

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

(October, 2023 to March, 2024)

For

**ESTABLISHED OF NEW MOLASSES/CANE JUICE/ GRAIN
BASED DISTILLERY HAVING CAPACITY: 100 KLD
ALONG WITH 4.5 MW**

By

M/s Forever Distillery Private Limited

At

**Plot No.-A, UPSIDA, Usar Bazar, Tehsil: Rudrapur,
District: Deoria, Uttar Pradesh**

For Submission to:

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

Submitted By:

M/s Forever Distillery Private Limited

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CHAPTER No. 01 INTRODUCTION AND PROJECT DESCRIPTION

Six monthly environmental compliance / status report is submitted for Established of New Molasses/Cane Juice/ Grain Based Distillery Having Capacity: 100 KLD Along With 4.5 MW by M/s Forever Distillery Pvt. Limited, for October, 2023 to March, 2024. The Project is located at Plot No.-A, UPSIDA, Usar Bazar, Tehsil: Rudrapur, District: Deoria, Uttar Pradesh Prior Environment Clearance was obtained from State Level Environment Impact Assessment Authority, Uttar Pradesh wide Ref. no.: **38/Parya/SEIAA/5948/2020, dated May 31st, 2021**. Consent to Establish under the provisions of Air and water has already been obtained for the project Vide Ref No. - **133465/UPPCB/Gorakhpur (UPPCBRO)/CTE/DEORIA/2021, dated 10/09/2021**. Copy of CTE is attached here as **Annexure - 1**. Industry started operating in September 2022, copy of CTO is attached as **Annexure - 2 (164110 /UPPCB /Gorakhpur (UPPCBRO) / CTO / both / DEORIA / 2022 dated 16.09.2022**.

Specific and general conditions stipulated in Environment Clearance complied during construction and will be complied post construction phases. Currently project is under operation phase.

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

Six monthly compliance/status reports for **October, 2023 to March, 2024** for conditions stipulated in the Environmental Clearance letter issued by SEIAA, U.P. are enclosed as **Annexure - 3**. Photographs view of implemented mitigation measures are also attached for the ready reference as Photo Documentation.

CHAPTER No. 02
COMPLIANCE OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE

Name of the Project: Established of New Molasses / Cane Juice / Grain Based Distillery having Capacity: 100 KLD along with 4.5 MW by Forever Distillery Private Limited, at Plot No.-A, UPSIDA, Usar Bazar, Tehsil: Rudrapur, District: Deoria, Uttar Pradesh.

Clearance Letter No: 38/Parya/SEIAA/5948/2020, dated May 31st, 2021.

Period of Compliance Report: (October, 2023 to March, 2024).

I. Statutory compliance		
Sr. No.	Conditions	Compliance Status
1.	45 days monitoring report of the area for air quality, water quality, noise level. Besides flora & fauna should be examined twice a week and be submitted within 60 days for a record.	Condition noted.
2.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.	No forest area is found in study area; hence forest clearance condition is not applicable.
3.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not applicable.
4.	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area).	Condition Noted. No schedule-I species is found in study area; hence this condition is not applicable.
5.	The project proponent shall obtain Consent to Establish/ Operate under the provisions of Air (Prevention &Control of Pollution) Act, 1981 and the Water (Prevention &Control of Pollution) Act, 1974 from the concerned	Consent to Establish/operate for the project has been obtained from the State Pollution Control Board as required under Air (Prevention and Control of Pollution) Act, 1981 and

	State pollution Control Board/ Committee.	the Water (Prevention and Control of Pollution) Act, 1974. Copy of CTE (Air & Water) is Enclosed as Annexure-1 . Copy of CTO (Air and Water) is enclosed as Annexure-2 .
6.	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	Unit obtain Hazardous Authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
7.	The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemical (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemical shall be as per the Motor Vehicle Act (MVA),1989.	The company has strictly be complying with the rules and guidelines under Manufacture Storage and Import of Hazardous Chemicals is as per the Motor Vehicle Act (MVA), 1989.
I. Air quality monitoring and preservation:		
1.	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online server and calibrate this system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Unit has installed 24x7 continuous emission monitoring system at stack to monitor stack emissions with respect to standards prescribed in Environment (Protection) Rules 1986 and installed OCEMS is connected to SPCB and CPCB online servers. Regular calibrations of these systems are being done time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986.
2.	The project proponent shall install system carryout to Ambient Air Quality Monitoring for common/criterion parameters relevant to the main pollutants released (eg PM ₁₀ and PM _{2.5} in reference to PM emission, and SO ₂ and NO _x in reference to SO ₂ and Nox emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (Case to case basis small plants:	As per the direction, unit has made arrangement for ambient air quality monitoring. Monitoring Results are attached as Annexure-4 .

	Manual; Large plants: Continuous).	
3.	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality/fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	Stack Monitoring and Ambient Air quality monitoring report is attached as Annexure-4 .
4.	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	The unit installed bag filters as air pollution control system. Continuous online monitoring system has been installed as per guidelines on stack.
5.	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16 th November, 2009 shall be complied with.	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16 th November, 2009 will be complied with. Test report is attached as Annexure-4 .
6.	Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	Unit is only using biomass / bagasse as a fuel. Unit is using Biomass as fuel in boiler. The gaseous emissions are dispersed through stack of adequate height as per CPCB/SPCB guidelines.
7.	The DG set shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in the regard.	Condition noted and complied.
8.	Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.	Fuel stored in covered sheds and Grains is being stored in Silos. Regular water sprinkling is being done avoid dust pollution and fugitive emissions.
II. Water quality monitoring and preservation:		
1.	For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters	Unit is based on Zero Liquid discharge. Online equipment has been installed as per guidelines for

	in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD) and connected to SPCB and CPCB online servers.	CPCB.
2.	Zero liquid discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the project achieving the ZLD).	Unit is maintaining as zero liquid discharge system as per consent condition.
3.	Process effluent/ any wastewater shall not be allowed to mix with storm water. The Storm water from the premises shall be collected and discharged through a separate conveyance system.	Separate Storm water drain has been provided. The Storm water from the premises has been collected and discharged through a separate conveyance system.
4.	The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.	Unit is maintaining as Zero Liquid Discharge system as per consent condition.
5.	Total fresh water requirement shall not exceed the proposed quantity or as specified by the committee. Prior permission shall be obtained from the concerned regulatory authority/ CGWA in this regard.	Unit has obtained NOC from Ground Water Department of Uttar Pradesh.
6.	Industrial/ trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO system.	Unit is maintaining as Zero Liquid Discharge system as per consent condition. Other effluent is being treated in Condensate polishing unit and 100 % treated water is being recycled.
7.	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.	Rain water harvesting has been adopted by industry for roof top only.
III. Noise monitoring and prevention:		
1.	Acoustic enclosure shall be provided to DG set for controlling the noise pollution.	DG set are provided with acoustic enclosure to reduce the noise level.
2.	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of	The overall noise levels in and around the plant area is being kept well within the standards as unit provided noise control measures including acoustic hoods, silencers,

	noise generation.	enclosures etc. on all sources of noise generation. Monitoring report is attached as Annexure-4.
3.	The ambient noise levels should conform to the standards prescribed under E (P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	Ambient Noise level is found within standard. Ambient Noise monitoring report is attached as Annexure-4.
IV. Energy Conservation measure:		
1.	The Energy sources for lighting purposes shall preferably be LED based.	The unit already installed LED lighting in the campus.
V. Waste management:		
1.	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.	Condition noted and complied.
2.	Process organic residue and spent carbon, if any shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	Hazardous waste generated is being provided to TSDF for further disposal.
3.	The company shall undertake waste minimization measures as below: -	
iii.	Metering and control of quantities of active ingredients to minimize waste.	Mass flow meter has been installed at different point as per the guidelines.
iv.	Reuse of by- products from the process as raw materials or as raw material substitutes in other processes.	DDGS generated from the spent wash treatment which is being sell in the market as Cattle feed.
v.	Use of automated filling to minimized spillage.	Complied.
vi.	Use of Close feed system into batch reactors.	Closed feed system has been provided.
vii.	Venting equipment through vapour recovery system.	Already provided.
viii.	Use of high-pressure hoses for equipment clearing to reduce waste water generation.	Noted.
VI. Green Belt:		
1.	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.	33% green belt is being developed within the plant premises as per the guidelines. Green Belt list is attached as Annexure – 7.
VII. Safety, Public hearing and Human health issues:		
1.	Emergency preparedness plan based on the	Disaster management plan has been

	Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	prepared and same is being implemented within premises.
2.	The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	Personal Protection Equipment (PPE) has been provided as per the norms of Factory Act.
3.	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 on regular basis. Training to all employees on handling of chemicals shall be imparted.	Training is being imparted to all employees on safety and health aspects of chemicals handling. Records is being maintained.
4.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Condition noted.
5.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupation health surveillance of worker is being done once in six months and record is being maintained.
6.	There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.	Unit earmark adequate space for parking of vehicles. Copy of the final layout depicting parking area is already submitted.

