

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

O.A NO. 912/2022

IN THE MATTER OF:

MANAV SEWA SANSTHAN AND ANR.

...APPLICANTS

VERSUS

UNION OF INDIA & ORS.

...RESPONDENTS

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THROUGH:

Shrey
A.R. TAKKAR, SHRIYA TAKKAR, UNNATI ANAND, KAPIL BAKSHI,

Himani
HIMANI BHADAURIA, MANAN TAKKAR AND PRINCE SHARMA
ADVOCATES

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A-25/12, DEODAR MARG, DLF PHASE 1,

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EMAIL ID: ARTAKKAR@ARTLO.IN

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

(1)

O.A NO. 912/2022

IN THE MATTER OF:

MANAV SEWA SANSTHAN AND ANR.

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REPLY TO RESPONSE FILED BY APPLICANTS
TO THE JOINT INSPECTION REPORT, ON
BEHALF OF RESPONDENT NO. 4, BALRAMPUR
CHINI MILLS LTD. THROUGH SUBHASHISH
GHOSH ITS AUTHORIZED OFFICER.

1. That the instant Reply is being filed to the response dated 08.02.2024 filed by the Applicants to the Joint Inspection Report filed by Joint Committee constituted by this Hon'ble Tribunal. That the Applicants in the aforesaid response have raised certain allegations pertaining to Respondent No. 4 Industry thus, the Respondent No. 4 Industry in this Reply is disputing the said allegations by bringing on record the factual aspects.
2. That the replies/responses/objections/submissions previously filed by the Answering Respondent Industry may kindly be read as part and parcel of the present reply as the same are not being repeated for the sake of brevity.
3. That response dated 08.02.2024 filed by the Applicants on page no.'s 865 to 868 of the paper book have raised certain objections/allegations pertaining to the Chemical as well as Sugar Division of the Answering Respondent Industry. That reply on the merits of the said corresponding paragraphs is as follows:

18. The contents of corresponding paragraph 18 of the response filed by the Applicants are wrong and denied. It is denied that the Joint Committee Report has admitted that pollutants are being discharged from the Balrampur Chini Mill unit, which is evident from the water in the drains. It is submitted that the Joint Committee in its report at page no. 544 of the paper book has concluded that no distillery effluent was found discharged outside the industry premises and the Answering Respondent Industry (Chemical Division) was found operating the Zero Liquid Discharge (ZLD) systems to achieve ZLD in compliance of conditions imposed under Environmental Clearance and CTO. That the permissible limit of industrial discharge as per Consent to Operate dated 24.12.2021 (Annexed as Annexure-A1 at page no. 627-631 of the Joint Inspection Report dated 30.12.2023) granted by the Uttar Pradesh Pollution Control Board to the Sugar Division of the Answering Respondent Industry is 2400 KLD and the discharge by the Answering Respondent Industry is well within permissible limit. That further, the permissible limit of domestic discharge as per the Consent to Operate dated 24.12.2021 (Annexed as Annexure-A1 at page no. 627-631 of the Joint Inspection Report dated 30.12.2023) granted by the Uttar Pradesh Pollution Control Board to the Sugar Division of the Answering Respondent Industry is 120 KLD and permissible limit as per Consent to Operate dated 17.11.2022 (Annexed as Annexure-A1 at page no. 602-607 of the Joint Inspection Report dated 30.12.2023) granted by the Uttar Pradesh Pollution Control Board to the Chemical Division is 48 KLD, thus total domestic discharge permitted is 168KLD and the discharge as observed by the Joint Committee in its Joint Inspection Report is 119.85 KLD, thus the discharge is well within prescribed limits.

19. That the contents of corresponding paragraph 19 of the response filed by the Applicants are a matter of record and need no reply from the Answering Respondent Industry.
20. The contents of corresponding paragraph 20 of the response filed by the Applicants are wrong and denied. It is denied that the ETP discharge drain of Balrampur sugar mill is clearly grey to black in colour, showing presence of pollutants and is clear that discharge from ETP is not treated and pollutants are being discharged into Suwaon nala. It is submitted that the final discharge from the Answering Respondent Industry as observed by the Joint Committee in its Report in table: analysis result of samples collected from ETP, at page no. 555 of the paper book were evidently found within the notified standard for disposal into the drain. It is pertinent to mention herein that the Joint Committee Report at page no. 533 of the paper book states that:

"... the analysis results of the sample after confluence of local drains indicates deterioration in the Suwaon drain w.r.t BOD-122mg/l, COD-362mg/l and TDS-927mg/l, though these characteristics don't indicate typical characteristics of Sugar & Distillery effluent but presence of sewage in the drain is quite evident. After this location lot of growth of water hyacinth was observed in the drain hence, the characteristics at further downstream location i.e at pond near Hanuman mandir road improves slightly w.r.t BOD-65.7 mg/l, COD-169mg/l and TDS-830mg/l.

The local drain upstream of Balrampur Chini Mill (Chemical Division) have BOD-249mg/l, COD-588mg/l and TDS-1329mg/l which indicates presence of mixed effluent (domestic & wastewater from two wheeler repairing centre).

At other locations the drain characteristics indicates presence of diluted sewage."

Thus, it is evident that characteristics of Sugar & Distillery effluent has not been found in Suwaon nala and the Answering Respondent Industry has not been discharging any untreated effluent whatsoever in the Suwaon nala as alleged by the Original Applicant. At this point it is important and relevant to bring out that the drain (leading to Suwaon drain) flowing outside the industrial premises of the Answering Respondent Industry already has a high load of pollutants it gathers from upstream and surrounding villages and there is some amount of intermixing when the drain carrying adequately treated permissible trade effluent from the Industry meets with the Suwaon drain and occasionally when the flow pressure is high in the later drain some effluent does enter for a few feet into the drain of the Answering Respondent Industry.

