



Date: 12/07/2023

To,
The Director,
Regional Office Lucknow,
Ministry of Environment, Forest & Climate Change (MoEF&CC),
Kendriya Bhawan, 5th Floor,
Sector-H, Aliganj, Lucknow-226024

Subject: Request for "Certified Compliance Report" of existing Environmental Clearance expansion of Sugar Mill Crushing Capacity From 7200 TCD & 10000 TCD Along with Captive Co-Generation Power Plant from Existing Capacity 9.7 MW 39.7 MW (Bagasse Based) at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh, by M/s **Gobind Sugar Mills Sugar Division**

Environment Clearance Ref No.- /Parya/SEAC/1745/2013/OSD(T), dated 07/08/2014

Dear Sir,

With reference to above subject, we would like to inform you that we have already obtained Environmental Clearance expansion of Sugar Mill Crushing Capacity From 7200 TCD & 10000 TCD Along with Captive Co-Generation Power Plant from Existing Capacity 9.7 MW 39.7 MW (Bagasse Based) at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh, by M/s Gobind Sugar Mills Sugar Division via EC No.- /Parya/SEAC/1745/2013/OSD (T), dated 07/08/2014.

We are submitting the six-monthly compliance of existing Environmental Clearance to the Regional MoEF&CC office, Lucknow. Copy of Environmental Clearance compliance along with all necessary annexure is enclosed with this letter.

Hence, it is requested that kindly considered our EC compliance report and grant us certified compliance report for which we shall be highly obliged.

Thanking You,
Your's Faithfully

Authorized Signatory

GOBIND SUGAR MILL - AIRA

A Division of ZUARI INDUSTRIES LIMITED (FORMERLY ZUARI GLOBAL LIMITED)

CIN No.: L65921GA1967PLC000157

Factory : P.O. Alra Estate, Dist. Lakhimpur Kheri – 262 722, Uttar Pradesh. Tel: +91 58742 82225

Corp. Off : 5th Floor, Tower - A, Global Business Park, M. G. Road, Sector 26, Gurugram -122002, Haryana India

Tel: +91124 482 7800 Fax: +91124 4212046

Regd. Off : Jai Kisaan Bhawan, Zuarinagar, Goa - 403726

Website: www.adventz.com, www.zuarisugar.com ; e-mail: lg.gsm1@adventz.com

Date: 08.07.2023

To,
The Director
Ministry of Environment, Forest & Climate Change
Kendriya Bhawan, 5th Floor, Sector "H" Aliganj
Lucknow (Uttar Pradesh)

Subject: Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar Mill Crushing Capacity From 7200 TCD & 10000 TCD Along with Captive Co-Generation Power Plant from Existing Capacity 9.7 MW 39.7 MW (Bagasse Based) by M/s Gobind Sugar Mills Limited at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh for the period of October, 2022 to March, 2023.

EC Ref. No: .../Parya/SEAC/1745/2013/OSD(T), Dated: 07th August, 2014

Reg: Submission of Six-Monthly Compliance Report for Period of October, 2022 to March, 2023.

Dear Sir,

This is in connection to above mentioned subject we are hereby submitting the six-monthly compliance report of the conditions of Environmental Clearance for Expansion of Existing Sugar Mill Crushing Capacity From 7200 TCD & 10000 TCD Along with Captive Co-Generation Power Plant from Existing Capacity 9.7 MW 39.7 MW (Bagasse Based) by M/s Gobind Sugar Mills Limited, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh for the period of October, 2022 to March, 2023.along with annexures as follows:

1. Annexure-01: Copy of CTO (Air and Water),
 2. Annexure-02: Copy of Environmental Clearance
 3. Annexure-03: Test Report
 4. Annexure-04: Employees Health status Report
 5. Annexure-05: CGWA NOC
 6. Annexure-06: Green belt photographs
 7. Annexure-07: Details of CSR Activity
- Requesting you to accept soft copy reports submitted for information please.

Thanking you,
Yours sincerely,



Authorized Signatory

GOBIND SUGAR MILL - AIRA

A Division of ZUARI INDUSTRIES LIMITED (FORMERLY ZUARI GLOBAL LIMITED)

CIN No.: L65921GA1967PLC000157

Factory : P.O. Aira Estate, Dist. Lakhimpur Kheri – 262 722, Uttar Pradesh. Tel: +91 58742 82225

Corp. Off : 5th Floor, Tower - A, Global Business Park, M. G. Road, Sector 26, Gurugram -122 002, Haryana India

Tel: +91124 482 7800 Fax: +91124 4212046

Regd. Off : Jal Kisaan Bhawan, Zuarinagar, Goa - 403726

Website: www.adventz.com, www.zuarisugar.com ; e-mail: lg.gsml@adventz.com

**SIX-MONTHLY ENVIRONMENTAL COMPLIANCE
REPORT OF STIPULATED CONDITIONS OF
ENVIRONMENTAL CLEARANCE**

(October, 2022 to March, 2023)

For

**Expansion of Existing Sugar Mill Crushing Capacity From 7200 TCD
& 10000 TCD Along with Captive Co-Generation Power Plant from
Existing Capacity 9.7 MW 39.7 MW (Bagasse Based)**

By

Gobind Sugar Mills Limited

At

**Village – Khamaria Pandit, Tehsil – Dhaurahra,
Block – Isha nagar, District – Lakhimpur, Uttar Pradesh**

For Submission to:

**Ministry of Environment, Forest & Climate Change
(Regional Office, Lucknow)**

**Submitted By:
M/s Gobind Sugar Mills Ltd.**

TABLE OF CONTENT

Sr. No	Title	Page No.
CHAPTER-1: INTRODUCTION AND PROJECT DESCRIPTION		04
CHAPTER-2: COMPLIANCE OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE		05 - 10
CHAPTER-3: DETAILS OF ENVIRONMENTAL MONITORING		11 - 35
3.1	Ambient air Quality Monitoring	11
3.1.1	Ambient air Quality Monitoring Stations	11
3.1.2	Ambient Air Quality Monitoring Methodology	11
3.1.3	Ambient Air Quality Monitoring Results at Near Main Gate (Factory Premises) (Station No: 1)	12
3.1.4	Ambient Air Quality Monitoring Results at Village: Allipur (Station No: 2)	13
3.1.5	Ambient Air Quality Monitoring Results at Village: Khamaria Pandit (Station No: 3)	13
3.1.6	Ambient Air Quality Monitoring Results at Village; Aira (Station No: 4)	14
3.1.7	Discussion on Ambient Air Quality in the Study Area	14
3.2	Stack Emission Monitoring	17
3.2.1	Stack Emission Monitoring Methodology	17
3.3	Ambient Noise monitoring	17
3.3.1	Ambient Noise Monitoring Locations	17
3.3.2	Methodology of Noise Monitoring	17
3.3.3	Ambient Noise Monitoring Results	17
3.3.4	Discussion on Ambient Noise Levels in the Study Area	18
3.4	Ground Water Quality Monitoring	19
3.4.1	Ground water Quality Monitoring Locations	19
3.4.2	Methodology of ground water Quality Monitoring	19
3.4.3	Ground water Quality Monitoring Results	19
3.5	Soil Monitoring	26
3.5.1	Soil Monitoring Locations	26
3.5.2	Methodology of Soil Monitoring	26
3.5.3	Soil Monitoring Results	26
3.5.4	Discussion on Soil Characteristics in the Study Area	27
3.6	Water Analysis ETP Inlet & Outlet Monitoring	27

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh	EC Compliance October 2022 to March, 2023
--	--

Sr. No.	List of Table	Page No.
1.	Table-3.1: Details of Ambient Air Quality Monitoring Stations	11
2.	Table-3.2: Techniques used for Ambient Air Quality Monitoring	12
3.	Table-3.3: Ambient Air Quality Monitoring Results at Near Main Gate (Factory Premises) (Station No: 1)	12
4.	Table-3.4: Ambient Air Quality Monitoring Results at Village: Allipur (Station No: 2)	13
5.	Table-3.5: Ambient Air Quality Monitoring Results at Village: Khamaria Pandit (Station No: 3)	13
6.	Table-3.6: Ambient Air Quality Monitoring Results at Village; Aira (Station No: 4)	14
7.	Table-3.7: Details of Stack Emission Monitoring Results	17
8.	Table-3.8: Details of Ambient Noise Monitoring Stations	17
9.	Table-3.9: Ambient Noise Monitoring Results	18
10.	Table-3.10: Details of Water Quality Monitoring Station	19
11.	Table-3.11: Ground water Quality Results at Handpump (within premises) (October, 2022)	20
12.	Table-3.12: Ground water Quality Results at Handpump (within premises) (November, 2022)	21
13.	Table-3.13: Ground water Quality Results at Handpump (within premises) (December, 2021)	22
14.	Table-3.14: Ground water Quality Results at Handpump (within premises) (January, 2023)	23
15.	Table-3.15: Ground water Quality Results at Handpump (within premises) (February, 2023)	24
16.	Table-3.16: Ground water Quality Results at Handpump (within premises) (March, 2023)	25
17.	Table-3.17: Details of Soil Monitoring Stations	26
18.	Table-3.18: Physico-Chemical Characteristics of Soil at Near Factory Premises	26
19.	Table-3.19: Physico-Chemical Characteristics of Soil at Near Khamaria Pandit village	
20.	Table 3.20 (A): ETP Inlet Monitoring Result	27
21.	Table 3.20 (B): ETP Outlet Monitoring Result	27

Sr. No.	List of Figures	Page No.
1.	Figure-3.1: Graphs Showing PM ₁₀ Concentration at all sites	15
2.	Figure-3.2: Graphs Showing PM _{2.5} Concentration at all sites	15
3.	Figure-3.3: Graphs Showing SO ₂ Concentration at all sites	16
4.	Figure-3.4: Graphs Showing NO _x Concentration at all sites	16
5.	Figure-3.5: Day and Night Time noise Level at Near admin block	18

Chapter-1

Introduction and Project Description

Six monthly environmental compliance / status report is submitted for Expansion of Existing Sugar Mill Crushing Capacity From 7200 TCD & 10000 TCD Along with Captive Co-Generation Power Plant from Existing Capacity 9.7 MW 39.7 MW (Bagasse Based) by Gobind Sugar Mills Limited for September 2022. The Project is located at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh. Prior Environment Clearance was obtained from SEIAA, U. P. wide Ref. no.: .../Parya/SEAC/1745/2013/OSD(T), dated 07th August, 2014. Consent to operate for Water has already been obtained for the project Vide Ref No. - 141503/UPPCB/Lucknow (UPPCBRO)/CTO/water/Lakhimpur Khiri/2021, dated 28/12/2021 and Consent to operate for Air Vide Ref No. 141511/UPPCB/Lucknow (UPPCBRO)/CTO/air/Lakhimpurkhiri/2021, dated 28/12/2021 for validity upto 31/12/2023. Copy of CTO is attached here as **Annexure-1**.

Specific and general conditions stipulated in Environment Clearance have been complied during construction and post construction phases.

Environmental mitigation measures described in Environmental Management Plan are being implemented operation phase. M/s **Gobind Sugar Mills Limited** management team is fully conscious about Environmental Management and enhancing green belt development in project surrounding area.

Six monthly compliance/status reports for October, 2022 to March, 2023 for conditions stipulated in the Environmental Clearance letter issued by MoEF&CC are enclosed as **Annexure-2**. Photographs view of implemented mitigation measures are also attached for the ready reference as Photo Documentation.

CHAPTER-2
COMPLIANCE OF STIPULATED CONDITIONS OF
ENVIRONMENTAL CLEARANCE

Name of the Project: Expansion of Existing Sugar Mill Crushing Capacity From 7200 TCD & 10000 TCD Along with Captive Co-Generation Power Plant from Existing Capacity 9.7 MW 39.7 MW (Bagasse Based) by Gobind Sugar Mills Limited at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh

Clearance Letter No: .../Parya/SEAC/1745/2013/OSD(T), dated 07th August, 2014.

Period of Compliance Report: (October, 2022 to March, 2023).

Sl. No.	Conditions	Reply
1	The project authorities must strictly adhere to the stipulations made by the Uttar Pradesh State Pollution Control Board and the State Government.	The project authorities strictly adhere to the stipulations made by the Uttar Pradesh State Pollution Control Board and the State Government.
2	No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA UP.	No further expansion or modifications in the plant will be carried out without prior approval of the SEIAA UP/MoEF & CC.
3	The gaseous emission from various process units shall conform to the load/mass-based standards notified by this Ministry on 19 th May, 1993 and standards prescribed from time to time. The State Pollution Control Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	Unit is following the stack emission standard as per the Pollution Control Board norms. Unit has done arrangements of regular testing of emissions from 3 rd party (EPA approved Laboratory). Test results are enclosed as Enclosure -3.
4	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentrations of PM ₁₀ , PM _{2.5} , SO ₂ and NO _x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to UPPCB/CPCB and Regional Office of MoEF at Lucknow once in six months.	For ambient quality monitoring stations were established in the down-wind directions (max GLC also). Test results of the same are enclosed as Enclosure-3.
5	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31 st December, 1993 or as amended from time to time. The treated wastewater shall be recycled in the plant and there shall not be any discharge of industrial waste water as committee by the project proponent during the presentation.	Industrial wastewater is properly collected, treated so as to conform to the standards prescribed by CPCB from time to time. Unit is working on the principle of maximum recycle and reuse.
6	The overall noise levels in and around the plant	The overall noise levels in and around

<p>Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh</p>	<p>EC Compliance October 2022 to March, 2023</p>
---	---

	<p>area shall be kept well within the standards (85 dBA) by providing noise control measures, including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).</p>	<p>the plant area are kept within the standards (85 dBA). The ambient noise levels conforms to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time). Concerning test reports are enclosed as enclosures-3.</p>
7	<p>Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.</p>	<p>Occupational health surveillance of the workers has been done on a regular basis and records maintained as per the Factories Act. Employee health status Report enclosed as enclosures-4.</p>
8	<p>The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.</p>	<p>Unit has valid NOC from CGWA and unit is complying the NOC conditions regarding rain water harvesting. Copy of the CGWA NOC is enclosed as enclosure-5.</p>
9	<p>The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economy development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.</p>	<p>The project proponent is complies with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company undertakes development programmes, educational programmes, drinking water supply and health care etc.</p>
10	<p>As proposed, budget shall be earmarked towards capital cost and recurring cost/annum for environmental pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of MoEF at Lucknow. The funds so provided shall not be diverted for any other purpose.</p>	<p>Unit has earmarked capital towards environmental pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. Unit has installed all the EPCD as per the project.</p>
11	<p>A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila/Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.</p>	<p>Condition complied.</p>
12	<p>The project shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data</p>	<p>Unit has uploaded EC copy on its website and the copy of compliance report (of EC) are sent to concerned</p>

<p>Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh</p>	<p>EC Compliance October 2022 to March, 2023</p>
---	---

	<p>on their website and shall update the same periodically . It shall simulataneiously be sent to the Regional Office of the the MoEF at Lucknow, CPCB and UPPCB. The criteria pollutant levels namely: PM₁₀, PM_{2.5}, SO₂, NO_x (ambient levels as well as stack emissions) for the projects shall be monitored and displayed at a convenient locations near the main gate of the company in the public domain.</p>	<p>departments.</p>
<p>13</p>	<p>The project proponent shall also submits six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF, CPCB and UPPCB. The Regional Office of MoEF at Lucknow / CPCB/ SPCB shall monitor the stipulated conditions.</p>	<p>Condition noted and complied.</p>
<p>14</p>	<p>The Environmental statement for each financial year ending 31st March in Form –V as is mandate to be submitted by the project proponent to the concered State Pollution Control Board as Prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmretal conditions and shall also be sent to the Regional Office of the MoEF at Lucknow</p>	<p>Environmental statement is regularly submitted to State Pollution Control Board.</p>
<p>15</p>	<p>The Project Proponent shall inform the Public that the project has been accorded Environmental Clearance by the SEIAAUP and copies of the clearance letter are available with the SPCB and may also bre seen at website of the SEIAAUP at seiaaup.com. This shall be adverstised within seven days fromk the date of isseus of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locally concered and a copy of the same should be forwarded to the Regional office at Lucknow.</p>	<p>Unit has informed public via local and regional newspapers regarding grant of EC.</p>
<p>16</p>	<p>Project authorities shall inform the Regional Office of MoEF, Lucknow as well as the SEIAA the date of Financial closure and final aapproval of the concered authorities and the date of commencing the land development work.</p>	<p>Noted and complied.</p>

Specific Condition:

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh

EC Compliance
October 2022 to
March, 2023

Sr.No.	Conditions	Reply
1	Filter press should be installed to handle the sludge.	Unit has installed filter press to handle the sludge.
2	Two continuous ambient Air quality Monitoring Station one in up wind and other in predominant wind direction shall be installed immediately after the plant is in operation.	For ambient quality monitoring stations were established in the down-wind directions. Test results of the same are enclosed as Enclosure-3.
3	Flow measurement device should be installed at the outlet of ETP.	Flow measurement device is installed at the outlet of ETP.
4	Proposed Expansion of cane crushing and co-generation plant to reduce the emission of particulate matter and gases Electrostatic precipitator shall be installed and connected with Boiler duct.	Unit has installed ESP as APCS.
5	To control the air emission from power plant a stack of about 72 mts from the ground level for the boiler and 8 mt. above ground for DG sety would be provided. The SPM emission from the stack shall be less than 150 mg/nm ³ . The exhaust stream from the boiler will be used for the process.	Unit has installed stack height of 72 mts from the ground level and the SPM emissions are well within in the stipulated norms. Test results are enclosed as Enclosure -3.
6	For minimizing the escape of SO ₂ from the Sulpherisation process, cane juice will be used as scrubber media which will be reused in the process.	Condition noted and complied.
7	Total fresh Water requirtement shall not excced 7000 KL/day on 10,000 TCD and shall be met from the ground water through tube well. Waste water generation shall not be more than 1000 m ³ /day in season and 200 m ³ /day in off-season. Permission shall be obtained from the Competent Atuhortity for withdrawal of ground water. No additional Bore well be installed.	Unit has valid NOC from CGWA regarding ground water abstraction. Copy of the CGWA NOC enclosed as Enclosure-5
8	The Process and domestic effluents shall not exceed 1000 m ³ /d and 16 m ³ /d respectively. After treatment through Diffusion Based Activated Sludge Process, the waste water will be subjected to secondary Clarifier and sludge drying bed based on activated sludge process followed by tertiary treatment. The BOD of the treated effluent shall be more than 30 mg/l. About 80% of the treated effluent will be recycled in the process and 20% will be utilized in irrigation. No effluent shall be discharged outside the factory premiees and zero discharge shall be strictly followed.	Unit is working on the principle of the maximum reuse and recycling of treated water. Unit has installed ETP based on activated sludge process for treatment of effluent to achieve stipulated standards.
9	Molasses shall be stored in MS tanks or in	Unit has constructed MS tank for

