To,

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

Subject: Request for "Certified Compliance Report" of Environmental Clearance of expansion of Molasses based Distillery from 75 KLD to 150 KLD at Village: Barkatpur, Tehsil: Nazibabad, District: Bijnor (Uttar Pradesh) by M/s Uttam Sugar Mills Limited (Distillery Division)

#### EC Ref. No.: J-11011/169/2014-IA II (I)Dated 19th August 2016.

#### Respected Sir,

In reference to the above-mentioned subject, we would like to inform you that we are going to file an application for proposed capacity expansion from 150 KLD to 250 KLD within existing premises of distillery. As per EIA Notification 2006 and its amendment, it is necessary to take the EC certified compliance report of existing unit.

We are also submitting the six monthly compliance of existing EC to the Regional MOEF&CC office, Lucknow. Copy of latest environmental Clearance Compliance along with all necessary annexure is enclosed with this letter.

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

Thanking you Your Faithfully

Authonized Signatory M/s Unam Sugar Mills Limited (Distillery Division)



# SIX-MONTHLY ENVIRONMENTAL COMPLIANCE AN NEW 2 - 3 REPORT OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE

#### (October 2021 to March 2022)

#### For

# Expansion of Molasses based Distillery from 75 KLD to 150 KLD

By

# M/s Uttam Sugar Mills Limited (Distillery Division)

At

Village: Barkatpur, Tehsil: Nazibabad District: Bijnor (Uttar Pradesh) - 246732

For Submission to: Ministry of Environment, Forest & Climate Change (Regional Office, Lucknow)

> Submitted By: M/s Uttam Sugar Mills Limited (Distillery Division)

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# CHAPTER-1: INTRODUCTION AND PROJECT DESCRIPTION

Six monthly environmental compliance/status report is submitted for Expansion of Molasses based Distillery from 75 KLD to 150 KLD by M/s Uttam Sugar Mills Limited (Distillery Division)for September, 2021. The Project is located at Village: Barkatpur, Tchsil: Nazibabad, District: Bijnor (Uttar Pradesh)- 246732.Prior Environment Clearance was obtained from Ministry of Environment & Forests (MoEF&CC) wide letter no.:J-11011/169/2014-JA II (I), dated 19th August, 2016. Consent to operate for Air has already heen obtained for. the project Vide Ref 13.04.2021 No.141363/UPPCB/Bijnor(UPPCBRO)/CTO/air/BLJNOR/2021dated and Consent 60 operate forWaterVide. RefNo. 108621/CPPCB/BJJNOR(UPPCBRO)/CTO/water/BJJNOR/2021dated16.12.2021 for validity up to 31/12/2022. 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 Uttam Sogar Mills Limited (Distillery Division)management team is fully conscious about Environmental Management and enhancing green belt development in project surrounding area.

Six monthly compliance/status reports for October, 2021 to March, 2022 for conditions stipulated in the Environmental Clearance letter issued by MoEF is enclosed as Anneuure-2. Photographs view of implemented mitigation measures are also attached for the ready reference as Photo Documentation.

EC Compliance October 2021 to March 2022

### CHAPTER-2: COMPLIANCE OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE

Name of the Project:Expansion of Molasses based Distillery from 75 KLD to 150 KLD at Village: Barkatpur, Tehsil: Nazibabad. District: Bijnor (Uttar Pradesh) - 246732 by M/s Uttam Sugar Mills Limited (Distillery Division).

### Clearance Letter No:J-11011/169/2014-IA II (1) dated 19th August 2016

Period of Compliance Report: (October, 2021 to March, 2022)

#### Sr. Condition Compliance No (i) Distillery unit shall be based on molasses based It is being complied. Distillery Unit is based on molasses as raw material only and no grain-based distillery unit shall be operated. only (ji) Complied, ESP along with stack of Bag filter along with stack of adequate height adequate height 85 Mtr has already shall be provided to bagasse/coal fired boiler to been provided attached to respective control particulate emission within 50mg/Nm3. boiler to control particulate emissions The gaseous emissions should be dispersed within 50 mg/NM3, Continuous through stack of adequate height as per online monitoring system for stack CPCB/SPCB/ guidelines. emissions has already been installed. Continuous online Stack Monitoring results are enclosed as Annerure-3. · Complied. The fugitive emissions (iii) In plant, Control Measures for checking fugitive limits are being maintained within emissions from all the vulnerable sources shall be the limit as imposed by UP provided Fugitive emissions shall be controlled Pollution Control Board (UPPCB). by providing closed storage , closed handling & Dust collection system provided in Conveyance of chemicals /materials, multiincineration Boiler as ESP Fuel cyclone separator and water sprinkling system handling systems are installed. Dust suppression system including water - Closed fuel conveying system is sprinkling system shall be provide at loading and installed. · Raw material stored in closed and unloading areas to control dust emission .Fugitive covered storage. emissions in the work zone environment, product Water sprinkling systems has been i , raw materials storage area etc. shall be regularly provided. Moving water sprinkling monitored and records shall be maintained . The system is in practice through the emissions shall conform to the limits imposed by lankers. UP Pollution Control Board (UPPCB). It is being complied. (iv)Company shall follow good management practices viz. collection of waste yeast sludge 1. Waste sludge and spent wash are from fermentation section in a closed system and

#### SPECIFIC CONDITION

	proper disposal ,reduced volume of effluent by adopting strategic approaches ,closed drains carrying spent wash to the treatment units, minimization of fugitive emissions from anuerobic treatment , minimum retention of treated & untreated spent wash in the lagoons, effective composting of the spent wash by controlled effluent spraying through mechanical system to avoid spillages & over application ,blending of sludge in correct proportion with press mud, and properly finished compost and green belt development with suitable plantation in and around the treatment units to mitigateodour from the distillery unit.	<ul> <li>transported through closed pipelines and will be used with the proportionate quantity of press mud/Ash for the making manure.</li> <li>2. Spent wash is being concentrated in MEE and is being used into the Boiler as Slop for the incineration. Spent lees and condensate water after treatment in CPU is being recycled back in process.</li> <li>33% greenbelt/plantation has already been developed all around the plant boundary helps in reducing the mitigate edor, noise level, arresting dust and improves the environment in surrounding. Green Belt Photographs is attached Annexure- 4.</li> </ul>
(v)	Pucca approach road to project site shall be constructed prior to commencing construction activity of the main distillery so as to avoid fugitive emissions	Complied. RCC approach roads are constructed and maintained with mobile water sprinkling system to avoid fugitive emission.
(vi)	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB guidelines, Acoustic enclosure shall be provided to the DG set to mitigate the noise pullution.	Unit has no OG set& is being maintained by the sugar mill.
(vii)	The Company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically, it shall simultaneously by sent Regional office of MOEF, the respective Zonal office of CPCB and the SPCB. The levels of PM <sub>10</sub> PM <sub>25</sub> , SO <sub>2</sub> , NO <sub>X</sub> , Co and HC (Methane) in ambient air shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.	CC Regional office. Certified compliance report of EC shall be uploaded on company website. The ambient air quality monitoring has been carried out on plant site and the monitoring results are enclosed as
(viii)	Total fresh water requirement from ground water source for distillery shall not exceed 1452 m3/day and prior permission shall be obtained from SGWA/CGWA. Water consumption shall be reduced by adopting 3R's (Reduce, reuse and	exceeded 600 m <sup>3</sup> per day. Valid permission for the withdrawal of

	recycle) concept in the process. Effort shall be made to use recycled water from sugar and condensate of MEE for the Co-generation power unit.	from the competent authority UPGWD Efforts has been made for 3R's (Reduce, reuse and recycle) concept in the process, UPGWD NOC Annexare-5.
(lx)	Spent wash generation from molasses-based distillery shall not exceed 8KL/KI of alcohol. The spent wash from molasses-based distillery shall be treated in bio-meth nation reactor Treated spent wash will be evaporated in MEE and concentrated spent wash will be bio-composted by mixing with press mud generated from sugar unit to achieve 'Zero' discharge Evaporator condensate shall be treated in polishing pond and recycled /reused in process. Sewage shall be treated in the STP. NO. Effluent shall be discharged outside the premises and 'Zero' discharge shall be maintained.	Spent wash generation from molasses has not exceeded 8 KL/KL of alcohol production. The Spent wash from molasses-based distillery is being concentrated in MEE and is being used in incineration Boiler as fuel.Spent lees and condensate water after treatment with CPU is being recycled back in process for molasses dilution and cooling towers etc. No effluent is being/will be discharged outside the Distillery.
(x)	Automatic/Online monitoring system (24x7moniotring devices) for flow measurement and relevant pollutants in the treatment system to be installed, the data to be made available to the respective SPCB and in the Company's website.	Installed & data are easily available on SPCB/CPCB and in the Company's website. We have already provided the user id & password to CPCB/UPPCB. Photographs attached Annexure-6.
(xi)	As proposed, no effluent from distillery and co- generation power plant shall be discharged outside the premises and 'Zero' discharge shall be adopted.	ZLD is being maintained No effluent is being/will be discharged outside the Distillery.
(xii)	Process offluent /any waste water shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	It is being complied. Separate lines constructed for process storm water and concentrated slop is being sent to the incineration Boiler
(xili)	Spent wash shall be stored in impervious RCC lagoons with proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. The storage of spent wash shall not exceed 15 days capacity.	The spent wash is stored in impervious lagoon of RCC with HDPE lining and arc kept in proper condition to prevent ground water pollution. As Per the CPCB recommendations, storage is not exceeding 07 days capacity.
(xiv)	Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be made on	Report is being submitted on monthly have to the Ministry's and Regional

	monthly a basis and report submitted to SPCB and this Ministry. The ground water quality monitoring fro pH, BOD,COD, Chloride, Sulphate and total dissolved solids shall be monitored sampling and trend analysis monitoring must be made on monthly basis and report submitted to the Ministry's Regional Office at Lucknow and SPCB.	Annexure-7.
(xv)	Bagasse storage should he done in such a way that it does not get air borne or fly around due to wind, boiler ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust shall be avoided.	<ul> <li>Complied.</li> <li>1. Unit has made arrangement to store the bagasse in covered area to avoid fly due to wind and sprinkling water around the premises/ bagasse stored area.</li> <li>2. Storage of bagasse is maintained scientifically in covered area with the adoption of sprinkling system along with covered conveying.</li> <li>3. Fly ash is being stored separately as per CPCB guidelines.</li> <li>4. Ash from the boiler is utilized in the bio composting process.</li> </ul>
(xvi)	Boiler ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust shall be avoided.Bagasse ash and coal shall be stored separately.	Ash disposal is being done in the environmentally save manner as per CPCB guidelines without affecting the air quality during wind or water regime during rainy season. Complied.
(xvii)	Firefighting system shall be as per the norms and cover all the areas where alcohol is produced handled and stored. Provision of foam system for firefighting shall be made to control fire from the alcohol storage tank.	<ul> <li>Complied. Full-fledged firefighting system is installed to cover complete distillery, sugar &amp; Co- generation power plant. Photographs of firefighting have been attached. The complete protection system comprise of :-</li> <li>a) Fire Hydrant</li> <li>b) Portable Fire Extinguisher</li> <li>c) Portable chemical Fire extinguisher</li> <li>d) Fire detection and Alarm system</li> </ul>
(xviii)	Risk assessment shall be carried to assess the fire and explosion risk due to storage of alcohol and report submitted to the ministry and its regional office at Lucknow within six month.	Being complied. We have already taken measures towards alcohol storage and approved drawing from Petroleum and Explosive Safety Organization is attached herewith. Letter of approved drawing has been

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		attached as Annexure-8.
(xix)	Occupational health surveillance programmed shall be undertaken as regular exercise for all the employees, the first aid facilities in the occupational health centre shall be strengthened and the regular medical test records of each employee shall be maintained separately.	It is being complied. Company has regularly conducted occupational health surveillance programmed once in year for all the employees & first aid facilities in the occupational health centre is strengthened with proper record. Sample Health reports have been attached as Annesure-9.
(xx)	Dedicated parking facility for loading and unloading of materials shall be provided in the factory premises Unit shall develop and implement good traffic management system for their incoming and outgoing vehicles to avoid congestion on the public road.	It is being complied. Dedicated parking facility has already been provided in the factory premises for loading & unloading of materials and first come and first out system is ensured by the way of digitalization.
(xxi)	As proposed, green belt over 16.5 acres of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc, selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.	It is being complied. Greenbelt has been developed as per the CPCB guidelines. Area of the plantation developed at our unit is approx. 33% of the total plant area.
(xxii)	All the commitments made during the public lifearing /Public Consultation meeting held on 7 th November, 2015 should be satisfactory implemented and adequate budget provision should be made accordingly.	It is being complied.
(xxiii)	At least 5% of the total cost of the project shall be earmarked towards the Enterprise social commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the ministry's Regional office at Lucknow. Implementation of such program shall be ensured accordingly in a time bound manner	
(xxiv)	The Company shall submit within three months their policy towards corporate Environment Responsibility which shall inter -alia address (i) standard operating process/procedure to being into focus any infringement /deviation /violation of environmental or forest norms /conditions ,(ii) Hierarchical system or Administrative order of the company to deal with environmental issues	

Six Monthly Compliance Report for Expansion of Molasses based Distilleryfrom 75EC ComplianceKLD to 150 KLD at Village: Barkatpur, Teksif: Nazibabad, District: Bijnor (Uttar<br/>Pradesh) - 246732 by M/s Uttam Sugar Mills Limited(Distillery Division)EC Compliance<br/>October 2021 to<br/>March 2022

	and ensuring compliance to the environmental clearance conditions and (iii) system of reporting of non-compliance /violation environmental norms to the Board of Directors of the company and /or stakeholders or shareholders.	
(8339)	Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, sufe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project, Alt the construction wastes shall be managed so the there is no impact on the surrounding environment.	Complied. Construction work is over.