21. The contents of corresponding paragraph 21 of the response filed by the Applicants are wrong and denied. It is denied that observations at Page 531 clearly show that polluted water is being discharged by the unit. It is denied that the discharge from ETP outlet from Balrampur Chini Mills Ltd. is exceeding the parameters set in Environment (Protection) Rules, 1986. It is submitted that the drain visible at page no. 531 of the paper book is a *Pakka* drain however, it has a lot of openings made by the local residents by breaking the bricks which leads to the domestic untreated water getting mixed in the drain making the colour greyish. It is submitted that the analysis result as provided at page no. 533 of the paper book provides analysis values as pH-7.19, Colour-30, BOD-22.8, COD-99.4, TDS-644, which makes it evident that all analysis values are within prescribed norms and no untreated effluent has been

discharged from the Answering Respondent Industry into Suwaon drain or local drains. It is reiterated that the Answering Respondent Industry (Chemical Division) was found operating the Zero Liquid Discharge (ZLD) systems to achieve ZLD in compliance of conditions imposed under Environmental Clearance and CTO and that the permissible limit of industrial discharge as per Consent to Operate dated 24.12.2021 (Annexed as Annexure-A1 at page no. 627-631 of the Joint Inspection Report dated 30.12.2023) granted by the Uttar Pradesh Pollution Control Board to the Sugar Division of the Answering Respondent Industry is 2400 KLD and the discharge by the Answering Respondent Industry is well within permissible limit.

22. That the contents of corresponding paragraph 22 of the response filed by the Applicants are a matter of record and need no reply from the Answering Respondent Industry.
- 23.-24. That the contents of corresponding paragraphs 23 and 24 of the response filed by the Applicants are false and denied. It is denied that perusal of the same will show that the Biological Oxygen Demand, Chemical Oxygen Demand and Total Suspended Solids exceed the parameters set in Environment (Protection) Rules, 1986. It is submitted that the Joint Committee has failed to note that ETP outlet after filtration going to RO is an intermediary point and the final discharge point is only after treatment in RO. That upon observing the analysis table as provided on page no. 555 of the paper book it becomes evident that values after RO permeate used in process are BOD- 25.9mg/l, COD- 68.4mg/l and TSS-17mg/l and thus, they are well within notified standards for disposal. It is further submitted that the Joint Committee in its report at page no. 556 of the paper book has admitted that RO permeate is complying with the notified norms and no discharge through drain was taking

place as treated effluent was reused into process after further treatment. The relevant extract from page no. 556 of the paper book is reproduced herein under for the convenience of this Hon'ble Tribunal:

"Though no discharge through drain was taking place at the time of inspection, as the unit was reusing the treated effluent into process after further treatment through RO. The sample collected from RO permeate is complying with the notified norms."

It is submitted that the Answering Respondent Industry had requested the Uttar Pradesh Pollution Control Board for conducting on cost sampling of secondary clarifier and auto filtration and the same was conducted by the Board, that the analysis report is annexed as Appendix-D at page no. 853-858 of the paper book and a bare perusal of the same would show that the ETP is functioning properly and values are within prescribed limits.

25. That the contents of corresponding paragraph 25 of the response filed by the Applicants are a matter of record and need no reply from the Answering Respondent Industry.
- 26.-27. That the contents of corresponding paragraphs 26 and 27 of the response filed by the Applicants are wrong and denied. It is denied that a perusal of monitoring locations will reveal that water from drains which contains discharge from the units only, have not been analysed. It is denied that all the locations from where the Joint Committee has taken water samples containing mixed effluents from the motor servicing units as well as domestic sewage. It is denied that there is no water sample analysis of drains where only unit effluent discharged is found and no conclusion can be drawn

regarding the pollution caused by the units.

It is submitted that the Joint Committee Report at page no. 528 of the paper book states that Suwaon drain was monitored at two locations and local drain was monitored at nine locations. That the Joint Committee took samples from various locations in the Answering Respondent Industry and it is reiterated that Joint Committee Report at page no. 533 of the paper book has held that analysis results of the sample after confluence of local drains indicates deterioration in the Suwaon drain w.r.t BOD-122mg/l, COD-362mg/l and TDS-927mg/l, these characteristics don't indicate typical characteristics of Sugar & Distillery effluent but presence of sewage in the drain is quite evident. The local drain upstream of Balrampur Chini Mill (Chemical Division) has BOD-249mg/l, COD-588mg/l and TDS-1329mg/l which indicates presence of mixed effluent (domestic & wastewater from two wheeler repairing centre). At other locations the drain characteristics indicates presence of diluted sewage. Thus, it is evident that characteristics of Sugar & Distillery effluent have not been found in Suwaon nala and the Answering Respondent Industry has not been discharging any untreated effluent whatsoever in the Suwaon nala as alleged by the Original Applicant.