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh

**EC Compliance
October 2022 to
March, 2023**

	<p>Pucca Lagoons. The Lagoons shall have propoer lining with HDPE and shall be kept in proper conditions to prevent ground water pollution.</p> <p>As per the CPCB/ SPCB recommendations, storage shall not exceed 15 days capacity.</p>	<p>storage of molasses (storage is of 15 days capacity).</p>
10	<p>The solid waste generated from the process will be mainly bagasse, fliter cake (press mud) and boiler ash, 100 % Bagasse shall be reused as fuel in the boiler and excess bagasse, if any shall be sent to other sugar plants for power generation. Molasses will be sent to the Distillery. 32 TPD of boiler Ash shall be sold to brick manufacturers. Sludge from the scrubber shall be dried and disposed of in the low lying areas. ETP sludge shall be used as fertilizer by the farmers. Used batteries and waste Lubricating oil shall be sold to authorized recycler.</p>	<p>Boiler ash along with filter cake, sludge is used as manure.</p>
11	<p>Adequate green belt shall be provided all around the plant premises (approximately 33 % of the area.)</p>	<p>Unit has maintained 33 % of green belt area. Green belt photographs are enclosed as enclosure-6</p>
12	<p>The industry shall take adequate water conservation measures including providing minimum six (06) RWH pits of size 2.34 × 2.34 ×3 at peak rainfall intensity.</p>	<p>Unit has valid NOC from CGWA and unit is complying the NOC conditions regarding rain water harvesting. Copy of the CGWA NOC is enclosed as enclosure-5.</p>
13	<p>CREP Guidelines for the Sugar industries shall be followed by the unit. The capacity of Lagoon shall be as per the CPCB Guidelines.</p>	<p>Condition noted and complied.</p>
14	<p>Commitments made during the public Hearing shall be complied with.</p>	<p>Commitments made during public hearing were complied.</p>
15	<p>Environmental Corporate Responsibility (ECR) plan along with budgetary provision amounting to 2% of total project profit shall be submitted (within the month) on need base assessment study in the study area. Income generating measures which can help in upliftment pf weaker section of society consistent with the traditional skills of the people indentified. The programmes can include activities such as old age homes, rain water harvesting provisions in nearby areas, development of fodder farm, fruit bearing orchards, vocational training etc. In addition, vocational training for individuals shall be imparted so that poor section of society can take up self-employment and jobs. Separate budget for community development activities and income generating programmers shall be</p>	<p>Unit is regularly have budgetary provision amounting to 2 % of total benefit. Unit is regularly organising programmes related to social awareness and safeguards the environment.</p>

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh

**EC Compliance
October 2022 to
March, 2023**

	specified.	
16	The company shall provide housing for construction labour within the site with all necessary infrastrucure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures and to be removed after the completion of the project.	The temporary housing facilities were provided to the construction labours. As it was expansion project, unit was already having residence facilities.
17	All storm water drain and conveyor belt should be covered.	Condition noted.
18	Any litigation pending in the Courts of law it shall be binding on project proponant.	No any litigation pending in the courts of law.
19	Parking facility should be provided within the project premises.	Parking facility is provided within the project premises..
20	Any appeal against this environmental clearance shall be with the National Green Tribunal, if prefered within a period of 30 days as prescribed under section 11 of the National Environment Appellate Authority Act, 1997.	Condition Noted.
21	All the exisitng boilers of capacities 20 TPH, 25 TPH and 15 TPH shall be dismached as mentioned during the presentation.	Condition Noted and complied.

Chapter-3

Details of Environmental Monitoring

3.1 AMBIENT AIR QUALITY MONITORING

3.1.1 Ambient air Quality Monitoring Stations

Ambient air quality monitoring has been carried out at 4 locations; Near Main Gate (Factory Premises) of the project site, village: Allipur village, Khamaria Pandit village and in village; Aira. This will enable to have a comparative analytical understanding about air quality and the changes in the air environment in the study area with respect to the condition prevailing. The location of the ambient air quality monitoring stations is given in Table -3.1: -

Table-3.1:

Details of Ambient Air Quality Monitoring Stations

Sr. No	Location Code	Location Name/Description	Environmental Setting of surrounding	Date of Monitoring
1.	AAQ-1	Near Main Gate (Factory Premises) (Station No: 1)	Industrial	04.01.2023 to 05.01.2023
2.	AAQ-2	Village: Allipur (Station No: 2)	Residential	04.01.2023 to 05.01.2023
3.	AAQ-3	Village: Khamaria Pandit (Station No: 3)	Residential	05.01.2023 to 06.01.2023
4.	AAQ-4	Village; Aira (Station No: 4)	Residential	05.01.2023 to 06.01.2023

AAQ-1: Near Main Gate (Factory Premises) (Station No: 1)

The sampler was placed near Main gate and was free from any obstructions. Surroundings of the sampling site represent industrial environmental setting.

AAQ-2-4: Village: Allipur, Khamaria Pandit, and Aira,

The sampler was placed at village: Allipur, Khamaria Pandit, and Aira were free from any obstructions. Surroundings of the sampling site represent village environmental setting.

3.1.2 Ambient Air Quality Monitoring Methodology

Monitoring was conducted in respect of the following parameters:

- Respirable Suspended Particulate Matter (PM₁₀)
- Fine Particulate Matter (PM_{2.5})
- Sulphur Dioxide (SO₂)
- Oxides of Nitrogen (NO_x)

The duration of sampling of PM₁₀, PM_{2.5}, SO₂ and NO_x was 24 hourly continuous sampling per day duration monitoring. The monitoring was conducted for one day at the location. This is to allow a comparison with the National Ambient Air Quality Standards.

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh	EC Compliance October 2022 to March, 2023
--	--

The air samples were analyzed as per standard methods specified by Central Pollution Control Board (CPCB) and IS: 5182. The techniques used for ambient air quality monitoring and minimum detectable levels are given in **Table-3.2**.

Fine Particulate Sampler instruments have been used for monitoring Particulate Matter 2.5 (PM_{2.5} i.e. <2.5 microns), and Respirable Dust Sampler with gaseous sampling attachment was used for sampling Respirable fraction (<10 microns), gaseous pollutants like SO₂, and NO_x.

Table-3.2
Techniques used for Ambient Air Quality Monitoring

Sr. No	Parameter	Technique	Range of testing /limit of detection
1.	Respirable Suspended Particulate Matter (PM ₁₀)	Respirable Dust Sampler, with cyclone separator, Gravimetric Method	5.0 - 1200
2.	Fine Particulate Matter (PM _{2.5})	Fine Particulate Sampler, Gravimetric Method	2.0 - 500
3.	Sulphur dioxide	Modified West and Gaeke	5.0 - 1050
4.	Oxides of Nitrogen	Jacob & Hochheiser	6.0 - 750

3.1.3 Ambient Air Quality Monitoring Results at Near Main Gate (Factory Premises) (Station No: 1)

The detailed on-site monitoring results of PM_{2.5}, PM₁₀, SO₂ and NO_x are presented in **Table-3.3**.

Table-3.3
Ambient Air Quality Monitoring Results at Near Main Gate (Factory Premises) (Station No: 1)

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	84.9	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	52.15	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	14.29	5.0 - 1050	For 24 hour =80
4	Oxides of nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	20.38	6.0 - 750	For 24 hour =80

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh	EC Compliance October 2022 to March, 2023
---	---

3.1.4 Ambient Air Quality Monitoring Results at Village: Allipur (Station No: 2)

The detailed on-site monitoring results of PM_{2.5}, PM₁₀, SO₂ and NO_x are presented in Table-3.4.

Table-3.4
Ambient Air Quality Monitoring Results at Village: Allipur (Station No: 2)

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	79.2	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	49.82	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	13.06	5.0 - 1050	For 24 hour =80
4	Oxides of nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	17.89	6.0 - 750	For 24 hour =80

3.1.5 Ambient Air Quality Monitoring Results at Village: Khamaria Pandit (Station No: 3)

The detailed on-site monitoring results of PM_{2.5}, PM₁₀, SO₂ and NO_x are presented in Table-3.5.

Table-3.5
Ambient Air Quality Monitoring Results at Village: Khamaria Pandit (Station No: 3)

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	79.5	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	49.71	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	12.53	5.0 - 1050	For 24 hour =80
4	Oxides of nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	17.86	6.0 - 750	For 24 hour =80

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh	EC Compliance October 2022 to March, 2023
---	---

3.1.6 Ambient Air Quality Monitoring Results at Village; Aira (Station No: 4)

The detailed on-site monitoring results of PM_{2.5}, PM₁₀, SO₂ and NO_x are presented in Table-3.6.

Table-3.6
Ambient Air Quality Monitoring Results at Village; Aira (Station No: 4)

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	77.5	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	48.52	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	13.15	5.0 - 1050	For 24 hour =80
4	Oxides of nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	17.56	6.0 - 750	For 24 hour =80

3.1.7 Discussion on Ambient Air Quality in the Study Area

The value of PM₁₀ at Ambient Air Monitoring Station No: 1, 2, 3 & 4 are 84.9 µg/m³, 79.2 µg/m³, 79.5 µg/m³ & 77.5 µg/m³ respectively which were within permissible limit of 100 µg/m³ and PM_{2.5} levels are 52.15 µg/m³ at Station No: 1, 49.82 µg/m³ at Station No: 2, 49.71 µg/m³ at Station No: 3 and 48.52 µg/m³ at Station No: 4, were also observed within permissible limit of 60 µg/m³ (for residential, rural and other areas as stipulated in the National Ambient Air Quality Standards). SO₂ ranges between 12.53 µg/m³ to 14.29 µg/m³ and NO_x ranges between 17.56 µg/m³ to 20.38 µg/m³ was also observed within the corresponding stipulated limits (Limit for SO₂ and NO_x; 80 µg/m³) at all of the 3 monitoring locations. Station wise variation of ambient air quality parameters has been graphically shown in Figure-3.1 to 3.4.



Figure-3.1: Graphs Showing PM₁₀ Concentration at all sites

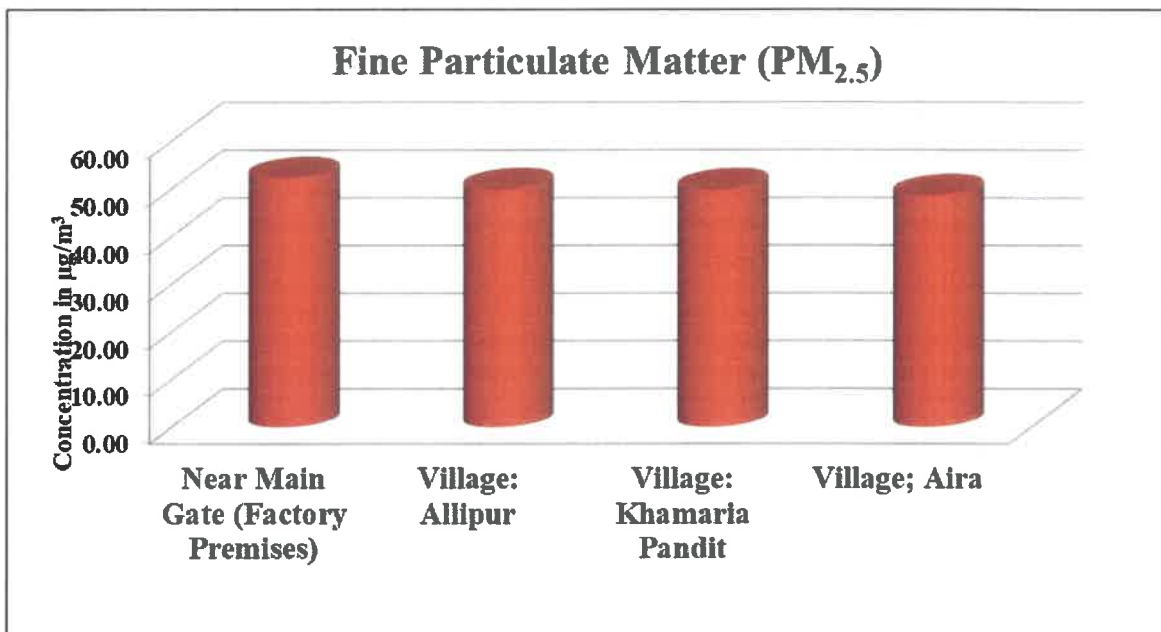


Figure-3.2: Graphs Showing PM_{2.5} Concentration at all sites

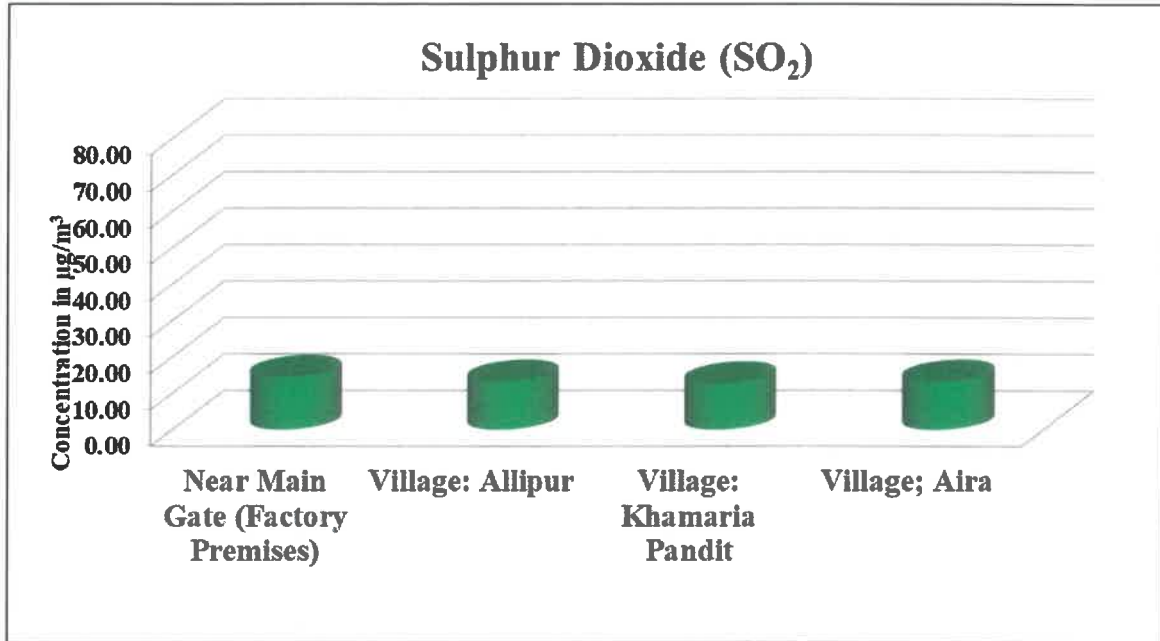


Figure-3.3: Graphs Showing SO₂ Concentration at all sites

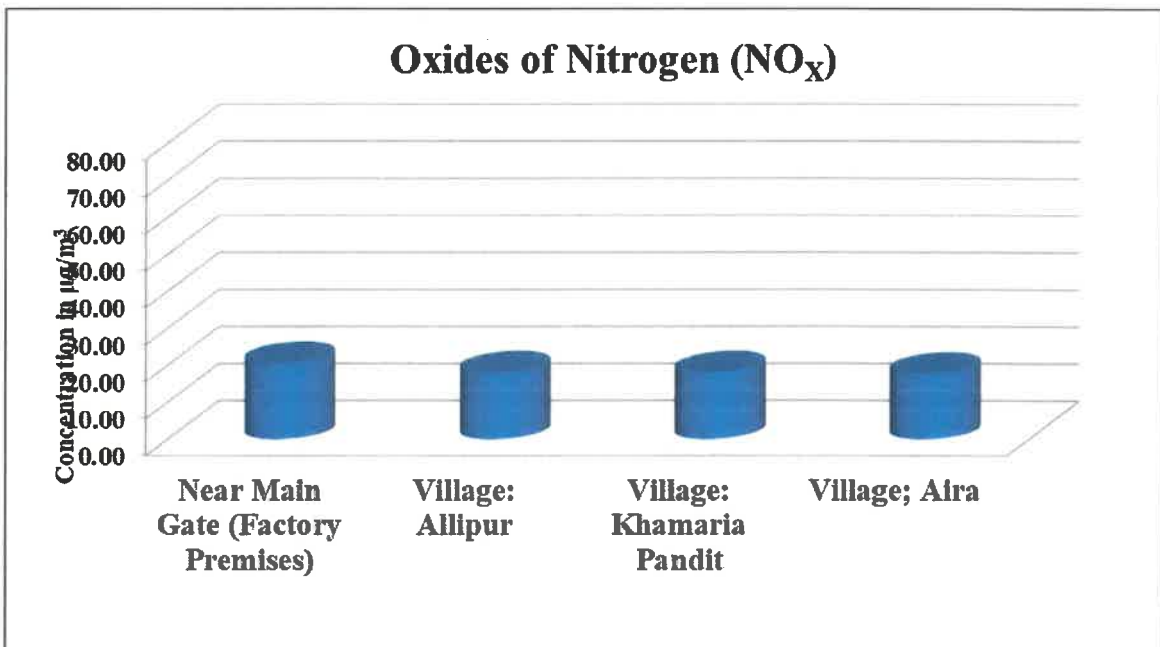


Figure-3.4: Graphs Showing NO_x Concentration at all sites

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh	EC Compliance October 2022 to March, 2023
---	---

3.2 STACK EMISSION MONITORING

Stack Emission monitoring was carried out by EPA approved Laboratory on date 04.01.2023 for the installed 70 TPH & 150 TPH boiler (attached with Bag Filters & ESP as air pollution control device with a stack height of 40 meter & 72 meter).