### GENERAL CONDITION

Sr. No	Candition	Compliance
(1)	The project authorities must strictly adhere to the stipulations made by the U.P. Pollution Control Board (UPPCB), State Government and any other statutory authority.	Agreed for Compliance.
(ii)	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and forests. In case of deviations or alterations in the project proposal from thuse submitted to this Ministry for clearance, a fresh reference shall be made to the ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	
(iii)	The locations of ambient air quality monitoring stations shall be decided in consultation with the SPCB and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Agreed & Complied. The ambient Air Quality Monitoring Station Is already installed. Ambient air analysis report Annexure-3
(iv)	The overall noise levels in and around the plant area shall be kept well within the standards by providingnoise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise	Agreed and complied. The overall noise levels is being maintained within norms (Noise Monitoring Report) Annexure-3.

	levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz.75 dBA(day time) and 70 dBA(night time).	
(\v)	The company shall harvest rainwater from the roof-tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	Rain water from the roof tops of the buildings is being harvested rainwater from the roof -tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
(vi)	During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.	Complied. Constructed garland drains to avoid mixing of accidental spillages with domestic wastewater & storm water drains.
(vii)	Usage of personnel protection Equipments by all employees/works shall be ensured.	It is being complied.
(viii)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken or regular basis. Training to all employees on handling of chemicals shall be imparted.	Complied. Periodically training to all employees on safety & health aspects is provided regularly under the supervision of Safety committee.
(ix)	The Company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented	
(x)	The Company shall undertake CSR activities and all relevant measures for improving the socio- economic conditions of the surrounding area.	It is being complied.
(xi)	The company shall undertake eco- developmental measures including community welfare measures in the project area for the overall improvement of the environment	It is being complied.
(xii)	A separate Environmental Management cell equipped with full-fledged laboratory facilities	

	shall be set up to carry out the Environmental Management and monitoring functions	
(xiii)	The company shall carmark sufficient funds for recurring cost per annum to implement the conditions stipulated by the ministry of environment and forests as well as the state Government along with the implementation schedule for all the conditions stipulated herein. The funds so carmarked for environment management/pollution control measures shall not be diverted for any other purpose.	The funds carmarked for environmental protection measures are kept in a separate account and never spend on other purposes.
(xiv)	A copy of the clearance letter shall be sent by the project proponent to concerned panchayat, Zila praised / Municipal Corporation. Urban local body and the local NGO, is any from who suggestions/ representations, if any, were received while processing the proposal.	complied
(xv)	The Project Proponent shall also submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional office of MOEF the respective zonal office of CPCB and the state pollution control Board. A copy of Environmental Clearance and six-monthly compliance status reports shall be posted on the website of the company.	We are submitting six monthly compliance reports along with monitoring results to the concerned authorities, and same will also be posted on the website of the company.
(xvi)	The Environmental statement for each financial year ending 31 st march in form-V as is mandated shall be submitted to the 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 clearance conditions and shall also be sent to the Lucknow Regional office of Moef by E-mail.	We are submitting the environmental statement report for each financial year on 31 <sup>st</sup> March, Form-V to the state pullution control board as prescribed under the environment (protection) Rules, the status of compliance of environmental clearance conditions and shall also is being sent to the Lucknow Regional office of MoEP by E-mail.
(xvii)	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <u>http://moef.nic in</u> . This	We have already published the accordance of Environmental Clearance in two local newspapers before completion of the project.

	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 shall, be forwarded to the concerned regional office of the ministry.	
(xviii)	The Project authorities shall inform the Regional office as well as the Ministry, the date financial closure and final approval of the project by the concerned authorities and the start of the project.	complied

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# 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 Near Main Gate, and Near Admin Office to assess the ambient air quality. This will enable to have analytical understanding about air quality and the changes in the air environment in the study area with respect to the condition prevailing. The locations of the ambient air quality monitoring stations are given in Table-3.1.

Sr. No	Location Code	Location Name/Description	Environmental Setting of surrounding
ι.	AAQ-1	Near Main Gate	Industrial
2.	AAQ-2	Near ETP	Industrial
3.	AAQ-3	Near Storage Godown	Industrial

**Table-3.1: Details of Ambient Air Quality Monitoring Stations** 

#### AAQ-1: Near Main Gate

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

#### AAQ- 2: Near ETP

The sampler was placed Near ETP and was free from any obstructions. Surroundings of the sampling site represent industrial environmental setting.

#### AAQ-3: Near Storage Godown

The sampler was placed Near Storage Godownand was free from any obstructions. Surroundings of the sampling site represent industrial environmental setting.

#### 3.1.2 Ambient Air Quality Monitoring Methodology

Monitoring was conducted in respect of the following parameters:

- Respirable Suspended Particulate Matter (PM<sub>10</sub>)
- Fine Particulate Matter (PM<sub>2.5</sub>)
- Sulphur Dioxide (SO<sub>2</sub>)
- Oxides of Nitrogen (NO<sub>X</sub>)

The duration of sampling of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>X</sub> was 24 hourly continuous sampling per day duration monitoring. The monitoring was conducted for one day at the lucation. This is to allow a comparison with the National Ambient Air Quality Standards.

The air samples were analyzed as per standard methods specified by Indian Standards(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 (PM25 i.e. <2.5 microns), and Respirable Dust Sampler with gaseous sampling attachment

was used for sampling Respirable fraction (<10 microns), gascous pollutants like SO<sub>2</sub>, and NOx.

Sr. No	Parameter	Technique	Range of testing /limit of detection
I.	Respirable Suspended Particulate Matter (PM <sub>10</sub> )	Respirable Dust Sampler, with cyclone separator, Gravimetric Method	5.0 - 1200
2.	Fine Particulate Matter (PM <sub>7.5</sub> )	Fine Particulate Sampler, Gravimetric Method	2.0 - 500
3.	Sulphur dioxide	Modified West and Gacke	5.0 - 1050
4.	Oxides of Nitrogen	Jacob & Hochheiser	6.0 - 750

#### Table-3.2: Techniques used for Ambient Air Quality Monitoring

#### 3.1.3 Ambient Air Quality Monitoring ResultsNear Main Gate

The detailed on-site monitoring results of  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$  and  $NO_X$  are presented in Table-3.3.

Sr. No	Particalars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/2009
6	Particulate matters size less than 10 µm (PM <sub>10</sub> )	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	μg/m <sup>3</sup>	\$9.3	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM <sub>1.5</sub> )	IS: 5182 (Part-24): 2019	µg/m <sup>‡</sup>	53.32	2.0 - 500	For 24 hour -60
3	Sulphur Dioxides (SO3)	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m²	14.50	5.0 - 1050	Far 24 hour =80
4	Oxides of altrogen (NO <sub>2</sub> )	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	µg/m <sup>1</sup>	22.82	6.0 - 750	For 24 hour =80

#### Table-3.3: Ambient Air Quality Monitoring ResultsNear Main Gate

#### 3.1.4 Ambient Air Quality Monitoring Results Near ETP

The detailed on-site monitoring results of PM<sub>10</sub>, PM<sub>25</sub>, SO<sub>2</sub> and NOx are presented in Table-3.4.

#### Table-3.4: Ambient Air Quality Monitoring Results Near ETP

Sr. No	Particulars	Protocol	Ųnjt	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/2009
L	Particulate matters size less than 10 µm (PM <sub>10</sub> )	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	pg/m <sup>3</sup>	85.0	5.0 - 1200	For 24 hour = 100
2	Particulate matters size tess than 2.5 µm (PM <sub>2.5</sub> )	1S: 5182 (Part-24): 2019	httan,	50.2 E	2.0 - 500	For 24 hour -60
Ĵ	Sulphur Dioxides (SO2)	18: 5182 (Part-2): 2001 Reaffirmed: 2017	hg/m3	13.86	5.0 - 1050	For 24 hour -80
4	Oxides of nitrogen (NO <sub>X</sub> )	IS: 5182 (Part-6): 2006 Reaffirmed: 2017	hő/w,	20.58	6.0 - 750	For 24 hour =80

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#### 3.1.5 Ambient Air Quality Monitoring Results Near Storage Godown

The detailed on-site monitoring results of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NOx are presented in **Table-**3.5

Sr. No	Particulars	Protocol	Unit	Result	Range of testing Aimit of detection	Standard as per NAAQS: diated 18/11/ 2009
Т	Particulate matters size less than 10 µm (PM <sub>10</sub> )	IS: \$182 (Part-23): 2006 ReafTirmed: 2017	µg/m³	83.0	5.0 - 1200	For 24 hour =100
z	Particulate matters size less than 2.5 µm (PM <sub>2.5</sub> )	IS: 5182 (Part-24): 2019	µg/m³	48.42	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO <sub>1</sub> )	IS: 5182 (Part-2): 2001 Reaffirmed: 2017	µg/m"	17.93	5.0 - 1050	For 24 hour -80
4	Oxides of nitrogen (NO <sub>x</sub> )	IS: 5182 (Part-6): 2006 Reaffinned: 2017	µg/m <sup>3</sup>	19.42	6.0 - 750	For 24 hour = 80

#### Table-3.5: Amhient Air Quality Monitoring Results Near Storage Godown

#### 3.1.6 Discussion on Ambient Air Quality in the Study Area

The value of  $PM_{10}$  at Ambient Air Monitoring Station No: 1, 2&3 are  $89.3\mu g/m^3$ ,  $85.0\mu g/m^3 \& 83.0\mu g/m^3$  respectively which were within permissible limit of 100  $\mu g/m^3$  and  $PM_{2.5}$  levels are  $53.32\mu g/m^3$ Near Main Gate,  $50.21\mu g/m^3$ Near ETP and  $48.42\mu g/m^3$ Near Storage Godown, were also observed within permissible limit of 60  $\mu g/m^3$  (for residential, rural and other areas as stipulated in the National Ambient Air Quality Standards). SO<sub>2</sub> ranges between 12.93  $\mu g/m^3$  to 14.50  $\mu g/m^3$  and NO<sub>X</sub> ranges between 19.42  $\mu g/m^3$  to 22.82  $\mu g/m^3$  was also observed within the corresponding stipulated limits (Limit for SO<sub>2</sub> and NO<sub>X</sub>; 80  $\mu g/m^3$ ) at all of the 03 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 PM16 Concentration at all sites

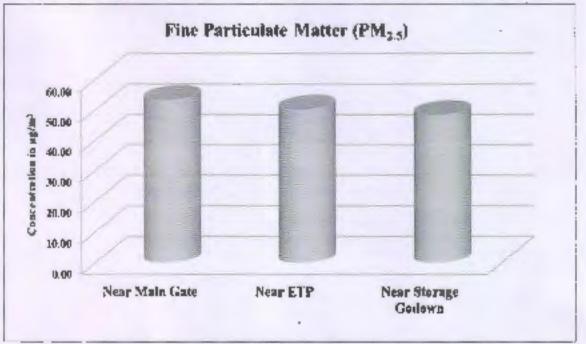


Figure-3.2: Graphs Showing PM23 Concentration at all sites

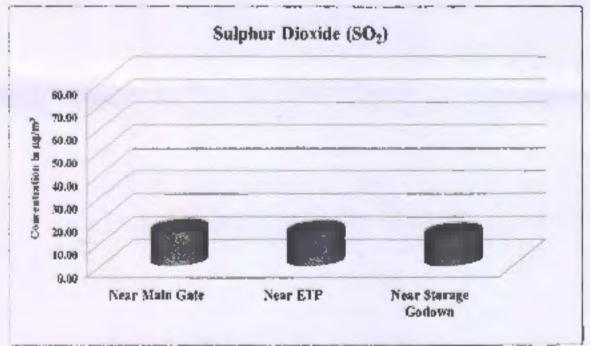


Figure-3.3: Graphs Showing SO; Concentration at all sites

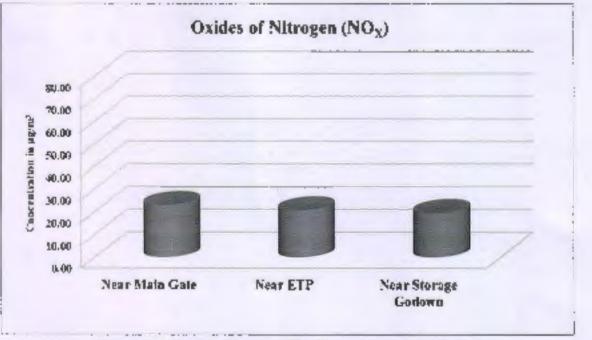


Figure 3.4: Graphs Showing NO<sub>X</sub> Concentration at all sites

#### 3.2 STACK EMISSION MONITORING

Stack Emission monitoring was carried out by EPA approved Laboratory on date 15.03.2022 for 02 No. of stackattached with 35.0 TPH&60.0 TPH bodiers(Wet Scrubber (with 35.0 TPH) and ESP (with 60 TPH)are used as Air Pollution Control Device with a stack height of 50.0 meter& 85.0 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-3.6

Sr. No.	Parameter	Unte	Protocol	Result	Range of Testing/ Limit of Detection	Stendard (as per CPCB)
			Stack No. 1			
1	Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	8L.6	2.0 - 1000	150
			Stack No. 2			
2	Particulate Matter	mg/Non <sup>3</sup>	(S: 11255 (Part-1): 1985 Reaffirmed: 2019	48.0	2.0 - 1000	50

Table-3.6: Details of Stack	Emission Monitoring Results
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#### 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 01 location as given in Table-3.7.