- 28.-29. That the contents of corresponding paragraphs 28 and 29 of the response filed by the Applicant are wrong and denied. It is denied that the photographs annexed by the Applicant show drains which only contains effluent discharge from the units. It is denied that it is clear from the photographs dated 03.02.2024 that the drain is connected to the Balrampur Chini Mills unit directly and is not connected with any other drain. It is denied that photographs also show the polluting effluents being discharged from the unit without



treatment. It is submitted that the pictures annexed by the Applicant as Annexure A-2 of the response are disputed and hold no weight as from these pictures it is clearly evident that the drain carried storm and domestic water from the upstream of the Answering Respondent Industry and after the discharge of treated effluent from the Sugar unit of the Answering Respondent Industry, the local residents, commercial establishments, car washing centres etc. meet with these drains thus, the contamination cannot be attributed upon the Answering Respondent Industry, therefore the averments made by the Applicant are not only misconceived but misleading as well.

30.-31. That the contents of corresponding paragraphs 30 and 31 of the response filed by the Applicant are wrong and denied. It is denied that human habitation and settlements are located far away from the unit therefore amount of domestic sewage is the drain will be low. It is denied that the unit is located in an area with low population density, therefore, there is less likelihood of high pollution load due to sewage flow. The contents of the map annexed by the Applicants are disputed, it is disputed that the map is prepared from BHUVAN, a mapping software prepared by Indian Space Research Organization to show that there is low population density in the area and the towns are located far away. It is denied that there is less likelihood of sewage being part of drain water. It is submitted that 1 Km of upstream from Answering Respondent Industry till Balrampur city, the area is highly populated along with many operating commercial establishments. Further, UPSIDC industrial area and Bhagwati Ganj are situated within 2Km downstream from the Answering Respondent Industry, thus all these facts together attribute to the contamination of Suwaon drain. Copy of map

evidencing the population of upstream and downstream of the Answering Respondent Industry is marked and attached hereto as **Appendix-1**. It is pertinent to mention here that the Answering Respondent Industry operates in Zero Liquid Discharge model for its Chemical Division and the Sugar Division is operating as per the consents granted and the same have been confirmed by the Joint Committee in its Report. It is reiterated that the Joint Committee in its report at page no. 533 of the paper book has evidently found the presence of sewage in the drain and the same cannot be disputed by the Applicant by way of baseless contentions without any scientific proof.

32. That the contents of corresponding paragraph 32 of the response filed by the Applicant are wrong and denied. It is denied that the Joint Committee should have specifically identified the outlet points from the industries and the route of effluent to the drains respectively. It is denied that local drain A & B upstream of sugar mill (shown in the map at Page 528) just abutting the sugar mill and chemical division as shown in the map indicate polluted drains. It is denied that as drain 'A' bisects the sugar mill and chemical division, it is very likely that the pollution load in the drain is due to the sugar mill, as the location of the mill has low population density thus less likelihood of high pollution load due to sewage flow. It is denied that a clear drain flow directional map should have been placed on record by the Joint Committee to clarify the flow direction of the drain. It is denied that sudden decrease in Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) from upstream of Chini Mill and Chini Mill Gate drain raise suspicion. It is submitted that the Joint Committee report at page no. 528 of the paper book indicates the origination of Suwaon drain which is 4 Km

from Balrampur city in west north direction which carries local drains' wastewater, Answering Respondent Industry's treated water along with untreated sewage of Balrampur town. The drain traverses at a distance of approximately 6-7 Kms to Gondipur, Balrampur. It can be clearly inferred from the Joint Committee report that deterioration of the Suwaon drain is due to the confluence of the local drains carrying untreated sewage and other waste from commercial establishments. It is pertinent to reiterate herein that these drains don't indicate typical characteristics of Sugar and Distillery effluents but the presence of sewage is quite evident thus, it is not the Answering Respondent Industry causing the contamination of Suwaon drain but other factors, rather the treated trade effluent of the Industry helps by diluting the concentrated sewage in the Suwaon drain.

33. That the contents of corresponding paragraph 33 of the response filed by the Applicants are a matter of record and need no reply from the Answering Respondent Industry.
34. That the contents of corresponding paragraph 34 of the response filed by the Applicant are wrong and denied. It is denied that a perusal of lab analysis results of water samples taken from different locations will show that the Biological Oxygen Demand in local drain upstream of Balrampur Chini Mills Ltd. is 249 which reduces significantly to 67.5 at Balrampur Chini Mill gate drain. It is denied that there is a sharp reduction in the Chemical Oxygen Demand from 588 to 246. It is submitted that the analysis report submitted by the Joint Committee states that the Local drain upstream of Balarampur Chinni Mills (Chemical Division) had BOD 249mg/l, COD-588mg/l and TDS-1329mg/l which indicates presence of mixed effluent (domestic and waste water from two wheeler repairing



centre) the report also mentions that the drain characteristics indicates presence of diluted sewage. It is pertinent to mention that COD and BOD of upstream water in drain are higher and when treated effluent of the Sugar Division of Answering Respondent Company is mixed with that water it reduces the COD and BOD due to dilution.