VIII. Corporate Environment Responsibility

1.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No 22-65/2017-IA.III dated 1 st May 2018, as applicable, regarding Corporate Environment Responsibility.	The MoEF Office Memorandum dated 30.09.2020 has superseded the Office Memorandum dated 01.05.2018 regarding the Corporate Environmental Responsibility. The unit is committed and is providing education funds in training centers/support in nearby villages school, support in health care facilities, drinking water supply, and allocated funds for miscellaneous activities like solar
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		street lights, battery, solar panel etc. in nearby villages.
2.	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/ forest/ wildlife norms I conditions and / or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	Company has laid down the Environmental policy. Same is being displayed. Copy of Environmental Policy is attached as Annexure - 8.
3.	A separate Environmental cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	The unit has organized an Environmental Cell to take care of all concerning stipulated conditions regarding environment. Copy of Environmental Cell is attached as Annexure – 9.
4.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/ Regional Office along with the Six-Monthly Compliance report.	Approved Environmental management plan has been implemented and Cost for Environmental Management plan is attached as Annexure-5.
5.	Self-environmental audit shall be conduct annually. Every three years third party environmental audit shall be carried out.	Condition noted and complied.
IX. Miscellaneous:		
1.	As proposed treated waste water should be completely recycle/ reuse and ZLD should be achieved. Under no circumstances treated	Unit is working on principle of maximum reuse and recycle; unit is being maintaining zero liquid

Six Monthly Compliance Report of Environmental Clearance for Established of New Molasses/Cane Juice/ Grain based Distillery having Capacity: 100 KLD along with 4.5 MW Co-gen power by M/s Forever Distillery Private Limited at Plot No.- A, UPSIDA, Usar Bazar, Tehsil: Rudrapur, District: Deoria, Uttar Pradesh

**EC Compliance
October, 2023 to
March, 2024**

	waste water shall be discharged to any drain/sewer line/ inland surface water/ Nala etc.	discharge scheme.
2.	“Directions/suggestions given during public hearing and commitment made by the project proponent should be strictly complied”.	Action plan against the public hearing issues has been submitted with Final EIA and EMP. Action plan is attached as Annexure-6.
3.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguard at their cost by prominently advertising it at least in two newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent’s website permanently.	The copy of published information (in 2 newspapers) regarding grant of environmental clearance.
4.	The copies of the environmental clearance shall be submitted by the project proponent to the Heads of the local bodies, Panchayat and Municipal bodies in addition to the relevant officers of the Government who in turn has to display the same for 30 days from the date of receipt.	The copies of the environment clearance letter are submitted to the Heads of local bodies Panchayat and Municipal bodies.
5.	The project proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same on half-yearly basis.	Condition noted and complied.
6.	The project proponent shall monitor the criteria pollutant levels namely; PM ₁₀ , SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the projects and display the same at a convenient location for discloser to the public and put on the website of the company.	Unit is regularly monitoring the ambient air quality; copy of the test reports is enclosed here with as Annexure-4.
7.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and climate change at environmental clearance portal.	Condition noted and complied.

8.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environmental (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Point is noted and complied. Form V has been submitted within stipulated time frame. Copy of Form V is attached as Annexure – 10.
9.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Unit has started the production in September 2022.
10.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	The project authorities are strictly complying to the stipulations made by the State Pollution Control Board and the State Government.
11.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	The project proponent abides by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee
12.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and climate change (MoEF&CC).	Unit will not expand or modify the plant without prior approval from the MoEF as well as UPPCB.
13.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Unit has not concealed any data.
14.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Condition noted.
15.	The Ministry reserves the right to stipulate additional conditions if found necessary.	Condition noted.
16.	The company in a time bound manner shall implement these conditions.	Condition noted.
17.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should	Condition noted.

	extend full cooperation to the Officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	
18.	The above condition shall be enforced inter-alia under the provisions of the water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Rules 1986, the Hazardous and other Waste Management Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/ High Courts and any other Court of Law relating to the subject matter.	Condition noted and complied.
19.	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act 2010.	Condition noted.

CHAPTER No. 03 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 04 locations 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**: -

Table-3.1: Details of Ambient Air Quality Monitoring Stations

Sr. No	Location Code	Location Name/ Description	Environmental Setting of surrounding	Date of Monitoring
1.	AAQ - 1	Near Main Gate	Industrial	08.02.2024 to 09.02.2024
2.	AAQ - 2	Usra Bazar	Residential	08.02.2024 to 09.02.2024
3.	AAQ - 3	Loniatala	Residential	09.02.2024 to 10.02.2024
4.	AAQ - 4	Majhgawan	Residential	09.02.2024 to 10.02.2024

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: Usra Bazar

The sampler was placed at Usra Bazar and was free from any obstructions. Surroundings of the sampling site represent residential environmental setting.

AAQ - 3: Loniatala

The sampler was placed at Loniatala and it was also free from any obstructions. Surroundings of the sampling site represent residential environment setting.

AAQ - 4: Majhgawan

The sampler was placed at Majhgawan and it was also free from any obstructions. Surroundings of the sampling site represent residential environment setting.

3.1.2 Ambient Air Quality Monitoring Methodology

Monitoring was conducted in respect of the following parameters:

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

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

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

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

Table-3.2: Techniques used for Ambient Air Quality Monitoring

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

3.1.3 Ambient Air Quality Monitoring Results Near Main Gate

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

Table-3.3: Ambient Air Quality Monitoring Results Near Main Gate

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2022	µg/m ³	84.5	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	52.43	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2022	µg/m ³	14.56	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2022	µg/m ³	20.19	6.0 - 750	For 24 hour =80

3.1.4 Ambient Air Quality Monitoring Results at Usra Bazar

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

Table-3.4: Ambient Air Quality Monitoring Results at Usra Bazar

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2022	µg/m ³	78.4	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	47.95	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2022	µg/m ³	13.69	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2022	µg/m ³	18.55	6.0 - 750	For 24 hour =80

3.1.5 Ambient Air Quality Monitoring Results at Loniatala

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

Table-3.5: Ambient Air Quality Monitoring Results at Loniatala

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2022	µg/m ³	79.4	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	47.85	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2022	µg/m ³	12.38	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2022	µg/m ³	18.94	6.0 - 750	For 24 hour =80

3.1.6 Ambient Air Quality Monitoring Results at Majhgawan

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

Table-3.6: Ambient Air Quality Monitoring Results at Majhgawan

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2022	µg/m ³	75.5	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	48.54	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO ₂)	IS: 5182 (Part-2): 2001 Reaffirmed: 2022	µg/m ³	12.89	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-6): 2006 Reaffirmed: 2022	µg/m ³	18.63	6.0 - 750	For 24 hour =80

3.1.7 Discussion on Ambient Air Quality in the Study Area

The value of PM₁₀ at Ambient Air Monitoring Station No: 1, 2, 3 & 4 are 84.5 µg/m³, 78.4 µg/m³, 79.4 µg/m³ & 75.5 µg/m³ respectively which were within permissible limit of 100 µg/m³ and PM_{2.5} levels are 52.43 µg/m³ Near Main Gate, 47.95 µg/m³ at Usra Bazar, 47.85 µg/m³ at Loniatola and 48.54 µg/m³ at Majhgawan, were also observed within permissible limit of 46.36 µg/m³ (for residential, rural and other areas as stipulated in the National Ambient Air Quality Standards). SO₂ ranges between 12.38 µg/m³ to 14.56 µg/m³ and NO_x ranges between 18.55 µg/m³ to 20.19 µg/m³ was also observed within the corresponding stipulated limits (Limit for SO₂ and NO_x; 80 µg/m³) at all of the 04 monitoring locations. Station wise variation of ambient air quality parameters has been graphically shown in Figure-3.1 to 3.4.