Table-3.7; Details of Am	ibient Noise Moni	toring Stations
--------------------------	-------------------	-----------------

Sr.	Location	Location name	Date of Monitoring
No	Code	and description	Date of Montioring
1,	NQ-I	Near Admin Building	24/03/2022to 25/03/2022

#### 3.3.2 Methodology of Noise Monitoring

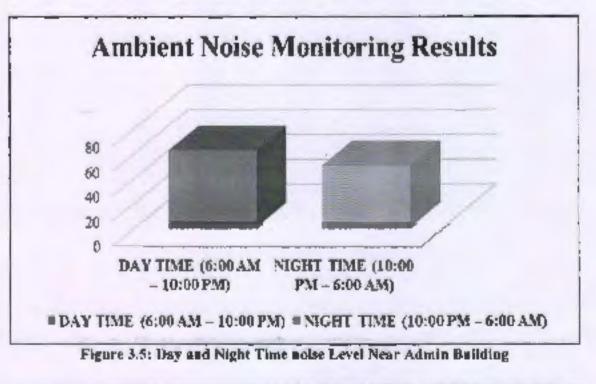
Noise levels were measured using sound level meter. Noise level monitoring was carried out continuously for 24-hours with one hour interval starting at 06:00 hrs to 06:00 hrs next day. The noise levels were monitored on working days only. During each hour Leq were directly computed by the instrument 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-3.8. The noise levels are graphically presented in Figure-3.5.

Table-3.8: Ambient Noise Monitoring Results

		An	abient Noise Level	
Sr. No.	Parameter	Unit	Results DAY TIME (6:00 AM - 10:00 PM)	Results NIGHT TIME (10:00 PM - 6:00 AM)
1	Equivalent sound level	dB(A)	62.05	49.86



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Area	Category of	Limits in dB(A) Leq		
Code	Ares/Zone	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 (Lgay):

The day time noise level at monitoring station was found 62.05 dB(A), which is within limits prescribed for industrial area i.e. 75 db (A).

#### Night Time Noise Levels (Lnight):

The night time noise level at monitoring station was found 49.86 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.

Sr. No	Location Code	Location name and description	Date of Sampling
E.	GW-1	Tubwell Water	12 <sup>th</sup> October, 2021
3.	GW-1	Tubwell Water	11th November, 2021
5.	GW-1	Tubwell Water	16th December, 2021
7.	GW-I	Tubwell Water	05 <sup>th</sup> January, 2022
9.	GW-1	Tubwell Water	14 <sup>th</sup> February, 2022
11.	GW-1	Tebwell Water	25th March, 2022

Table-3.10: Details of Water Quality Monitoring Station

#### 3.4.2 Methodology of ground water Quality Monitoring

Sampling of ground water was carried out on 12.10.2021, 11.11.2021, 16.12.2021, 05.01.2022, 14.02.2022and 25.03.2022. 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 t ml HNO<sub>3</sub>. 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 Rescarch 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.

Sr. No	Test Parameter	Unit	Protocol/Test Misthod	HesaN	Range of sesting /limit		Standard D: 2012
No					of detection	Desirable	Permissible
_			Physics-chemical Param	elera			
1	Çolaur	Hazzen	IS: 3025 (Part-4): 1983 Repfformed: 2017	<1.0	5 + 100	5	15
2	Odour -		IS: 3025 (Par-5): 1983 Reaffirmed: 2017	Agreeble	Qualicative	Agreeable	Agreeable
3	pH	-	APHA 23* Ed. 2017-4500 H*	7.6	1-14	6.5-8.5	No Relaxition
4	Tertsidity	NTU	APHA 23 <sup>40</sup> Tal. 2017-2130 B	<2.0	2-40	L	5
1	Total Dissalved Solids (TDS)	mg/l	IS 3025 (Part-16); 1984 Realfurmed: 2017	364,7	10 - \$000	\$00	2000
6	Ammonia (as tota) numanka-Nj	mg/1	APHA 23 <sup>rl</sup> Ed. 2017-4500-NH <sub>2</sub> F	<0.5	0.5-10	0.5	No Relevation
7	Anionic Detergents (an MBAS)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-5540 C	<0,05	0.05-0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Renfirmed: 2019	44.8	2.0 - 600	75	200
9_	Magnetium as Mg	mg/l	APHA 234 Ed. 2017-3500 Mg, B	27.21	0.1 - 200	30	001
10	Chloride an Cl	mg/l	APHA 23" F.I. 2017-4500-CITB	28.0	2.0 - 2000	2.10	1000
11	Flueride as F	nų/l	APILA 23" Ed. 2017-4500 F C	8,27	0.02-5.0	1.0	1.5
12	First Residual org/1		IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1-5.0	03	0,1
13	Nitrate as NO <sub>2</sub> mg/l		IS. 3025 (Pan-34). 1986 ReafErmed: 2019	<1.0	1,0 - 70	45	No Relevation
14	Phenalle Compound (as C <sub>o</sub> M <sub>2</sub> OH)	നുഴി	APHA 23 <sup>N</sup> Ed. 2017-5530 C			0.001	0.002
15	Sulphate as SO,	Jug/l	APHA 23" Ed. 2017-4500- SO, 2 31,26 1.0 - SO		200	400	
16	Alkalinity as CeCO <sub>3</sub>	ing/)	APHA 73" Fd 2017-2320 B	248.4	2.0 - 1000	200	600
17	Trital Handbass as         mg/l           CsCO <sub>3</sub> mg/l           Aluminium as Al         mg/l		АРНА 23 <sup>41</sup> Б. 2017-2340 С	224.0	5.0 - 800	200	600
18			APHA 23 <sup>N</sup> F.d. 2017-3120 B (KCP-ORS)	-0.015	0.015-5.0	0.03	0.2
19	Dorna as B	mg/l	APHA 23 <sup>10</sup> Ed. 2017-3120 B (ECP-OES)	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Ca	nış/l	APHA 23" Fd 2017-3120 B (ICP-OFS)	<0.03	0.03 - 10	0.45	1.5
21	Juon as Fe	ng/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	0.17	0.05 - 20	0.3	No Relayacion
22	Manganese as Mn	mg/l	APRA 23" Ed 2017-3120 B (ICP-0ES)	0,42	0.02- 5.0	0.1	0.3
21	Zine as Zn	тgЛ	APHA 23 <sup>rd</sup> Ed. 2017-3120 P (ICP-DES)	0.56	0.05 - 15	5	15
24	Codesians as Cd	<u>т</u> вл	APHA 22"TAI 2017-3120 B (ICP-DES)	<0.05	0.05 - 2.0	0.003	No Relexation
25	Lead as Pb	mgJ	APHA 21'0 Ed 2017-3120 B (ICP-DES)	<0.01	0.01 - 10	0.03	No Reluxation
26	Mercury as Hg	pug/1	APUA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.5	0.5-1000	1.0	No Relaxation
27	Nickel as NI	ng/l	APHA 23 <sup>48</sup> T.J. 2017-3120 B (ICP-UES)	-0.05	0.05 -5.0	0.03	Relaxation
28	Агневіс ві Аз	ണളംി	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (JCP-OES)	<0.02	0.02 - 2.0	001	0.05
29	Total Chromium	mg/l	APRIA 23 <sup>40</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	NO Relaxation
_			Microbiologiest Param	elers .	N. C. Starter	-	
0E	E. culi	MPN/ 100 ml	15: 1622 - 1981 Reaffirmed: 2019	Alpapat	2 2 MPN Presser re Abjecti pice 100 mil		descened in an U sample
31	T. celi	MPN/ 160 mL	[5; 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 kPh Presat or Absent per 106 rsl		detected in an disample

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### Table-3.11: Ground water Quality Results of Tubewell Water (October, 2021)

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#### Table-3.13: Ground water Quality Results of Tubewell Water

(November, 2021)

Sr.	Test Parameter	Unit	Protocol/Test Method	Result	Hange of testing /limit	Indian Standard 10500: 2012	
14					ofdetection	Desirable	Permissible
_			Physico-chemical Param	eters			
1	Colour	Hayan	45: 3025 (Port-4): 1983 Reoffirmed: 2017	<5A	5 - 100	5	13
2	Odomr	•	IS: 3025 (Purt-5): 1983 Reuffirmed: 2017	Agreeable	Qaplitnäve	Agrecable	Agreeable
3	pll		APRA 23 <sup>4</sup> Ed. 2017-4500 HT	7.6	1 - 14	6.5-8.5	Relaxation
4	Turbidity	NITI	APHA 23 <sup>rd</sup> Ed. 2017-2120 B	<2.0	2 - 40	1	5
5	Total Dissolved Solida (FDS)	mgA	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	412.8	10 - 1000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 23* Ed. 2017-4500-NDI, F	-15	0.3 - [4]	0.5	No Relaxinition
7	Anionic Detergents (as MRAS)	0.jgf	APHA 23 <sup>rl</sup> Ed. 2017-5540 C	<0.05	0.05-0.5	0.2	0.1
R	Cafelam at Ca	mgʻi	IS 3025 (Part-40) 1991 Reaffirmed: 2019	51.2	2.0 - 600	75	200
9	Mugnesium as Mg	mg/k	APHA 23" Ed 2017-3500 Mg B	34.02	0.1 - 200	30	100
34	Chloride as CI	mg/l	APHA 23 <sup>4</sup> Ed. 2017-4500-CT B	32.0	2.0 - 2000	250	1DOU
11	Fluoride as F	mgʻli	APHA 23 <sup>rd</sup> Ed. 2017-4500 F C	UL-IN	0.02 -5,0	1.0	1.5
D	) Free Residual Chlorine		15: 3025 (Part-26): 1986 Reaffinned, 2019	-40.1	0.1 - 5.0	41.2	1.0
13	Nitrate as NO <sub>3</sub> mg/l		15: 3025 (Part-34): 1986 Reuffinned 2019	0.1>	1.9 - 70	45	No Relaxation
14	Phenolise Compound (as CoHsOH)	ngA	APHA 23* Ed. 2017-55.90 C	<0.001	0.001-0.005	0.001	0 002
15	Sulphate as SO <sub>1</sub>			34.82	1.0 + 500	200	400
16	Alkalinity as CaCO,	mg/1 APIIA 2.1" Ed. 2017-2.120 B 276,0 2,		2,0 - 1000	2/10	600	
17	Total Bardness as CaCO <sub>3</sub> Ing/ Algenialues as Al Ing/		APITA 23** 15d. 2017-2340 C	268.0	5.0 - 800	200	600
18			APHA 23 <sup>rd</sup> EJ. 2017-3120-B (JCP-OUS)	-0.015	0.015-5.0	0.0.4	02
19	Boron as H	inge i	APICA 23 <sup>rd</sup> 15J, 2017-3120 B (10P-0ES)	~0.05	0.05 - 2.0	0.5	1.0
20-	Copper as Cu	ا/ير۳۱	APEA 23 <sup>-8</sup> Ed. 2017-3120 H (ICP-OES)	0.0-3	0.03 - 10	0.05	1.5
21	Tren as lie	mg/l	APITA 23 <sup>rd</sup> EJ. 2017-3120 B (ICP-0FSF	0.11	0.05 - 20	0.3	No Releastion
22	Mangaueur as Min	ing/l	APITA 23 <sup>16</sup> Ed. 2017-3120 B (ICP-OES)	0.03	0.02- 5.0	01	0.3
2.1	Zine as Za	mp/l	APHA 23 <sup>10</sup> Ed. 2017-3120 B (ICP-0ES)	0.86	0.05 - 15	3	15
24	Cadeslans or Cd	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OEN)	<0.05	0.05 - 2.0	0.003	No- Relexation
2.5	Lend as Ph	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.01	0.01 - 10.0	001	No Reluxation
26	Mercury as Hg	PB/1	APHA 23 <sup>rd</sup> Ed. 2013-3120 H (ICP-OES)	<0.5	0.5 - 1000	10	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OFS)	-:0.05	0.05-5.0	0.02	Np Relaxation
28	Arsenic is As	mp/l	APHA 23 <sup>14</sup> EU 2017- VI20 B (ICP-DES)	<0.02	0.02 - 2.0	0.01	0.06
29	Tetal Chromium	mg/l	APHA 23 <sup>8</sup> Ed. 2017-3120 B (ICP-DES)	<0.03	0 03 - 5.0	0.05	No Kelavarium
_			Microbiological Person	clers			
30	E- celi	MPN2 100 ml	IS: 1622 - 1981 Reaffinited 2019	Absent	S 2 MPN Prejaru Gr Assaml por 1/0 ml		detected in an al sample
31	T. celi	MPN- 100 ml	15: 1622 - 1981 Restliamed: 2019	Absent	> 2 MPN Fresent or Alseniger 600 mil		detected in an al sample