35.-36. That the contents of corresponding paragraphs 35 and 36 of the response filed by the Applicant are wrong and denied. It is denied that significant reduction in the BOD and COD of water raises suspicion that the figures have been fabricated. It is denied that since the Joint Committee has failed to annex the lab reports of water samples analysis, therefore, the same cannot be relied upon. It is denied that the water sample analysis does not conduct scrutiny of heavy metals. It is denied that the discharge coming from sugar and distillery units can have evidence of heavy metals such as lead, cadmium, selenium, nickel etc, which can cause toxicity in the water as well as soil. It is denied that the Joint Committee has not conducted inspection for such heavy metals in the water and has only inspected pH, colour, BOD, COD, Total Suspended Solids, Total Dissolved Solids, So₄, Cl, Conductivity, NH₃, TC and FC. It is denied that none of these factors account for the heavy metals that may be discharged by the distillery and sugar units produced during the process. It is denied that since, no inspection for heavy metals was done, no conclusion can be drawn regarding the discharge of effluents from the units. It is submitted that the Ld. Joint Committee was constituted by this Hon'ble Tribunal and the Applicants are raising false and baseless contentions without any scientific proof. That soil and water samples from borewells as well as surface water have regularly been tested

by the Answering Respondent Industry to keep a check and record, some of which have also been submitted to government authorities. Copies of reports evidencing that heavy metals in water as well as soil samples are well within prescribed limits are marked and attached hereto as **Appendix-2 (Colly.)**, thus allegations made by the Applicant are completely baseless and have been made without any scientific evidence of the same. It is reiterated that the Joint Committee in its report at page no. 544 of the paper book has concluded that no distillery effluent was found discharged outside the industry premises and the Answering Respondent Industry (Chemical Division) was found operating the Zero Liquid Discharge (ZLD) systems to achieve ZLD in compliance of conditions imposed under Environmental Clearance and CTO. That the permissible limit of industrial discharge as per Consent to Operate dated 24.12.2021 (Annexed as Annexure-A1 at page no. 627-631 of the Joint Inspection Report dated 30.12.2023) granted by the Uttar Pradesh Pollution Control Board to the Sugar Division of the Answering Respondent Industry is 2400 KLD and the discharge by the Answering Respondent Industry is well within permissible limit. That further, the permissible limit of domestic discharge as per the Consent to Operate dated 24.12.2021 (Annexed as Annexure-A1 at page no. 627-631 of the Joint Inspection Report dated 30.12.2023) granted by the Uttar Pradesh Pollution Control Board to the Sugar Division of the Answering Respondent Industry is 120 KLD and permissible limit as per Consent to Operate dated 17.11.2022 (Annexed as Annexure-A1 at page no. 602-607 of the Joint Inspection Report dated 30.12.2023) granted by the Uttar Pradesh Pollution Control Board to the Chemical Division is 48 KLD, thus total domestic discharge permitted is 168KLD and the discharge as

observed by the Joint Committee in its Joint Inspection Report is 119.85 KLD, thus the discharge is well within prescribed limits.

PRAYER

It is therefore most respectfully prayed that this Hon'ble Tribunal in order to provide substantial justice in the matter may kindly be pleased to take on record the facts stated in the body of this Reply along with Appendix-1 & 2 and be further pleased to discharge the Answering Respondent Industry from this OA;

It is further prayed that this Hon'ble Tribunal may pass any such or further order as it may deem fit and proper in the interest of justice and fairplay in favour of the Answering Respondent Industry.

THROUGH:



A.R. TAKKAR, SHRIYA TAKKAR, UNNATI ANAND, KAPIL BAKSHI,



HIMANI BHADAURIA, MANAN TAKKAR AND PRINCE SHARMA
ADVOCATES

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(14)

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH AT NEW DELHI

Original Application No. 912 Of 2022

IN THE MATTER OF:

Manav Sewa Sansthan & Anr

...Applicants

VERSUS

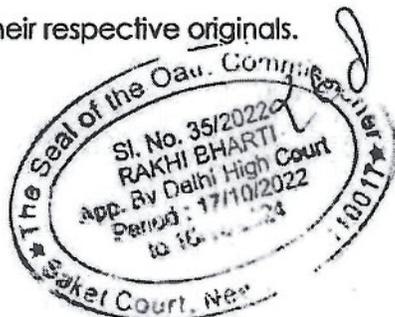
Union of India & ors.

...Respondents

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

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

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



Subhashish Ghosh

DEPONENT

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VERIFICATION:

Verified at New Delhi on 2nd day of February, 2024 that the contents of para 1 and 2 of my affidavit are true and correct to my knowledge. No part of it is false and nothing material has been kept concealed therefrom.

I identify the deponent who has signed in my Presence

02 FEB 2024

Subhashish Ghosh
DEPONENT

The Seal of the Oath Commissioner
SI. No. 35/2022
RAKHI BHARTI
App. By Delhi High Court
Period : 17/10/2022
to 16/10/2024
Saket Court, New Delhi-110017

Certified That the Dependent
Shri/Smt. *Subhashish Ghosh*
S/o, W/o, D/o. Shri. *Pradeep*
R/o. *Pradeep*
Identified by Shri. *Pradeep*
has solemnly affirmed before me at New Delhi
On..... that The contents of this affidavit
which has been read over & explained to him are true
& correct to his knowledge.

Pradeep
Oath Commissioner, New Delhi

02 FEB 2024

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APPENDIX- 1
16

Reliance Petroleum

Balra

Balrampur Chini Mill

बलरामपुर
चीनी मिल

Recently viewed

Home

Bishunapur

बिशुनपुरा

Vishwakarm

विश्वकर्मासि

Balrampur

बलरामपुर स्टेशन

330

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ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/251, Vishwas Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)

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

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

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

ETRC/PM14/TES-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/7103/2022	Date of Report: 07/10/2022
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur (Chemical Division) Village: Bishunipur, Tehsil: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1 Water/ Waste Water	Ground Water	5 Packing Condition	Scaled
2 Sample Description	Handpump (within premises)	6 Sample Collected By	Industry Self
3 Sample received date	03.10.2022	7 Analysis Start Date	03.10.2022
4 Sample Quantity	5.0 liters	8 Analysis End Date	06.10.2022