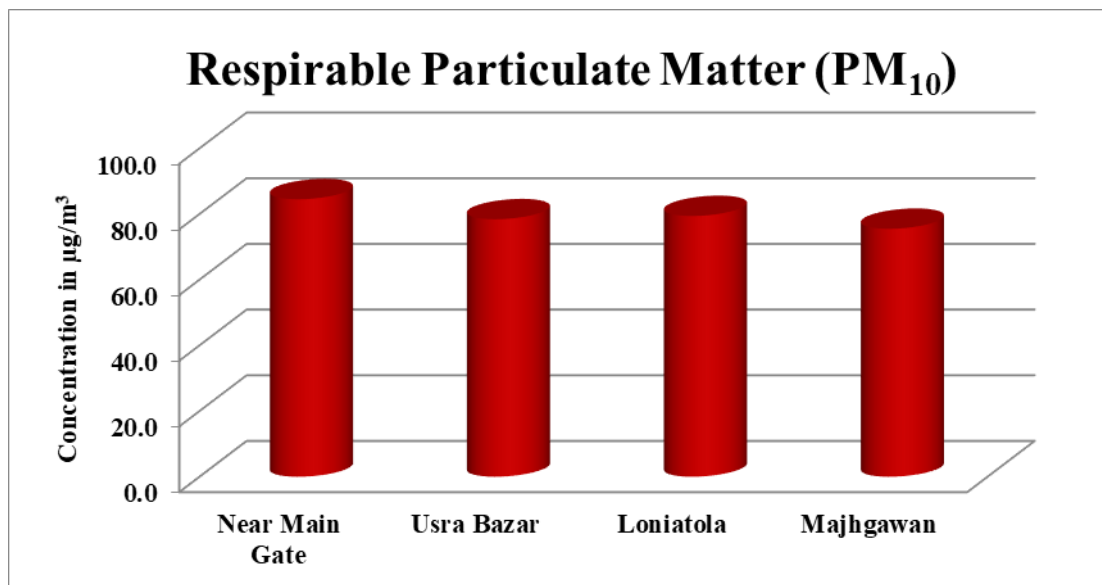


Figure-3.1: Graphs Showing PM₁₀ Concentration at all sites

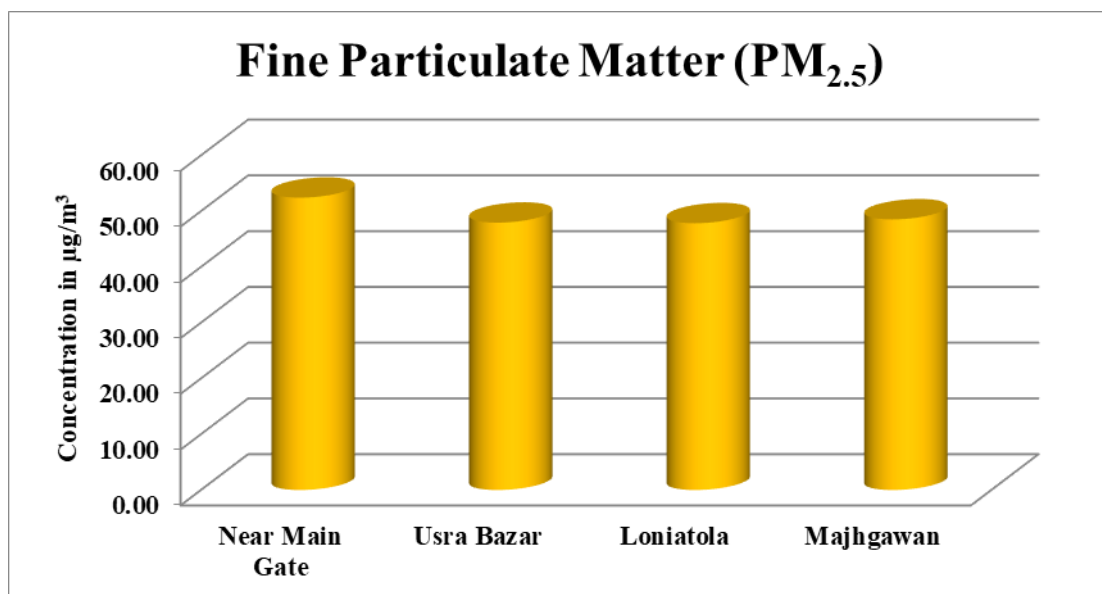


Figure-3.2: Graphs Showing PM_{2.5} Concentration at all sites

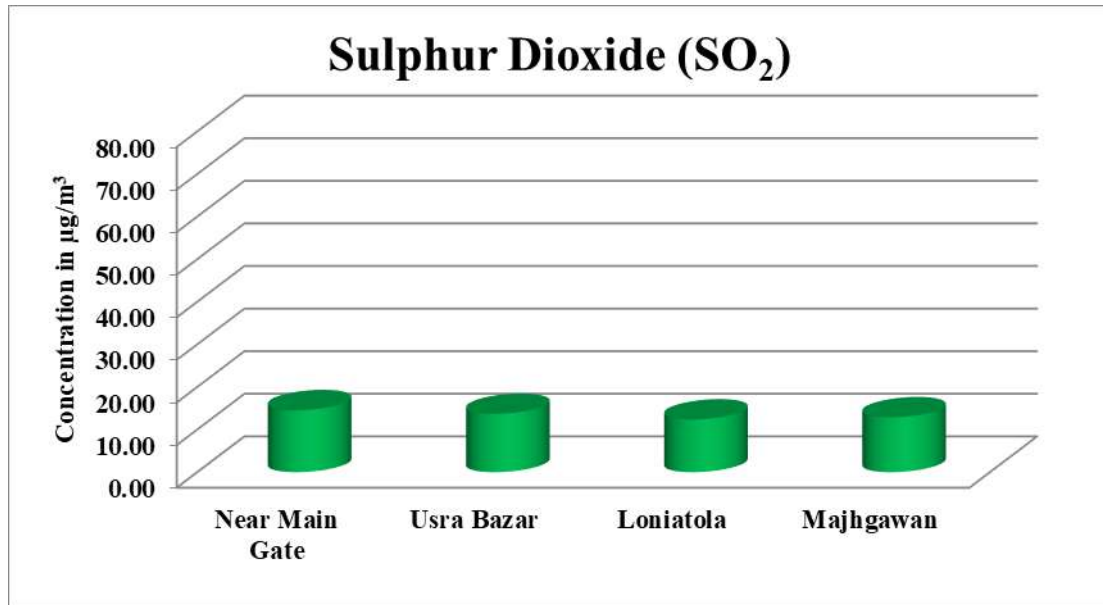


Figure-3.3: Graphs Showing SO₂ Concentration at all sites

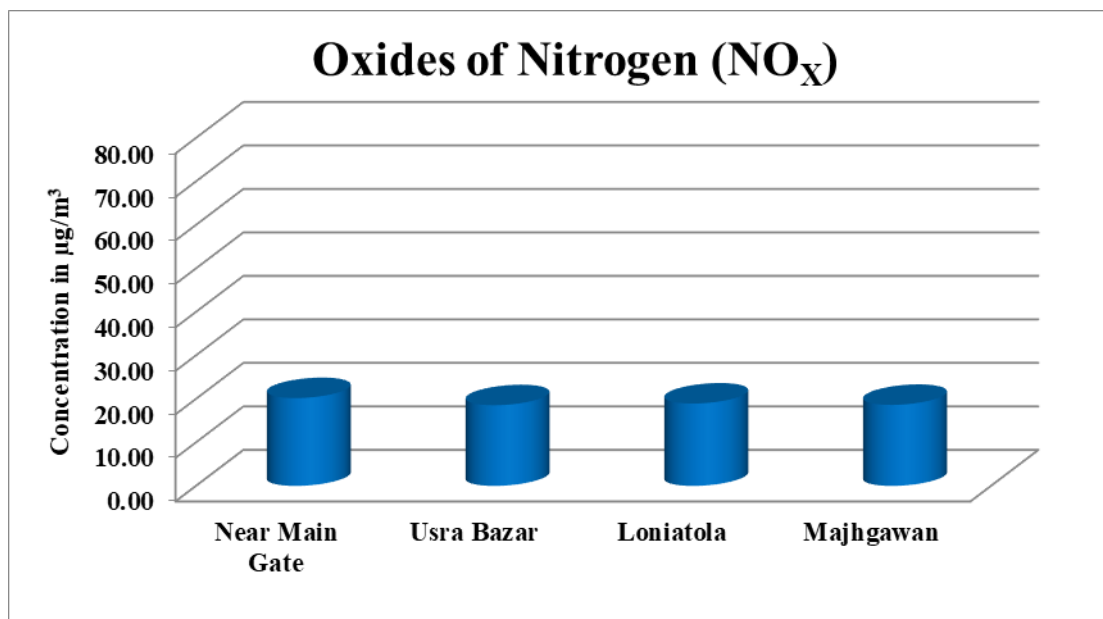


Figure-3.4: Graphs Showing NO_x Concentration at all sites

3.2 STACK EMISSION MONITORING

Stack Emission monitoring was carried out by EPA approved Laboratory on date 08.02.2024 for the installed 35.0 TPH slop fired boiler attached with Electro Static Precipitator as air pollution control device with a stack height of 72 meter.