3.2.1 Stack Emission Monitoring Methodology

Monitoring was conducted in respect of the following parameters:

- Particulate Matter (PM)

The Method used for Stack Emission monitoring and range of testing with CPCB standard are given in Table-3.7.

Table-3.7:
Details of Stack Emission Monitoring Results

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
Stack-1	Particulate Matter	mg/Nm ³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	75.8	2.0 - 1000	150
Stack-2	Particulate Matter	mg/Nm ³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	76.2	2.0 - 1000	150

3.3 AMBIENT NOISE MONITORING

3.3.1 Ambient Noise Monitoring Locations

The main objective of noise monitoring in the study area is to assess the present ambient noise levels near project site due to various industrial activities and increased vehicular movement. A preliminary reconnaissance survey has been undertaken to identify the major noise generating sources in the area. Ambient noise monitoring was conducted at 1 location as given in Table-3.8.

Table-3.8:
Details of Ambient Noise Monitoring Stations

Sr. No	Location Code	Location name and description	Date of Monitoring
1.	NQ-1	Project site	05/01/2023 to 06/01/2023

3.3.2 Methodology of Noise Monitoring

Noise levels were measured using sound level meter. Noise level monitoring was carried out continuously for 24-hours with one-hour interval starting at 06:00 hrs to 06:00 hrs next day. The noise levels were monitored on working days only. During each hour Leq were directly computed by the instrument based on the sound pressure levels. Monitoring was carried out at 'A' response.

3.3.3 Ambient Noise Monitoring Results

The location wise ambient noise monitoring results is summarized in Table-3.9. The noise levels are graphically presented in Figure-3.5.

Table-3.9: Ambient Noise Monitoring Results

Ambient Noise Level				
Sr. No.	Parameter	Unit	Results	Results
			DAY TIME (6:00 AM - 10:00 PM)	NIGHT TIME (10:00 PM - 6:00 AM)
1	Equivalent sound level	dB(A)	61.4	50.18

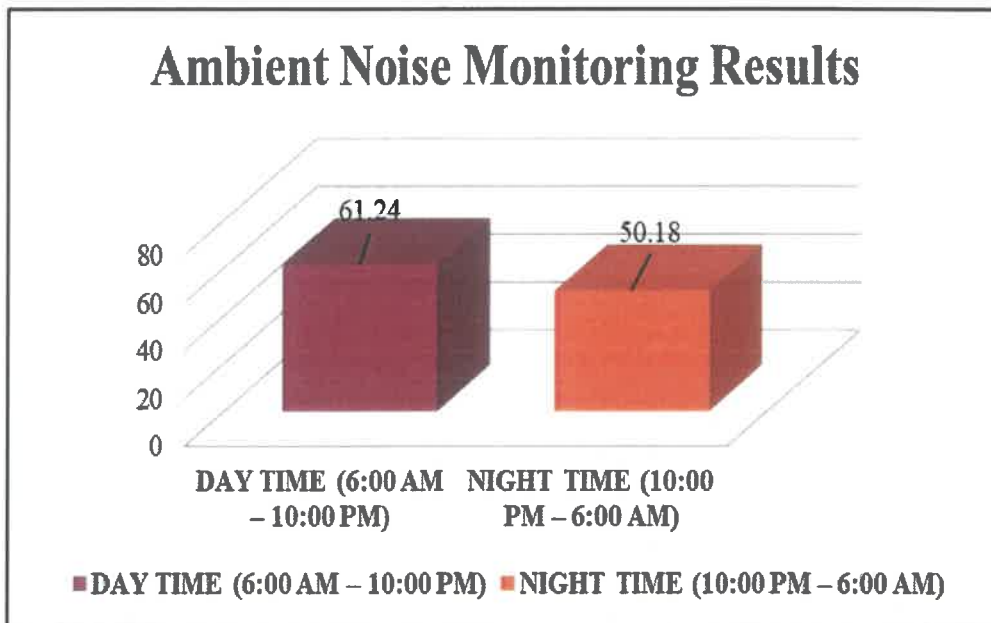


Figure-3.5: Day and Night Time noise Level at Near admin block

Noise Standards as per CPCB Schedule rule 3(1) and 4(1)			
Area Code	Category of Area/Zone	Limits in dB(A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

3.3.4 Discussion on Ambient Noise Levels in the Study Area

Day Time Noise Levels (L_{day}):

The day time noise level at monitoring station was found 61.24 dB(A), which is within limits prescribed for industrial area i.e. 75 dB (A).

Night Time Noise Levels (L_{night}):

The night time noise level at monitoring station was found 50.18 dB(A), which is within limit prescribed for industrial area i.e. 70 dB (A).

3.4 GROUND WATER QUALITY MONITORING

3.4.1 Ground water Quality Monitoring Locations

Keeping in view the importance of ground water, sample of ground water was collected from the project site for the assessment of impacts of the project on the groundwater quality.

Water sample was collected from the project site. The sample was analyzed for various parameters to compare with the standards for Ground water as per IS: 10500 for Groundwater sources. The details of water sampling locations are given in Table-3.10.

Table-3.10:

Details of Water Quality Monitoring Station

Sr. No	Location Code	Location name and description	Date of Monitoring
1.	GW-1	Borewell Water	14 th October, 2022
2.	GW-1	Borewell Water	25 th November, 2022
3.	GW-1	Borewell Water	23 th December, 2022
4.	GW-1	Borewell Water	06 th January, 2023
5.	GW-1	Borewell Water	16 th February, 2023
6.	GW-1	Borewell Water	11 th March-2023

3.4.2 Methodology of ground water Quality Monitoring

Sampling of ground water was carried out on 14.01.2022, 25.11.2022, 23.12.2022, 06.01.2023, 16.02.2023 and 11.03.2023. Samples were collected as grab sample and sampling forms are filled in as per the sampling plan. The preservative sample were properly added to preserve as per standard operating procedures (SOP) and stored immediately in ice boxes, which were ensured for appropriate temperatures. **Sample for chemical analysis was collected in polyethylene carboys. Sample collected for metal content were acidified to <2 pH with 1 ml HNO₃. A sample for bacteriological analysis was collected in sterilized glass bottles.**

Soon after the completion of sampling, chain of custody sheets for the samples are filled in and then they were transported by road to Environmental & Technical Research Centre, Lucknow for further analysis. Proper care was taken during packing and transportation of samples. All the samples reached the central laboratory within the holding times for different parameters. After ensuring the same the samples were forwarded immediately for analysis.

The samples were analyzed as per the standard procedures specified in 'Standard Methods for the Examination of Water and Wastewater' published by American Public Health Association (APHA) and CPCB. The analytical techniques and the test methods adopted for testing of ground water are given in Table-3.11 to Table-3.16.

3.4.3 Ground water Quality Monitoring Results

The detailed Ground water quality monitoring results are presented in Table-3.11 to Table-3.16.

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Daurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh

EC Compliance
October 2022 to
March, 2023

Table-3.11:
Ground water Quality Results at Borewell Water (October, 2022)

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	420.6	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	62.4	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	24.0	2.0 - 2000	250	1000
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-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⁻	30.6	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	296.0	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)	0.14	0.05 - 20	0.3	No Relaxation
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)	0.56	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	<i>E. coli</i>	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	<i>T. coli</i>	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	

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh

EC Compliance
October 2022 to
March, 2023

Table-3.12:
Ground water Quality Results at Borewell Water (November 2022)

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	410.8	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	31.10	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	0.42	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⁻	28.4	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	280.0	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
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)	0.59	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	<i>E. coli</i>	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	<i>T. coli</i>	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	

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh

EC Compliance
October 2022 to
March, 2023

Table-3.13:
Ground water Quality Results at Borewell Water (December, 2022)

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 ⁺	7.5	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	406.0	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	60.8	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 rd Ed. 2017-3500 Mg, B	32.076	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	0.36	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⁻	28.2	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	308.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2340 C	284.0	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
22	Manganese as Mn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.05	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.76	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	<i>E. coli</i>	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	<i>T. coli</i>	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	

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh	EC Compliance October 2022 to March, 2023
--	--

**Table-3.14:
Ground water Quality Results at Borewell Water (January, 2023)**

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	396.2	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	57.6	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 rd Ed. 2017-3500 Mg, B	32.076	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 23 rd Ed. 2017-4500-Cl B	26.0	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⁻	30.0	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	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)	0.12	0.05 - 20	0.3	No Relaxation
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)	0.83	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	<i>E. coli</i>	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	<i>T. coli</i>	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	

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh

EC Compliance
October 2022 to
March, 2023

Table-3.15:
Ground water Quality Results at Borewell Water (February, 2023)

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 ⁺	7.5	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	404.0	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	31.10	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	1000
11	Fluoride as F	mg/l	APHA 23 rd 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): 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⁻	32.6	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)	0.09	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.07	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.58	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	<i>E. coli</i>	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	<i>T. coli</i>	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	

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh	EC Compliance October 2022 to March, 2023
--	--

**Table-3.16;
Ground water Quality Results at Borewell Water (March, 2023)**

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	414.4	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	60.8	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 rd Ed. 2017-3500 Mg, B	31.10	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	0.42	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⁻	30.8	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	296.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2340 C	280.0	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
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)	0.62	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	<i>E. coli</i>	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	<i>T. coli</i>	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	

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh	EC Compliance October 2022 to March, 2023
---	---

3.5 SOIL MONITORING

3.5.1 Soil Monitoring Locations

The objective of the soil monitoring is to identify the impacts of ongoing project activities on soil quality and also predict impacts, which have arisen due to execution of various constructions allied activities. Accordingly, a study of assessment of the soil quality has been carried out.

To assess impacts of ongoing project activities on the soil in the area, the Physico-chemical characteristics of soils were examined by obtaining soil samples from selected points and analysis of the same. Single sample of soil was collected from the project site for studying soil characteristics, the location of which is listed in Table-3.17.

Table-3.17:

Details of Soil Monitoring Stations

S. No.	Location Code	Location name and description
1.	S1	Plant Site

3.5.2 Methodology of Soil Monitoring

The sampling has been done in line with IS: 2720 & Methods of Soil Analysis, Part-1st, 2nd Edition, 1986 of American Society for Agronomy and Soil Science Society of America. The homogenized samples were analyzed for physical and chemical characteristics (physical, chemical and heavy metal concentrations). The soil samples were collected in the month of December on 23.12.2022.

The samples have been analyzed as per the established scientific methods for Physico-chemical parameters. The heavy metals have been analyzed by using Atomic Absorption Spectro-photometer.

3.5.3 Soil Monitoring Results

Single sample of soil is collected from the site to check the quality of soil of the study area. The Physico-chemical characteristics of the soil, as obtained from the analysis of the soil sample, are presented in Table-3.18 & 3.19.

Table-3.18:

Physico-Chemical Characteristics of Soil at Plant Site

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	IS: 2720 (Part-26): 1987 Reaffirmed: 2016	7.3	1 - 14
2	Electrical Conductivity	µmhos/cm	IS: 14767:2000 Reaffirmed:2016	296.3	1.0 - 40000
3	Moisture content	%	IS: 2720 (Part-2): 1973 Reaffirmed: 2015	3.45	1.0 - 50
4	Nitrate as N	Kg/Hec	Method manual of soil testing India	260.8	1.0-50
5	Phosphorus (as P ₂ O ₅)	Kg/Hec	Method manual of soil testing India	18.6	5.0-500
6	Potash as K ₂ O	Kg/Hec	ETRC/ LABSOPS/17	148.0	1.0 - 2000

Six Monthly Compliance Report of Environmental Clearance for Expansion of Existing Sugar mill crushing capacity from 7200 TCD & 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW 39.7 MW (bagasse based) by M/s Gobind Sugar Mills Ltd. Unit, at village – Khamaria Pandit, Tehsil – Dhaurahra, Block – Isha nagar, District – Lakhimpur, Uttar Pradesh	EC Compliance October 2022 to March, 2023
--	--

7	Copper	mg/kg	ETRC/ LABSOPS/07	0.39	0.3 - 500
8	Zinc	mg/kg	ETRC/ LABSOPS/08	12.2	1.0 - 500
9	Iron	mg/kg	ETRC/ LABSOPS/09	84.5	5.0 - 500
10	Sulphur	Kg/Hec	IS:14685: 1999 Reaffirmed: 2014	9.1	5.0 - 100
11	Manganese	mg/kg	ETRC/ LABSOPS/10	12.8	5.0 - 500

3.5.4 Discussion on Soil Characteristics in the Study Area

The soil in study area is characterized by moderate organic content. The soil quality in the project area has not been affected by the project activities

3.6 Water Analysis ETP Inlet & Outlet Monitoring

The sampling and analysis of ETP Inlet & outlet was done on month April 2022 the monthly results are as under.

Table 3.20 (A): ETP Inlet Monitoring Result

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	APHA 23 rd Ed. 2017-4500H ⁺	4.1	1 - 14
2	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	1798.0	10 - 40000
3	Total Suspended Solid (TSS)	mg/l	APHA 23 rd Ed. 2017-2540 D	262.4	5.0 - 20000
4	Bio-chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44): 1993 Reaffirmed: 2019	260.0	1.0 - 150000
5	Chemical Oxygen Demand (COD)	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2017	1268.0	2.0 - 600000

Table 3.20 (B): ETP Outlet Monitoring Result

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	APHA 23 rd Ed. 2017-4500H ⁺	7.5	1 - 14
2	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	1024.0	10 - 40000
3	Total Suspended Solid (TSS)	mg/l	APHA 23 rd Ed. 2017-2540 D	18.6	5.0 - 20000
4	Bio-chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44): 1993 Reaffirmed: 2019	9.2	1.0 - 150000
5	Chemical Oxygen Demand (COD)	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2017	24.0	2.0 - 600000

Annexure -1



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.com, Website: www.uppcb.com

CONSENT ORDER

Ref No. -
141511/UPPCB/Lucknow(UPPCBRO)/CTO/air/LAKHIMPUR
KHIRI/2021

Dated : 28/12/2021

To ,

Shri GOBIND SUGAR MILLS LIMITED SUGAR DIVISION
M/s GOBIND SUGAR MILLS LIMITED SUGAR DIVISION
AIRA ESTATE, KHAMARIA PANDIT,LAKHIMPUR KHIRI,LAKHIMPUR KHIRI,262722
LAKHIMPUR KHIRI

Sub : Consent under section 21/22 of the Air (Prevention and control of Pollution) Act, 1981 (as amended)
to M/s. GOBIND SUGAR MILLS LIMITED SUGAR DIVISION

Reference Application No. 14035923

Dated : 28/12/2021

1. With reference to the application for consent for emission of air pollutants from the plant of M/s GOBIND SUGAR MILLS LIMITED SUGAR DIVISION. under Air Act 1981. It is being authorised for said emissions, as per the standards, in environment, by the Board as per enclosed conditions .
2. This consent is valid for the period from 01/01/2022 to 31/12/2023 .
3. In spite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 21 (6) of the Air (Prevention and Control of Pollution) Act, 1981 as amended.
This consent is being issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board

PRAMOD KUMAR AGRAWAL Digitally signed by PRAMOD KUMAR
AGRAWAL
Date: 2021.12.28 11:17:06 +05'30'
Chief Environmental Officer,Circle-5.

**Enclosed : As above
(condition of consent):**

Copy to: Regional Officer, UPPCB, Lucknow.

PRAMOD KUMAR AGRAWAL Digitally signed by PRAMOD KUMAR
AGRAWAL
Date: 2021.12.28 11:17:32 +05'30'
Chief Environmental Officer,Circle-5.

U.P. Pollution Control Board

Dated : 28/12/2021

CONDITIONS OF CONSENT

1. This consent is valid for the approved production capacity of cane crushing Sugar by crushing sugar cane 10,000 TCD and 39.7 Megawatt Co-generation Power Plant .
2. 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.
- 3(a) The maximum rate of emission of flue gas should not be more than the emission norms for the stacks.
- 3(b) . Air Pollution Source Details.

Air Pollution Source Details					
S.No	Air Pollution Source	Type of Fuel	Stack No.	Parameters	Height
1	01 nos. Boiler (capacity of 150.0 TPH)	Bagasse	1	Particulate Matter	72 meter from GL
2	01 nos. Boiler (capacity of 70.0 TPH)	Bagasse	2	Particulate Matter	40 meter from GL
3	625 KVA DG set	Diesel	3	Particulate Matter	As specified in EPA, 1986
4	625 KVA DG set	Diesel	4	Particulate Matter	As specified in EPA, 1986
5	625 KVA DG set	Diesel	5	Particulate Matter	As specified in EPA, 1986

- 3(c) . The emissions by various stacks into the environment should be as per the norms of the Board .

Emission Quality Details Detail			
S.No	Stack No	Parameter	Standard
1	1	Particulate Matter	150 mg/Nm ³
2	2	Particulate Matter	150 mg/Nm ³

- 4 . The industry should be operated in such a manner that it does not adversely affect the environment and the solid waste generated such as ash etc. is disposed in eco friendly manner .
- 5 . Any source of emission other than that mentioned in the Air consent seeking application will not be permitted by the Board .
- 6 . The industry should ensure the operation of the air pollution control system (APCS) in such a manner that the air emission confirms with the standards prescribed under the E.P Act 1986 as amended.
- 7 . The industry shall submit Environmental Statement in prescribed format as per rule no.14 as per E.P Rules 1986 .
- 8 . The industry shall abide by orders / directions issued by Hon'ble Supreme court Hon'ble High Court, Hon'ble National Green tribunal, Central Pollution Control Board and U.P Pollution Control Board for protection and safe guard of environment from time to time .
- 9 . Industry shall submit monthly monitoring reports of all stacks and ambient air quality from a certified / approved laboratory under E.P. Act 1986 .
- 10 . The industry shall comply with various provisions of Air (Prevention and Control of Pollution) Act 1981 as amended, Water (Prevention and Control of Pollution) Act 1974 as amended and all other applicable rules notified under E.P. Act 1986.
- 11 . The industry will ensure the continuous and uninterrupted data supply from the OCEEMS to the CPCB and SPCB .