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Şr.	Test Parameter	Unit	Protoen//Test Method	Result	Runge of testing /imit		Standard 0: 2012
Nu					of detection		Perminibi
-			Physics-chemical Param	eters			
I.	Coleur	Назели	IS: 3025 (Part-4): 1983 Realfirmed, 2017	<5.0	5 - 100	5	15
2	Cidowr		IS: 3025 (Part-5): 1983 Realfirmed: 20)7	Agreeable	Qualitative	Agreeable	A greeable
3	pH	_ · ·	APHA 23 <sup>N</sup> F4 2017-4500 H*	7.7	) - 14	6.5.8.5	No Relaxation
4	1 arbidity	NTU	APHA 23" Ed. 2017-2130 B	<2.0	2 - 40	1	5
5	Lotal Dissolved Solids (TDS)	∎ng⁄1	18: 3025 (Part-16): 1984 Reaffirmed: 2017	435.0	10 - 5000	500	2000
6	Americania (as tetali simmonia-N)	ആളി	APHA 23" Ed. 2017-4500-NH, F	-0.5	0.5 - 10	0.5	No Nelazation
7	Ankonie Detergents (an MBAS)	mgi	АРНА 23 <sup>4</sup> На 2017-5540 С	<8.05	0.05-0.5	0.2	10
\$	Calcium as Ca	eng/l	1S: 3025 (Part-40): 1991 Reafformed: 2019	41.6	20-600	75	200
9	Magnesium as Mg	nig'i	APHA 23" Ed. 2017-3500 Mg. B	24.3	0.1 - 200	30	100
10	Chloride as Cl	mg'l	APHA 23" EJ. 2017-4500-CI B	36.0	2.0 - 2000	2.50	1000
П	Fluoride as F	img/l	APHA 25" Ed. 2017-4500 F C	0.44	0.02-5.0	1.0	1,5
12	Free Residual mg/l		IS: 3025 (Part-26): 1986 Reaffirmed: 2019	-0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO <sub>3</sub> mg/l		[5: 3025 (Part-34): 1986 Reaffirmed, 2019	\$L\$>	1.0 - 70	45	No Relazation
14	Phenolic Comprued (as C <sub>4</sub> H,OH)	H,OH) mgt APHA 23 EA 101 (3530)		104.0>	0.001-0.005	0.001	0.002
15	Sulphate as SO,	ang/F	APHA 23" Ed. 2017-4900- 5424	48.18	1.0 - 500	200	400
16	Alloshishy as CaCO <sub>3</sub>	mg/l	APHA 23" Ed 2017-2320 B	218.0	2.0 - 1000	200	600
17	Total Hardness as CaCO <sub>3</sub>		АРНА 23 <sup>41</sup> IG. 2017-2340 С	204.0	5.0 - 900	200	600
18	Aluminium as Al	ninium us Al mg/l APICA 23" Ed		<0.015	0.015-5.0	0.03	0.2
19	Boroa as B	figar	APIEA 21" Ed. 2017-3120.0 (LCP-QES)	-0.05	0.05-2.0	0.5	1.0
20	Copper as Ca	mg/l	APIEA 23 <sup>14</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	Figm	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-0ES)	D.16	0.05-20	0.3	No Relaxation
22	Manganese as Mo	mg/J	APHA 23" Fd. 2017-3120 B (JCP-OES)	6.05	0.02-5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (JCP-OES)	1.19	0.05-15	5	. 15
24	Cadmiana as Cd	mg/l	APHA 23 <sup>44</sup> Ed. 2017-3120 B (JCP-OES)	<1.05	0.05 - 2.0	0.003	Relaxation
25	Land in Pb	നു/ി	APHA 23 <sup>4</sup> Ed. 2017-3120 B (JCP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/t	APTIA 23" Ed. 2017-3120 B (ICP-OES)	4) <i>5</i>	0.5 - 1000	L.0	Relexation
27	Niekel us Ni	mg/l	APHA 23" Ed. 2015-3120 B (CP-OES)	20.0×	0.05 - 5.0	0.02	No Relaxition
28	Arzenic as As	mg/l	APHA 23 <sup>-4</sup> Ed. 2017-3 [20 B (ICP-OES)	\$9.95	0.02 - 2.0	0.01	0.05
29	Total Chromium	mg/l	APGA 23" Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
_			Microbiological Param	ciers			
30	K. sali	MPN/ 100 mil	15: 1622 - 1981 Realfirmed: 2019	Absent	2 7 MPN Press or Abicol per 190 ml		detected in an
31	T. coli	MPN/ 100 mL	IS: 1622 • 1983 Reaffmred 2019	Absent	2 MPN Present or Absent per 100 mJ		detected in an

# Table-3.15: Ground water Quality Results of Tubewell Water

(December, 2021)

Sr.	Test Parameter	<b>U</b> nit	Proterol/Test Mittbod	Result	Hange of testing flight	Indian Standard 10500: 2012	
Vo					of detection	Desirable	
_			Physico-chemical Param	eters .			
1	Colour	Hazen	LS: 3025 (1%++4): 1983 Reaffirmed 2017	<5.0	5 - 100	5	15
2	Odeur		IS: 3025 (Part-5); 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	рH	<ul> <li>АРНА 23<sup>4</sup> Еd. 2017-0500 Н<sup>*</sup></li> </ul>		7,5	1 - 14	6.5-8.5	Nn Relazion
4	Turbidity	NTU	APBA 23" EJ. 2017-2130 B	<2.0	2.40	1	5
5	Total Dissolved Solids (TDS)	13mg/l	IS: 3025 (Part-16): 1984 Realfirmed, 2017	428.6	10-5000	500	2000
6	Ammonia (as total soumonia-N)	158/1	APHA 20** Ed. 2017-4500-NH, F	<0.5	0.5 - 10	0.5	Nu Relaxation
7	Anisotic Defengents (at MBAS)	mgyl	APHA 23" EJ. 2017-5540 C	-0.05	0.05-0.5	0,z	1.0
8	Catelum as Ca togyl		15: 3025 (Part-40): 1991 Realfirmed 2019	43.2	2.0 - 600	75	200
9	Magneeium as Mg			340	100		
10	Chloride as Ci	ugi	APHA 23 6J. 2017-4500-CT B	30.0	2.0 - 2000	250	1900
11	Flueride as F	mag/)	APHA 23" Bd. 2017-4500 F C	0.42	0.02-5.0	1.0	13
12	Free Residual mg/		IS: 3024 (Part-26): 1986 Reaffirmed: 2019	-40.1	0.1 - 5.0	0.2	1,0
13	Nitrate as NO, mg		IS: 3023 (Part-34) 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Refecution
14	Pheoolie Compound (as C <sub>6</sub> H <sub>1</sub> Oil)	ungol	АРНА 23 <sup>46</sup> Еd. 2017-5530 С	<0.001	0.001-0.005	(00.0	0.002
15	Sulphace as SO,	mg/l	APHA 23rd Ed. 2017-4500- SO42-			200	400
16	Affectinity as CaCO,	#CO, mg/ APHA 23 <sup>rd</sup> Ed. 2017-2320 B		237.0	2.0 - 1000	200	600
17	Total Hardness as men		APTIA 23th Ed. 2017-2340 C	220.0	5.0 + 800	200	600
18	Atominise as At	ng4 APHA 23" Ed. 2017-3120 B <0.015 0.015-5.0		0.015-5.0	0.03	0.7	
19	Bornin as B	mg/l	APHA 23" Ed. 2017-3120 B (RCP-OF-S)	-0.05	0.05 - 2.0	0.5	1.0
20	Copper at Cu	ng/l	APHA 23" Ed. 2017-3120 B (ICP-0ES)	-0.03	0 03 - 10	0.05	1.5
21	Iron as Pe	ரழி	APHA 23" Ed. 2017-3120 B (ICP-OES)	EI.Ø	0.05-20	0.3	No Relucion
22	Manganese as Min	Regist	APIIA 23 <sup>rd</sup> EJ. 2017-3320 B (ICP-0):S)	0.05	0.02- 5.0	0.1	0.3
23	24Rc 23 24	tt;gm	APHA 23 <sup>ed</sup> Ed. 2017-3120 B (JCP-OES)	0.86	0.05 - 1.5	1	15
24	Cadmiana as Cil	mgil	APHA 23 <sup>40</sup> Ed. 2017-3320 B (ICP-OES)	<1.05	0.03 - 2.0	0.003	No Relaxation
25	Lead as Ph	rugen	APHA 23 <sup>4</sup> Ed. 2017-3120 B (JCP-0ES)	-01.04	0.01 - 10	0.01	No Released on
26	Mercury as Hg	µg/l	APHA 23 <sup>rd</sup> Ed. 2017-J420 B (ICP-DES)	<0.5	0.5 - 1000	0.1	No Relaxation
27	Nichol as Ni	ngn	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-0ES)	<0.05	0.05 -5.0	0.02	No Relosation
78	Arsenic as As	mg/j	APHA 23" Ed. 2017-3120 B (ICP-DES)	<0.02	0.02 - 2.0	6.01	0.0,1
29	Tetal Chromium	mgʻl	APHA 23" Ed 2017-3120 B (ICP-OES)	×0.03	0.03 - 5.0	0.05	No Relaxation
			Microbiological Param	elecs			
30	E. coli	MPN/ 100 ml	15: [622 - 1981 Reaffirmed: 2019	Absent	≥ 2 NDN Perancel on Absent per 100 and		denested in an Example
31	T. cali	MPN/ 100 ml	LS: 1622 - 1981 Reaffigmed: 2019	Absent	≥ 7 MPN Paron or Absort por 109 mil		desected in an

## Table 3.17: Ground water Quality Results of Tubewell Water

(January, 2022)

EC Compliance October 2021 to March 2022

Table 3.19: Ground	d water	Quality	Results of	Tubewell Water
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Sr. Ne	Test Paraneter	Unit	Protorel/Test Mitchod	Result	Range of testing /limit	Indian Standard 10500: 2012	
PI#					of detection	Desirable	Permissible
			Physico-chemical Paran	iciers.			
1	Colour	Hazon	15: 3025 (Part-4): 1983 RealTorned 2017	<3.0	5 - 100	5	1 15
2	Ordowr		IS: 3025 (Part-5): 1983 Renfformed: 2017	Agronable	Qualitative	Agreeable	Agreeable
3	p.H		APHA 23 <sup>4</sup> Ed. 2017-4500 H	7.5	1 - 14	6.5-8.5	No Relaxation
4	Torbidity	NIU	APRA 23 <sup>rd</sup> Ed. 2017-2130 R	<2.0	2-40	1	5
5	Total Dispolved Solids (TDS)	mg/l	15: 3025 (Part-16): 1984 Renfformed: 2017	404.2	10 - 3000	500	2000
6	Ammenia (ay tetat ammenia-N)	mg/l	APTIA 27* Ed. 2017-4500-NRT, F	<0.5	0.5 - 90	0.5	No Relaxation
7	Anionic Delergents (m MBAS)	Ing/L	APHA 23" Ed. 2017-5540 C	<0.85	0.05-0.5	0.2	1.0
*	Calcium as Cu	mg/l	(5: 3025 (Part-40): 1991 Realformed: 2019	56.0	2.0 - 600	75	200
9	Magnesium as Mg	July 1	APITA 23" Ed. 2017-3500 Mg. B	32.0	0.1 - 200	30	100
10	Chloride na Cl	mg/l	APRA 23" Ed 2017-4500-CI B	28.0	7.0 - 2000	250	1000
15	Fluoride as F	mg/l	APILA 23 <sup>rd</sup> Ed. 2017-4500 F C	0.35	0.02.5.0	L.0	1.5
12	Pres Residual Chlorine	mg/l	(5: 3025 (Part-26) 1986 Realfirmed: 2019	<0.1	0.1-5.0	0.2	1.0
13	Nitrute as ND, mg/l		IS: 3023 (Part-34): 1986 Reaffirmed: 2019	<1.0	10-70	43	No Relexation
14	Phenolic Campound (m C <sub>n</sub> H <sub>6</sub> OH) mg/l		APHA 23* EL 2017-5550 C	<0.001	0.001-0.005	0.001	0.002
19	Sulphate as SO4	mg	APHA 23" Ed. 2017-4500- SO,3 28.0 1.0 - 500		1.0 - 500	200	400
16	Adkalinity as CaCO <sub>3</sub>	mg/	APHA 23" Ed. 2017-2320 B	289.0	2.0-1000	200	600
17	Total llardness as CaCO <sub>1</sub>	mg/	APHA 23" Ed. 2017-2340 C	272.0	5.0 - 800	200	600
18	Alaminium as Al	mg/1	APHA 214 Ed. 2017-3120 B (ICP-DES)	-0.015	0.015-5.0	0.03	0.2
19	Borrow us B	raug/J	APITA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	-40.05	0.05 - 2.0	D.5	1.0
20	Cupper us Ca	mg/l	APHA 2.3" Ed. 2017-3120 B (ICP-DES)	<0.03	0.03 - 10	0.05	1.5
21	Tron as Fe	aug/l	APHA 23" Ed. 2017-3120 B (3CP-OES)	8,10	0.05 - 20	0.3	Nu Relaxation
22	Mangaucoc as Mn	глу/	APHA 23" Ed. 2017-3120 B (JCP-OES)	0.04	0.02- 5.0	0.1	0.3
23	' Zine us Zn	reng/1	APHA 23" Ed. 2017-3120 B (JCP-OUS)	0.93	0.05 - 15	5	15
24	Cadmiana as Cd	mg/l	APHA 25 <sup>4</sup> Ed. 2017-3120 R (ICP-OES)	<0.05	0.05 - 2.0	0.003	Relevation
25	Loud as Pb	ong/1	APHA 25 <sup>-0</sup> Ed. 2017-3120 H (ICP-OES)	<0.0)	0.01 + 10	0.01	No Relavation
26	Mercury as fig	⊨\$ <sup>,1</sup>	APHA 25" Ed. 2017-312013 (ICP-OEN)	e).5	0.5 - 1000	1.0	Relavation
27	Nickel us Ni	ing/l	APBA 23 <sup>rd</sup> Ec. 2017-3120 ft (ICP-OES)	<0.03	0.05 -5.0	0.02	No Relanquior
28	Arsenic as As	đug/l	APHA 23 <sup>10</sup> Ed. 2017-3120 H (ICP-OES)	<0.02	0.02 + 2.0	0.01	20.0
29	Total Chromium	me/1	APBA 23 <sup>80</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 + 5.0	0.05	Relaxation
-			Microbiological Param	eters			
30	E coli	MPW/ HUO mi	15: [622 - 1984 Reafformed: 2019	Absent	> 2 MPN Proceed or Ataani per '00 mA		detected in en al sample
11	T. 408	MPN/ 100 ml	35: 1622 - 1981 Reaffirmed: 2019	Absent	9 2 MDN Present or Abreat per DUI get		detected in an al sample