3.2.1 Stack Emission Monitoring Methodology

Monitoring was conducted in respect of the following parameters:

- Particulate Matter (PM)

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

Table-3.7: Details of Stack Emission Monitoring Results

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm ³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	42.63	2.0 - 1000	150

3.3 AMBIENT NOISE MONITORING

3.3.1 Ambient Noise Monitoring Locations

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

Table-3.8: Details of Ambient Noise Monitoring Stations

Sr. No	Location Code	Location name and description	Date of Monitoring
1.	NQ - 1	At Plant Premises	09/02/2024 to 10/02/2024

3.3.2 Methodology of Noise Monitoring

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

3.3.3 Ambient Noise Monitoring Results

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

Table-3.9: Ambient Noise Monitoring Results

Ambient Noise Level				
Sr. No.	Parameter	Unit	Results Day Time (06:00 AM - 10:00 PM)	Results Night Time (10:00 PM - 06:00 AM)
1	Equivalent sound level	dB(A)	61.59	48.58

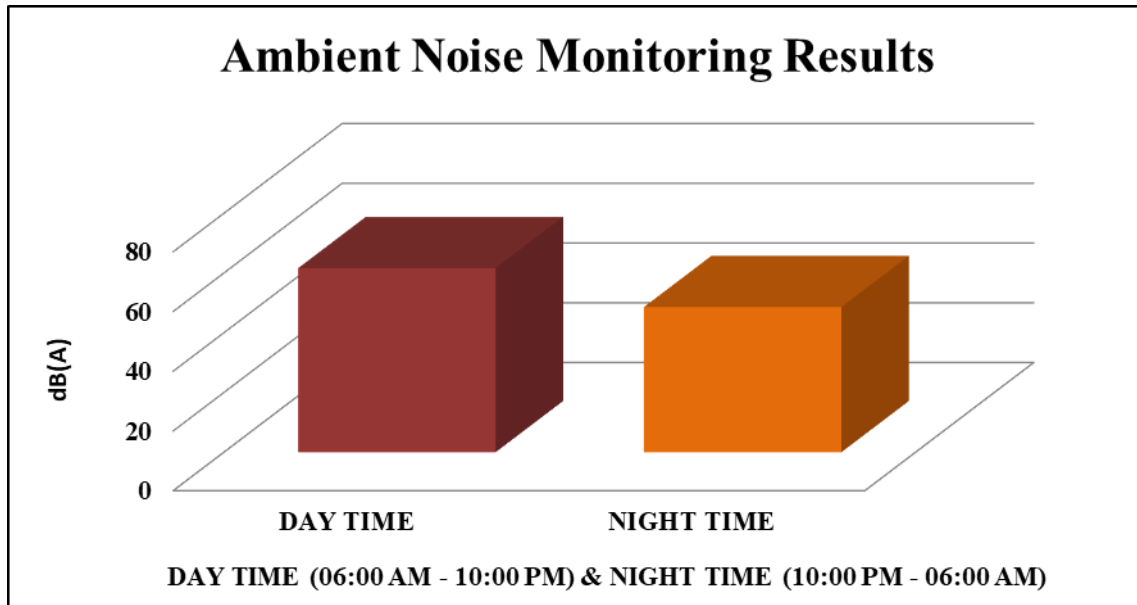


Figure-3.5: Day and Night Time noise Level at Plant Premises

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

3.3.4 Discussion on Ambient Noise Levels in the Study Area

Day Time Noise Levels (L_{day}):

The day time noise level at monitoring station was found 61.59 dB(A), which is within limits prescribed for industrial area i.e. 75 db (A).

Night Time Noise Levels (L_{night}):

The night time noise level at monitoring station was found 48.58 dB(A), which is within limit prescribed for industrial area i.e. 70 dB (A)

3.4 GROUND WATER QUALITY MONITORING

3.4.1 Ground water Quality Monitoring Locations

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

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

Table-3.10: Details of Water Quality Monitoring Station

Sr. No	Location Code	Location name and description	Date of Monitoring
1.	GW - 01	Borewell water	11 th October, 2023
2.	GW - 01	Borewell water	13 th November, 2023
3.	GW - 01	Borewell water	12 th December, 2023
4.	GW - 01	Borewell water	08 th January, 2024
5.	GW - 01	Borewell water	10 th February, 2024
6.	GW - 01	Borewell water	13 th March, 2024

3.4.2 Methodology of ground water Quality Monitoring

Sampling of ground water was carried out on 11.10.2023, 13.11.2023, 12.12.2023, 08.01.2024, 10.02.2024 and 13.03.2024. Samples were collected as grab sample and sampling forms are filled in as per the sampling plan. The preservative sample were properly added to preserve as per standard operating procedures (SOP) and stored immediately in ice boxes, which were ensured for appropriate temperatures. **Sample for chemical analysis was collected in polyethylene carboys. Sample collected for metal content were acidified to <2 pH with 1 ml HNO₃. A sample for bacteriological analysis was collected in sterilized glass bottles.**

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

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

3.4.3 Ground water Quality Monitoring Results

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

**Table-3.11:
Ground Water Quality Results at Borewell Water (October, 2023)**

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed. 2023 - 4500 H ⁺	7.4	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed. 2023 - 2130 B	<2.0	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 2023	391.8	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 th Ed. 2023 - 4500-NH ₃ F	<0.5	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed. 2023 - 5540 C	<0.05	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	51.2	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed. 2023 - 3500 Mg, B	34.02	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed. 2023 - 4500-Cl- B	28.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed. 2023 - 4500 F- C	0.39	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed. 2023 - 5530 C	<0.001	0.001 - 0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed. 2023 - 4500- SO ₄ ²⁻	28.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2320 B	292.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2340 C	268.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.015	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.18	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.03	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.39	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.003	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed. 2023 - 3112 B	<0.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	<i>E. coli</i>	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
31	<i>T. coli</i>	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	

**Table-3.12:
Ground Water Quality Results at Borewell Water (November, 2023)**

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed. 2023 - 4500 H ⁺	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed. 2023 - 2130 B	<2.0	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 2023	388.2	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 th Ed. 2023 - 4500-NH ₃ F	<0.5	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed. 2023 - 5540 C	<0.05	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	54.4	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed. 2023 - 3500 Mg, B	25.27	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed. 2023 - 4500-Cl- B	30.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed. 2023 - 4500 F- C	0.40	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed. 2023 - 5530 C	<0.001	0.001 - 0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed. 2023 - 4500- SO ₄ ²⁻	24.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2320 B	272.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2340 C	240.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.015	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.10	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.04	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.40	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.003	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed. 2023 - 3112 B	<0.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	<i>E. coli</i>	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
31	<i>T. coli</i>	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	

**Table-3.13:
Ground Water Quality Results at Borewell Water (December, 2023)**

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed. 2023 - 4500 H ⁺	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed. 2023 - 2130 B	<2.0	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 2023	408.0	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 th Ed. 2023 - 4500-NH ₃ F	<0.5	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed. 2023 - 5540 C	<0.05	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	59.2	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed. 2023 - 3500 Mg, B	26.24	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed. 2023 - 4500-Cl- B	28.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed. 2023 - 4500 F- C	0.38	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed. 2023 - 5530 C	<0.001	0.001 - 0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed. 2023 - 4500- SO ₄ ²⁻	30.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2320 B	288.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2340 C	256.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.015	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.14	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.08	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.42	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.003	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed. 2023 - 3112 B	<0.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	<i>E. coli</i>	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
31	<i>T. coli</i>	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	

**Table-3.14:
Ground Water Quality Results at Borewell Water (January, 2024)**

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed. 2023 - 4500 H ⁺	7.4	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed. 2023 - 2130 B	<2.0	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 2023	396.6	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 th Ed. 2023 - 4500-NH ₃ F	<0.5	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed. 2023 - 5540 C	<0.05	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	52.8	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed. 2023 - 3500 Mg, B	25.27	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed. 2023 - 4500-Cl B	32.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed. 2023 - 4500 F C	0.35	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed. 2023 - 5530 C	<0.001	0.001 - 0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed. 2023 - 4500- SO ₄ ²⁻	28.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2320 B	264.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2340 C	236.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.015	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.19	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.03	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.36	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.003	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed. 2023 - 3112 B	<0.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	<i>E. coli</i>	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
31	<i>T. coli</i>	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	

Table-3.15:

Ground Water Quality Results at Borewell Water (February, 2024)

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed. 2023 - 4500 H ⁺	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed. 2023 - 2130 B	<2.0	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 2023	394.4	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 th Ed. 2023 - 4500-NH ₃ F	<0.5	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed. 2023 - 5540 C	<0.05	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	54.4	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed. 2023 - 3500 Mg, B	28.18	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed. 2023 - 4500-Cl B	24.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed. 2023 - 4500 F C	0.40	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed. 2023 - 5530 C	<0.001	0.001 - 0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed. 2023 - 4500- SO ₄ ²⁻	28.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2320 B	276.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2340 C	252.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.015	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.15	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.04	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.45	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.003	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed. 2023 - 3112 B	<0.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	<i>E. coli</i>	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
31	<i>T. coli</i>	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	