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 23 ¹ Ed. 2017-4500 H ⁺	7.4	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23 ¹ Ed. 2017-2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	406.8	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 23 ¹⁸ Ed. 2017-4500-NH ₃ F	BDL	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 23 ¹³ Ed. 2017-5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	56.0	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 ¹⁹ Ed. 2017-3500 Mg, B	32.076	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 23 ¹ Ed. 2017-4500 Cl B	32.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 23 ¹⁴ Ed. 2017-4500 F C	0.40	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	BDL	0.1 - 5.0	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1990 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 23 ¹⁴ Ed. 2017-5530 C	BDL	0.001 - 0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 23 ¹⁶ Ed. 2017-4500-SO ₄ ²⁻	30.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 23 ¹³ Ed. 2017-2320 B	296.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 23 ¹³ Ed. 2017-2340 C	272.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 23 ¹ Ed. 2017-3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 23 ¹ Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 23 ¹ Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 23 ¹ Ed. 2017-3120 B (ICP-OES)	0.15	0.05 - 20	0.3	No Relaxation



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

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

Test Report Ref No.: ETRC/EPA/7103/2022

22	Manganese as Mn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.02	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.36	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	E. coli	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	T. coli	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM



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ETRC/PM14/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/7227/2022	Date of Report: 11/11/2022
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur (Chemical Division) Village: Bishunipur, Tehsil: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Handpump (within premises)	6	Sample Collected By	Industry Self
3	Sample received date	07.11.2022	7	Analysis Start Date	07.11.2022
4	Sample Quantity	5.0 liters	8	Analysis End Date	10.11.2022

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 23 rd Ed. 2017-4500 H	7.4	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23 rd Ed. 2017-2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	366.2	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 23 rd Ed. 2017-4500-NH ₃ F	BDL	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 23 rd Ed. 2017-5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	60.8	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 rd Ed. 2017-3500 Mg, B	28.18	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 23 rd Ed. 2017-4500-Cl B	36.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 23 rd Ed. 2017-4500 F C	0.38	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	BDL	0.1 - 5.0	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 23 rd Ed. 2017-5530 C	BDL	0.001 - 0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 23 rd Ed. 2017-4500-SO ₄ ²⁻	28.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	288.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2340 C	268.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.13	0.05 - 20	0.3	No Relaxation

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22	Manganese as Mn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.03	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.52	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	E. coli	MPN/ 100 ml	IS: 1022 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	T. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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Authorized Signatory
(Ritu Garg)
QM

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ETRC/PM14/TES-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/7599/2023	Date of Report: 07/01/2023
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur (Chemical Division) Village: Bishunipur, Tehsil: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Handpump (within premises)	6	Sample Collected By	Industry Self
3	Sample received date	03.01.2023	7	Analysis Start Date	03.01.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	06.01.2023

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	0 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 23 rd Ed. 2017-4500 H	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23 rd Ed. 2017-2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	408.0	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 23 rd Ed. 2017-4500-NH ₃ F	BDL	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 23 rd Ed. 2017-5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	59.2	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 rd Ed. 2017-3500 Mg, B	30.13	0.1 - 200	30	100
10	Chloride as Cl ⁻	mg/l	APHA 23 rd Ed. 2017-4500-Cl ⁻ B	30.0	2.0 - 2000	250	4000
11	Fluoride as F ⁻	mg/l	APHA 23 rd Ed. 2017-4500 F ⁻ C	0.36	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-28): 1986 Reaffirmed: 2019	BDL	0.1 - 5.0	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 23 rd Ed. 2017-5530 C	BDL	0.001 - 0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 23 rd Ed. 2017-4500- SO ₄ ²⁻	26.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	292.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2340 C	272.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.10	0.05 - 20	0.3	No Relaxation

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22	Manganese as Mn	mg/l	APHA 23 ¹¹ Ed. 2017-3120 B (ICP-OES)	0.08	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 ¹¹ Ed. 2017-3120 B (ICP-OES)	0.47	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 23 ¹¹ Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 23 ¹¹ Ed. 2017-3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 23 ¹¹ Ed. 2017-3120 B (ICP-OES)	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 ¹¹ Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 23 ¹¹ Ed. 2017-3120 B (ICP-OES)	BDL	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 23 ¹¹ Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	E. coli	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	T. coli	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

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ETRC/PM14/TE/REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No. ETRC/GW/3863/2023	Date of Report: 04.02.2023
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur Sugar Division P.O.: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1 Water/ Waste Water	Ground Water	5 Packing Condition	Sealed
2 Sample Description	Piezometer No. 1	6 Sample Collected By	Industry self
3 Sample received date	25.01.2023	7 Analysis Start Date	25.01.2023
4 Sample Quantity	5.0 liters	8 Analysis End Date	04.02.2023

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 23 rd Ed. 2017-4500 H ⁺	7.3	1 - 14	6.5 - 8.5	No Relaxation
4	Turbidity	NTU	APHA 23 rd Ed. 2017-2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	370.0	10 - 5000	500	2000
6	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	65.73	2.0 - 600	75	200
7	Magnesium as Mg	mg/l	APHA 23 rd Ed. 2017-3500 Mg, B	21.38	0.1 - 200	30	100
8	Chloride as Cl	mg/l	APHA 23 rd Ed. 2017-4500-Cl B	17.89	2.0 - 2000	250	1000
9	Fluoride as F	mg/l	APHA 23 rd Ed. 2017-4500 F C	0.27	0.02 - 5.0	1.0	1.5
10	Sulphate as SO ₄	mg/l	APHA 23 rd Ed. 2017-4500-SO ₄ ²⁻	3.69	1.0 - 500	200	400
11	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
12	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	280.0	2.0 - 1000	200	600
13	Total Hardness as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2340 C	252.0	5.0 - 800	200	600
14	Copper as Cu	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
15	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.10	0.05 - 20	0.3	No Relaxation
16	Manganese as Mn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.02 - 5.0	0.1	0.3
17	Zinc as Zn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 15	5	15