Sr. Ne	Test Parameter	Unix	Prefocel/Test Machael	Result	Range of testing Abris	Indian Standard (4500: 2012	
Ne.					ofdetection	Desirable	Permissible
			Physico-chemient Param	Cit 11			
1	Colour	1 Mazzen	Es: 3025 (Part-4): 1983 RealFirmed: 2017	<5.0	3 - 100	5	15
1	Diduur	-	IS: 3025 (Pert-5): 1982 Realfirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pfl	- APHA 23** Ed. 2017-4500 EF	APHA 23" Ed. 2017-4500 EF	7.5	1-14	6.5-8.5	No
4	Turbidity	NTU	API3A 23 <sup>st</sup> Ed. 2017-2130 B	4.0	2.40	L	5
3	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 3984 Reaffirmed: 2017	378.5	10 - 5000	500	2000
6	Ammedia (as tetal ummedia-N)	mg/l	APHA 23* Ed. 2017-0500-NH3 F	<0.5	0.5 + 10	0.5	No Reinzabon
7	Anionir Detergents (as 51BAS)	mg/l	APRA 23* Ed. 2017-5540 C	-0.05	0.05-0.5	02	1.0
8	Calcium as Ca	mg/l	15 3025 (Pari-40): 1991 RealTaned: 2019	49.6	2 0 - 600	75	200
ų	Magnesium as Ma	mg/l	APEA 23" Ed. 2017-3500 Mg. B	31.10	0   - 200	.30	100
10	Chloride as CI	mg/l	APHA 23" Ed. 2017-4500-CFB	34.0	2.0-2000	2.50	1000
11	Fluoride as F	mg/l	APHA 23" EL 2017-4500 F C	0,43	0.02 - 5.0	10	1.5
12	Ease Destitued		IS 3025 (Part-26): 1986 Reoffinged: 2019	-41.1	0.1-5.0	0.2	1.0
B	Nutrate as NO <sub>2</sub> m		15 3025 (Part-34): 1985 ReatFirmed: 2019	×1.0	1.0 - 70	45	No
н	Phenolic Compound (as C <sub>4</sub> H,OH)			0.001	0.001-0.003	0.001	D.00/2
15	Sulphate as SO <sub>4</sub>	mg/l	AP11A 23" Ed. 2017-4500- SU,*	A 23 <sup>d</sup> Ed. 2017-4500- 50, <sup>2</sup> 32.52		200	400
16	Alkalinity as CaCO <sub>5</sub>	mg/T	APHA 23rd Ed. 2017-2320 B	272.0	2.0 - 1000	200	600
17	Total Hardness as m CaCO, m		APHA 234 Ed 2017-2340 C	252.4	30-800	200	600
18	Abuminion as Al	as Al mg/ APHA 23" Ed 2017-3120 H0,015 0015		0.015-5.0	0.03	0.2	
19	ligenda un fi	mgA	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	CO.UP>	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iran as Re	mg/l	APHA 23 <sup>rd</sup> Ed 2017-3120 B (ICP-OES)	0.10	0.05 - 20	0.3	No Relaxation
22	Manganese as Ma	mgʻl	APHA 23" Ed. 2017-3120 B (ICP-OES)	IKU7	0.02- 5.0	0.1	0_3
23	Zinc as Zn	mg/l	APIA 23 <sup>10</sup> Ed. 2017-3120 B (ICP-OES)	0.44	0.05 - 15	5	15
24	Cadmium as Cd	.mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 + 2.0	0.003	No Retaxation
25	Lend as Pb	rug/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	-4101	0.01 - 10	0.01	No
26	Mercury as Hg	rgд	AFHA 23" Ed. 2017-3 20 B (ECP-OES)	-41.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	-145	0,05-5.0	0.02	No Relaxation
28	Arsenie as Aa	APRIA 217 Ed 2017, 3120		<1.02	0.02 - 2.0	0.01	0.05
29	Total Chromium	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	<=,03	0.03 - 5.0	0.04	No Relaxacion
			Microbiological Param	elers			
30	E. coli	MPN/ ID0 mJ	18: 1622 - 1981 Reaffirmed: 2019	Absent	2 MPN Present or Abassi per 100 mil		detected in an Isample
-	1. coli	MPN/	18: (622 - 1981		22 MP N Present		detected in un

# Table-3.21 Ground water Quality Results of Tubewell Water

(March, 2022)

#### 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-3.23.

Sr. No	Location Code	Location name and description
1.	SQ-1	Near Project Site

#### Table-3.23: Details of Soil Monitoring Stations

#### 3.5.2 Methodology of Soil Monitoring

The sampling has been done in line with IS: 2720 & Methods of Soil Analysis, Part-1<sup>st</sup>, 2<sup>nd</sup> 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 March on 25.03.2022.

The samples have been analyzed as per the established scientific methods for Physicochemical 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-3.24.

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	
T	рH		IS: 2720 (Part-26): 1987 Reaffirmed: 2016	7,3	1 - 14	
2	Electrical Conductivity	µmhos/cm	1S: 14767:2000 Reaffirmed:2016	292.0	1.0 - 40000	
3	Moisture content	%	IS: 2720 (Part-2): 1973 Reaffirmed: 2015	3.42	1.0 - 50	
4	Sulphur	Kg/Hec	IS:14685: 1999 Reaffirmed: 2014	14.32	5,0 - 100	
5	Boron	mg/kg	ETRC/ LABSOPS/06	<4.0	4.0 - 100	
6	Copper	mg/kg	ETRC/ LABSOPS/07	0.37	0.3 - 500	
7	Zine	mg/kg	ETRC/LABSOPS/08	1.42	1.0 - 500	
8	trop	mg/kg	ETRC/ LABSOPS/09	14.14	\$.0 - 500	
9	Manganese	mg/kg	ETRC/LABSOPS/10	7.25	5.0 - 500	

#### Table-3.24: Physico-Chemical Characteristics of Soil Near Project Site

# 3.5.4 Discussion on Soil Characteristics in the Near Project Site

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.







5

Б

7

8

9

10

Solids (TDS)

ammonia-Nj Anionio Detergente

Calcium as Ce

**Chiloride as Cl** 

Magnesium as Mg

(as MBAS)

Ammonia (as total

mg/l

mg/l

mg/l

mgA

mgd

mgd

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378.5

BOL

BDL.

49.6

\$1.50

34.0

10-5000

0.5 - 2.0

0.05 . 0.5

2.0-600

0.1 - 200

2.0 - 2009

500

0.5

02

75

30

260

No Relaxation

1.0

200

100

1000

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#### ETRCPM14/TES-REP#T/17

			WATER	ANA					
	t Report Ref No. ET ne /Address/Type o			Un VII	te of Report: a Uttern Sugar it: Barkatpur, lage Barkatpu strict: Bijnor (	r Mills Limi Distiliery I r, P.O. Sat	Division Selpur Bitra	n	
			SAMPL	EDET	ALS				
11	Water/Waste Water	Group	d Water	. 6	Packing Cond	ltion	: Sealed		
2	Sample Description		vell Water		Sample Collec		Industry Self		
3	Sample received date				Analysis Start	25.03.2022			
4	Sample Quantity	5.0 lite	ITB	18	Analysis End	28.03.20	28.03.2022		
			TEST	RESI	JLT				
Br.	Test Parameter	Unit	Protocal/Test Me	lbod	Result	Range of Letting		Standard 0: 2012	
No						detection	Desirable	Permissible	
			Physico-chu		in determine res				
1	Colour	Hazen	IS: 3025 (Part-4): Realfirmed: 201	7	<5.0	5-30	5	15	
2	Odour		15: 3625 (Part-5): " Reeffirmed: 201	7	Agreashie	Qualitative	Agraephia	Agreeable	
3	phi		APHA 23" Ed. 2017-		7.5	1+14	6.5-6.5	No Relaxation	
4	Turbidity	NTU	APHA 23" Ed. 2017-		BOL	2-40	1	5	
	Total Disactved	mad i	(S: 3025 (Part 16):	1884	378.5	10 - 5000	500	2000	

	1.50			A LELES PORTENTI LEGE PORT	T 1-T	I BUT POTT		A
	11	Fluoride as F	mgð	APHA 23 <sup>AI</sup> Ed 2017-4500 F C	0.43	0.02 - 5.0	1.0	15
	12	Free Residual Chiorine	mgA	IS. 3025 (Part-26): 1986 Reaffirmed: 2019	BDL	0.1-5.0	02	1.0
	13	Nitrale as NDs	ngn	t5: 3025 (Part-34): 1988 Resfirmed: 2019	BDL	1.0 - 70	45	No Relaxator
	14	Phenolic Compound (se C <sub>2</sub> H <sub>2</sub> OH)	mgđ	APHA 23'4 Ed. 2017-5530 C	BDL	0.001 - 0.005	0.001	0.002
	15	Salphate as SO4	ngri	APMA 23" Ed. 2017-4500- SO4"	32.52	1.0 - 500	200	400
E	16	Alkalinity as CaCOs	mg/i	APHA 23" Ed. 2017-2320 B	272.8	2.0 - 1000	200	800
	17	Total Hardness as CaCO;	mg/l	APHA 23" Ed. 2017-2340 C	252.0	5.0-800	200	600
	18	Aluminium as Al	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.015 - 5.0	0.03	0.2
	10	Boron as B	mg/l	APHA 23" Ed. 2017-3120 B [ICP-OES]	801	0.05 - 2.0	D.5	1.0
	20	Copper as Cu	mg/l	APHA 23" Ed. 2017-3120 B	BOL	0.03 - 10	0.00	1.5
i	21	fron as Fe	mg/l	APHA 237 Ed. 2017-3120 B	D.10	0.05 - 2D	0.3	No Relexation

Reaffirmed: 2017

APHA 23" Ed. 2017-4500-NHc F

APHA 23<sup>rd</sup> Ed. 2017 5540 C

IS. 3025 [Part-40]: 1991

Reaffirmed: 2019

APHA 23" Ed. 2017-3500 Mg. B

APHA 23" Ed. 2017-4500-CT B

Page 1 of 2

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22	Manganese as Min	ngn	APHA 23 <sup>m</sup> Ed. 2017-3120 B (ICP-OES)	0.02	0.02 - 5.0	01	0.3
23	Zinc as Zn	rgm .	APHA 23" Ed. 2017-3120 B (ICP-OEB)	0.55	0.05 - 15	5	15
24	Çadmium as Gd	mg#	APHA 23" Ed. 2017-3120 B (ICP-OES;	BD4.	0.05 - 2.0	0.003	No Relaxation
25	Lund as Pb	mgA	APMA 23" Ed. 2017-3120 8 (ICP-DES)	BDL	0.01 - 10	0,01	No Relaxation
28	Mercury as Hg	(Da	APMA 23" Ed. 2017-3120 8 (ICP-OES)	BOL	0.5 - 1000	1.0	No Relaxation
27	Nickel es Ni	ngn	APHA 23" Ed. 2017-3120 8 (KCP-OES)	BDL	0.08 - 5.0	0.02	No Relaxetion
ŻB	Arsenic as As	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05
<b>Z</b> 9	Total Chromium	mg/l	APHA 23" Ed. 2017-3120 8 (ICP-OES)	BOL	0.03 - 5.0	0.05	No Retaxation
			Microbiological Pare	neiner			
30	E. coll	MPN/ 100 ml	(\$: 1522 - 1981 Realfinmed: 2019	Abeant	E 2 MPH Presseri or Absort per 100 mi	Shall not be detected in a 100 ml sample	
31	T. coll	MPN/ 100 mil	13: 1622 - 1981 Reaffirmed: 2019	Absent	2 2 MPM Present of Abapt2 per 100 ml	Shafi not be detected in wi 100 mi sample	

Bla.-Below Delection Limit

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#### ETROPHIA/TES-REP/ET/38

TEST REPORT SOIL ANALYSIS

Test Report Ref No. ETRC/EPA/6052/2022	Date of Report: 26/03/2022
Name /Address/Type of Industry	We Uttam Sugar Mills Limited Unit: Barketpur, Distillery Division Village Barkatpur, P.O. Sabalpur Bitran District: Bijnor (U.P.) - 246732

SAMPLE DETAILS

1	Sampling Location	Near Project Site	• 5	Packing Condition	Sealed
Ż	Sample Description	Soil Sample	6	Sample Collected By	ETRC, Lucknow
3	Sample received date	25.03 2022	7	Analysis Start Date	25 03 2022
4	Sample Quantity	! 500 gms	B :	Analysis End Date	28 03 2022

TEST REPORT

Sr. No.	Teat Parameter	Unit	Protocol/Test Method	Reput	Range of testing	
1	рН		IS: 2720 (Pert-25):1987 Reaffirmed:2016	7.3	1-14	
2	Electrical Conductivity	µmhos/cm	(S: 14767:2000 Reaffirmed:2018	292.0	1.0 - 40000	
3	Moisture content	%	IS :2720 (Part -2):1973 Rastfirmed:2015	3.42	1.0 - 50	
4	Sulphur	Kg/Hec	IS :14665:1999 Reaffirmed:2014	14.32	5.0 - 100	
5	Boron	mg/kg	ETRC/ LABSOPS/06	BOL	4.0 - 100	
6	Copper	mg/kg	ETRC/ LA9SOPS/07	0.37	0.3 - 500	
7	Zinc	ng/kg	ETRC/ LABSOPS/06	9.42	1.0 - 500	
8	Iron	mg/kg	ETRC/ LABSOPS/09	14.14	5.0 - 500	
9	Manganese	mg/kg	ETRC/LABSOPS/10	7.25	5.0 - 500	

**BDL = Below Detection Limit** 

ETRC warants that all analytical work is confucatel professionally in accordance with all applicable standard laboratory practices and that the date reflects can just attempt to the itera landard to the nettype, memoried in the report as above. The neuron statutes are laborated.

ETRC does not assume any liability for any claims or damages minited to the quality of parameter analyzed in the receive anti/or the performance of the equipment compliainty in the results. As adjusters surgion to functional jurisdictors.