**Table-3.16:
Ground Water Quality Results at Borewell Water (March, 2024)**

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed. 2023 - 4500 H ⁺	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed. 2023 - 2130 B	<2.0	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 2023	402.0	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 th Ed. 2023 - 4500-NH ₃ F	<0.5	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed. 2023 - 5540 C	<0.05	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	54.4	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed. 2023 - 3500 Mg, B	30.13	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed. 2023 - 4500-Cl B	26.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed. 2023 - 4500 F C	0.39	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed. 2023 - 5530 C	<0.001	0.001 - 0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed. 2023 - 4500- SO ₄ ²⁻	26.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2320 B	284.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed. 2023 - 2340 C	260.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.015	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.18	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.06	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	0.95	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.003	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed. 2023 - 3112 B	<0.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 24 th Ed. 2023 - 3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	<i>E. coli</i>	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
31	<i>T. coli</i>	MPN/100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	

3.5 SOIL MONITORING

3.5.1 Soil Monitoring Locations

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

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

Table-3.17: Details of Soil Monitoring Stations

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

3.5.2 Methodology of Soil Monitoring

The sampling has been done in line with IS: 2720 & Methods of Soil Analysis, Part-01st, 02nd 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 February on 10.02.2024.

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

3.5.3 Soil Monitoring Results

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

Table-3.18: Physico-Chemical Characteristics of Soil at Near Plant Site

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection
1	pH	-	IS: 2720 (Part-26):1987 Reaffirmed: 2021	7.4	1 - 14
2	Electrical Conductivity	µmhos/cm	IS: 14767: 2000 Reaffirmed: 2021	296.0	1.0 - 40000
3	Moisture content	%	IS: 2720 (Part-2):1973 Reaffirmed: 2020	3.08	1.0 - 50
4	Sulphur	Kg/Hec	IS: 14685: 1999 Reaffirmed: 2019	12.86	5.0 - 100
5	Boron	mg/kg	Method Manual of Soil Testing in India	1.56	1.0 - 100
6	Copper	mg/kg	Method Manual of Soil Testing in India	0.35	0.3 - 500
7	Zinc	mg/kg	Method Manual of Soil Testing in India	8.26	1.0 - 500
8	Iron	mg/kg	Method Manual of Soil Testing in India	141.0	5.0 - 500
9	Manganese	mg/kg	Method Manual of Soil Testing in India	18.26	5.0 - 500

3.5.4 Discussion on Soil Characteristics in the Study Area

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



UTTAR PRADESH POLLUTION CONTROL BOARD
Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

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

Validity Period :29/08/2021 To 31/12/2025

Ref No. - 133465/UPPCB/Gorakhpur(UPPCBRO)/CTE/DEORIA/2021

Dated:- 10/09/2021

To ,

Shri MANISH KEDIA
M/s Forever Distillery Private Limited Distillery Division
Plot No - A, UPSIDA Industrial Area, Usra Bazar, Tehsil Rudrapur, District Deoria (UP) -

274001

DEORIA

Sub : Consent to Establish for New Unit/Expansion/Diversification under the provisions of Water (Prevention and control of pollution) Act, 1974 as amended and Air (Prevention and control of Pollution) Act, 1981 as amended.

Please refer to your Application Form No.- 13031834 dated - 25/08/2021. After examining the application with respect to pollution angle, Consent to Establish (CTE) is granted subject to the compliance of following conditions :

1. Consent to Establish is being issued for following specific details :

A- Site along with geo-coordinates :

B- Main Raw Material :

Main Raw Material Details		
Name of Raw Material	Raw Material Unit Name	Raw Material Quantity
Molasses 446 TPD or	Metric Tonnes/Day	446
Cane Juice - 1200 TPD	Metric Tonnes/Day	1200
Grains 220 TPD or	Metric Tonnes/Day	220

C- Product with capacity :

Product Detail	
Name of Product	Product Quantity
RS/ENA/AA - 100 KLD	3100
Co Gen Power - 4.5 MW	.

D- By-Product if any with capacity :

By Product Detail			
Name of By Product	Unit Name	Licence Product Capacity	Install Product Capacity
0	Metric Tonnes/Day	0	0

E- Water Requirement (in KLD) and its Source :

Source of Water Details		
Source Type	Name of Source	Quantity (KL/D)
Ground Water (within premises)	Borewell	1000.0

F- Quantity of effluent (In KLD) :

Effluent Details	
Source Consumption	Quantity (KL/D)
Domestic	20.0
Industrial	980.0

G- Fuel used in the equipment/machinery Name and Quantity (per day) :

Fuel Consumption Details		
Fuel	Consumption(tpd/kld)	Use
Others	265	Used as fuel in Slop fired boiler along with bagasse.
Others	113	Used as Supporting fuel along with bagasse.
Others	378	During Grain based operation, only bagasse will be used as fuel.
Others	210	Used as fuel in boiler

For any change in above mentioned parameters, it will be mandatory to obtain Consent to Establish again. No further expansion or modification in the plant shall be carried out without prior approval of U.P. Pollution Control Board.

2. You are directed to furnish the progress of Establishment of plant and machinery, green belt, Effluent Treatment Plant and Air pollution control devices, by 10th day of completion of subsequent quarter in the Board.
3. Copy of the work order/purchase order, regarding instruction and supply of proposed Effluent Treatment Plant/Sewerage Treatment Plant /Air Pollution control System shall be submitted by the industry within three months to the Board.
4. Industry will not start its operation, unless CTO is obtained under water (Prevention and control of Pollution) Act, 1974 and Air (Prevention and control of Pollution) Act, 1981 from the Board.
5. It is mandatory to submit Air and Water consent Application complete in all respect, four months before start of operation, to the U.P. Pollution Control Board.
6. Legal action under water (Prevention and control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 may be initiated against the industry without any prior information, in case of non compliance of above conditions.
7. The industry shall install facilities to ensure Zero Liquid Discharge (ZLD) such as Multi Effect Evaporator (MEE), Condensate Polishing Unit(CPU) and Slop/ incineration boiler etc .
8. Industry shall develop proper green belt and rain water harvesting system as per guidelines. For green belt at least 8 feet height plants should be planted which shall be properly protected as proper irrigation and maturing arrangements shall be made. For the development of the green belt the guidelines issued vide Board office order no. H10405/220/2018/02 Dt. 16-02-2018 shall be complied.

Specific Conditions:

1. This consent to establish is valid only for production of Rectified Sprit/Extra Neutral Alcohol/Ethanol 100 KLD & installation of Co-Generation Power Plant of capacity 4.5 Megawatt at Plot No - A, UPSIDA Industrial Area, Usra Bazar, Tehsil Rudrapur, District Deoria. In case of any change in capacity, the project will have to intimate the Board. For any enhancement of the above, fresh Consent to Establish has to be obtained from U.P. State Pollution Control Board.
2. The industry shall comply the conditions of EC issued by State Level Environment Impact Assessment Authority, Uttar Pradesh vide its letter no. 38/Parya/SEIAA/5948/202020 dated 31.05.2021 and submit the compliance report on the EC condition on six monthly basis.
3. The industry shall submit stack emission monitoring report and ambient air quality monitoring report of the surrounding area of the factory on quarterly basis after commencement of the production of the industry.
4. Number of operating days of the industry will be 365 days per annum.
5. Unit shall obtain consent from the Board before starting production.
6. The maximum storage capacity for storage of spent wash shall not be more than 07 days.
7. The industry shall develop green belt as per the protocol attached with Board's office order dated 16.02.2018 which is available on Board's Website.
8. The industry shall install ZLD system comprising of multi effect evaporator, incineration boiler & CPU.
9. No effluent shall be discharged outside the industry premises. Unit shall maintain ZLD condition.
10. Unit shall submit a copy of NOC from CGWA at the earliest before start of the production.
11. The industry shall install APCS (Electro Ecstatic Precipitator) of adequate size and specifications capable of achieving the stipulated Norms along with proposed 35 TPH slop fired incineration boiler & a stack of height 72 mtr from ground level.
12. The industry shall use baggasse/coal & slop as fuel in the boiler.
13. The industry shall cover fuel conveyors to control fugitive emissions.
14. The industry shall install acoustic enclosures and stack of sufficient height (as per the Board's norms) on proposed DG sets.
15. The industry shall provided water sprinkling system to control dust from transportation of raw material and product.
16. Separate Energy Meter must be installed on ETP (CPU).
17. The fly ash should be scientifically disposed off so that the same should not adversely affect the nearby area.
18. The industry shall submit Ash Management Plan.
19. The industry is directed to install roof top rain water harvesting for recharging of ground water.
20. The industry shall install mass flow meter on various points as per CPCB guidelines and install PTZ web camera which should be connected to CPCB server for ensuring ZLD condition.
21. The industry shall comply with the provisions of charter made by CPCB for distillery industries.
22. Unit shall install On-line continuous emission monitoring system in the stack proposed.
23. The boiler in the industry must use bio coal or bio briquette minimum 20% as per availability.
24. The industry shall comply with the provisions made in Hazardous and other Waste (Management

& Trans boundary Movement) Rules, 2016.

