall be liable to pay a fine as levied by the State Pollution Control Board under the rules.
17. Details of raw material (which is Hazardous waste) and product along with quantity shall be sent within a month.
18. You shall become the member of any common TSDF for S.L.F. which has been authorized by UPPCB and send the stored hazardous wastes for final disposal to the TSDF and report back to U.P.P.C.B. with the required manifesto (document of proof) within one/three month of this letter.
19. The unit shall ensure that H.W. is regularly sent to Authorized common TSDF and shall not store for more than 90 days in accordance with under rule 8 of HOWM Rules, 2016.
20. Emission from the Common/Captive incinerator stack shall meet the prescribed standards under Environmental Protection Act. 1986.
21. Copies of Hazardous Waste Manifest in Form-10 shall be sent regularly to UPPCB for each category of waste sent to TSDF/Incinerator.
22. This authorization/Registration is valid till the industry is having valid consent as per the provisions of Air(Prevention and Control of Pollution) Act 1981 and Water (Prevention and Control of Pollution) Act, 1974.
23. Industry shall comply the provisions of EP Act, 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended and E-waste (Management and Handling) Rules, 2016.
24. The authorized actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorization.
25. The industry shall submit copy of logbook of mixing the hazardous waste with bagasse and incinerated in boilers within 15 days.
26. The industry shall submit the colored photo graph of display board within 15 days.  
The industry shall submit the form-10 within 15 days for disposal of hazardous waste.



( Authorized Signatory )

Nishi Kumar  
Chauhan

Digitally signed by  
Nishi Kumar Chauhan  
Date: 2020.05.08  
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**UTTAR PRADESH POLLUTION CONTROL BOARD**

Copy to: To the Regional Officer, U.P.Pollution Control Board, R.O., UPPCB, BASTI for information and necessary action .

**CEO/EE, I/C Circle** \_\_\_\_\_

Nishi Kumar  
Chauhan

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Nishi Kumar Chauhan  
Date: 2020.05.08  
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