- 12 . The unit shall submit audited balance sheet for the current year and the details of fees deposited during last three years within a month failing which consent would be deemed void.
- 13 . The use of Pet coke and Furnace oil as a fuel in the factory is restricted in compliance of the Hon'ble Supreme court order .
- 14 . The Industry will use minimum 20% Bio Briquette as fuel in the Boiler depending upon its availability .
- 15 . The industry shall obtain prior consents in the event of any addition of new emission generation sources such as- Boiler/ Furnace/ Heaters/ D.G. Sets or alteration of existing emission sources in accordance with section- 21/22 of air Act 1981 (as amended respectively).
- 16 . Minimum 33% of the land on which industry is established will be covered and properly maintained by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H-16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www.uppcb.com/pdf/Green-Belt-Guide_160218.pdf .
- 17 . If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order .
- 18 . Industry shall abide by the directions given by Hon'ble Court, Central Pollution Control Board and UPPCB for protection and safe guard of environment from time to time .

The Unit will file the renewal application at least 2 months prior to the expiry of this Order.

Specific Conditions:

1. This consent is valid for the production of Sugar by crushing sugar cane- 10,000 TCD and 39.70 Megawatt Co-generation Power Plant.
2. The analysis report of flue gas emission, and ambient air quality shall be submitted on quarterly basis.
3. The industry shall ensure the proper operation and maintenance of the air pollution control system (wet scrubber) in such a manner that the air emission confirms with the standards prescribed under the E.P Act 1986 as amended.
4. The industry shall ensure comply with the provisions of charter on Sugar industry and industry shall abide by directions given by Hon'ble Supreme Court, High Court, National Green Tribunals, Central Pollution Control Board and Uttar Pradesh Pollution Control Board for protection and safeguard of environment from time to time.
5. Industry shall operate and maintain installed APCS (ESP and wet scrubber attached with the boilers of capacity 150.0 TPH and 70 TPH) effectively and Stack monitoring report shall be submitted on quarterly basis.
6. Stack heights of all the DG sets (capacities of 3X625 KVA) should be kept as per the prescribed norms under E.P. Act, 1986 and all the DG sets shall be in acoustic enclosure.
7. Industry shall submit the latest copy of Audited Balance Sheet/C.A. Certificate (Fixed Assets+ Current Assets - Current Liabilities) so the Consent fee payable by the industry may be verified.
8. The operation of industry shall be in such a manner that no any adverse impact on the environment and public in surrounding.
9. Industry shall develop green belt as per the protocol attached with the board's office order no. H16405/220/2018/02 dated 16-02-2018 which is available on board's website.
10. Effective operation & maintenance of all installed air pollution control equipment shall be done so that emission meets the norms/standards of CPCB and Industry shall be operated in such a manner that ambient air quality should not be adversely affected.
11. Fly Ash content shall be used for low lying industry own land filling in a scientific manner that ambient air quality near by the industry should not be adversely affected.
12. The industry shall follow the directions issued by the Ministry of Environment Forest and Climate Change, Delhi vide Notification no. GSR 35(E) dated 14/01/2016.
13. The industry shall be operated in such a manner that it does not adversely affect the environment and the solid waste generated such as ash etc. is disposed in Eco friendly manner.
14. Arrangements for collection, segregation, storage, handling and disposal of solid Waste including garbage shall be provided and maintained properly.
15. Any new source of emission other than that mentioned in the Air consent seeking application will not be permitted by the Board. The unit shall obtain prior consents in the event of any addition of new emission generation sources such as- Boiler/ Furnace/ Heaters/ D.G. Sets or alteration of existing emission sources in accordance with section- 21/22 of air Act 1981 (as amended respectively).
16. The industry shall ensure to submit within 01 month a proposal, along with relevant land ownership documents, for safe disposal of boiler ash.
17. Solid waste generated from industries will not be allowed for open burning in the premises or around the industry's area as it is mandatory by the order of NGT.
18. The industry shall comply with the provisions of Environment (Protection) Act 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended, Plastic Waste Management Rules 2016, E- Waste (Management) Rules 2016, Solid Waste Management Rules 2016 & Hazardous and other Waste (Management and

Transboundary Movement) Rules 2016 (Whichever is applicable).

19. The units must ensure to deposit the balance CTO (Air) fee of Rs. 50,000/-, in compliance to the condition mentioned at serial no. 19 of previous CTO issued dated 11.3.2020.

20. If closure order is issued by CPCB or UPPCB against any defaulting unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective from the date of issuance of closure order revocation, with additional conditions mentioned in the closure revocation order.

Issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board .

PRAMOD KUMAR

Digitally signed by PRAMOD KUMAR

AGRAWAL

AGRAWAL

Date: 2021.12.28 11:17:51 +05'30'

Chief Environmental Officer, Circle-5.



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.com, Website: www.uppcb.com

CONSENT ORDER

Ref No. -
141503/UPPCB/Lucknow(UPPCBRO)/CTO/wate
r/LAKHIMPUR KHIRI/2021

Dated : 28/12/2021

To ,

Shri GOBIND SUGAR MILLS LIMITED SUGAR DIVISION
M/s GOBIND SUGAR MILLS LIMITED SUGAR DIVISION
AIRA ESTATE, KHAMARIA PANDIT,LAKHIMPUR KHIRI,LAKHIMPUR KHIRI,262722
LAKHIMPUR KHIRI

Sub : **Consent under Section 25/26 of The Water (Prevention and control of Pollution) Act, 1974 (as amended) for discharge of effluent to M/s. GOBIND SUGAR MILLS LIMITED SUGAR DIVISION**

Reference Application No :14034884

Dated :28/12/2021

1. For disposal of effluent into water body or drain or land under The Water (Prevention and control of Pollution) Act,1974 as amended (here in after referred as the act) M/s. GOBIND SUGAR MILLS LIMITED SUGAR DIVISION is hereby authorized by the board for discharge of their industrial effluent generated through ETP for irrigation/river through drain and disposal of domestic effluent through septic tant/soak pit subject to general and special conditions mentioned in the annexure ,in refrence to their foresaid application .
2. This consent is valid for the period from 01/01/2022 to 31/12/2023 .
3. In spite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 27(2) of the Water (Previntion and Controt of Pollution) Act, 1974 as amended .

This consent is being issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board

PRAMOD KUMAR AGRAWAL, Digitally signed by PRAMOD KUMAR AGRAWAL
Chief Environmental Officer, Circle-5, UPPCB. (Date: 28/12/2021 10:55:05)

Enclosed : As above
(condition of consent):

Copy to: Regional Officer, UPPCB, Lucknow.

PRAMOD KUMAR AGRAWAL, Digitally signed by PRAMOD KUMAR
AGRAWAL
Chief Environmental Officer, Circle-5, UPPCB. (Date: 28/12/2021 11:01:30)

U.P. POLLUTION CONTROL BOARD, LUCKNOW

Annexure to Consent issued to M/s.GOBIND SUGAR MILLS LIMITED SUGAR DIVISION vide

Consent Order No. 14034884/ Water

Dated : 28/12/2021

CONDITIONS OF CONSENT

1. This consent is valid for the approved production capacity of Sugar by crushing sugar cane 10,000 TCD and 39.7 Megawatt Co-generation Power Plant .
2. 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.
3. The quantity of maximum daily effluent discharge should not be more than the following :

Effluent Discharge Details			
S.No	Kind of Effluent	Maximum daily discharge,KL/day	Treatment facility and discharge point
1	Domestic	160 KLD	Septic Tank
2	Industrial	2000 KLD	ETP

4. Arrangement should be made for collection of water used in process and domestic effluent separately in closed water supply system. The treated domestic and industrial effluent if discharged outside the premises, if meets at the end of final discharge point, arrangement should be made for measurement of effluent and for collecting its sample. Except the effluent informed in the application for consent no other effluent should enter in the said arrangements for collection of effluent. It should also be ensured that domestic effluent should not be discharged in storm water drain .
- 4(a) The domestic effluent should be treated in the treatment plant so that it should be in conformity with the norms of treated effluent as stipulated in E.P. Rules 1986 as amended.

Domestic Effluent		
S.No	Parameter	Standard

- 4(b) The industrial effluent should be treated in treatment plant so that the treated effluent should be in conformity with the standard lay down under the notification issued by MOEF&CC vide its GO no GSR 35 (E) dated 14/01/2016.

Industrial Effluent		
S.No	Parameter	Standard
1	Total Suspended Solids	30 mg/l
2	BOD	30 mg/l
3	COD	250 mg/l
4	Oil & Grease	10 mg/l

- 4(c) Loading Rates for different soil textures.

S.No	Soil Texture	Loading rate in m3/Ha/Day
------	--------------	---------------------------

5. Effluent generated in all the processes, bleed water, cooling effluent and the effluent generated from washing of floor and equipments etc should be treated before its disposal with treated industrial effluent so that it should be according to the norms prescribed under The Environment (Protection) Rules, 1986 or otherwise mandatory.
6. The method for collecting industrial and domestic effluent and its analysis should be as per legal Indian standards and its subsequent amendments/ standards prescribed under the Environment (Protection) Act, 1986.
7. The industry shall establish the cooling arrangement and polishing tank for recycling the excess condensate water to process or utilities or allied units.
8. Effluent Treatment Plant to be stabilized one month prior to the start of the crushing season and continue to operate one month after the crushing season.

9. During no demand period for irrigation, the treated effluent to be stored in a seepage proof lined pond having 15 days holding capacity only.
10. The industry shall implement treated effluent flow distribution measurement for irrigation purposes completely in accordance with irrigation plan.
11. The impact of treated effluent application on land is to be included further in E.I.A. studies, involving ground water monitoring point identified in close proximity to the unit.
12. The industry will have to ensure compliance of the permission from the CGWA before ground water extraction and it will be the responsibility of the industry to comply with the various conditions of the permission taken.
13. The industry shall submit Environmental Statement in prescribed form V rule no.14 of E.P Rules 1986.
14. The industry shall comply with various provisions of Air (Prevention and Control of Pollution) Act 1981 as amended, Water (Prevention and Control of Pollution) Act 1974 as amended and all other applicable rules notified under E.P. Act 1986.
15. Minimum 33% of the land on which unit is established will be covered and properly maintained by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H-16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www.uppcb.com/pdf/Green-Belt-Guidle_160218.pdf.
16. The industry will ensure the continuous and uninterrupted data supply from the OCEEMS to the CPCB and SPCB .
17. Flow meter to be installed in all water abstraction points and usage of fresh water to be minimized. The unit will ensure facility to transmit data to CPCB server and submit a regular calibration certificate of Electro Magnetic Flow meter to the Board.
18. If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order.
19. Industry shall abide by the directions given by Hon'ble Court, Central Pollution Control Board and UPPCB for protection and safe guard of environment from time to time.
20. The Unit will file the renewal application at least 2 months prior to the expiry of this Order.

Specific Conditions:

1. This consent is valid for the production of Sugar by crushing Sugar cane- 10,000 TCD and 39.7 Megawatt Co-generation Power.
2. This consent is valid for the current products and capacity. In Case of any change in process, capacity enhancement etc. No Objection Certificate shall be obtained from the Board.
3. The industry shall treat industrial effluent through ETP in such manner, so that quality of treated effluent meets the prescribed standards.
4. The industry shall ensure continuous operation of ETP in non crushing season of sugar unit.
5. The industry shall maintain and operate the ETP properly and the treated effluent/sewage shall be recycled and used for irrigation and shall ensure that no treated effluent is discharged in any surface water body.
6. The industry shall ensure to maintain and operate the PTZ webcam on the aeration tanks and at the final outlet of ETP.
7. The industry shall ensure regular operation of water flow meter at ETP outlet.
8. During no demand period for irrigation, the treated effluent shall be stored in a seepage proof lined pond having 15 days holding capacity and should be red marked at free Board.
9. The industry shall ensure to operate and maintain the online Continuous Effluent Monitoring System regularly.
10. The industry shall ensure to install the STP of adequate capacity for treatment of domestic waste water and submit a time bound program in this office within a month.
11. The industry shall follow the directions issued by the Ministry of Environment Forest and Climate Change, Delhi vide Notification no. GSR 35(E) dated 14/01/2016.
12. The industry shall be submit irrigation plan as per the protocol within one month.
13. The industry shall submit to proposal for installation of flow meter to ensure recycled condensate from sugar cane juice and cooling tower within 01 month.
14. The industry shall comply with the conditions as imposed in NOC from CGWA issued dated 28.02.2020.
15. The Order issued by Hon'ble Courts/Hon'ble NGT, MOEF, Central Pollution Control Board, U.P. Pollution Control Board, shall be complied with.
16. Generated hazardous waste shall be stored temporarily in the factory premises and disposed off through authorized TSDF after obtaining the authorization from the Board.
17. Industry shall submit the latest copy of Audited Balance Sheet/C.A. Certificate (Fixed Assets+ Current Assets - Current Liabilities) so the Consent fee payable by the industry may be verified.
18. Install Electromagnetic Pizo Meter at each point of water supply source and at effluent discharge point and ensure to timely send meter reading to department on monthly basis.
19. The industry shall comply with the provisions of Environment (Protection) Act 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended, Plastic Waste Management Rules 2016, E- Waste (Management) Rules 2016, Solid Waste Management Rules 2016 & Hazardous and other Waste (Management and Transboundary Movement) Rules 2016 (Whichever is applicable).
20. Industry shall develop green belt as per the Protocol attached with Board's office order H 16405 /220/2018/02 dated 16-2-2018, which is available on Board's website- www.uppcb.com.
21. The unit must submit within 01 month a proposal in the Board for installation of Sewage Treatment Plant for treatment of domestic sewage.

22. Conditions for Molasses Storage:

- i. The molasses shall be properly collected and stored in steel tank which shall be leak proof. At no stage of handling of molasses, there shall be leakage or spillage.
- ii. The capacity of tank for storage of molasses shall be such that it will take care of bumper production of sugar, non-lifting of molasses etc.
- iii. All the area on which molasses are stored and handled should be provided with drain for diverting the spills to the treatment plant/molasses tank. Suitable arrangements for accidental discharges of molasses from the tank shall be provided to contain the same within factory premises.
- iv. Destruction of molasses and its disposal shall not be done without specific permission in writing from the authorized officer of the Board. Intimation of intention to destroy or dispose of the molasses shall be given to the Board at least 15 days in advance by registered post under intimation to the Board.
- v. The storage tanks shall be kept in good conditions all the year around with adequate maintenance. The tanks size and capacity per cm, height, total capacity in tones shall be displayed prominently near/on the tank.

23. Operation of ETP shall be started at least one month before starting of cane crushing to achieve desired MLSS. So as to meet prescribed standards from day one the operation of mill.

24. Industry shall maintain flow meter at the Final Outlet of ETP and maintain a logbook to record its readings.

25. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.

26. The industry shall ensure polluted water is not discharged into any stream so that the quality of Sharda river water is not adversely affected.

27. Industry to keep minimum number of fresh water taps in the sugar mill to reduce loss of water.

28. All pipe lines and vessels should be properly insulated to reduce steam consumption and water loss.

29. The unit must ensure compliance of the instruction given to it vide Board's letter H 61846/C-5/L/Jal/01/2021 dated 17.5.2021 regarding installation of Sulphate removal system.

30. The units must ensure to deposit the balance CTO (Water) fee of Rs. 50,000/-, in compliance to letter issued by Head Office ref. no. H 50937/C-5/L/Jal-1/2020 dated 14.7.2020, due towards renewal of previous CTO (water).

31. If closure order is issued by CPCB or UPPCB against the unit, then this CTO issued will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective from the date of issuance of closure order revocation, with additional conditions mentioned in the closure revocation order.

Issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board .

PRAMOD KUMAR

AGRAWAL

Chief Environmental Officer, Circle-5, UPPCB.

Digitally signed by PRAMOD
KUMAR AGRAWAL

Annexure-2

(755)

State Level Environment Impact Assessment Authority, Uttar Pradesh

Ec
File no - 1745

Directorate of Environment, U.P.
Viceroy Khasra-I, Ganga Nagar, Lucknow - 226 010
Phone: 91-522-2301541, Fax: 91-522-2301543
E-mail: doegupllw@satyam.com
Website: www.seiaup.com

To:
Sri Ashok Saxena,
President- Unit Head,
M/s Govind Sugar Mill Ltd.,
Ara Estate,
Lakhimpur-Kheri-262722

Ref. No...../Para/SEAC/1745/2013/OSD(T)

Date: 07/8 August, 2014

Sub: Environmental Clearance for Expansion of existing sugar Mill crushing capacity from 7200 TCD to 10000 TCD along with captive co-generation power plant from existing capacity 9.7 MW to 39.7 MW (bagasse based) within existing Sugar Plant, at Village-Khamaria Pandit, Tehsil- Dhaurahra, Block- Isha nagar, district- Lakhimpur of M/s Govind Sugar Mill Ltd. -Regarding.

Dear Sir,

Please refer to your application/letters dated 08-08-2013 & 22-05-2014 addressed to the Secretary, SEAC and Director, Directorate of Environment Govt. of UP on the subject as above. A presentation was made by the representative of the project proponent along with their consultant M/s Sawen Consultancy Services Pvt. Ltd. Lucknow, of the project in State Level Expert Appraisal Committee (SEAC) meeting dated 20-06-2013.