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in the and Authorized Signatory (Sandeep Kr Verma)

Lob-Incharge

2 ili gors

Authorized Signatory (Ritu Garg) QM



# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

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#### ETRCPM14/TE8-REP/FT/17

	WAT	ER ANALYSIS			
Test Report Ref No. ET	RC/1010/10056/2021	Date of Report: 16/10/202	1		
Name /Address/Type of Industry		M/s Uttam Suger Mills Limited Unit: Barketpur, Distillery Olvision Village Barketpur, P.O. Sabsipur Bitran District: Bijnor (U.P.) - 246732			
	SAM	APLE DETAILS			
1 Water/ Waste Water	Ground Water	6 Packing Condition	Sealed		
2 Sample Description	Tubewell Water	6 Sample Collected By	Inclusion Solf		

TEST REPORT

2 Sample Description	Tubewell Water	6	Sample Collected By	Industry Self
3 Sample received date	12.10 2021	7	Analysis Start Date	12.10.2021
4   Sample Quantity	5.0 liters	B	Analysis End Date	16.10.2021

#### TEST RESULT

Sr.	' Test Paramater	Unit	Protocol/Test Method	Result	Range of testing	Indian Standard 10500: 2012	
No					/imit of detection	Desirable	Permisalble
			Physico-chemics Pers	meters			
1	Colour	Hazen	IS. 3025 (Part-4), 1983 Reaffirmed; 2017	<\$.0	5-30	5	15
2	Odour		IS: 3025 (Pert-5): 1983 Realimned: 2017	Agroeable	Qualitative	Agreeable	Agreeabla
3	pH	-	APHA 23" Ed. 2017-4500 H*	1.6	1-14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23" Ed. 2017-2130 B	BOL	2-40	1	5
5	Total Disacived Solide (TDS)	ngri	IS: 3025 (Part-16): 1964 Reeffirmed: 2017	364.7	10 - 5000	500	2000
8	Ammonie (as total ammonie-N)	mgA	APHA 23" Ed. 2017-4500-NH; F	BDL	0.5 - 2.0	Q.5	No Relatation
7	Anionic Delergenta (as MBAS)	nga	APHA 23 <sup>rd</sup> Ed. 2017-5540 C	SOL	0.05-0.5	0.2	1,0
8	Celcium as Ce	mg/l	IS: 3025 (Part-40): 1991 Renfilmed: 2019	44.8	2.0 - 600	75	200
9	Negneslum se Mg	mg/l	APHA 2310 Ed. 2017-3500 Mg, B	27.21	0.1 - 200	30	100
10	Chioride es Ci	mg/l	APHA 23" Ed. 2017-4500-CI'B	28.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/t	APHA 23" Ed. 2017-4500 F C	0.27	0.02 - 5.0	1.0	1.5
12	Free Regizingi Chiorine	mgñ	IS: 3026 (Part-26): 1986 Reeffirmed: 2019	BOL	0,1 - 5.0	0.2	1.0
13	Nitrate as NOs	nga	45: 3025 (Part-34), 1986 Regiftment: 2019	SDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C;H,OH)	ngñ	APHA 23" Ed. 2017-5530 C	BDL	0.001 - 0.005	0.001	0.002
15	Sulphate as SO,	ngri	APHA 23 Ed. 2017-4500- \$042	31.28	1.0-500	200	400
18	Alkalinity as CoCO3	mgA	APHA 23" Ed. 2017-2020 B	245.0	2.0 - 1000	200	50D
17	Total Hardnese as CaCOy	mga	APHA 23" Ed. 2017-2340 C	224.0	5.0 - 800	200	500
18	Aluminium te Al	mgd	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.015 - 8.0	<b>¢0.</b> 0	0.2
19	Boron as B	mg/)	APHA 23" Ed. 2017-3120 B (ICP-OES)	601	0 05 - 2.0	0.5	1.0
20	Copper as Cu	mgri	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.03 - 10	D.D5	1,5
21	kon as Fe	ngñ	APHA 23" Ed. 2017-3120 B (ICP-OES)	0.17	0.05 - 20	0.3	No Relavation

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31	T. coll	MPN 100 ml	IS: 1622 - 1991 Reaffirmed: 2019	Abaatti	a 2 taline Presson tor Abuser par 100 ml		e detected in any mi eample
30	E. coli	MPN/ 100 mil	15: 1622 - 1961 Restlimed: 2019	Absent	a 3 MPN Prosent or Absent per 100 mi		e detected in any mi semple
			Microbiological Parag	motions			
29	Total Chromium	mg/l	APHA 23 <sup>th</sup> Ed. 2017-3120 B (ICP-OE6)	BDL	0.03 - 5.0	0.05	No Releastion
28	Arsenic as As	mgri	APHA 23" Ed. 2017-3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05
27	Mickel as NI	mgri	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.06 - 5.D	0.02	No Relaxation
26	Moreury as Hg	нри	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	BDL	0.5 - 1000	1.0	No Relaxation
26	Lund as Pb	ngit	APHA 23" Ed. 2017-3120 B (ICP-DES)	BDL	0.01 - 10	0.01	No Relaxation
24	Codmium as Gd	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.05 - 2.0	0.003	No Relexation
23	Zinc as Za	ngt	APHA 23 <sup>10</sup> Ed. 2017-3120 B (ICP-OES)	0.56	0.05 - 15	5	15
22	Малдарени ев Мл	mgal	APHA 23" Ed. 2017-3120 B (ICP-CES)	0.02	0.02 - 5.0	0.1	0.3

BOL-Beien Dettetton Link

#### ...... FAD OF REPORT......

ETRC warrants that at apalytical work is conducted professionally in accordance of with at appropriate pandand schemetory practices and then this data reflects our basil arrange to generate bocurse mouth for the sample, mandored in the report as above. The mouth fields only to the terms tetled ETRC down not exclude any lighting for any caline or demogram related to the quality of personally delayoust in the results and/or the performance of the requiperent constituting to the results.

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(Ritu Garg) ON

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#### ETRCPM14/TES-REP/FT/17

-		TAW	ER ANA	LYSIS	
	st Report Ref No. ETF me /Address/Type of		Min Un Vil	te of Report: 17/11/2021 s Uttam Suger Mille Lim il: Barkatpur, Distillery lege Berkstpur, P.O. Se strict: Bijnor (U.P.) - 246	ited Division belgur Bitran
		SAL	APLE DET	ALS	
1	Water Waste Water	Ground Water	1 5	Packing Condition	Sealed
2	Sample Description	i Tubewell Water	6	Sample Collected By	Industry Self
3	Sampla received date	11.11.2021	17	Analysis Start Date	11,11.2021
4	Sample Quantity	5.0 inters	8	Analysis End Date	16.11.2021

TEST REPORT

#### TEST RESULT

Sr.	Test Parameter	Unit	Protocol/Test Method	Protocol/Test Method Provid	Range of teeting		Standard 0: 2012
No				n to the tart	detection	Desirable	Permissible
			Physico-chemical Pare	metors			
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Realfamed: 2017	~5.0	5 - 30	5	15
2	Odour		19. 3025 (Part-6): 1963 Rectimed: 2017	Agreeable	Qualitative	Agreceithe	Agreesbio
3	pH	-	APHA 23" Ed. 2017-4500 H	7.8	1 = 14	6.5-8.6	No Relaction
4	Turbidity	NTU	APHA 23" Ed. 2017-2130 B	BOL	2 - 40	1	6
5	Total Discolved Solids (TDS)	ngn	IS: 3026 (Part-18): 1964 Restance: 2017	412.8	10 - 5000	500	2000
£	Ammonie (as total ammonie-N)	ngri	APHA 23" Ed. 2017-4600-NH3 F	BOL	0.5 - 2.0	0.5	No Relaastion
7	Anionic Detergents (as MBAS)	mp/l	APHA 23" Ed. 2017-5540 C	BDL	0.05-0.5	0.2	1,0
8	Calcium as Ca	ngn	IS: 3025 (Pert-40): 1991 Realfirmed: 2019	51.2	2.0 - 600	75	200
9 1	Magneslum as Mg	mg/l	APHA 23" Ed. 2017-3500 Mg. B	34.02	0.1 - 200	30	100
10	Chloride es Cl	mg/l	APHA 23" Ed. 2017-4500-CFB	32.0	2.0 - 2000	250	1000
11	Fluoride as F	Nem	APMA 23" Ed. 2017-4600 F C	0.40	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	ngn	IS: 3026 (Part-26): 1988 Reaffirmed: 2019	BDL	0.1-5.0	0.Z	1.0
13	NPtratie as NO <sub>2</sub>	nga	IS: 3026 (Part-34): 1966 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (es C <sub>2</sub> H <sub>3</sub> OH)	mgA	APHA 23" Ed. 2017-5530 C	BOL	D.001 - 0.005	0.001	0.002
15	Sulphate an SO4	mg/t	APHA 23" Ed. 2017-4600- SO."	34.82	1.0 - 600	200	400
16	Alkalinity as CaCO	Rem	APHA 23" Ed. 2017-2320 B	276.0	2.0 - 1000	200	900
17	Total Hardness as GeCOs	mgit	APHA 23" Ed. 2017-2340 C	268.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.016 - 5.0	0.03	0.2
18	Boron as B	mgA	APHA 23" Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mgil	APHA 23 <sup>19</sup> Ed. 2017-3120 B (ICP-OES)	BD4.	Q.03 - 1D	0.045	1.5
21	Hon as Fe	ngn	APHA 23" Ed. 2017-3120 B (ICP-OES)	0.11	0 05 - 20	0.3	No Relaxation

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31	T. coll	MPN/ 100 ml	IS: 1522 - 1981 Reaffirmed: 2019	Absent	z 2 AlPre Principal or Absort per 105 mil		e detected in any rhi wample
30	Е. соЛ	MPN/ 100 mi	IS: 1622 - 1981 Realimed: 2019	Absent	a 2 MPpe Presame or Aquatrix per 100 mi		e delected in any milaample
			Microbiological Para	netem			
29	Total Chromium	ศอไ	APHA 23" Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relevantion
28	Arsenic as As	mg/l	APHA 23" Ed 2017-3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05
27	Nickel es Ni	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.05 - 5.0	9.02	No Relaxation
26	Mercury as Hg	New	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.5 - 1000	1.0	No Relevation
26	Land as Pb	fugen I	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.01 - 10	0.01	No Relavation
24	Cedmium as Cd	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.003	No Relaxation
23	Zinc as Zn	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	0.85	0.05 - 15	5	15
22	Manganese as Mo	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	0.03	0.02 - 5.0	0.1	0.3

**PCLy Being Prinction Light** 

END OF REPORT ....

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#### ETRCPM14/TES-REP/FT/17

# TEST REPORT

Test Report Ref No. ETRC/EPA/5406/2021 Name /Address/Type of industry Date of Report: 21/12/2021 M/s Uttam Sugar Mills Limited Unit: Barkatpur, Distillery Division Village Barkatpur, P.O. Sabalpur Bitran District: Bijnor (U.P.) - 246732

#### SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Tubewell Water	6	Sample Collected By	Industry Self
3	Sample reperved date	16.12.2021	7	Analysis Stert Date	16.12.2021
4	Sample Quantity	· 5.0 liters	8	Analysis End Date	20.12.2021

#### TEST RESULT

Sr.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing	Indian Standard 10500: 2012	
No.	a mart a far for regider	<b>V</b>	Fretocoo Fest mando	Neevin	fimit of detection	Desirable	Permissible
			Physico-chemical Para	meters.			
1	Colour	Hezen	IS: 3025 (Part-4): 1983 Reatlimed, 2017	<5.0	5-30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reeffirmed: 2017	Agroeable	Qualitativa	Agreeablo	Agreeable
3	pH	-	APHA 23" Ed. 2017-4500 H	7.7	1 - 14	6.5-8.5	No Relexation
4	Turbidity	NTU	APHA 23" Ed. 2017-2130 B	BDL	2.40	1	5
5	Total Dissolved Solids (TDS)	mg/l	\$3025 (Parl-16): 1984 Reaffirmed: 2017	435.0	1D - 5000	900	2000
6	Ammonia (as total ammonia-N)	mg/l	APNA 23" Ed. 2017-4500-NH; F	BDL	0.5 - 2.0	05	No Relaxation
7	Anionic Detergents (as MBAS)	mgri	APHA 23" Ed. 2017-5540 C	BOL	0.05-0.5	0.2	1.0
B	Calcium an Ca	mg/l	IS: 3025 (Part-40); 1991 Reaffirmed: 2019	41.8	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23" Ed. 2017-3500 Mg. B	24.3	0.1 - 200	30	100
10	Chloride es Cl	movi	APHA 23" Ed. 2017-4500-CI'B	35.0	2.0 - 2000	250	1000
11	Fluoride at F	mçA	APHA 23" Ed. 2017-4500 F C	0.44	D.02 5.0	1.0	1.5
12	Free Residual Chiorine	mg/l	IS- 3025 (Part-26): 1966 Realfirmed: 2019	BDL	0.1 - 5.0	0.2	1.0
13	Nitrate as NO1	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2018	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C <sub>6</sub> H <sub>2</sub> OH)	mg/l	APHA 23" Ed. 2017-5530 C	BDL	0.001 - 0.006	0.001	0.002
15	Sulphate as SO4	mg/l	APHA 23" Ed. 2017-4500- SO."	48.18	1,0 - 500	200	400
15	Alkalinity as CaCO,	mgA	APHA 23" Ed. 2017-2320 B	218.0	2.0 - 1000	200	600
17	Totel Hardness se CuCO;	rog/l	APHA 23" Ed. 2017-2340 C	204.0	5.0 - 600	200	600
18	Aluminium sa Al	mg/l	APHA 23" Ed. 2017-3120 8 (ICP-OES)	BOL	0.015-5.D	0.03	D.2
19	Boron as B	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	SPL	0 05 - 2.0	0.5	1.0
20	Copper as Co	mg/i	APHA 23" Ed. 2017-3120 8 (ICP-OES)	BOL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 23" Ed. 2017-3120 B (ICP-OES)	0.16	0.05 - 20	0.3	No Relevation