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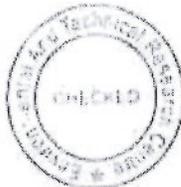
18	Cadmium as Cd	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.003	No Relaxation
19	Lead as Pb	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
20	Total Chromium	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
21	Nickel as Ni	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 5.0	0.02	No Relaxation
22	Arsenic as As	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05
23	Mercury as Hg	µg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.5 - 1000	1.0	No Relaxation

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 (Sandeep Kr Verma)
 Lab-Incharge



Ritu Garg
 Authorized Signatory
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 QM



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ETRC/PM14/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No. ETRC/GW/3867/2023	Date of Report: 04.02.2023
Name /Address/Type of Industry.	M/s Balrampur Chini Mills Limited Unit: Balrampur Sugar Division P.O.: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1 Water/ Waste Water	Ground Water	5 Packing Condition	Sealed
2 Sample Description	Tubewell No. 2	6 Sample Collected By	Industry self
3 Sample received date	25.01.2023	7 Analysis Start Date	25.01.2023
4 Sample Quantity	5.0 liters	8 Analysis End Date	04.02.2023

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 23 rd Ed. 2017-4500 H'	7.5	1 - 14	6.5 - 8.5	No Relaxation
4	Turbidity	NTU	APHA 23 rd Ed. 2017-2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	314.0	10 - 5000	500	2000
6	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	73.74	2.0 - 600	75	200
7	Magnesium as Mg	mg/l	APHA 23 rd Ed. 2017-3500 Mg, B	20.41	0.1 - 200	30	100
8	Chloride as Cl	mg/l	APHA 23 rd Ed. 2017-4500-Cl' B	19.88	2.0 - 2000	250	1000
9	Fluoride as F	mg/l	APHA 23 rd Ed. 2017-4500 F' C	0.32	0.02 - 5.0	1.0	1.5
10	Sulphate as SO ₄	mg/l	APHA 23 rd Ed. 2017-4500-SO ₄ ²⁻	5.52	1.0 - 500	200	400
11	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
12	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	280.0	2.0 - 1000	200	600
13	Total Hardness as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2340 C	268.0	5.0 - 800	200	600
14	Copper as Cu	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
15	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 20	0.3	No Relaxation
16	Manganese as Mn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.02 - 5.0	0.1	0.3
17	Zinc as Zn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.07	0.05 - 15	5	15



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Test Report Ref No. ETRC/GW/3867/2023

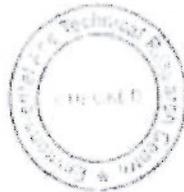
18	Cadmium as Cd	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.003	No Relaxation
19	Lead as Pb	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
20	Total Chromium	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
21	Nickel as Ni	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 5.0	0.02	No Relaxation
22	Arsenic as As	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05
23	Mercury as Hg	µg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.5 - 1000	1.0	No Relaxation

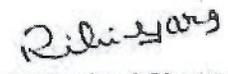
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 Authorized Signatory
 (Sandeep Kr Verma)
 Lab-Incharge




 Authorized Signatory
 (Ritu Garg)
 QM



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ETRC/PM14/TE-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/7890/2023	Date of Report: 08/02/2023
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur (Chemical Division) Village: Bishunipur, Tehsil: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Handpump (within premises)	6	Sample Collected By	Industry Self
3	Sample received date	04.02.2023	7	Analysis Start Date	04.02.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	07.02.2023

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 23 rd Ed. 2017-4500 H	7.4	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23 rd Ed. 2017-2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	374.2	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 23 rd Ed. 2017-4500-NH ₃ F	BDL	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 23 rd Ed. 2017-5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	60.8	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 rd Ed. 2017-3500 Mg, B	32.06	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 23 rd Ed. 2017-4500-Cl B	34.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 23 rd Ed. 2017-4500 F C	0.37	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	BDL	0.1 - 5.0	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 23 rd Ed. 2017-5530 C	BDL	0.001 - 0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 23 rd Ed. 2017-4500- SO ₄ ²⁻	28.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	300.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2340 C	204.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.18	0.05 - 20	0.3	No Relaxation

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22	Manganese as Mn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.04	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.59	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	E. coli	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	T. coli	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
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ETRC/PM14/TEST-REP/FT/38

TEST REPORT SOIL ANALYSIS

Test Report Ref No.: ETRC/EPA/8276/2023	Date of Report: 28/03/2023
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur (Chemical Division) Village: Bishunipur, Tehsil: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1	Sampling Location	Near Bio-Compost site	5	Packing Condition	Sealed
2	Sample Description	Soil Sample	6	Sample Collected By	ETRC
3	Sample received date	22.03.2023	7	Analysis Start Date	22.03.2023
4	Sample Quantity	500 gm	8	Analysis End Date	27.03.2023