The Project proponent, through documents (submitted to SEAC) and presentation made during meeting, has informed to the SEAC that:

1. The environmental clearance is sought for Expansion of existing sugar Mill crushing capacity from capacity 7200 TCD to 10000 TCD and captive power co-generation from existing capacity 9.7 MW to 39.7 MW based on the bagasse fuel within existing Sugar Mill Plant (Govind Sugar Mill Ltd., Lakhimpur Kheri.)
2. Salient features of the project are as follows:

Item	Details
1. Total project area	Expansion will be done within existing premises, land is available
2. Proposed capacity of Expansion of Sugar plant & Power	Expansion of existing cane crushing capacity from 7200 TCD to 10000 TCD along with expansion of Power- 9.7MW to 39.7MW. Project cost: 272 Crore + 5.44 Crore for CSR activities @ 2% of total project profit
3. Proposed capacity of Power	39.7 MW after expansion

Hand
 4/8/14
 25/8/14
 26/8/14
 VIKAS C. ADYANVAL
 S.O. (EIA)
 Directorate of Environment

	generation	
4.	Category of Project	'B' Sugar with power (integrated project)
5.	Raw material	Sugarcane
6.	Quantity of Sugarcane	10,000 MT/day Sugarcane,
7.	Steam requirement	Approx. 270 TPH
8.	Water requirement	Industrial process- 7000 KLPD, Domestic- 20 KLPD
9.	Waste water generation	1000 KLPD
10.	Waste water treatment	ETP based on Activated sludge process by up gradation of the existing ETP
11.	Waste water discharge	ZERO
12.	No of Boilers	Existing- 70 TPH -01 no, Proposed 150 TPH - 03 no.
13.	Fuel quality & quantity	Bagasse -1354 TPD
14.	Air pollution control device	ESP (electro static precipitator) in new Boilers. Wet scrubber is reported to be installed in the existing boiler
15.	No of Stack	Existing attached with existing boiler & 01 for proposed boiler height 72 mtrs
16.	Solid waste generation and its disposal (1) Fly ash from boiler (2) Bagasse (3) Molasses (4) Press mud	92 TPD will be reused in filling of low lying areas or making fly ash bricks 3000 TPD will be used as fuel in own boilers 450 TPD will be sold to the fermentation units/Distillery 350 TPD will be used as fertilizers.
17.	Power Generation	39.7 MW after expansion
18.	Power requirement	10.0 MW in own consumption, rest for export.
19.	Green belt development	Approx. 33-35 % of total area
20.	Cost towards Environmental protection measures(Capital cost)	Approx. Rs 3.0 crores
21.	Recurring cost towards Environmental control measures	Approx. 50 Lacs per annum
22.	CSR expenses (Corporate social responsibility)	Up to 2% of the project profit i.e. approx. 5.44 crores.

- The proposals are covered under category 5 "j" and 1 "d" of EIA notification dated 14/09/2006, as amended.
- The TOR was issued on vide letter 2098/parya/SEAC/1745/2013 OSD(T) dated 12.10.2013. The EIA report has been submitted vide letter no- 7492 dated 22.05.2014.

Based on the recommendations of the State Level Expert Appraisal Committee Meeting (SEAC) held on 20-06-2014 the State Level Environment Impact Assessment Authority (SEIAA) in its Meeting held on 22-07-2014 decided to grant the Environmental Clearance to the project subject to the effective implementation of the following general and specific conditions:-

General Conditions:

1. The project authorities must strictly adhere to the stipulations made by the Uttar Pradesh State Pollution Control Board and the State Government.
2. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, UP.
3. The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Pollution Control Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.
4. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM_{10} , $PM_{2.5}$, SO_2 and NO_x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to UPPCB/CPCB and Regional Office, of MoEF at Lucknow once in six months.
5. Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be recycled in the plant and there shall not be any discharge of industrial waste water as committed by the project proponent during the presentation.
6. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night times).
7. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
8. The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
9. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
10. As proposed, budget shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of MoEF at Lucknow. The funds so provided shall not be diverted for any other purpose.
11. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
12. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF at Lucknow, CPCB and UPPCB. The criteria pollutant levels namely; PM_{10} , $PM_{2.5}$, SO_2 , NO_x (ambient levels as well as stack emissions) for the projects shall

- to be monitored and displayed at a convenient location near the main gate of the company in the public domain.
13. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF, CPCB and UPPCB. The Regional Office of MoEF at Lucknow / CPCB / SPCB shall monitor the stipulated conditions.
 14. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the Regional Office of the MoEF at Lucknow.
 15. The Project Proponent shall inform the public that the project has been accorded Environmental Clearance by the SEIAAUP and copies of the clearance letter are available with the SPCB and may also be seen at Website of the SEIAAUP at selaaup.com. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Lucknow.
 16. Project authorities shall inform the Regional Office of MoEF, Lucknow as well as the SEIAA the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

Specific Conditions

1. Filter press should be installed to handle the sludge.
2. Two continuous ambient Air Quality Monitoring Station one in up wind and other in predominant wind direction shall be installed immediately after the plant is in operation
3. Flow measurement device should be installed at the outlet of ETP.
4. Proposed Expansion of cane crushing and co-generation plant to reduce the emission of particulate matter and gasses Electrostatic Precipitator shall be installed and connected with Boiler duct.
5. To control the air emission from power plant a stack of about 72 mts from the ground level for the boiler and 8mt. above ground for DG set would be provided. The SPM emission from the stack shall be less than 150 mg/nm³. The exhaust stream from the boiler will be used for the process.
6. For minimizing the escape of SO₂ from the Sulphurisation process, cane juice will be used as scrubber media which will be reused in the process.
7. Total fresh Water requirement shall not exceed 7000 KL/day on 10,000 TCD and shall be met from the ground water through tube well. Waste water generation shall not be more than 1000 m³/day in season and 200 m³/day in off-season. Permission shall be obtained from the Competent Authority for withdrawal of ground water. No additional Bore Well be installed.
8. The process and domestic effluents shall not exceed 1000 m³/d and 16 m³/d respectively. After treatment through Diffusion Based Activated Sludge Process, the waste water will be subjected to Secondary Clarifier and sludge drying bed based on activated sludge process followed by tertiary treatment. The BOD of the treated effluent shall be more than 30 mg/l. About 80% of the treated effluent will be recycled in the process and 20% will be utilized in irrigation. No effluent shall be discharged outside the factory premises and zero discharge shall be strictly followed.

9. Molasses shall be stored in MS tanks or in Pucca Lagoons. The lagoons shall have proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. As per the CPCB/ SPCB recommendation, storage shall not exceed 15 days capacity.
10. The Solid waste generated from the process will be mainly bagasse, filter cake (press mud) and boiler ash. 100 % Bagasse shall be reused as fuel in the boiler and excess bagasse, if any, shall be sent to other sugar plants for power generation. Molasses will be sent to the Distillery unit. Filter cake shall be sent for bio-composting in the Distillery. 32 TPD of Boiler Ash shall be sold to brick manufacturers. Sludge from the scrubber shall be dried and disposed of in the low lying areas. ETP sludge shall be used as fertilizer by the farmers. Used batteries and Waste Lubricating Oil shall be sold to authorized recyclers.
11. Adequate green belt shall be provided all around the plant premises (approximately 33% of total area).
12. The Industry shall take adequate water conservation measures including providing minimum six(06) RWH pits of size 2.34 X 2.34 X 3 at peak rainfall intensity.
13. CREP Guidelines for the Sugar Industries shall be followed by the unit. The capacity of Lagoon shall be as per the CPCB Guidelines.
14. Commitments made during the Public Hearing shall be complied with.
15. Environmental Corporate Responsibility (ECR) plan along with budgetary provision amounting to 2% of total project profit shall be submitted (within the month) on need base assessment study in the study area. Income generating measures which can help in upliftment of weaker section of society consistent with the traditional skills of the people identified. The programme can include activities such as old age homes, rain water harvesting provisions in nearby areas, development of fodder farm, fruit bearing orchards, vocational training etc. In addition, vocational training for individuals shall be imparted so that poor section of society can take up self-employment and jobs. Separate budget for community development activities and income generating programmes shall be specified.
16. The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures and to be removed after the completion of the project.
17. All storm water drain and conveyor belt should be covered.
18. Any litigation pending in the Courts of Law it shall be binding on project proponent.
19. Parking facility should be provided within the project premises.
20. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.
21. All the existing boilers of capacities 20 TPH, 25 TPH and 35 TPH shall be dismantled as mentioned during the presentation.

No construction/operation is to be started without obtaining Prior Environmental Clearance. Concealing factual data and information or submission of false/fabricated data and failure to comply with any of the conditions stipulated in the Prior Environmental Clearance attract action under the provision of Environmental (Protection) Act, 1986.

This Environmental Clearance is subject to ownership of the site by the project proponents in confirmation with approved Master Plan for Lakhimpur Kheri. In case of violation, it would not be effective and would automatically be stand cancelled.

You are also directed to ensure that the proposed site is not a part of any no-

development zone as required/prescribed/identified under law. In case of violation, this permission shall automatically deem to be cancelled. Also, in the event of any dispute on ownership or land use of the proposed site, this clearance shall automatically deemed to be cancelled.

The project proponent will have to submit approved plans and proposals incorporating the conditions specified in the Environmental Clearance within 03 months of issue of the clearance. The SEIAA/MoEF reserves the right to revoke the environmental clearance, if conditions stipulated are not implemented to the satisfaction of SEIAA/MoEF. SEIAA may impose additional environmental conditions or modify the existing ones, if necessary. Necessary statutory clearances should be obtained and submitted before start of any construction activity.

These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006 including the amendments and rules made thereafter.

This is to request you to take further necessary action in the matter as per provision of Gazette Notification No. S.O. 1533(E) dated 14.9.2006, as amended and send regular compliance reports to the authority as prescribed in the aforesaid notification.

(I. S. Yadav)

Member Secretary, SEIAA

No. 996 /Parya/SEAC/1745/2013/OSD(T)

Dated: As above

Copy with enclosure for Information and necessary action to:

1. The Principal Secretary, Department of Environment, Govt. of Uttar Pradesh, Lucknow.
2. Advisor, IA Division, Ministry of Environment & Forests, Govt. of India, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.
3. Chief Conservator, Regional Office, Ministry of Environment & Forests, (Central Region), Kendriya Bhawan, 5th Floor, Sector-H, Aliganj, Lucknow.
4. District Magistrate, Lakhimpur Kheri.
5. The Member Secretary, U.P. Pollution Control Board, Gomti Nagar, Lucknow.
6. Copy to Web Master/ guard file.

20/06/2014

(Dr. R.K. Sardana)

Secretary, SEAC/

Director (I/C), Environment

**SIX MONTHLY
COMPLIANCE REPORT
(October, 2022 to March, 2023)**

Ambient Air	: November, 2022 to January, 2023
Stack Emission	: November, 2022 to January, 2023
Noise Monitoring	: November, 2022 to January, 2023
Ground Water	: October, 2022 to March, 2023
ETP Inlet & Outlet	: November, 2022 to January, 2023
Soil Quality	: December, 2022

of

M/s Zuari Industries Limited

Sugar Division

Village: Khamaria Pandit, Aira Estate,

Tehsil: Dhaurahra

District: Lakhimpur Kheri

Uttar Pradesh - 262722

By

Environmental and Technical Research Centre

(A QCI / NABET Accredited Organization and

MoEF, NABL Approved Laboratory)

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrclndia.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/1910/11520/2022	Date of Report: 19.10.2022
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division. Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	Industry self
3	Sample received date	14.10.2022	7	Analysis Start Date	14.10.2022
4	Sample Quantity	5.0 liters	8	Analysis End Date	18.10.2022

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 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	420.6	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	0.5	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	62.4	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	24.0	2.0 - 2000	250	1000
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-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⁻	30.6	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	296.0	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



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/281, Vishwas Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)

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

Test Report Ref No.: ETRC/1910/11520/2022

21	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.14	0.05 - 20	0.3	No Relaxation
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)	0.56	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	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

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/281, 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/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/2911/11081/2022		Date of Report: 29.11.2022	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Near Main Gate (Factory Premises)	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	55	55
(d)	Average ambient temperature (°C)	19	19
(e)	Time of Sampling Started (Hours)	10:24 am (23.11.2022)	10:24 am (23.11.2022)
(f)	Time of Sampling completed (Hours)	10:13 am (24.11.2022)	10:13 am (24.11.2022)
(g)	Total time of sampling (Minutes)	24 hour (1426 minutes)	24 hour (1426 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.195	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1703.592	• 23.758
	• GAS	• 712.8	

TEST RESULT


Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	85.6	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	51.35	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	14.42	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	21.68	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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/RES-REP/FT/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/2911/11082/2022		Date of Report: 29.11.2022	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Village: Allipur	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	55	55
(d)	Average ambient temperature (°C)	19	19
(e)	Time of Sampling Started (Hours)	10:42 am (23.11.2022)	10:42 am (23.11.2022)
(f)	Time of Sampling completed (Hours)	10:25 am (24.11.2022)	10:25 am (24.11.2022)
(g)	Total time of sampling (Minutes)	24 hour (1421 minutes)	24 hour (1421 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.185	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1683.648	• 23.675
	• GAS	• 710.4	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	78.9	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	48.57	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	12.68	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	17.23	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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/TEST-REP/FT/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/2911/11083/2022		Date of Report: 29.11.2022	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Alra Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Village: Khamaria Pandit	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	58	58
(d)	Average ambient temperature (°C)	19	19
(e)	Time of Sampling Started (Hours)	10:30 am (24.11.2022)	10:30 am (24.11.2022)
(f)	Time of Sampling completed (Hours)	10:18 am (25.11.2022)	10:18 am (25.11.2022)
(g)	Total time of sampling (Minutes)	24 hour (1417 minutes)	24 hour (1417 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.140	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1614.924	• 23.598
	• GAS	• 708.3	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	80.5	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	50.30	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	13.04	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	16.89	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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/TEST-REP/FT/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/2911/11084/2022		Date of Report: 29.11.2022	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Village: Aira	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	58	58
(d)	Average ambient temperature (°C)	19	19
(e)	Time of Sampling Started (Hours)	10:45 am (24.11.2022)	10:45 am (24.11.2022)
(f)	Time of Sampling completed (Hours)	10:22 am (25.11.2022)	10:22 am (25.11.2022)
(g)	Total time of sampling (Minutes)	24 hour (1423 minutes)	24 hour (1423 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.165	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1658.028	• 23.718
	• GAS	• 711.6	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	79.4	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	46.80	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	12.98	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	17.29	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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/36

TEST REPORT STACK EMISSION MONITORING AND ANALYSIS REPORT STACK No. 01

Test Report Ref No. ETRC/2911/11085/2022		Date of Report: 29.11.2022
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722
Monitored by		ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
1.(a)	Date of monitoring	23.11.2022
(b)	Stack material	MS
(c)	Height of stack from ground level	40 mts
(d)	Source to which stack attached	Boiler
(e)	No of Source attached with capacity	01 No., 70 TPH
(f)	Type and quantity of fuel used	Bagasse
(g)	Details of APCS installed	Wet Scrubber
2.	PARAMETERS	VALUES
(a)	Ambient temperature (°C)	21.0
(b)	Stack gas temperature (°C)	128.0
(c)	Stack gas velocity (m/sec)	11.31
(d)	Flow rate (LPM)	16
(e)	Sampling time (minutes)	65
(f)	Volume of air sampled (liters)	1040

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing / Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm ³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	76.3	2.0 - 1000	150

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

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

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

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

ETRC/PM14/TES-REP/FT/36

TEST REPORT STACK EMISSION MONITORING AND ANALYSIS REPORT STACK No. 02

Test Report Ref No. ETRC/2911/11086/2022		Date of Report: 29.11.2022
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722
Monitored by		ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
1.(a)	Date of monitoring	23.11.2022
(b)	Stack material	RCC
(c)	Height of stack from ground level	72 mts
(d)	Source to which stack attached	Boiler
(e)	No of Source attached with capacity	01 Nos., 150 TPH
(f)	Type and quantity of fuel used	Bagasse
(g)	Details of APCS installed	ESP
2.	PARAMETERS	VALUES
(a)	Ambient temperature (°C)	21.0
(b)	Stack gas temperature (°C)	129.0
(c)	Stack gas velocity (m/sec)	11.39
(d)	Flow rate (LPM)	16
(e)	Sampling time (minutes)	64
(f)	Volume of air sampled (liters)	1024

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing / Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm ³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	79.5	2.0 - 1000	150

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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

TEST REPORT AMBIENT NOISE MONITORING AND ANALYSIS REPORT

Test Report Ref No. ETRC/2911/11087/2022		Date of Report: 29.11.2022
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722
Monitored by		ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
(a)	Date of monitoring	24/11/2022 (6:00 AM) to 25/11/2022 (6:00 AM)
(b)	Sample Description	Ambient Noise
(c)	Parameter	Equivalent sound level
(d)	Environmental Condition	Normal

TEST RESULT

Sr. No.	Locations	Unit	Ambient Noise Level	
			Results DAY TIME (6:00 AM - 10:00 PM)	Results NIGHT TIME (10:00 PM - 6:00 AM)
1	Near Main Gate	dB(A)	62.46	49.82

Noise Standards as per CPCB Schedule rule 3(1) and 4(1)			
Area Code	Category of Area/Zone	Limits in dB(A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

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

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


**Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge**




**Authorized Signatory
(Ritu Garg)
QM**



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No. ETRC/2911/11089/2022	Date of Report: 29.11.2022
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Alra Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

SAMPLE DETAILS

1	Water/ Waste Water	Waste Water	5	Packing Condition	Sealed
2	Sample Description	ETP Inlet	6	Sample Collected By	ETRC
3	Sample received date	25.11.2022	7	Analysis Start Date	25.11.2022
4	Sample Quantity	2.0 liters	8	Analysis End Date	29.11.2022

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	APHA 23 rd Ed. 2017-4500H ⁺	4.2	1 - 14
2	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	1446.0	10 - 40000
3	Total Suspended Solid (TSS)	mg/l	APHA 23 rd Ed. 2017-2540 D	258.9	5.0 - 20000
4	Bio-chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44): 1993 Reaffirmed: 2019	240	1.0 - 150000
5	Chemical Oxygen Demand (COD)	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2017	1048.0	2.0 - 600000