Page 1 of 2

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TC.	t Report Ref No. E	TRC/EPA					
22	Manganese as Mri	mg/l	APHA 23° Ed. 2017-3120 B (ICP-OES)	0.05	0.02 - 6.0	D.1	D.3
23	Zine es Zo	mph	APHA 23" Ed. 2017-3120 B (ICP-OES)	1,19	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 23" Ed. 2017-3120 B (KOP-OES)	BOL	0.05 - 2.0	0.003	No Relaxation
26	Land as Pb	ngn	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	NDI	APHA 23" Ed. 2017-3120 8 (ICP-OES)	BOL	0.5 - 1000	1.0	No Relevation
27	Nickel as Ni	mgi	APMA 23" Ed. 2017-3120 8 (ICP-QES)	BOL	0.06 - 5.0	0.02	No Relaxation
28	Argonip as As	ngi	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.02-2.0	0.01	0,05
29	Total Chromium	ngri	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.03-5.0	0.05	No Relaxation
			Microbiological Parts	neters			
30	E cell	MPN/ 100 ml	IS: 1622 - 1981 Reammed: 2019	Abeeni	2 3 MPN Present or Absent per 100 mi	Shall not be detected in any 100 ml sample	
31	T. coll	MPN/ 100 ml	18: 1622 - 1961 Realfirmed: 2019	Abeem	# 2 WPM Process or Absent per 100 ml		e detected in any mi eample

**BDL-Batter Delection Link** 

ETAC manyoris that all prohybral work is consistent professionally in accordance with all applicable standard feboratory practices, and the link all a reflects our barr escrept to generate accesses reavis for the sample, mentioned in the report as above. . The result relate only to the terms tested

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(Sundeep Kr Verma) Lab-Incharge



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#### ETRCPM14/TES-REP/FT/17

WATER ANALYSIS					
Test Report Ref No. ETRC/1101/10058/2022	Date of Report: 11/01/2022				
Name /Address/Type of Industry	M/s Uttam Suger Mills Limited Unit: Berkatpur, Distillery Division Village Barkatpur, P.O. Sabelpur Bitran District: Bijnor (U.P.) - 246732				
SAM	PLE DETAILS				

**JEST REPORT** 

1	Water/ Waste Water	Ground Water	6	Packing Condition	Sealed
2	Sample Description	Tubewell Water	É	Sample Collected By	Industry Self
3	Sample received date	05.01.2022	7	Analysis Start Date	05.01.2022
4	Sample Quantity	5.0 liters	8	Analysis End Date	10.01.2022

#### TEST RESULT

Sr.	Test Parameter	Unit	Protocol/Test Melhod	Result	Range of testing		Standard 0: 2012
No.					/fimit of detection	Desirable	Permissible
			Physico-chemical Para	metere			
1	Colour	Hazen	IS: 3025 (Part-4): 1963 Restinmed: 2017	<5.0	5 - 30	5	15
2	Oxforur	-	IS. 3025 (Pent-5): 1983 Reefformed: 2017	Agreeable	Qualitative	Agreeable	Agroamble
3	pH		APHA 23" Ed. 2017-4500 H	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23" Ed. 2017-2130 B	BÓL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1964 Reaffirmed: 2017	428 8	10 - 5000	500	2000
8	Ammonia (as total ammonia (N)	mg/l	APHA 23" Ed. 2017-4500-NH <sub>3</sub> F	BDL	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	ngn	APHA 23" Ed. 2017-5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3026 (Pan-40): 1991 Reaffirmed: 2019	43.2	1 2.0 - 600	75	200
B	Magnesium as Mg	mg/l	APHA 23" E4. 2017-3500 Mg. B	27.21	0.1 - 200	30	100
10	Chioride as Cl	നൃദ	APHA 23" Ed 2017-4500-CI'B	30.0	2 0 - 2000	250	1000
11	Fluoride se F	mg/l	APHA 23" Ed. 2017-4500 F C	0.42	0.02 - 5.0	1.0	1.5
12	Free Realdual Chiorine	നുന	IŞ: 3025 (Part-26): 1986 Reaffirmed: 2019	BDL	0.1-5.0	0.2	1.0
13	Nitrate as NO,	ngn	IS: 3025 (Part-34): 1980 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phonolic Gompound (as C.H.OH)	mg/4	APHA 23" Ed. 2017-5530 C	BDL	0.001 -	0.001	0.002
15	Sulphan as SO4	mg/l	APHA 23" Ed. 2017-4500- SO."	30.64	1.0 - 600	200	400
16	Alkalinity se CaCO,	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2320 B	232.0	2.0 - 1000	200	600
17	Total Hardness as CaCO <sub>2</sub>	mgit	APHA 23" Ed. 2017-2340 C	220.0	5.D + 600	200	600
18	Atuminium ae Al	mgd	APHA 23" Ed. 2017-3120 B (ICP-OES)	BDL	0.015-5.D	0.03	0.2
18	Boron as B	mgA	APHA 23" Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mgd	АРНА 23 Ed. 2017-3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Jacon as Fe	mg/l	APHA 23" Ed. 2017-3120 8 (ICP-OES)	0.13	D.D5 - 20	0.3	No Relazabor
-							

Page 1 of 2

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31	T. coli	MPN/ 100 mi	IS: 1622 - 1981 Reaffirmed: 2010	Absent	2 2 mD/M Present or Absent per 100 ml		e detected in any mi sample
30	E. coli	MPN/ 100 ml	IS: 1622 - 1981 Resfirmed. 2019	Absent	e 2 MPN Present or Absent per 100 m <sup>2</sup>		e detected in any milisample
			Microbiological Para	T) (Tildersk			
29	Total Chromium	mg1	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.03-5.0	0.05	No Relaxation
28	Arsenic as As	mg/l	APHA 23" Ed. 2017-3120 B (ICP-DES)	BOL.	0.02-20	0.01	0.05
27	Nickel as Ni	mg/l	APHA 23 <sup>4</sup> Ed. 2017-3120 B (ICP-OES)	BOL	0.05 - 5.0	0.02	No Refaxation
26	Mercury as Hg	Pay	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.5 - 1000	1.9	No Relaxellor
26	Load at Pb	mg4	APHA 23" Ed. 2017-3120 B [ICP-DES]	BOL	0.01 - 10	0.01	No Relaxation
24	Cadmium as Cd	mg/l [	APHA 23 <sup>17</sup> Ed. 2017-3120 B (ICP-OES)	BOL	0.06 - 2.0	0.003	No Releasion
23	Zinc se Zn	mgA	APHA 23" Ed. 2017-3120 B (ICP-OE5;	D.05	0.05 - 15	5	15
22	Mangeneze as Min	mga	APHA 23 <sup>th</sup> Ed. 2017-3120 B (ICP-OE8)	0.05	0.02 - 5.0	D.1	0.3

BOL-Below Delection Limit

ETRC warming that all analytical work is conducted protectionally in accordance with all applicable standard laboratory practices and that the date indiance our bool sources to generate accurate results for the sample, memoried in the report as above. +

The ready relate only to the rooms asked. ETRC does not assume any lebility for any claims or damages related to the quality of parameter analyzed in the results and/or the partomance of the equipment constituting to the results.

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This may Authorized Signatory

(Sandeep Kr Verma) Lab-Incharge

ومعد تبليز

Authorized Signatory (Ritu Garg) QM

Page 2 of 2

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4 Sample Quentity

### ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Analysis End Date

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#### ETROPM14/TES-REP/FT/17

18.02.2022

	st Report Ref No. ETF			Date of Report: 19/02/2022				
Na	me /Address/Type of	Industry	Un Vil	s Uttam Sugar Mills Lin it: Barkstpur, Distlifery lege Barkstpur, P.O. Sa krict: Bijnor (U.P.) - 246	Division belour Bitran			
		SA	MPLE DET	AILS				
1	Water/Weste Water	Ground Water	: 5	Packing Condition	Sealed			
	17 d 17 l d	Tubwell Water	6	Sample Collected By	Industry Self			
2	Sample Description	A COMPANY SECTOR	-0	Stample Conected By	I minner A Sell			

TEST REPORT

### TEST RESULT

8

5.0 liters

Sr. No	Test Parameter	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing		Standard 9: 2012
		Onic	P30(000) ( wait within the	some entr	Almit of detection	Desirable	Permissible	
			Physico-chemical Para	meters				
1	Colour	Hazen	IS: 3025 (Part-4): 1963 Reaffirmed: 2017	<5.0	5+30	5	15	
2	Odour	-	IS: 3025 (Part-5): 1983 Reafinned: 2017	Agreeable	Qualitative	Agreesble	Agreeable	
3	pH	-	APHA 23" Ed. 2017-4500 H	7.6	1-14	6.5-8.5	No Relaxation	
4	Turbidity	NTU	APHA 23" Ed. 2017-2130 B	BOL	2-40	1	5	
5	Total Dissolved Solide (TDS)	mgA	IS: 3025 (Part-16): 1984 Reaffirmed; 2017	484.2	10-5000	500	2000	
8	Ammonia (as total ammonia-N)	mg/l	APHA 23" Ed. 2017-4500-NH <sub>3</sub> F	BIOL	0.5 - 2.0	0.5	No Relaxation	
7	Anionic Detergents (as MBAS)	Ing/l	APHA 23" Ed. 2017-5540 C	BOL	0.05-05	0.2	1.0	
в	Calcium as Ca	mg/l	IS. 3025 (Part-10): 1991 Reaffirmed: 2019	56.0	2.0 - 600	75	200	
Ð	Magneelum as Mg	mg/l	APHA 23" Ed. 2017-3500 Mg. B	32.0	0.1 - 200	30	100	
10	Chioride as Cl	mon	APHA 23" Ed. 2017-4500-CI B	20.0	2.0 - 2000	250	1000	
11	Fluoride as F	man	APHA 23" Ed. 2017-4500 FC	0.35	0.02 - 5.0	1.0	1.5	
12	Free Residual Chierine	ngn	IS: 3025 (Pert-26): 1995 Reaffirmed: 2019	BDL	0.1 - 5.0	0.2	1,0	
13	Nitrate as NO;	mg/l	IS: 3025 (Park-34): 1968 Reaffirmed: 2019	BDL	1.D - 70	45	No Relaxation	
14	Phenolic Compound (se CeHeOH)	mg/l	APHA 23* Ed. 2017-5530 C	BDL	0.001 - 0.005	0.001	0.002	
15	Suiphate as SO4	mgil	APHA 23" Ed. 2017-4500- 8042	28.0	1.0 - 500	200	400	
16	Alkatinity as CoCOs	<b>FTXSA</b>	APHA 23 <sup>H</sup> Ed. 2017-2320 B	288.0	2.0 - 1000	200	600	
17	Total Hardneep as CaEO1	mga	APHA 23" Ed. 2017-2340 C	272.0	5.0 - 800	200	600	
18	Aluminium as Al	ngi	APHA 23" Ed. 2017-3120 B (ICP-OES)	BDL	0.015 - 5.0	0.00	0.2	
19	Boron as B	ngA	APHA 23" Ed. 2017-3120 B (ICP-OES)	BOL	0.05 - 2.0	0.5	1.0	
20	Copper as Co	mga	APHA 23" Ed. 2017-3120 B (ICP-OE8)	BDL	0.03 - 10	0.05	1.5	
21	Iron as Fe	mgfl	APHA 23" Ed. 2017-3120 B {ICP-OES]	Q.1D	0.05 - 20	0.3	No Relaxation	

Page 1 of 2

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31	T. coff	MPN8'	IS: 1622 - 1981 Reaffirmed: 2019	Absent	Present or Arean ( gas 100 ml		e detwcted in any mi sample
30	E. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	Present or Absent par HOD (M		e detected in any mi sample
			Microbiological Parar	THIAT			
29	Tatal Chromium	mg/l	APHA 23 Ed. 2017-3120 B (ICP-CIES)	BOL	0.03 - 50	0.05	No Relatation
28	Arbenic as As	ng/i	APHA 23" Ed. 2017-3120 B (ICP-OES)	1801.	0.02 - 2.0	0.01	0.05
27	Nickal as th	ngn	APHA 23" Ed. 2017-3120 8 (ICP-OES)	BOL	0.05 - 5.0	0.02	No Relaxation
26	Mencury as Hg	Pou	APHA 23" Ed. 2017-3120 B (ICP-DES)	BQL	0.5 - 1000	1,0	No Relaction
25	Lead as Pb	ngri	APHA 23" Ed. 2017-3120 B (ICP-DE5)	BDL	0.01 - 10	0.01	No Relaction
24	Cadmium as Cd	mgut	APMA 23° Ed. 2017-3120 B (ICP-OES)	BDL	0.05 - 2.0	0.003	No Relaxetion
23	Zinc as Zo	mgh	APHA 23" Ed. 2017-3120 B (HCP-OE5)	0.93	0.05 - 16	5	15
22	Manganasa as Min	mgA	APHA 23" Ed. 2017-3120 B (ICP-OES)	0.04	0.02 - 6.0	0.1	0.3

**SOURGalow Pasacilan Link** 

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

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ETIRC senses but at entrylical work to compute professorably in eccordance with at applicable planderd lateratory precises and that the data reflects cur part attempt to generate accurate neutral for the sample, mentioned in the report as above. The result rotate only to the terms tasked ETIRC data not assume any listency for any claims or damages related to the quality of paremeter analyzed in the results and/or the performance of the equipment constituting to the results.

All disolvies subject to Lucknow jurisdiction. 4 .