25. The industry shall comply with the provisions of Solid and Other Waste Management Rules, 2016.

26. Project proponent shall submit a bank guarantee of Rs. 10.00 lacs within 15 days of issuance of the certificate, comprising above condition no 1 to 25 for ensuring the compliance of conditions.

Please note that consent to Establish will be revoked, in case of, non compliance of any of the above mentioned conditions. Board reserves its right for amendment or cancellation of any of the conditions specified above. Industry is directed to submit its first compliance report regarding above mentioned specific and general conditions till 10/10/2021 in this office. Ensure to submit the regular compliance report otherwise this Consent to Establish will be revoked.

Chief Environmental Officer, Circle-6

Dated:- 10/09/2021

Copy To -

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

Chief Environmental Officer, Circle-6



Uttar Pradesh Pollution Control Board

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

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

164110/UPPCB/Gorakhpur(UPPCBRO)/CTO/both/DEORIA/2022

Date: 16/09/2022

To,

M/s

Forever Distillery Private Limited Distillery Division

Plot No - A, UPSIDA Industrial Area, Usra Bazar, Tehsil Rudrapur,
District Deoria (UP) - 274001

Application Id-
17762164

Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981

CCA is hereby granted to Forever Distillery Private Limited Distillery Division located at Plot No - A, UPSIDA Industrial Area, Usra Bazar, Tehsil Rudrapur, District Deoria (UP) - 274001. subject to the provisions of the Water Act, Air Act and the orders that may be made further and subject to following terms and conditions :-

1. This CCA Forever Distillery Private Limited Distillery Division granted for the period from 10/09/2022 to 31/12/2024 and valid for manufacturing of following products.

S No	Product	Quantity	Unit
1	RS/ENA/Ethanol & Co-Generation Power Plant 4.5 MW	100	Kilo Liters/Day

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

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

Kind of Effluent	Quantity(KLD)	Treatment facility	Discharge point
Domestic	9.6 KLD	STP	
Industrial	ZLD (Zero Liquid Discharge)	ETP	

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

In case of stoppage of functioning of ETP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

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

Industrial Effluent Quality Standard

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

(iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality. In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

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

S No.	Parameters	Standards
1	pH	As per E(P)A Rules, 1986
2	BOD (mg/L)	As per E(P)A Rules, 1986
3	TSS (mg/L)	As per E(P)A Rules, 1986
4	Fecal Coliform (MPN/100ml)	As per E(P)A Rules, 1986
5	Remarks	9.6 KLD Treated Sewage

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

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards.

Air Pollution Source Details

S No.	Air Pollution Source	Type of fuel	Stack no	Control Device	Height of Stack
1	1000 KVA DG Set	Diesel Oil	2	Sulphur Dioxide	As per E(P)A Rules, 1986
2	1000 KVA DG Set	Diesel Oil	3	Sulphur Dioxide	As per E(P)A Rules, 1986
3	35 TPH Boiler	Baggasse and Slope	1	Particulate Matter	As per E(P)A Rules, 1986

Emmission Quality Standards

S No.	Stack no	Parameters	Standards
1	1	Particulate Matter	As per E(P)A Rules, 1986
2	2	Sulphur Dioxide	As per E(P)A Rules, 1986
3	3	Sulphur Dioxide	As per E(P)A Rules, 1986

In case of stoppage of functioning of air pollution control equipment, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately

(ii) The unit will not use any type of restricted fuel.

iii) Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial, Commercial, Residential, Silence) which are as follows :-

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

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

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

(i) Environment Statement in Form-V of Environment (Protection) Rules, 1986.

(ii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.

5. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.

6. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will result in legal action under the aforesaid Acts and Rules.

7. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-<http://www.upecp.in/TrainingSession.aspx> for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of non-compliance of this direction, your consent will be revoked by the Board.

8. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

Specific Conditions:-

1. This consent is valid for production of Rectified Spirit/Extra Neutral Alcohol/Ethanol 100 KLD & installation of Co-Generation Power Plant of capacity 4.5 Megawatt maximum using Molasses 446 TPD or Cane Juice 1200 TPD or Grains 220 TPD as raw material.

2. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharge outside the premises (applicable in case of the projects achieving the ZLD).

3. This consent is subject to final disposal of CPCB letter no. CP-11/21/2121-IPC-III-HO-CPCB-HO dated 12.01.2021.

4. Industry shall operate and maintain the MEE systems to ensure Zero Liquid Discharge, failing which, this consent shall be treated as revoked.

5. The separated water from solid separation system such as condensate from evaporation concentration system such as MEE shall be reutilized in the process. If required, separated water and condensate may be treated before reutilization.

6. Industry shall operate and maintain measuring devices (water/flow meters) at required location (raw water consumption, solid separation system: feed, permeate and reject, evaporation concentration systems: feed concentrate and condensate, water reused in the process & concentrate utilized in drying system/equivalent technology) to record the water balance shortly without delay.

7. The storage facility provided for spent wash shall be properly lined and made impermeable and the storage capacity at any stage shall not exceed 30 days equivalent of production.
8. The other effluent streams apart from spent wash including spent lees, plant washings, leakages, boiler blow down, etc. shall be used in process.
9. Industry shall operate and maintain the effluent treatment system effectively and regularly. All the effluent treatment system shall be kept in good running condition all the time and failure (if any), shall be immediately rectified without delay otherwise, similar alternate arrangement shall be made. In the event of any failure of any pollution control system adopted by the industry, the respective production unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Industry shall not discharge any treated / untreated effluent in to the river or any surface water bodies. No effluent shall be discharged outside of the factory premises in any circumstances; hence zero discharge condition shall be maintained at all the time.
10. Industry shall make proper arrangement for safe and scientific handling, storage, transportation and disposal of all solid wastes, sludge etc. generated.
11. Industry shall provide adequate arrangement for control of odour nuisance. All internal roads shall be made pucca. Industry shall maintain good housekeeping within factory premises, around effluent treatment facilities etc.
12. Industry must strictly comply all the directions issued by UPPCB, CPCB and Hon'ble NGT from time to time.
13. The industry shall install roof top rain water harvesting system and Piezometer in the factory premises.
14. The industry shall always connect the CCTV Camera with the server of CPCB and UPPCB.
15. Industry shall submit Environment Statement to this Board as per provision of Environment (Protection) amendment Rule, 1993 for the previous year ending 31st March on or before 30th September every year.
16. In case industry fails to comply with the directions issued by Board in a stipulated time schedule and/or fails to comply with any of the conditions stipulated in the consent / renewal, the consent to operate (CTO) / renewal of consent issued by Uttar Pradesh Pollution Control Board, Lucknow shall stand automatically withdrawn and manufacturing operations shall be close down without further notice.
17. Construct 0.3 mtr free Board in each lagoon used for storing spent wash to prevent overflow.
18. Maximum 30 days Spent Wash shall be stored in the Lagoon and ensured to send monthly reports regarding spent wash storage and details of water level in each lagoon constructed in industry.
19. Audited Balance Sheet/ C.A. Certificate should be submitted within one month from the date of issue of this Certificate for verification of Consent fee payable.
20. Percentages of solid concentration after MEE shall be analysed by NABL accredited lab and report will be submitted within a month.

21. The unit shall operate and maintain the Air Pollution Control Systems efficiently and continuously so as to satisfy the prescribed emission standards.
22. The unit shall adhere to the ambient Air quality prescribed standards at all the times.
23. The industry shall develop green belt as per the protocol attached with Board's office order dated 16.02.2018 which is available on Board's Website.
24. The industry shall to submit stack emission monitoring report every quarter from NABL accredited laboratory.
25. Industry shall strictly comply with conditions mentioned in the charter prepared by CPCB.
26. The Industry shall install on line emission continuous monitoring system and shall ensure regular transmission of data of Continuous Online Emission Monitoring System for to the servers of CPCB and UPPCB. Industry shall submit regular stack monitoring report every month.
27. Ash generated during production process must be disposed off in scientific manner as per guidelines of CPCB/MOEF. It is also mandatory that disposed ash will never affect the Health and Environment of nearby areas an residents.
28. The industry shall use at least 20% of total fuel as bio briquettes in boiler, as per availability.
29. If closure order is issued by CPCB or UPPCB against any defaulting unit, then CTO issued earlier will suspended during the pendency of the closure period and after ensuring the compliance and after revocation of closure order, the CTO will be deemed to be restore subject to the effective date of revocation of the closure order, with imposed conditions thereof.
30. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this CTO and attract action under the provisions of Environment (Protection) Act, 1986.