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcltdia.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/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No. ETRC/2911/11090/2022	Date of Report: 29.11.2022
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

SAMPLE DETAILS

1	Water/ Waste Water	Waste Water	5	Packing Condition	Sealed
2	Sample Description	ETP Outlet	6	Sample Collected By	ETRC
3	Sample received date	25.11.2022	7	Analysis Start Date	25.11.2022
4	Sample Quantity	2.0 liters	8	Analysis End Date	29.11.2022

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	APHA 23 rd Ed. 2017-4500H ⁺	7.5	1 - 14
2	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	948.0	10 - 40000
3	Total Suspended Solid (TSS)	mg/l	APHA 23 rd Ed. 2017-2540 D	18.4	5.0 - 20000
4	Bio-chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44): 1993 Reaffirmed: 2019	9.2	1.0 - 150000
5	Chemical Oxygen Demand (COD)	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2017	28.0	2.0 - 600000

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/2911/11521/2022	Date of Report: 29.11.2022
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	ETRC
3	Sample received date	25.11.2022	7	Analysis Start Date	25.11.2022
4	Sample Quantity	5.0 liters	8	Analysis End Date	29.11.2022

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	410.8	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	0.5	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	31.10	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	0.42	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⁻	28.4	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	280.0	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



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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

Test Report Ref No.: ETRC/2911/11521/2022

21	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.13	0.05 - 20	0.3	No Relaxation
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)	0.59	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	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

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

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

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

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

ETRC/PM14/TEST-REP/FT/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/3112/11056/2022		Date of Report: 31.12.2022	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Near Main Gate (Factory Premises)	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	56	56
(d)	Average ambient temperature (°C)	14	14
(e)	Time of Sampling Started (Hours)	10:14 am (21.12.2022)	10:14 am (21.12.2022)
(f)	Time of Sampling completed (Hours)	10:03 am (22.12.2022)	10:03 am (22.12.2022)
(g)	Total time of sampling (Minutes)	24 hour (1424 minutes)	24 hour (1424 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.165	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1658.727	• 23.724
	• GAS	• 711.9	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	84.3	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	52.27	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	14.73	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	22.19	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcltdia.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/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/3112/11057/2022		Date of Report: 31.12.2022	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Village: Allipur	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM₁₀	DETAILS-PM_{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	56	56
(d)	Average ambient temperature (°C)	14	14
(e)	Time of Sampling Started (Hours)	10:29 am (21.12.2022)	10:29 am (21.12.2022)
(f)	Time of Sampling completed (Hours)	10:14 am (22.12.2022)	10:14 am (22.12.2022)
(g)	Total time of sampling (Minutes)	24 hour (1430 minutes)	24 hour (1430 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.125	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1609.200	• 23.826
	• GAS	• 715.2	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	79.3	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	49.11	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	12.59	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	16.34	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

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

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

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

ETRCPM14/TES-REP/FT/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/3112/11058/2022		Date of Report: 31.12.2022	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Village: Khamaria Pandit	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM₁₀	DETAILS-PM_{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	56	56
(d)	Average ambient temperature (°C)	15	15
(e)	Time of Sampling Started (Hours)	10:18 am (22.12.2022)	10:18 am (22.12.2022)
(f)	Time of Sampling completed (Hours)	10:06 am (23.12.2022)	10:06 am (23.12.2022)
(g)	Total time of sampling (Minutes)	24 hour (1415 minutes)	24 hour (1415 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.180	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1672.296	• 23.529
	• GAS	• 707.7	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	82.3	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	51.85	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	13.03	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	17.49	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.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/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/3112/11059/2022		Date of Report: 31.12.2022	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Village: Aira	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	56	56
(d)	Average ambient temperature (°C)	15	15
(e)	Time of Sampling Started (Hours)	10:35 am (22.12.2022)	10:35 am (22.12.2022)
(f)	Time of Sampling completed (Hours)	10:20 am (23.12.2022)	10:20 am (23.12.2022)
(g)	Total time of sampling (Minutes)	24 hour (1427 minutes)	24 hour (1427 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.145	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1634.373	• 23.783
	• GAS	• 713.7	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	78.2	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	44.57	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	12.28	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	18.11	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcltdia.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/36

TEST REPORT STACK EMISSION MONITORING AND ANALYSIS REPORT STACK No. 01

Test Report Ref No. ETRC/3112/11060/2022		Date of Report: 31.12.2022
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Alra Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722
Monitored by		ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
1.(a)	Date of monitoring	22.12.2022
(b)	Stack material	MS
(c)	Height of stack from ground level	40 mts
(d)	Source to which stack attached	Boiler
(e)	No of Source attached with capacity	01 No., 70 TPH
(f)	Type and quantity of fuel used	Bagasse
(g)	Details of APCS installed	Wet Scrubber
2.	PARAMETERS	VALUES
(a)	Ambient temperature (°C)	15.0
(b)	Stack gas temperature (°C)	127.0
(c)	Stack gas velocity (m/sec)	11.24
(d)	Flow rate (LPM)	16
(e)	Sampling time (minutes)	64
(f)	Volume of air sampled (liters)	1024

TEST RESULT


Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing / Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm ³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	79.9	2.0 - 1000	150

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/281, Vishwas Khand, Gomti Nagar, Lucknow- 226 010. (U.P.)

Email : ETRCLTH@YAHOO.IN, Web: www.etrcltdia.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/36

TEST REPORT STACK EMISSION MONITORING AND ANALYSIS REPORT STACK No. 02

Test Report Ref No. ETRC/3112/11061/2022		Date of Report: 31.12.2022
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722
Monitored by		ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
1.(a)	Date of monitoring	22.12.2022
(b)	Stack material	RCC
(c)	Height of stack from ground level	72 mts
(d)	Source to which stack attached	Boiler
(e)	No of Source attached with capacity	01 Nos., 150 TPH
(f)	Type and quantity of fuel used	Bagasse
(g)	Details of APCS installed	ESP
2.	PARAMETERS	VALUES
(a)	Ambient temperature (°C)	16.0
(b)	Stack gas temperature (°C)	130.0
(c)	Stack gas velocity (m/sec)	11.41
(d)	Flow rate (LPM)	16
(e)	Sampling time (minutes)	63
(f)	Volume of air sampled (liters)	1008

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing / Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm ³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	78.5	2.0 - 1000	150

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.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

TEST REPORT AMBIENT NOISE MONITORING AND ANALYSIS REPORT

Test Report Ref No. ETRC/3112/11062/2022		Date of Report: 31.12.2022	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Sr. No.	GENERAL INFORMATION	DETAILS	
(a)	Date of monitoring	22/12/2022 (6:00 AM) to 23/12/2022 (6:00 AM)	
(b)	Sample Description	Ambient Noise	
(c)	Parameter	Equivalent sound level	
(d)	Environmental Condition	Normal	

TEST RESULT

Ambient Noise Level				
Sr. No.	Locations	Unit	Results	Results
			DAY TIME (6:00 AM - 10:00 PM)	NIGHT TIME (10:00 PM - 6:00 AM)
1	Near Main Gate	dB(A)	61.32	50.14

Noise Standards as per CPCB Schedule rule 3(1) and 4(1)			
Area Code	Category of Area/Zone	Limits in dB(A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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 & NABL Accredited Laboratory



ETRC/PM14/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No. ETRC/WW/3754/2022	Date of Report: 31.12.2022
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Khari (U.P.) - 262722

SAMPLE DETAILS

1	Water/ Waste Water	Waste Water	5	Packing Condition	Sealed
2	Sample Description	ETP Inlet	6	Sample Collected By	Industry Self
3	Sample received date	23.12.2022	7	Analysis Start Date	23.12.2022
4	Sample Quantity	2.0 liters	8	Analysis End Date	26.12.2022

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	APHA 23 rd Ed. 2017-4500H ⁺	4.0	1 - 14
2	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	1880.0	10 - 40000
3	Total Suspended Solid (TSS)	mg/l	APHA 23 rd Ed. 2017-2540 D	288.1	5.0 - 20000
4	Bio-chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44): 1993 Reaffirmed: 2019	255.0	1.0 - 150000
5	Chemical Oxygen Demand (COD)	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2017	1292.8	2.0 - 600000

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/281, 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 & NABL Accredited Laboratory



ETRC/PM14/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No. ETRC/WW/3755/2022	Date of Report: 31.12.2022
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

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	23.12.2022	7	Analysis Start Date	23.12.2022
4	Sample Quantity	2.0 liters	8	Analysis End Date	26.12.2022

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	APHA 23 rd Ed. 2017-4500H ⁺	7.6	1 - 14
2	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	700.0	10 - 40000
3	Total Suspended Solid (TSS)	mg/l	APHA 23 rd Ed. 2017-2540 D	18.3	5.0 - 20000
4	Bio-chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44): 1993 Reaffirmed: 2019	9.6	1.0 - 150000
5	Chemical Oxygen Demand (COD)	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2017	29.12	2.0 - 600000

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcltdia.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/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/3112/11522/2022	Date of Report: 31.12.2022
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	ETRC
3	Sample received date	23.12.2022	7	Analysis Start Date	23.12.2022
4	Sample Quantity	5.0 liters	8	Analysis End Date	31.12.2022

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 ⁺	7.5	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	406.0	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	0.5	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	32.076	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	0.36	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⁻	28.2	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	308.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2340 C	284.0	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



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.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

Test Report Ref No.: ETRC/3112/11522/2022

21	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.11	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.05	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.76	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	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

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

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

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

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

ETRC/PM14/TES-REP/FT/38

TEST REPORT SOIL ANALYSIS

Test Report Ref No.: ETRC/3112/11523/2022	Date of Report: 31.12.2022
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

SAMPLE DETAILS

1	Sampling Location	Plant Site	5	Packing Condition	Sealed
2	Sample Description	Soil	6	Sample Collected By	ETRC
3	Sample received date	23.12.2022	7	Analysis Start Date	23.12.2022
4	Sample Quantity	1.0 kg	8	Analysis End Date	31.12.2022

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	IS: 2720 (Part-26): 1987, Reaffirmed: 2016	7.3	1 - 14
2	Electrical Conductivity	µS/cm	IS: 14767: 2002 Reaffirmed: 2016	296.3	1 - 40000
3	Moisture Contents	%	IS: 2720 (Part-2): 1973 Reaffirmed: 2015	3.45	1.0 - 50
4	Nitrate as N	kg/Hec	Method manual of soil testing India	260.8	5.0 - 500
5	Phosphorus (as P ₂ O ₅)	kg/Hec	Method manual of soil testing India	18.6	1 - 2000
6	Potash as K ₂ O	kg/Hec	ETRC/ LABSOPS/17, ISSUE NO.1 Dated 10.08.2015	148.0	1.0 - 2000
7	Copper as Cu	mg/kg	ETRC/LABSOPS/07 Issue. 1 Dated. 10.08.2015	0.39	0.3 - 500
8	Zinc as Zn	mg/kg	ETRC/LABSOPS/08 Issue. 1 Dated. 10.08.2015	12.2	1.0 - 500
9	Iron as Fe	mg/kg	ETRC/LABSOPS/09 Issue. 1 Dated. 10.08.2015	84.5	5.0 - 500
10	Manganese as Mn	mg/kg	ETRC/LABSOPS/10 Issue. 1 Dated. 10.08.2015	9.1	5.0 - 500
11	Sulphur	mg/kg	IS: 14685: 1999 Reaffirmed: 2014	12.8	5.0 - 100

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

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

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

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

ETRC/PM14/TES-REP/FT/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/EPA/7662/2023		Date of Report: 10.01.2023	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Near Main Gate (Factory Premises)	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	58	58
(d)	Average ambient temperature (°C)	12	12
(e)	Time of Sampling Started (Hours)	10:35 am (04.01.2023)	10:35 am (04.01.2023)
(f)	Time of Sampling completed (Hours)	10:19 am (05.01.2023)	10:19 am (05.01.2023)
(g)	Total time of sampling (Minutes)	24 hour (1415 minutes)	24 hour (1415 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.155	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1634.787	• 23.586
	• GAS	• 707.7	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	84.9	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	52.15	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	14.29	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	20.38	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/EPA/7663/2023		Date of Report: 10.01.2023	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Village: Allipur	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	58	58
(d)	Average ambient temperature (°C)	12	12
(e)	Time of Sampling Started (Hours)	10:42 am (04.01.2023)	10:42 am (04.01.2023)
(f)	Time of Sampling completed (Hours)	10:28 am (05.01.2023)	10:28 am (05.01.2023)
(g)	Total time of sampling (Minutes)	24 hour (1421 minutes)	24 hour (1421 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.165	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1655.931	• 23.687
	• GAS	• 710.7	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	79.2	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	49.82	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	13.06	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	17.89	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

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

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

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

ETRC/PM14/TES-REP/FT/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/EPA/7664/2023		Date of Report: 10.01.2023	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Village: Khamaria Pandit	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	58	58
(d)	Average ambient temperature (°C)	13	13
(e)	Time of Sampling Started (Hours)	10:30 am (05.01.2023)	10:30 am (05.01.2023)
(f)	Time of Sampling completed (Hours)	10:14 am (06.01.2023)	10:14 am (06.01.2023)
(g)	Total time of sampling (Minutes)	24 hour (1412 minutes)	24 hour (1412 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.170	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1652.508	• 23.536
	• GAS	• 706.2	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	79.5	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	49.71	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	12.53	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	17.86	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcltdla.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/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No. ETRC/EPA/7665/2023		Date of Report: 10.01.2023	
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Village: Aira	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1 (a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	58	58
(d)	Average ambient temperature (°C)	13	13
(e)	Time of Sampling Started (Hours)	10:44 am (05.01.2023)	10:44 am (05.01.2023)
(f)	Time of Sampling completed (Hours)	10:25 am (06.01.2023)	10:25 am (06.01.2023)
(g)	Total time of sampling (Minutes)	24 hour (1423 minutes)	24 hour (1423 minutes)
2	Average Air sampling rate for PM (m ³ /minute)	1.155	NA
3	Average sampling rate for gas (LPM)	0.5	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM	• 1643.103	• 23.704
	• GAS	• 711.3	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	77.5	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	48.52	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m ³	13.15	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m ³	17.56	6.0 - 750	For 24 hour =80

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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/36

TEST REPORT STACK EMISSION MONITORING AND ANALYSIS REPORT STACK No. 01

Test Report Ref No. ETRC/EPA/7666/2023		Date of Report: 10.01.2023
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722
Monitored by		ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
1.(a)	Date of monitoring	04.01.2023
(b)	Stack material	MS
(c)	Height of stack from ground level	40 mts
(d)	Source to which stack attached	Boiler
(e)	No of Source attached with capacity	01 No., 70 TPH
(f)	Type and quantity of fuel used	Bagasse
(g)	Details of APCS installed	Wet Scrubber
2.	PARAMETERS	VALUES
(a)	Ambient temperature (°C)	15.0
(b)	Stack gas temperature (°C)	129.0
(c)	Stack gas velocity (m/sec)	11.35
(d)	Flow rate (LPM)	16
(e)	Sampling time (minutes)	64
(f)	Volume of air sampled (liters)	1024

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing / Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm ³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	75.8	2.0 - 1000	150

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/281, Vishwas Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web: www.etrcltdia.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/36

TEST REPORT STACK EMISSION MONITORING AND ANALYSIS REPORT STACK No. 02

Test Report Ref No. ETRC/EPA/7667/2023		Date of Report: 10.01.2023
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722
Monitored by		ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
1.(a)	Date of monitoring	04.01.2023
(b)	Stack material	RCC
(c)	Height of stack from ground level	72 mts
(d)	Source to which stack attached	Boiler
(e)	No of Source attached with capacity	01 Nos., 150 TPH
(f)	Type and quantity of fuel used	Bagasse
(g)	Details of APCS installed	ESP
2.	PARAMETERS	VALUES
(a)	Ambient temperature (°C)	15.0
(b)	Stack gas temperature (°C)	130.0
(c)	Stack gas velocity (m/sec)	11.38
(d)	Flow rate (LPM)	16
(e)	Sampling time (minutes)	63
(f)	Volume of air sampled (liters)	1008

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing / Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm ³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	76.2	2.0 - 1000	150

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.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

TEST REPORT AMBIENT NOISE MONITORING AND ANALYSIS REPORT

Test Report Ref No. ETRC/EPA/7668/2023		Date of Report: 10.01.2023
Name /Address/Type of Industry		M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722
Monitored by		ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
(a)	Date of monitoring	05/01/2023 (6:00 AM) to 06/01/2023 (6:00 AM)
(b)	Sample Description	Ambient Noise
(c)	Parameter	Equivalent sound level
(d)	Environmental Condition	Normal

TEST RESULT

Sr. No.	Locations	Unit	Ambient Noise Level	
			Results DAY TIME (6:00 AM - 10:00 PM)	Results NIGHT TIME (10:00 PM - 6:00 AM)
1	Near Main Gate	dB(A)	61.24	50.18

Noise Standards as per CPCB Schedule rule 3(1) and 4(1)			
Area Code	Category of Area/Zone	Limits in dB(A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcltdia.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/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No. ETRC/EPA/7670/2023	Date of Report: 10.01.2023
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

SAMPLE DETAILS

1	Water/ Waste Water	Waste Water	5	Packing Condition	Sealed
2	Sample Description	ETP Inlet	6	Sample Collected By	ETRC
3	Sample received date	06.01.2023	7	Analysis Start Date	06.01.2023
4	Sample Quantity	2.0 liters	8	Analysis End Date	10.01.2023

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	APHA 23 rd Ed. 2017-4500H ⁺	4.1	1 - 14
2	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	1798.0	10 - 40000
3	Total Suspended Solid (TSS)	mg/l	APHA 23 rd Ed. 2017-2540 D	262.4	5.0 - 20000
4	Bio-chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44): 1993 Reaffirmed: 2019	260.0	1.0 - 150000
5	Chemical Oxygen Demand (COD)	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2017	1268.0	2.0 - 600000

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.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/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No. ETRC/EPA/7671/2023	Date of Report: 10.01.2023
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

SAMPLE DETAILS

1	Water/ Waste Water	Waste Water	5	Packing Condition	Sealed
2	Sample Description	ETP Outlet	6	Sample Collected By	ETRC
3	Sample received date	06.01.2023	7	Analysis Start Date	06.01.2023
4	Sample Quantity	2.0 liters	8	Analysis End Date	10.01.2023

TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	APHA 23 rd Ed. 2017-4500H ⁺	7.5	1 - 14
2	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	1024.0	10 - 40000
3	Total Suspended Solid (TSS)	mg/l	APHA 23 rd Ed. 2017-2540 D	18.6	5.0 - 20000
4	Bio-chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44): 1993 Reaffirmed: 2019	9.2	1.0 - 150000
5	Chemical Oxygen Demand (COD)	mg/l	IS: 3025 (Part-58): 2006 Reaffirmed: 2017	24.0	2.0 - 600000

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge


Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.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/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/1001/11524/2023	Date of Report: 10.01.2023
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	ETRC
3	Sample received date	06.01.2023	7	Analysis Start Date	06.01.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	10.01.2023

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	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	396.2	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	0.5	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	57.6	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 rd Ed. 2017-3500 Mg, B	32.076	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 23 rd Ed. 2017-4500-Cl ⁻ B	26.0	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⁻	30.0	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	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

Page 1 of 2



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcltdia.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

Test Report Ref No.: ETRC/1001/11524/2023

21	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.12	0.05 - 20	0.3	No Relaxation
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)	0.83	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	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

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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

Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.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/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/2102/11525/2023	Date of Report: 21.02.2023
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	Industry self
3	Sample received date	16.02.2023	7	Analysis Start Date	16.02.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	20.02.2023

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 ⁺	7.5	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	404.0	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	0.5	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	31.10	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	1000
11	Fluoride as F	mg/l	APHA 23 rd 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): 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⁻	32.6	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

Page 1 of 2



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, Vishwas Khand, Gomti Nagar, Lucknow- 228 010 (U.P.)