This injust is not be interactional wholly of in part and cannot be used as evidence in the sourt of law and should not be used in any edverterag made without our special particulation in writing. Complete a svalistife in our laboratory. 2

Authorized Signatory (Sandoop Kr Verma) Lab-Incharge

Qilli-yorg

**Authorized Signatory** (Rits Garg) OM

Page 2 of 2

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#### ETRCPM14/TES-REP/FT/37

#### TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Re	port Ref No. ETRC/EPA/6045/2022	Date of Report: 26/03/2022				
Name /	Address/Type of Industry	M/s Uttam Sugar Mills Limited Unit: Barkatpur, Distillery Division Village Barkatpur, P.O. Sabalpur Bitran District: Bijnor (U.P.) - 246732				
Monitor	ed by	ETRC, Lucknow				
Localio	n of Sampling points	Near Main Gate				
Sr. No.	GENERAL OBSERVATIONS	DETARS-PM	DETAILS-PM			
1(a)	Weather conditions	Clear	Clear			
(0)	Wind direction	West to Easi	West to East			
(0)	Average humidity (%)	64	54			
(d)	Average ambient temperature (°C)	30	30			
(8)	Time of Sampling Started (Hours)	10:28 am (23.03.2022)	10:28 am (23.03.2022)			
(1)	Time of Samping completed (Hours)	10:19 am (24.03.2022)	10:19 am (24.03.2022)			
(9)	Total time of sen pling (Minutes)	24 hour (1429 minutes)	, 24 hour (1429 minutes)			
2	Average Air sampling rate for PM (m3/minute)	1.296	NA			
3	Average sampling rele for ges (LPM)	0.5	NA			
4	FOTAL VOLUME OF AIR SAMPLED     PM     GAS	<ul> <li>1850.814</li> <li>714.6</li> </ul>	• 23.820			

#### TEST RESULT

Sr. Ng.	Particulars	Protocol	Unit	Result	Range of leating Almit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 gm (PM <sub>19</sub> )	IS: 5162 (Part-23): 2006 Reaffirmed. 2017	Patro a	89.3	5.0 - 1200	For 24 hour =100
ż	Particulate matters size less than 2.6 µm (PM <sub>2.6</sub> )	IS: 5182 (Part-24): 2019	hðyu,	53.32	2.0 - 500	For 24 hour =60
3	Gulphur Dioxide (SO <sub>2</sub> )	IS: 6182 (Part-2): 2001 Reaffirmed: 2017	µg/m³	14.50	6.0 - 1050	For 24 hour =80
4	Oxides of Nilzogen (NO <sub>X</sub> )	IS: 5182 (Pari-8): 2006 Reatfirmed: 2017	µg/m <sup>a</sup>	22.82	8.0 - 750	For 24 hour

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

EVEC watered that all analyses work is conducted professionally in accordance with all apprecipe substance laboratory precises and that this data reflects on test attempt to generate accurate results for the second in the report is allower. The result return only to the terminal typical ETFC; dops not account any testing to any claims an analysis existed to the quelty of particular analysis in the results and/or the performance of the deplacement contributing to the results. .

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Authorized Signetory (Sandeep Kr Verma) Lab-Incharge

Right-sports

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Authorized Signatory (Ritu Garg) QM

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#### ETROPM14/TES-REP/FT/37

#### TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Re	port Ref No. ETRC/EPA/8046/2022	Data of Report: 28/03/2022				
	Address/Type of industry	N/s Uttam Suger Allis Limited Unit: Barkatpur, Distillery Olvision Village Barkatpur, P.O. Sebalpur Bitran District: Bijnor (U.P.) - 246732				
Monitor	ed by	ETRC, Lucknow				
Location	n of Sampling points					
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM1	DETAKS-PM2.			
1(a)	Weather conditions	Clear	Clear			
(b)	Wind direction	West to East	West to East			
(6)	Average numidity (%)	54	54			
101	Average ambient temperature (*C)	30	30			
(e)	Time of Sampling Started (Hours)	10:46 am (23.03.2022)	10:46 am (23.03.2022)			
(f)	Time of Sampling completed (Hours)	10:25 am (24.03.2022)	10.26 am (24.03.2022)			
	Total time of sampling (Minutea)	24 hour (1422 minutes)	24 hour (1422 minutea)			
2	Average Air sampling rate for PM (m³/mmule)	1.180	NA			
3	Average sampling rate for gas (LPM)	05	NA			
4	• PM • GAS	• 1549 52 • 711.0	• 23.782			

#### TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing fimit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size tees than 10 µm (PM <sub>10</sub> )	15: 5182 (Part-23): 2006 Reaffirmed: 2017	hðiu <sub>3</sub>	85.0	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM <sub>2.5</sub> )	IS: 5182 (Part-24): 2019	ug/m³	50.21	2.0 - 500	For 24 hour =80
3	Sulphur Dioxide (SO2)	JS: 5182 (Part-2): 2001 Reaffirmed: 2017	hð <sub>\u</sub> ,	13.86	5.0 - 1050	For 24 hour #80
4	Oxides of Nitrogen (NO <sub>2</sub> )	IS: 5182 (Pert-8): 2008 Reaffirmed: 2017	hðiu <sub>a</sub>	20.58	60-760	For 24 hour =80

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ETHO: warmants that all analytical work is conducted protessions by in accordance with all applicable standard tablicatory unactions and due the data reflects. Our cest-allerent to generate accurate results for the sample, manifored in the report as above. The result reflects only to the items leaved ETHO: does not accurate any indication of damages valued to the guality of generately adapted in the results and/or the performance of the experiment constituting to the results.

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Authorized Signatory (Sandeep Kr Verma) Lab-Incharge

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Rili goos

Authorized Signatory (Rity Garg) GM

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#### ETRCPM14/TES-REP/FT/97

#### TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Re	port Ref No. ETRC/EPA/6047/2022	Date of Report: 28/03/2022				
	Address/Type of Industry	M/s Uttam Sugar Mills Limited Unit: Barketpur, Distiliery Division Village Barketpur, P.O. Sabalpur Bitran District: Bijnor (U.P.) - 246732 ETRC, Lucknow				
Monitor	ad by					
Location	of Sampling points	Near Storage Godown				
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM.	DETAILS-PM2			
1(8)	Weather conditions	Clear	Clear			
(b)	Wind direction	West to East	West to East			
(C)	Average humidity (%)	54	54			
(0)	Average ambient temperature (*C)	30	30			
(e)	Time of Sampling Started (Hours)	10:30 am (24.03.2022)	10:30 am (24.03.2022)			
(1)	Time of Sampling completed (Hours)	10:22 am (25.03.2022)	10:22 am (25.03.2022)			
10)	Total time of sampling (Minutes)	24 hour (1426 minutes)	24 hour (1425 minutes)			
2	Average Air sampling rate for PM (m <sup>2</sup> /minute)	1.175	NA			
3	Average sampling rate for gas (LPM)	0.5	NA			
4	• PM • GAS	• 1674.375 • 712.5	• 23.750			

#### TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of tanling Almit of detection	Standard as per NAAOS; dated 18/11/ 2009
1	Particulate mettore eize isse than 10 µm (PM <sub>10</sub> )	IS: 5182 (Part-23): 2008 Reaffirmed: 2017	hôwa2	83.0	5.0 - 1200	For 24 hour =100
2	Particulate mattere eize less than 2.5 µm (PM <sub>2.5</sub> )	IS: 5182 (Part-24): 2019	µg/m <sup>3</sup>	48.42	2.0 - 500	For 24 hour
3	Sulphur Ploxide (SO2)	IS: 5162 (Part-2): 2001 Reaffirmed: 2017	hðyw <sub>a</sub>	12.93	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part-6): 2005 Reaffirmed: 2017	(ug/m <sup>3</sup>	19.42	6.0 - 750	For 24 hour =80

..... OND OF REPORT......

STRC warrants that all analytical work is conducted professionally in accordance with all applicable standard leponetory inections and this data referse our cash adamys to generate accurace results for the sample, mentioned in the report to obove. +

The result rainie only to the Rema Cented.

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Authorized Signatory (Sandeep Kr Verma) Lab-incharge

وحمديد تبارح

Authorized Signatory (Rilu Garg) OM

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Office & Laboratory: 2/261, Visitwas Khand, Gond Negar, Lucknow-226 010 (U.P.)

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190 9001:2015, ISO 14001 : 2015, OHSAS 18001 : 2007

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#### TEST REPORT

#### STACK EMISSION MONITORING AND ANALYSIS REPORT Stack No. 2

Name .	eport Ref No. ETRC/EPA/6049/2022 /Address/Type of Industry	Date of Report: 28/03/2022 M/s Uttern Sugar Mills Limited Unit: Barkatpur, Distillery Division Village Barkatpur, P.O. Sabalpur Bitran District: Bijnor (U.P.) - 246732
Monito	pred by	ETRC, Lucknew
Sr. No,	GENERAL INFORMATION	DETAILS
1.(a)	Date of monitoring	24.03.2022
(6)	Stack material	RCC
(0)	Height of steck from ground level	85.0 mts
(d)	Source to which stack attached	! Boller
(0)	No of Source attached with capacity	01 No. (60.0 TPH)
(1)	Type and quantily of fuel used	Bagaasa + Slop
(g)	Details of APCS installed	ESP
2.	PARAMETERS	VALUES
(a)	Ambient temperature (°C)	36.0
(b)	Stack gas temperature (°C)	125.0
(6)	Stack gas velocity (m/sec)	11,79
(d)	Flow rate (LPM)	17
(0)	Sampling time (minutes)	60
(1)	Volume of air sampled (liters)	1020

#### TEST RESULT

Br. No.	Parameter	Unit	Protocol	Result	Range of Testing / Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm <sup>8</sup>	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	48.0	2.0 - 1000	50

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S KNOTAS. Authorized Signatory (Sandsep Kr Yama) Lab-Incharge

ومميد ترازح

Authorized Signatory (Ritu Garg) QM



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

Email: ETROLTH@YAHOO.IN, Web: www.ebroindia.com

ISO 8001:2015, ISO 14001 : 2015, OH&AS 14001 : 2007

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#### TEST REPORT

#### STACK EMISSION MONITORING AND ANALYSIS REPORT Stack No. 1

Test Report Ref No. ETRC/EPA/6048/2022		Date of Report: 28/03/2022
Name /Address/Type of Industry		M/s Uttern Sugar Mills Limited Unit: Barketpur, Distillery Division Village Barketpur, P.O. Sabalpur Bitran District: Bijnor (U.P.) - 246732
Monito	ared by	ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
1.(a)	Date of monitoring	24.0.2022
(b)	Stack meteriel	MS
(0)	Height of stack from ground level	50.0 mis
(d)	Source to which stack attached	Boiler
(e)	No of Source attached with capacity	01 No. (35.0 TPH)
(f)	Type and quantity of fuel used	Begasse + Blogas
(9)	Details of APCS installed	Wet scrubber
2.	PARAMETERS	VALUES
(a)	Ambient temperature (°C)	33.0
(b)	Stack gas temperature (°C)	129,0
(0)	Stack gas velocity (m/sec)	11.84
(d)	Flow rate (LPM)	17
(0)	Sampling time (minutes)	62
(f)	Volume of air sampled (iders)	1054

#### TEST RESULT

Sr. No.	Perameter	Unit	Protocol	Result	Range of Testing / Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	B1.6	2.0 - 1000	150

#### ITTIME END OF REPORT.....

ETRC weren's theil of ensighted work to conducted professionally in accordance with all applicable standard lateratory practices and theil this data reflects curbest stamptics generate accurate results for the sample, membrand in the report generate. The result relats only to the tamp tested. .

The next relate only to the terms lested. ETING date not assume any tability for any claims of damages, related to the quality of persentian analyzed in the results and/or the perioritative of the equisment conditions to the results. All deputes subject to tuborow jurisdiction. The report er not to be reproduced wholly or in pert and cannot be used as evidence in the pourt of law and should not be used in any advertising media without our specie permittion is writing. Completin register is available in our laboratory.

WWSI YPS Authorized Signatory

(Sandeep Kr Verma) Lab-Incharge



ومعرب تساور

Authorized Signatory (Ritu Garg) QM.





Office & Laboratory: 2/261, Visitves Khand, Gomii Nager, Lucinow- 226 010 (U.P.) Email : ETROLTH@YAHOO.IN, Web: www.etroindle.com ISO 9001:2015, ISO 14001 : 2016, OHSAS 18001 : 2007

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#### **TEST REPORT** AMBIENT NOISE MONITORING AND ANALYSIS REPORT

Test Re	port Ref No. ETRC/EPA/6050/2022	Date of Report: 26/03/2022		
Name /Address/Type of Industry Monitored by		M/s Uttam Sugar Mills Limited Unit: Barkatpur, Distillery Division Village Barkatpur, P.O. Sabalpur Bitran District: Bijnor (U.P.) - 246732		
		ETRC, Lucknew		
Sr. No.	GENERAL INFORMATION	OFTAILS		
[a]	Date of monitoring	24/03/2022 (6:00 AM) to 25/03/2022 (6:00 AM)		
(a) (b)	Sample Description	Ambient Noise		
(0)	Sampling Location	Near Admin Building		
(d)	Environmental Condition	Normal		

#### TEST RESULT

			Ambient Noise Level	
Şr. No.	Parameter	Unit	. Results DAY TIME (6:00 AM - 10:00 PM)	Results NIGHT TIME (10:00 PM - 0:00 AM)
1	Equivalent sound fevel	dB(A)	62.05	49.86

Noise Standards as per CPCB Schedule rule 3(1) and 4(1)							
Aren Code	Category of Area/Zone	Linnia In dB(A) Leg					
Ne de Loue	Carby Cry Cr Arquizzerib	Dey Time	Night Time				
A	Industrial Avec	75	70				
e i	Commercial Area	*	55				
¢ ;	Residential Area	\$5	45				
0	Silence Zone	30	40				

ETHIC variants per all endpress work is conducted professionally in accordance with all applicable standard laboratory precises and that this data reflects our test standard testing to generate accurate results for the sample, mentioned in the report at above. The results only to the terms total. ETRC does not make any liability for any characte demogratic relates to the quality of personnes emolyted in the results end/or the performance of the samples relates to the quality of personnes emolyted in the results end/or the performance of the samples relates to the quality of personnes emolyted in the results end/or the performance of the samples relates to the quality of personnes emolyted in the results end/or the performance of the samples relates to the quality of personnes emolyted in the results end/or the performance of the samples relates to the quality of personnes emolyted in the results end/or the performance of the samples to the quality of personnes emolyted in the results end/or the performance of the samples to the quality of personnes emolyted in the results end/or the performance of the samples to the device of the version of the samples of the samples are the samples of the samples of the samples are the same samples are the samples are samples are the samples are the samples are the sampl

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Authorited Signatory (Sandeep Kr Verma) Lab-Incharge

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Authorized Signatory (Ritu Garg) CAL

Regd. Address: 4/57, Vipul Knuwl, Gomb Neger, Lucknew - 228010 (U.P.) Mob: 09897674227