General Conditions:-

1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.
2. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.
3. Treated Industrial waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.
4. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions within 30 days of receipt of this CCA. If at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the Board, legal action shall be initiated against the applicant.
5. The applicant shall maintain good house keeping. All valves/pipes/sewer/drains etc. must be leak-proof
6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.

7. The industry shall provide Inspection Book at the time of inspection to the Board's officials.
8. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect.
9. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
10. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.
11. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point
12. The Board reserves the right to revoke/add/modify any stipulated condition issued along with CCA, as may be necessary.

Chief Environmental Officer, Circle-6

Copy to:

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

Chief Environmental Officer, Circle-6

State Level Environment Impact Assessment Authority, Uttar Pradesh

Directorate of Environment, U.P.

Vineet Khand-I, Gomti Nagar, Lucknow - 226 010

Phone : 91-522-2300 541, Fax : 91-522-2300 543

E-mail : doeuplko@yahoo.com

Website : www.seiaaup.com

To,

Director,
M/s Forever Distillery Pvt. Ltd.,
Plot No. 623/624, Gulhara, Goarakhpur, U.P.

Ref. No. 38...../Parya/SEIAA/5948/2020

Date: 31 May, 2021

Sub: Environmental Clearance for Establishment of New Molasses/Cane Juice/ Grain based Distillery having Capacity:100 KLD along with 4.5 MW co-gen power at Plot No.-A, UPSIDA, Usar Bazar, Tehsil-Rudrapur, Deoria., M/s Forever Distillery Pvt. Ltd.

Dear Sir,

Please refer to your application/letters 18-10-2020, 20-11-2020, 07-12-2020, 10-12-2020, 05-03-2021 & 31/03/2021 addressed to the Chairman/Secretary, State Level Environment Impact Assessment Authority (SEIAA) and Director, Directorate of Environment Govt. of UP on the subject as above. The State Level Expert Appraisal Committee considered the matter in its meetings held on dated 07-04-2021 and SEIAA in its meeting dated 31-05-2021.

A presentation was made by project proponent along with their consultant M/s Environmental & Technical Research Centre. The proponent, through the documents submitted and the presentation made, informed the committee that:-

1. The Environment clearance is sought for Establishment of New Molasses/Cane Juice/ Grain based Distillery having Capacity:100 KLD along with 4.5 MW co-gen power at Plot No.-A, UPSIDA, Usar Bazar, Tehsil- Rudrapur, Deoria., M/s Forever Distillery Pvt. Ltd.
2. The terms of reference in the matter were issued 18/11/2020.
3. Public hearing organized on 26/02/2021. Final EIA report submitted by the project proponent on 05/03/2021.
4. Land use details:

Sr No	Land use	Area (sqm)	Area in %
1	Roof Top	12,720	12
2	Green Belt	37,100	35
3	Road and Paved	15,900	15
4	Open area	40,280	38
	Grand Total	1,06,000	100

5. Salient features of the project:

Particulars	Details
Description of the project	Proposed 100 KLD (Molasses / Cane Juice or Grain) based Distillery along with 4.5 MW co - generation power plant. Plant will run on two modes : Mode 1 – Molasses/Cane Juice based Plant Mode 2 – Grain based Plant # Industry will run on only one mode at a time.
Plot area	10.60 Hectares (26.182 acres)
% of greenbelt provided	33% (3.50 Hectare) of the total project area will be covered under greenbelt & plantation.
Land use change required	Existing Land use of proposed site is industrial under UPSIDA, as the land is already under the possession of M/s Forever Distillery Private Limited.
Sources of Air + Noise	Air: Stack emissions from bagasse fired boiler (35 TPH),



pollution	Fugitive emissions: Handling & transportation of Raw material, fuel, fly ash, Noise: Exhaust fans, compressors, pumps, motors, boiler turbine.	
Estimated project cost	Rs. 17212.36 Lakhs	
EMP Cost	Capital Cost: Rs. 4350 Lakhs or Rs. 43.50 Crore Recurring Cost: Rs. 4.35 Crore/ annum.	
Manpower	330 persons	
Details of environment officers with qualifications	The environment officers will be appointed after installation of distillery unit with adequate qualifications. (M.Sc./M.Tech Environment).	
Number of Operation days	365 Days / Annum	
Water consumption/day	Mode 1: For Distillery : 1000 KLD (@ 10 KL/KL of Product), Mode 2: For Distillery : 950 KLD (@ 9.5 KL/KL of Product) # Domestic water requirement will be 20 KLD.	
Source of water	Ground water	
Permission from CGWA or any other agency	NOC for ground water abstraction has been obtained from Ground Water Department, Uttar Pradesh.	
Energy consumption	Total power requirement for the proposed project will be 2124 KWH. Source : 4.5 MW Co-Generation Power Plant For Emergency power backup : (DG Sets 2 x 1000 KVA)	
	Mode – 1 (Molasses/Cane Juice based Plant)	Mode – 2 (Grain based Plant)
Kind of fuel used	Bagasse / Other biomass / Coal + Slop	Only Bagasse / Other biomass / Coal
Quantity of fuel used	SLOP : 265 KLD + Bagasse : 113 TPD	Bagasse : 378 TPD
	In case of non availability of Bagasse / other biomass, coal will be used as fuel, the quantity will be 96 tonnes per day based on molasses / sugarcane juice and grain based on 210 tonnes per day respectively.	
Waste water generated/day	Spent wash : 750 KLD Other effluent : 1024 KLD (it includes Lees, DM Reject, Boiler & CT blow Down, Floor washing etc)	Spent Wash : 680 KLD Other effluent : 671 KLD (it includes Lees, DM Reject, Boiler & CT blow Down, Floor washing etc)
Treatment facility with capacity	Spent wash will be concentrated in Multi effect evaporator then concentrated from MEE will be incinerate in Slop fired boiler of capacity 35 TPH.	Spent wash generated from molasses operation (750 KLD) will be concentrated in Multi effect evaporator then concentrated from MEE will be incinerate in Slop fired boiler of capacity 35 TPH. Spent wash generated from grain based operation (680 KLD) will be fed into the decanter for solid separation then concentrated in MEE, then concentrate from MEE will be mixed with wet cake of decanter and converted to DDGS which will be sold as cattle feed .
Mode of discharge	Zero Liquid Discharge	

6. Water requirement details:

SL	Particulars	Fresh water requirement (KLD)	Remark
1	100 KLD Molasses / Cane Juice based operation (Mode -I)	1000 KLD (@ 10 KL/KL of product) (Net fresh water requirement after recycling)	Maximum water requirement of water in day will be 1000 KL as plant would be run



	OR		either on Mode I & Mode II. Source: Ground water. Unit obtained NOC from GWD for proposed abstraction of water.
	100 KLD Grain based operation (Mode - II)	950 KLD (@ 9.5 KL/KL of product) (Net fresh water requirement after recycling)	
AND			
2	Domestic water requirement	20.0 KLD	
<ul style="list-style-type: none"> During 100 % molasses / Cane Juice based operation (Mode - I): Water requirement for first run would be 2109 KLD. Fresh water requirement will be reduced through recycling of 1109 KLD of treated water/ Condensates. Fresh Water requirement will be 1000 KLD. During 100 % Grain based operation (Mode – II): Water requirement for first run would be 1895 KLD. Fresh water requirement will be reduced through recycling of 945 KLD of treated water/ condensates. Fresh water requirement will be 950 KLD. 			

7. Raw material details:

Sr No	Particular	Quantity, MT/Day	Storage	Source of raw material & Mode of Transportation
Mode - 1 Molasses Based / Cane Juice based				
1.a	Molasses	446 MT/Day	30 Days	Nearby sugar mill. Tanker will be used for molasses transport.
OR				
1.b	Cane Juice	1200 TPD	-	Nearby sugar mills.
Or				
Mode – 2, Grain Based				
1.c	Grain	220 MT/Day	30 Days	Nearby market and truck will be used for transportation.
2.	Other Chemicals			
	Sulphuric Acid	65 kg/Day	15 Days	Nearby Market by Truck. 15 Days storage will be provided.
	Sodium Hydroxide (Caustic)	10 Kg/Day	15 Days	
	Enzymes	8 kg/Day	15 Days	
	NH ₂ -CO- NH ₃ (Nutrient : 46% N ₂)	15 kg/Day	15 Days	
	Antifoam Agent	125 kg/Day	15 Days	

8. The project proposal falls under category 5 (g) of EIA Notification, 2006 (as amended).

Based on the recommendations of the State Level Expert Appraisal Committee Meeting (SEAC) held on 07-04-2021 the State Level Environment Impact Assessment Authority (SEIAA) in its Meeting held 31-05-2021 and decided to grant the Environmental Clearance for proposed project along with subject to the effective implementation of the following general & specific conditions:-

i. Statutory compliance:

- 45 days monitoring report of the area for air quality, water quality, Noise level. Besides flora & fauna should be examined twice a week and be submitted within 60 days for a record.
- The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of



the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six - monthly compliance report. (in case of the presence of schedule-I species in the study area).