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

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

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

Test Report Ref No.: ETRC/2102/11525/2023

21	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.09	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.07	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.58	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	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

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/281, 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/TEST-REP/FT/17

TEST REPORT WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/8093/2023	Date of Report: 17.03.2023
Name /Address/Type of Industry	M/s Zuari Industries Limited Sugar Division Village: Khamaria Pandit, Aira Estate, Tehsil: Dhaurahra District: Lakhimpur Kheri (U.P.) - 262722

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	Industry self
3	Sample received date	11.03.2023	7	Analysis Start Date	11.03.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	16.03.2023

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	414.4	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	0.5	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	31.10	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	0.42	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⁻	30.8	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2320 B	296.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 23 rd Ed. 2017-2340 C	280.0	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



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/261, 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

Test Report Ref No.: ETRC/EPA/8093/2023

21	Iron as Fe	mg/l	APHA 23 rd Ed. 2017-3120 B (ICP-OES)	0.10	0.05 - 20	0.3	No Relaxation
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)	0.62	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	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

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

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


Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM

Annexure - 4

Date 20/04/2023

TO WHOM SO EVER IT MAY CONCERN

This is to certify that employee as per attached list are working in Gobind Sugar Mills Ltd. Aira Estate, Lakhimpur Kheri (U.P) have been carefully examined by me.

Based on the medical examination they are found fit for work.

Name & Signature with seal



Registered Medical Officer

Dr. M. K. Gupta
Reg. No. H23293
Medical Officer
Gobind Sugar Mills Ltd.
Aira Estate, Lakhimpur-Kheri

Enclosure: As above

GOBIND SUGAR MILLS LIMITED : AIRA (LAKHIMPUR)

Health Examination List

S. NO	NAME	DEPARTMENT	AGE (Yrs.)	WEIGHT (kg)	Pulse Rate (Per Minute)	B/P	TEMP (°F)	BLOOD GROUP	SUGAR (mg/dl)	Contiguous / Infectious / Communicable Diseases Examined
1	Anil Sheoren	Account	51	75	78	114/78	90.0	A-	81	Not Found
2	Sanjay Rayjada	Account	51	83	80	130/78	97.0	B+	135	Not Found
3	Manoj Kumar	Account	40	40	76	117/74	98.2	AB+	92	Not Found
4	Anil Dubey	Account	45	73	74	117/74	97.0	O+	124	Not Found
5	Satyajeet Tripathi	Account	49	75	80	102/70	97.8	O+	138	Not Found
6	Praveen Vyas	Account	48	70	74	108/76	98.0	A+	100	Not Found
7	M. Raj chandra Naidu	Account	50	85	74	136/76	97.0	O+	106	Not Found
8	Satyajeet Singh	Account	33	75	74	120/80	98.0		112	Not Found
9	Chaman Lal	Store	39	75	72	100/70	98.0	A+	108	Not Found
10	Mahendra Singh	Store	41	70	74	110/74	98.0	O+	114	Not Found
11	P P Tiwari	Eng.	54	70	70	104/64	97.0	O+	166	Not Found
12	Vishal Mishra	EDP	29	66	74	100/70	98.0	B+	112	Not Found
13	Atul Shukla	EHS	35	78	80	112/76	98.0	A+	116	Not Found
14	Anuj Vishnoi	T.O	41	76	80	135/80	98.0	B+	125	Not Found
15	Sunil Kumar Singh	Store	31	80	82	140/90	97.6	B+	87	Not Found
16	Arpit Srivastava	T.O	27	55	80	106/70	98.2	A+	100	Not Found
17	Sanjeev Kumar Singh	T.O	43	80	78	126/83	97.8	B+	136	Not Found
18	Dharmendra Rai	Account	52	70	80	122/83	98.0	B+	125	Not Found
19	Shyam jee Pandit	Account	38	85	87	117/80	97.0	AB+	215	Not Found
20	B.N. Srivastava	EDP	55	80	74	138/84	97.8	O+	215	Not Found
21	Prashanth	Eng.	30	75	76	123/79	97.8	A+	151	Not Found
22	Satya Prakash	Eng.	31	80	80	136/90	97.2	O+	159	Not Found
23	Anuj Srivastava	Eng. Ins	48	53	78	108/70	98.0	O+	107	Not Found
24	Chote Lal Yadav	Eng.	42	74	76	108/76	98.2	B+	105	Not Found
25	Vasupap Srivastava	Eng.	49	65	78	140/93	98.0	O+	167	Not Found
26	Sri Niwas Singh	Eng.	49	66	76	128/88	97.0	AB+	120	Not Found
27	D.P.S Yadav	Eng.	54	85	72	108/70	97.2	AB+	115	Not Found
28	Virendra Singh	Eng. Ins	44	86	80	140/92	97.4	B+	121	Not Found
29	M.N Yadav	Eng. Ele	64	65	76	122/83	98.0	O+	133	Not Found
30	G.L Saxena	Eng. Ele	70	64	80	140/84	97.4	A+	138	Not Found
31	Indal Yadav	Eng.	44	85	83	132/92	97.4	B+	128	Not Found
32	Shailendra Kumar	Eng.	37	77	78	124/80	97.2	A+	152	Not Found
33	Bhagwati Prasad	Eng.	46	70	74	131/79	97.0	B+	144	Not Found
34	Satendra Yadav	Eng.	35	60	74	126/72	97.0	B+	92	Not Found
35	Arvind Kumar Kushwah	Eng.	40	55	74	118/74	98.0	O+	124	Not Found
36	Anil Kumar Yadav	Eng. Ins.	33	57	72	113/72	97.0	O-	126	Not Found
37	Rama Nand Yadav	Eng.	44	67	74	132/72	97.2	B+	114	Not Found
38	K.S Pandly	Lab	61	67	74	120/76	97.0	AB+	135	Not Found
39	Manager Yadav	Eng.	33	65	80	120/78	97.0	B+	133	Not Found
40	Dilip Pandly	Eng.	41	65	78	124/68	92.2	B+	86	Not Found
41	Ramasray Yadav	Eng.	29	60	74	113/70	97.0	A+	94	Not Found
42	Sanjay Kumar Singh	Eng. Ele	35	50	72	134/88	98.0	A+	124	Not Found
43	Jata Shanker Singh	Eng	57	72	88	113/80	97.0	O+	105	Not Found
44	S.N Mishra	P.P	53	87	78	124/86	97.4	B+	126	Not Found
45	Ramesh Tiwari	Production	54	96	74	106/70	97.6	B+	138	Not Found
46	Ritesh Singh	Eng.	28	80	75	140/mt	97.0	O+	115	Not Found
47	D.P Jaiswal	Production	47	61	72	100/70	97.0	B+	117	Not Found
48	Sanjay Dubey	Production	52	74	88	127/80	97.2	B+	299	Not Found
49	Surendra Saini	Production	41	86	80	127/82	97.4	B+	164	Not Found
50	Sukant Srivastava	Production	52	66	78	128/80	97.2	B+	114	Not Found
51	Vijay Kumar Mishra	Production	38	66	74	110/68	97.0	A+	91	Not Found

Print Quality: Standard

Xerox WorkCentre 7830 Raw TCP Tue Dec 22 15:23:17 2020 Media Type: Default Color: Gray

Dr. M. K. Gupta
Reg. No. H23293
Gobind Sugar Mills Ltd.
Aira Estate, Lakhimpur

52	Pankaj Chauhan	Production	39	68	76	110/68	97.0	B+	88	Not Found
53	Ashutosh Tirathi	Production	44	87	80	124/88	97.0	O+	187	Not Found
54	A.K Mishra	Production	52	67	74	98/70	97.4	O+	125	Not Found
55	Devendra Singh	Security	57	95	76	124/84	97.2	O+	115	Not Found
56	Vinay Kumar Agarhari	P.P	39	95	80	127/77	97.0	A+	109	Not Found
57	Dilip Kumar	P.P	39	60	78	122/74	97.0	B+	114	Not Found
58	Hari Krisna Tiwari	P.P	28	82	76	134/86	97.2	O+	124	Not Found
59	Rahul Gupta	Production	23	67	80	132/76	97.6	A+	92	Not Found
60	Vijay Srivastava	Eng.	49	56	80	136/76	98.0	A+	175	Not Found
61	M.R Sharma	Eng.	54	62	78	112/76	98.0	B+	116	Not Found
62	Pankaj Gupta	Production	38	65	80	128/84	97.0	B+	167	Not Found
63	B.K Singh	Cane	65	78	76	106/66	97.0	O+	203	Not Found
64	Manoj Srivastava	Cane	59	84	76	140/92	97.2	O+	211	Not Found
65	S.K Mishra	Cane	58	86	80	192/94	98.0	A+	169	Not Found
66	Suresh Singh	Cane	53	80	82	154/90	98.0	A+	153	Not Found
67	Satendra Singh	Cane	51	78	80	142/88	97.2	B+	110	Not Found
68	Satyam Nayak	P.P	27	83	78	124/78	97.0	A+	96	Not Found
69	Rajesh Tripathi	T.O	45	85	74	160/90	98.2	B+	164	Not Found
70	Ajeet Singh	Eng.	36	76	80	100/70	98.0	A+	138	Not Found
71	Vineet Kumar Mishra	EHS	28	90	78	124/84	98.4	A+	115	Not Found
72	Ghanshyam Singh	CDI	55	68	80	110/70	98.0	O+	146	Not Found
73	Kapil Chaudhary	Cane	45	80	74	110/70	98.0	O+	129	Not Found
74	Mukesh Mishra	Cane	45	61	78	140/90	97.6	A-	163	Not Found
75	Bhupendra Singh	Cane	40	98	74	120/82	97.0	B+	122	Not Found
76	Ram pyarey Yadav	Production	66	56	84	150/90	98.0	B+	139	Not Found
77	B.N Sharma	Eng.	56	66	88	124/76	100.0	B+	158	Not Found
78	Anil Bisht	Eng.	28	60	76	120/76	97.4	A+	108	Not Found
79	MH Faizan	Eng.	24	68	74	116/74	98.2	A+	91	Not Found
80	Jai Prakash Dubey	Production	55	75	78	148/90	97.0	A+	282	Not Found
81	Brijesh Kumar	Store	38	80	78	114/76	97.2	B+	133	Not Found
82	Sachinand	Eng.	50	70	76	118/80	98.0	B+	160	Not Found
83	Pankaj Joshi	Production	32	61	74	116/70	97.0	A+	142	Not Found
84	Opendra Pratap Mishra	Production	45	61	74	120/80	98.4	B+	102	Not Found
85	Virendra Singh	Eng	43	67	78	124/80	97.4	O+	129	Not Found
86	Punyatma Tiwari	Production	46	77	74	120/84	97.4	O+	102	Not Found
87	Sunil Kumar Gupta	Production	32	70	76	112/80	98.0	O+	105	Not Found
88	Ashok Kumar	Production	51	65	78	150/100	98.4	B+	121	Not Found
89	Shesh Chand Trivedi	Store	48	80	80	132/88	98.2	B+	112	Not Found
90	CB Dixit	Production	48	80	80	132/88	98.4	B+	199	Not Found
91	Vinay Srivastava	Store	30	67	72	110/70	98.2	B+	96	Not Found
92	S.N Gupta	Store	61	78	76	128/84	98.0	B+	281	Not Found
93	Satish Pandly	Store	38	83	77	120/78	98.2	AB+	108	Not Found
94	Ajay Kumar Singh	Store	33	58	74	114/78	98.2	O+	84	Not Found
95	Yugal Vishone	Production	30	68	76	110/70	98.4	B+	95	Not Found
96	Babloo	Production	35	64	74	110/70	98.2	O+	97	Not Found
97	Ramagya	Production	52	50	72	112/70	98.0	A+	105	Not Found
98	Anil Kumar	Production	43	48	74	100/70	98.2		98	Not Found
99	Ram Harakh	Eng.	60	39	76	140/90	98.2	AB+	96	Not Found
100	Ram Preet	Eng.	52	67	78	130/86	97.0	B+	112	Not Found
101	Hari Lal Yadav	Production	38	60	78	110/70	97.0	B+	199	Not Found
102	Krishna ji Yadav	Production	40	75	74	171/94	97.4	B+	96	Not Found
103	Mheshwar	Production	60	51	74	140/80	98.2	O+	281	Not Found
104	Rafiq Ahmad	Production	45	56	76	122/80	97.0	B+	129	Not Found
105	Sripal	Production	45	70	72	140/84	97.0	O+	112	Not Found
106	Lallan Prasad	Production	57	55	80	140/90	97.1	O+	98	Not Found
107	Sanjay Kumar Rai	Production	40	71	78	116/74	97.0	A-	165	Not Found
108	Gautam	Production	30	66	72	100/70	98.7	O+	149	Not Found

Print Quality: Standard

Xerox WorkCentre 7830 Raw TCP Tue Dec 22 15:23:17 2020 Media Type: Default Color: Gray

Dr. M. K. G...
 Reg. No.-H23293
 Gobind Sugar Mills Ltd.
 Aira Estate, Lakhimpur

109	Vinay Kuamr Yadav	Production	40	63	78	120/84	97.0	A+	118	Not Found
110	Vikas khewan	Cane	46	88	88	148/90	97.0	O+	109	Not Found
111	Om Singh	Emg.	28	66	88	124/84	98.2	B+	70	Not Found
112	Sandlep Singh	Production	36	71	84	116/88	97.4	A+	116	Not Found
113	Ashish Dubey	Production	30	60	80	114/80	98.2	B+	101	Not Found
114	Sanjay Kumar Dubey	Production	38	71	82	134/90	98.2	AB+	116	Not Found
115	Sushish Dubey	Production	32	85	84	130/80	97.2	O+	120	Not Found
116	Baijnath Yadav	Production	23	100	80	130/88	98.0	B+	120	Not Found
117	Rakesh Kumar Patel	Production	29	50	84	128/86	97.0	A+	91	Not Found
118	Rajesh Prasad	Production	32	57	74	120/84	98.0	B+	96	Not Found
119	Kishan Agnihotri	P.P	38	56	72	104/68	98.0	B-	132	Not Found
120	Prem Narayan Trivedi	Production	58	56	74	144/84	97.0		110	Not Found
121	Pramod Singh	Production	30	60	78	120/86	98.0	O+	96	Not Found
122	Ramakant	Production	42	63	72	122/84	98.2	A+	105	Not Found
123	Abhishek Bharadwaj	P.A	43	73	80	120/82	97.2	AB+	134	Not Found
124	Sarvesh Singh	Security	53	85	88	133/88	97.4	O+	112	Not Found
125	Balvindra Singh	security	46	77	80	116/80	98.0	O+	125	Not Found
126	Nathoni Lal	Account	51	73	76	116/76	97.0		105	Not Found
127	Ram Swaroop	Store	42	69	78	126/90	97.4	A+	108	Not Found
128	Dinesh Kumar Mishra	Cane	50	65	74	118/74	98.0	B+	140	Not Found
129	Susdash Chandra Yadav	Cane	38	53	76	111/73	98.4		151	Not Found
130	Santosh Srivastava	T.O	57	65	80	130/66	98.2	O+	146	Not Found
131	Parmeshwar	T.O	42	62	82	120/72	98.2	O+	206	Not Found
132	Bariyam Singh	Transport	54	78	76	130/76	97.6	A+	206	Not Found
133	Om Prakash	Cane	47	95	74	135/90	98.0	O+	199	Not Found
134	Srikant Jha	Eng	60	74	82	150/93	97.0	AB+	131	Not Found
135	Ajay Kumar Tiwari	Eng	50	62	80	140/86	97.2	O+	99	Not Found
136	Chandra Prakash	Eng	54	65	74	108/72	98.2	O+	106	Not Found
137	Akhileshwar Yadav	Eng.	53	60	78	146/71	97.0	O+	196	Not Found
138	Uddesh Sharma	Eng.	50	72	76	115/72	97.0	B+	120	Not Found
139	Ram Pravesh	Production	52	64	74	115/72	98.0	B+	179	Not Found
140	Sudarshan Rai	Transport	50	64	80	180/120	98.0	O+	95	Not Found
141	Surendra Dubey	Eng.	55	90	70	121/83	98.2	A+	97	Not Found
142	Ram Variksha	Eng.	56	54	78	132/72	97.4	A+	105	Not Found
143	Shyam Sunder	Eng.	55	62	76	136/83	98.2	A+	98	Not Found
144	Manbharan	Eng.	55	60	78	153/83	98.2	A+	96	Not Found
145	Jai Prakash	security	47	57	74	123/76	98.2	A+	112	Not Found
146	Raj Mangal Yadav	Production	45	57	80	116/70	98.0	A+	199	Not Found
147	Raj Kishore	Production	45	54	78	108/78	98.2	B+	118	Not Found
148	Shiv Bhagwan Shah	Production	44	60	80	168/86	98.4	AB+	125	Not Found
149	Annel Lal	Eng.	58	56	70	112/64	97.0	B+	154	Not Found
150	Ram Parikhan	Eng.	55	54	78	124/68	97.2	A+	106	Not Found
151	Ram Kumar Sahni	Eng.	56	68	78	132/82	98.4	O+	117	Not Found
152	Ram Sanehi	Eng	50	55	72	106/70	97.6	O+	312	Not Found
153	Ram Pravesh Yadav	Production	44	60	74	130/80	97.0	A+	169	Not Found
154	Suresh Yadav	Production	50	105	78	149/81	98.0	AB+	228	Not Found
155	Phool Chandra	Production	52	72	76	131/88	97.0	AB+	119	Not Found
156	Surendra Chaudhary	Transport	46	90	74	124/70	97.2	O+	134	Not Found
157	Gobind Lal	Lab	61	56	80	130/74	97.2	A+	222	Not Found
158	Jugal Kishore Rai	Production	50	63	80	114/70	98.4	B+	113	Not Found
159	Ram Singar Yadav	Production	52	60	78	130/86	98.0	B+	93	Not Found
160	Sada Bricks	Eng.	60	55	80	114/70	98.2	A+	113	Not Found
161	Sarvan Kumar	Transport	46	74	76	122/86	98.2	B+	98	Not Found
162	Deo Narayan	Eng.	49	58	78	110/70	98.4	O+	108	Not Found
163	Gargi Prasad	Eng.	39	68	74	128/84	98.0	O+	124	Not Found
164	Sushanshu Shekhar Jha	Cane	58	66	80	140/90	98.0	A+	93	Not Found
165	Kamal	Production	45	83	78	124/82	97.6	O+	132	Not Found