TEST REPORT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	IS: 2720 (Part-26): 1987 Reaffirmed: 2016	7.2	1 - 14
2	Electrical Conductivity	µmhos/cm	IS: 14767: 2000 Reaffirmed: 2016	288.0	1.0 - 40000
3	Moisture content	%	IS: 2720 (Part -2): 1973 Reaffirmed: 2015	3.02	1.0 - 50
4	Sulphur	Kg/Hec	IS:14685: 1999 Reaffirmed: 2014	15.35	5.0 - 100
5	Boron	mg/kg	ETRC/ LABSOPS/06	BDL	4.0 - 100
6	Copper	mg/kg	ETRC/ LABSOPS/07	0.30	0.3 - 500
7	Zinc	mg/kg	ETRC/ LABSOPS/08	6.89	1.0 - 500
8	Iron	mg/kg	ETRC/ LABSOPS/09	95.42	5.0 - 500
9	Manganese	mg/kg	ETRC/ LABSOPS/10	10.5	5.0 - 500

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ETRC/PM14/TES-REP/FT/38

TEST REPORT SOIL ANALYSIS

Test Report Ref No.: ETRC/EPA/8276/2023	Date of Report: 28/03/2023
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur (Chemical Division) Village: Bishunipur, Tehsil: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1	Sampling Location	Near Bio-Compost site	5	Packing Condition	Sealed
2	Sample Description	Soil Sample	6	Sample Collected By	ETRC
3	Sample received date	22.03.2023	7	Analysis Start Date	22.03.2023
4	Sample Quantity	500 gm	8	Analysis End Date	27.03.2023

TEST REPORT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH		IS: 2720 (Part-26): 1987 Reaffirmed: 2016	7.2	1 - 14
2	Electrical Conductivity	µmhos/cm	IS: 14767: 2000 Reaffirmed: 2016	288.0	1.0 - 40000
3	Moisture content	%	IS: 2720 (Part -2): 1973 Reaffirmed: 2015	3.02	1.0 - 50
4	Sulphur	Kg/Hec	IS:14685: 1999 Reaffirmed: 2014	15.36	5.0 - 100
5	Boron	mg/kg	ETRC/ LABSOPS/06	BDL	4.0 - 100
6	Copper	mg/kg	ETRC/ LABSOPS/07	0.30	0.3 - 500
7	Zinc	mg/kg	ETRC/ LABSOPS/08	6.89	1.0 - 500
8	Iron	mg/kg	ETRC/ LABSOPS/09	95.42	5.0 - 500
9	Manganese	mg/kg	ETRC/ LABSOPS/10	10.5	5.0 - 500

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ETRC/PM14/TE/REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/8275/2023	Date of Report: 28/03/2023
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur (Chemical Division) Village: Bishunpur, Tehsil: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1 Water/ Waste Water	Ground Water	5 Packing Condition	Sealed
2 Sample Description	Handpump (within premises)	6 Sample Collected By	ETRC
3 Sample received date	23.03.2023	7 Analysis Start Date	23.03.2023
4 Sample Quantity	5.0 liters	8 Analysis End Date	27.03.2023

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 23 rd Ed. 2017-4500 H	7.4	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23 rd Ed. 2017-2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	406.4	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 23 rd Ed. 2017-4500-NH ₃ F	BDL	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 23 rd Ed. 2017-5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	56.0	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 rd Ed. 2017-3500 Mg, B	3.048	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 23 rd Ed. 2017-4500-Cl B	28.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 23 rd Ed. 2017-4500 F C	0.39	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	BDL	0.1 - 5.0	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 23 rd Ed. 2017-5530 C	BDL	0.001 - 0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 23 rd Ed. 2017-4500- SO ₄ ²⁻	26.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	292.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2340 C	276.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.11	0.05 - 20	0.3	No Relaxation

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Test Report Ref No.: ETRC/EPA/8275/2023

22	Manganese as Mn	mg/l	APHA 23 ¹⁴ Ed. 2017-3120 B (ICP-OES)	0.08	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 ¹⁴ Ed. 2017-3120 B (ICP-OES)	0.36	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 23 ¹⁴ Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 23 ¹⁴ Ed. 2017-3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 23 ¹⁴ Ed. 2017-3120 B (ICP-OES)	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 ¹⁴ Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 23 ¹⁴ Ed. 2017-3120 B (ICP-OES)	BDL	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 23 ¹⁴ Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	E. coli	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	
31	T. coli	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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ETRC/PM09/TEST-REP/FT/46

TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No. ETRC/GW/4796/2023	Date of Report: 07.11.2023
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur Sugar Division P.O.: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Piezometer No. 01	6	Sample Collected By	Industry self
3	Sample received date	02.11.2023	7	Analysis Start Date	02.11.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	06.11.2023

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
1	Colour	Hazen	IS: 3025 (Part-4): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed. 2023-4500 H ⁺	7.7	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed. 2023-2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 2023	306.0	10 - 5000	500	2000
6	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	65.73	2.0 - 600	75	200
7	Magnesium as Mg	mg/l	APHA 24 th Ed. 2023-3500 Mg, B	24.30	0.1 - 200	30	100
8	Chloride as Cl	mg/l	APHA 24 th Ed. 2023-4500-Cl ⁻ B	18.01	2.0 - 2000	250	1000
9	Fluoride as F	mg/l	APHA 24 th Ed. 2023-4500 F ⁻ C	0.24	0.02 - 5.0	1.0	1.5
10	Sulphate as SO ₄	mg/l	APHA 24 th Ed. 2023-4500-SO ₄ ²⁻ E	6.107	1.0 - 500	200	400
11	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
12	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed. 2023-2320 B	276.0	2.0 - 1000	200	600
13	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed. 2023-2340 C	264.0	5.0 - 800	200	600
14	Copper as Cu	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
15	Iron as Fe	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	0.10	0.05 - 20	0.3	No Relaxation
16	Manganese as Mn	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	0.04	0.02 - 5.0	0.1	0.3
17	Zinc as Zn	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	0.06	0.05 - 15	5	15
18	Cadmium as Cd	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.003	No Relaxation