Print Quality: Standard

Default Color: Gray

Xerox WorkCentre 7830 Raw TCP Tue Dec 22 15:23:17 2020 Media Type: Default

Dr. M. K. G...
 Reg No.-H23283
 Gobind Sugar Mills Ltd.
 Aira Estate, Lakhimpur

166	Nand Kishore Sharma	Eng	58	55	80	140/80	98.0	A+	132	Not Found
167	Ashok Paswan	Cane	52	64	78	122/80	98.2	O-	131	Not Found
168	MashrafAnasari	Eng.	55	68	80	114/74	97.8	O+	179	Not Found
169	Dshrath Rai	Production	53	77	78	128/86	97.8	B+	133	Not Found
170	Anil Rai	Eng.	56	108	80	130/86	97.6	B+	120	Not Found
171	Harikrishna Rai	Eng.	52	90	78	116/80	98.0	O+	104	Not Found
172	Srikant	Production	50	50	74	110/70	98.0	O+	147	Not Found
173	Putan Ali	Production	52	46	74	120/80	98.0	O+	132	Not Found
174	Vijay Agnihotri	security	54	77	74	126/86	98.2	A+	101	Not Found
175	Karan Chandra	Eng.	53	63	74	126/80	98.0	A+	108	Not Found
176	Awdhwsh Yadav	security	44	73	74	117/70	98.2	A+	110	Not Found
177	Putnni Lal	security	60	75	78	160/90	98.2	B+	137	Not Found
178	Arun Tiwari	Production	57	93	74	116/76	96.4	B+	160	Not Found
179	Arjun Vishwkarma	Production	48	54	78	112/74	97.6	O+	126	Not Found
180	Jawahar Lal	Eng.	59	56	80	160/90	98.2	A+	108	Not Found
181	Musahib	Production	56	52	84	170/110	98.4	B+	107	Not Found
182	Dineshwar Prasad	Production	52	64	74	124/80	98.0	B+	105	Not Found
183	Laldeo Rai	Eng.	55	70	70	120/84	98.2	O+	125	Not Found
184	Anil Shukla	Cane	49	105	76	136/88	98.0	O+	154	Not Found
185	Sandeep Viswkrma	Eng.	38	45	74	110/76	98.2	A+	106	Not Found
186	Shiv Balak	Eng.	55	75	76	140/80	98.0	O+	117	Not Found
187	Ramayan Singh		54	75	80	122/80	97.0	A+	212	Not Found
188	Haider Ali		50	73	76	134/80	97.2	AB+	169	Not Found
189	Baldeo	Eng p.p	45	60	74	120/76	97.4	A+	228	Not Found
190	Rajedra	Eng.	59	64	78	180/66	97.4	B+	119	Not Found
191	Dhoup Chandra	Production	43	56	80	140/80	97.6	O+	159	Not Found
192	Haribans	Production	50	60	76	138/88	97.4	B+	133	Not Found
193	Hari Lal	Production	45	72	74	134/86	97.6	B+	94	Not Found
194	Ram Pal	Production	45	72	76	130/84	98.0	B+	124	Not Found
195	Chunni Lal	Production	48	50	78	140/90	98.0	A+	106	Not Found
196	Krishna Nand	Production	40	66	74	122/80	98.0	A+	102	Not Found
197	Pulli Lal	Production	55	70	74	126/80	98.0	A+	88	Not Found
198	Maheswar Pandey	Cane	45	66	80	128/84	98.0	AB+	100	Not Found
199	Baij Nath	Production	45	55	82	120/82	98.2		214	Not Found
200	Raj Kumar pandey	Eng.	39	95	78	128/78	98.0	A+	304	Not Found
201	Ganlesh Singh	Cane	51	72	80	130/86	98.2	AB+	133	Not Found
202	Atul Mishra	Eng.	35	53	78	100/70	98.0	B+	160	Not Found
203	Munni Lal	Production	55	55	80	136/88	98.0	A+	142	Not Found
204	Rajendra Singh Bhadoriya	Eng.	53	60	74	110/70	98.2	A+	102	Not Found
205	S.K Tiwari	security	55	71	84	170/100	98.2	A+	129	Not Found
206	Surendra	Production	54	64	82	128/86	98.0	B+	102	Not Found
207	Ranvijay Singh	security	42	78	78	120/80	98.2	A+	124	Not Found
208	Mukul Yadav	Production	46	58	76	130/80	98.0	O-	184	Not Found
209	Devi Chandra	Production	57	59	84	145/100	97.0	A+	110	Not Found
210	Ranjeet Singh	Production	44	61	72	108/76	98.0	A+	123	Not Found
211	Anand Kumar Dubey	Production	54	88	90	158/88	97.0	O+	115	Not Found
212	Naresh Kumar	Production	45	55	84	140/90	98.2	B+	239	Not Found
213	Kuber Ji Yadav	Eng.	50	69	78	104/80	97.4	B+	104	Not Found
214	Sanjay Srivastava	Sugar Sale	55	67	80	133/77	97.4	B+	136	Not Found
215	Ram Tirth	Production	55	70	70	122/76	97.6	A+	129	Not Found
216	Ram Bajpai	Production	56	61	72	109/75	98.0	B+	155	Not Found
217	Susheel Kumar Mishra	Production	57	55	74	110/74	97.0	A+	118	Not Found
218	Ajay Vishwkarma	Eng.	45	68	76	110/74	97.0		102	Not Found
219	Kishan Dev	Production	49	67	76	132/90	97.2	O+	160	Not Found
220	Madan Yadav	security	55	61	80	156/94	97.4	O+	169	Not Found
221	Bachhu Lal	Eng.	55	71	74	120/80	97.2		112	Not Found
222	Damari	Eng	60	43	90	122/78	97.6		191	Not Found

Dr. M. K. Gupta

Reg. No. H25293
Gobind Sugar Mills Ltd.
Aire Estate, Lakhimpur

223	Pashupati Rai	Eng.	60	57	98	184/130	98.2	B+	106	Not Found
224	Manoj Kumar Mishra	security	50	92	84	130/84	97.3		208	Not Found
225	Satish Pandey	Eng	51	56	80	133/90	98.2	O+	158	Not Found
226	Sushil Chandra Awasthi	Cane	53	60	84	120/80	97.0	A+	118	Not Found
227	Ram Kripal	Transport	58	65	78	126/76	98.2		179	Not Found
228	Deepak Shukla	Elitrical	56	69	71	123/90	97.6	B+	105	Not Found
229	Rakesh Kumar	security	46	83	80	122/88	96.0	B+	255	Not Found
230	M.P Singh	security	57	78	76	132/90	97.8	B+	91	Not Found
231	Pawan kumar Singh	Transport	42	64	74	112/70	97.2	B+	460	Not Found

MJ

Dr. M. K. Gupta
 Reg. No.-H25294
 Gobind Sugar Mills Ltd.
 Aira Estate, Lakhimpur

Annexure - 5



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

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	M/s Gobind Sugar Mills Ltd.		
Project Address:	M/s Gobind Sugar Mills Ltd. Village- Khamaria Pandit, Tehsil- Dhaurahra, District - Lakhimpur Kheri , Uttar Pradesh		
Village:	Khamaria Pandit	Block:	Isanagar
District:	Kheri	State:	Uttar Pradesh
Pin Code:	262722		
Communication Address:	Village- Khamaria Pandit, Tehsil- Dhaurahra, District - Lakhimpur Kheri , Kheri, Uttar Pradesh - 262722		
Address of CGWB Regional Office :	Central Ground Water Board Northern Region, Bhujal Bhavan, Sector-B Sitapur Road Yojna, Ram Ram Bank Chauraha, Lucknow, Uttar Pradesh - 226021		

1. NOC No.:	CGWA/NOC/IND/REN/1/2020/5692									
2. Application No.:	21-4/3872/UP/IND/2017			3. Category:	Industry					
4. Project Status:	Existing Project			5. NOC Type:	1st Renewal					
6. Valid from:	28/02/2020			7. Valid up to:	26/02/2023					
8. Ground Water Abstraction Permitted:										
Fresh Water		Saline Water		Dewatering		Total				
m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year			
3000.00	535000.00					3000.00	535000.00			
9. Details of ground water abstraction /Dewatering structures										
Total Existing No.:2					Total Proposed No.:0					
	DW	DCB	BW	TW	MP	DW	DCB	BW	TW	MP
Abstraction Structure*	0	0	0	2	0	0	0	0	0	0
*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit										
10. Quantum of ground water recharge/harvesting(m ³ /year):	78244.00									
11. Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism.	No. of Piezometers		Monitoring Mechanism							
			Manual		DWLR**		DWLR With Telemetry			
**DWLR - Digital Water Level Recorder	2		0		1		1			

(Compliance Conditions given overleaf)

SUNIL KUMAR Digitally signed
by SUNIL KUMAR
Date: 2020.09.08
11:23:16 +05'30'

सदस्य (केन्द्रीय भूमि जल प्राधिकरण)
Member (CGWA)

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

1. No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
2. The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
3. All new as well as existing ground water abstraction/ de-watering structures shall be fitted with digital water flow meters by the firm at its own cost immediately on completion of their construction or grant of NOC as the case may be. In case of renewal of NOCs, all existing ground water abstraction structures shall continue to be fitted with digital water flow meters. Intimation of installation of flow meters shall be sent by the proponent to the Regional Director of CGWB within 6 months of grant of NOC. Daily ground water abstraction data shall be monitored / continue to be monitored (in case of renewal) by the firm and recorded in a log book. Details of month-wise ground water abstraction shall be submitted to the Regional Director, CGWB, once every year.
4. In case the ground water abstraction is more than 10 m³/day, monthly water level monitoring data shall be maintained and submitted annually to the Regional Office of CGWB. Wherever groundwater withdrawal is more than 500 m³/day, the firm shall install telemetry system in one of the piezometers and share USER ID and password of the telemetry system with the Regional Director, CGWB.
5. In case ground water abstraction is more than 10 m³/day, ground water quality shall be monitored once in a year (during pre- monsoon period) and the report submitted to the Regional Office, CGWB. Wherever the extraction is less than 10 m³/day, ground water quality report shall be submitted by the proponent at the time of submission of self-compliance report.
6. Ground water augmentation/harvesting measures, as stipulated in the NOC, shall be implemented (in new cases) / continue to be maintained (in case of renewal) in consultation with the concerned Regional Director, CGWB.
7. Proof of recharge/water harvesting structures constructed (photographs of structures) shall be submitted to the concerned Regional Director, CGWB within 6 months from the date of issue of NOC. The firm shall also undertake periodic maintenance of recharge/water harvesting structures at its own cost.
8. The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
9. In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
10. The firm shall optimize water use through recycling/ reuse of waste water after proper treatment.
11. Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
12. In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
13. Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
14. The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
15. This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.
16. This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
17. The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
18. This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.
19. Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment(Protection)Act,1986.
20. **In case of any violation of NOC conditions or illegal extraction of Ground water the firm shall be liable to pay "Environmental Compensation"/ "Penalty", if any under Sec 15 of EPA 1986as and when decided by statutory authorities.**

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

Green Belt

Annexure - 6



Green Belt



Green Belt



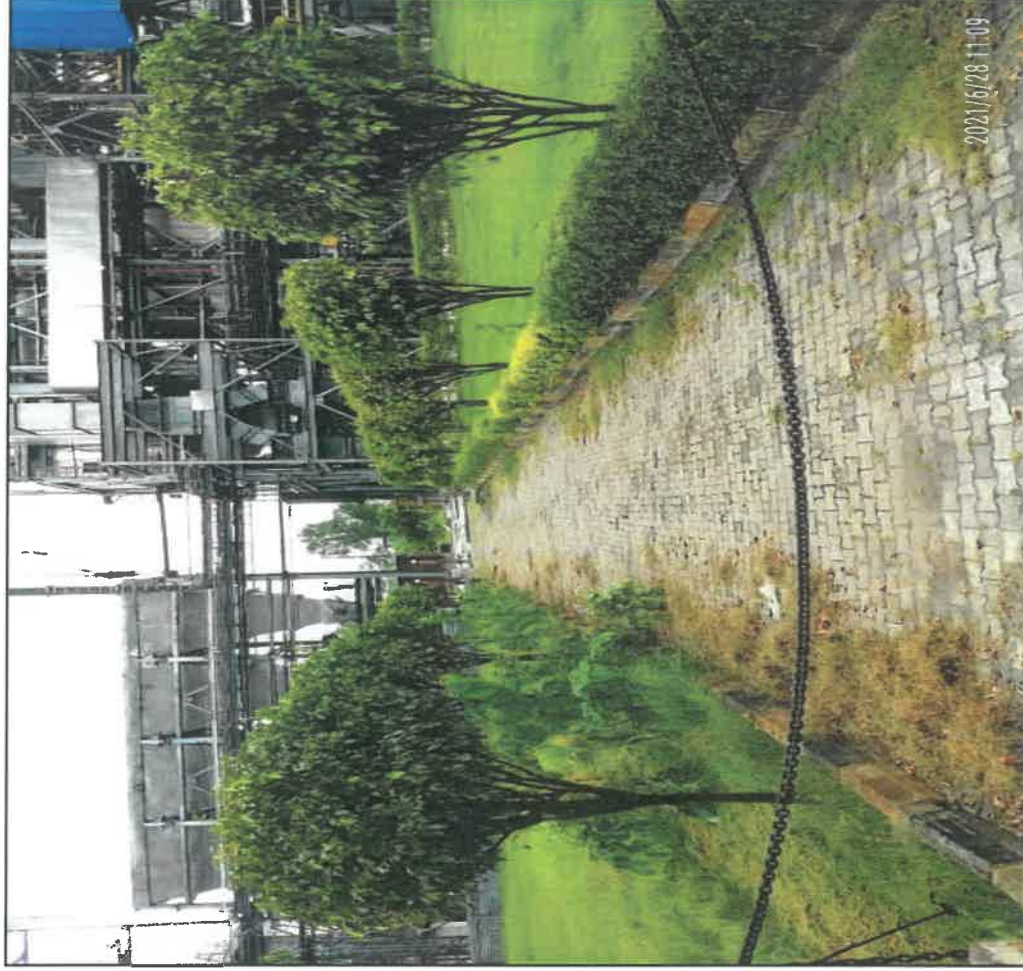
Green Belt



Green Belt



Green Belt



Green Belt



Green Belt



Annexure - 7

GOBIND SUGAR MILLS LIMITED : AIRA (LAKHIMPUR)

Major CSR Activitie & Expenses

SR. NO.	DETAILS OF CSR ACTIVITIES	AMOUNT
1	TOILET BLOCK AT CHC KHAMARIA	318269.00
2	RENOVATION OF HALL AT BBLC INTER COLLAGE	1132510.00
3	PLASTIC CHAIRS FOR BBLC INTER COLLAGE	172731.23
4	FULLY AUTOMATIC MEDICAL GRADE OXYGEN PLANT	3025000.00
5	AMBULANCE VEHICLE & REGISTRATION CHARGES	1550000.00
6	DESIGN & FABRICATION OF AMBULANCE	550000.00
7	CONSTRUCTION OF 5 NOS. ROOMS FOR RO PLANT	567101.40
8	SOLAR PUMP & RO PLANT 5 NOS.	942820.00
9	TOILET BLOCK IN CANE SOCIETY	250378.00
10	CIVIL FOUNDATION WORK FOR OXYGEN PLANT	130000.00
11	EXPENSES INCURED DURING COVID - 19, SANITIZER AND OTHERS	918140.56
	Total	9556950.19