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Test Report Ref No. ETRC/GW/4796/2023

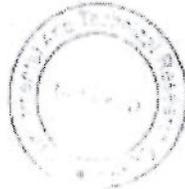
19	Lead as Pb	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
20	Total Chromium	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
21	Nickel as Ni	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.05 - 5.0	0.02	No Relaxation
22	Arsenic as As	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05

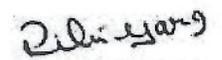
BDL=Below Detection Limit

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

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- Complain register is available in our laboratory.


 Authorized Signatory
 (Sandeep Kr Verma)
 Lab-Incharge




 Authorized Signatory
 (Ritu Garg)
 QM

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ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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 ISO 9001:2015, ISO 14001 : 2015, OHSAS 18001 : 2007 & NABL Accredited Laboratory



ETRC/PM09/TEST-REP/FT/5

TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No. ETRC/GW/4800/2023	Date of Report: 07.11.2023
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur Sugar Division P.O.: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Tubewell No. 02	6	Sample Collected By	Industry self.
3	Sample received date	02.11.2023	7	Analysis Start Date	02.11.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	06.11.2023

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
1	Colour	Hazen	IS: 3025 (Part-4): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed. 2023-4500 H ⁺	7.8	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed. 2023-2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 2023	302.0	10 - 5000	500	2000
6	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	62.52	2.0 - 600	75	200
7	Magnesium as Mg	mg/l	APHA 24 th Ed. 2023-3500 Mg, B	21.38	0.1 - 200	30	100
8	Chloride as Cl ₂	mg/l	APHA 24 th Ed. 2023-4500-Cl ⁻ B	14.01	2.0 - 2000	250	1000
9	Fluoride as F	mg/l	APHA 24 th Ed. 2023-4500 F ⁻ C	0.24	0.02 - 5.0	1.0	1.5
10	Sulphate as SO ₄	mg/l	APHA 24 th Ed. 2023-4500-SO ₄ ²⁻ E	7.035	1.0 - 500	200	400
11	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
12	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed. 2023-2320 B	268.0	2.0 - 1000	200	600
13	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed. 2023-2340 C	244.0	5.0 - 800	200	600
14	Copper as Cu	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
15	Iron as Fe	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	0.08	0.05 - 20	0.3	No Relaxation
16	Manganese as Mn	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	0.04	0.02 - 5.0	0.1	0.3
17	Zinc as Zn	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.05 - 15	5	15
18	Cadmium as Cd	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.003	No Relaxation

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TC-5469

Test Report Ref No. ETRC/GW/4800/2023

19	Lead as Pb	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
20	Total Chromium	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
21	Nickel as Ni	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.05 - 5.0	0.02	No Relaxation
22	Arsenic as As	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05

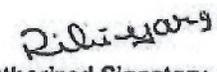
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ETRC/PM09/TEST-REP/FT/45

TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No. ETRC/MW/5161(A)/2024	Date of Report: 24.02.2024
Name /Address/Type of Industry	M/s Balrampur Chini Mills Limited Unit: Balrampur Sugar Division P.O.: Balrampur District: Balrampur (U.P.) - 271201

SAMPLE DETAILS

1 Water/ Waste Water	Waste Water	5 Packing Condition	Sealed
2 Sample Description	ETP Outlet	6 Sample Collected By	Industry self
3 Sample received date	21.02.2024	7 Analysis Start Date	21.02.2024
4 Sample Quantity	5.0 liters	8 Analysis End Date	24.02.2024

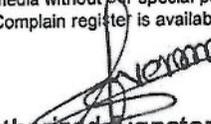
TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	APHA 24 th Ed. 2023-4500 H ⁺	7.1	1 - 14
2	Colour	Hazen	IS: 3025 (Part-4): 2021	25.0	5 - 100
3	Electrical Conductivity	µs/cm	APHA 24 th Ed. 2023 - 2510 - A + B	1319.0	1 - 40000
4	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 2023	884.0	10 - 40000
5	Total Suspended Solid (TSS)	mg/l	APHA 24 th Ed. 2023 - 2540 D	38.6	5.0 - 20000
6	Biochemical Oxygen Demand	mg/l	IS: 3025 (Part-44): 1993 Reaffirmed: 2019	24.4	1.0 - 150000
7	Chemical Oxygen Demand	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2022	132.0	2.0 - 600000
8	Ammoniacal Nitrogen	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	0.5 - 500
9	Copper as Cu	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	0.20	0.03 - 50
10	Iron as Fe	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	0.26	0.05 - 100
11	Manganese as Mn	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	0.08	0.02 - 35
12	Zinc as Zn	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	0.56	0.05 - 80
13	Cadmium as Cd	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.003 - 50
14	Lead as Pb	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.01 - 40
15	Total Chromium	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	0.04	0.03 - 300
16	Nickel as Ni	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.05 - 80
17	Arsenic as As	mg/l	APHA 24 th Ed. 2023-3120 B (ICP-OES)	BDL	0.01 - 15

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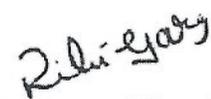
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