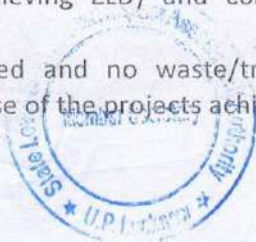
5. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
6. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
7. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules , 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989

II. Air quality monitoring and preservation:

1. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
2. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission , and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous). *
3. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six- monthly monitoring report.
4. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
5. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.
6. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
7. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
8. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

III. Water quality monitoring and preservation:

1. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD) and connected to SPCB and CPCB online servers.
2. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).



3. Process effluent /any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
4. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
5. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
6. Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO system.
7. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.

IV. Noise monitoring and prevention:

1. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
2. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
3. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

1. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management:

1. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
2. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
3. The company shall undertake waste minimization measures as below :-
 - iii. Metering and control of quantities of active ingredients to minimize waste .
 - iv. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - v. Use of automated filling to minimize spillage.
 - vi. Use of Close Feed system into batch reactors.
 - vii. Venting equipment through vapour recovery system.
 - viii. Use of high pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt:

1. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

VIII. Safety, Public hearing and Human health issues:

1. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
2. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
3. 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 on regular basis. Training to all employees on handling of chemicals shall be imparted.

4. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
5. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
6. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

IX. Corporate Environment Responsibility:

1. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements /deviation/violation of the environmental / forest /wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation/ violation of the environmental/ forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
5. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

1. As proposed treated waste water should be completely recycled/reused and ZLD should be achieved. Under no circumstances treated waste water shall be discharged to any drain/sewer line/inland surface water/Nala etc.
2. Directions/suggestions given during public hearing and commitment made by the project proponent should be strictly complied.
3. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
4. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant



offices of the Government who in turn has to display the same for 30 days from the date of receipt.

5. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
6. The project proponent shall monitor the criteria pollutants level namely; PM10, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
7. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
8. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
9. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
10. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
11. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
12. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
13. Concealing factual data or submission of false /fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
14. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
15. The Ministry reserves the right to stipulate additional conditions if found necessary.
16. The Company in a time bound manner shall implement these conditions.
17. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
18. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
19. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Concealing factual data and information or submission of false/fabricated data and failure to comply with any of the conditions stipulated in the Prior Environmental Clearance attract action under the provision of Environmental (Protection) Act, 1986.

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



The project proponent has to ensure that the proposed site is not a part of any no- development zone as required/prescribed/identified under law. In case of the violation this permission shall automatically be deemed to be cancelled. Also, in the event of any dispute on ownership or land use of the proposed site, this Clearance shall automatically be deemed to be cancelled.

The project proponent has to mandatorily submit the compliance of specific conditions no- 1, 3, 4 & 5 given in E.C. letter within 3 months, failing which the Clearance shall automatically be deemed to be cancelled.

Further project proponent has to submit the regular 6 monthly compliance report regarding general & specific conditions as specified in the E.C. letter and comply the provision of EIA notification 2006 (as Amended).

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



(Ashish Tiwari)
Member Secretary, SEIAA

No...../Parya/SEAC/5948/2020 Dated: As above

Copy with enclosure for Information and necessary action to:

1. The Principal Secretary, Department of Environment, Govt. of Uttar Pradesh, Lucknow.
2. Advisor, IA Division, Ministry of Environment, Forests & Climate Change, Govt. of India, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi.
3. Additional Director, Regional Office, Ministry of Environment & Forests, (Central Region), Kendriya Bhawan, 5th Floor, Sector-H, Aliganj, Lucknow.
4. District Magistrate Deoria.
5. The Member Secretary, U.P. Pollution Control Board, TC-12V, Paryavaran Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow.
6. Copy to Web Master/ guard file.

(Ashish Tiwari)
Member Secretary, SEIAA



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ETRC/PM09/TEST-REP/FT/45

TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/9603/2023	Date of Report: 17/10/2023
Name /Address/Type of Industry	M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	Industry Self
3	Sample received date	11.10.2023	7	Analysis Start Date	11.10.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	16.10.2023

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed 2023 - 4500 H ⁺	7.4	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed 2023 - 2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 2023	391.8	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	0.5 - 100	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	51.2	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed 2023 - 3500 Mg, B	34.02	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed 2023 - 4500-Cl ⁻ B	28.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed 2023 - 4500 F ⁻ C	0.39	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	BDL	0.1 - 5	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed 2023 - 5530 C	BDL	0.001-0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed 2023 - 4500 SO ₄ ²⁻ E	28.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2320 B	292.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2340 C	268.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.18	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.03	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.39	0.05 - 15	5	15



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Test Report Ref No.: ETRC/EPA/9603/2023

24	Cadmium as Cd	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed 2023 - 3112 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2	0.01	0.05
29	Total Chromium as Cr	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	E. coli	MPN/ 100 ml	IS: 1622:1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
31	T. coli	MPN/ 100 ml	IS: 1622:1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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

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Authorized Signatory
(Sandeep Kr. Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



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ETRC/PM09/TEST-REP/FT/45

TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No.: ETRC/1811/12698/2023	Date of Report: 18/11/2023
Name /Address/Type of Industry	M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	Industry Self
3	Sample received date	13.11.2023	7	Analysis Start Date	13.11.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	17.11.2023

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed 2023 - 4500 H ⁺	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed 2023 - 2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 2023	388.2	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	0.5 - 100	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	54.4	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed 2023 - 3500 Mg, B	25.27	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed 2023 - 4500-Cl ⁻ B	30.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed 2023 - 4500 F ⁻ C	0.40	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	BDL	0.1 - 5	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed 2023 - 5530 C	BDL	0.001-0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed 2023 - 4500 SO ₄ ²⁻ E	24.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2320 B	272.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2340 C	240.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.10	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.04	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.40	0.05 - 15	5	15



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Test Report Ref No.: ETRC/1811/12698/2023

24	Cadmium as Cd	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed 2023 - 3112 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2	0.01	0.05
29	Total Chromium as Cr	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	E. coli	MPN/ 100 ml	IS: 1622:1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
31	T. coli	MPN/ 100 ml	IS: 1622:1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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

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Authorized Signatory
(Sandeep Kr. Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



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ETRC/PM09/TEST-REP/FT/45

TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No.: ETRC/1812/12699/2023	Date of Report: 18/12/2023
Name /Address/Type of Industry	M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	Industry Self
3	Sample received date	12.12.2023	7	Analysis Start Date	12.12.2023
4	Sample Quantity	5.0 liters	8	Analysis End Date	17.12.2023

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed 2023 - 4500 H ⁺	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed 2023 - 2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 2023	408.0	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	0.5 - 100	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	59.2	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed 2023 - 3500 Mg, B	26.24	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed 2023 - 4500-Cl ⁻ B	28.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed 2023 - 4500 F C	0.38	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1988 Reaffirmed: 2019	BDL	0.1 - 5	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed 2023 - 5530 C	BDL	0.001-0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed 2023 - 4500 SO ₄ ²⁻ E	30.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2320 B	288.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2340 C	256.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.14	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.08	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.42	0.05 - 15	5	15



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Test Report Ref No.: ETRC/1812/12699/2023

24	Cadmium as Cd	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed 2023 - 3112 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2	0.01	0.05
29	Total Chromium as Cr	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	E. coli	MPN/ 100 ml	IS: 1622:1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
31	T. coli	MPN/ 100 ml	IS: 1622:1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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

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ETRC/PM09/TEST-REP/FT/45

TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No.: ETRC/1301/12700/2024	Date of Report: 13/01/2024
Name /Address/Type of Industry	M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	Industry Self
3	Sample received date	08.01.2024	7	Analysis Start Date	08.01.2024
4	Sample Quantity	5.0 liters	8	Analysis End Date	12.01.2024

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed 2023 - 4500 H ⁺	7.4	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed 2023 - 2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 2023	396.6	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	0.5 - 100	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	52.8	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed 2023 - 3500 Mg, B	25.27	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed 2023 - 4500-Cl B	32.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed 2023 - 4500 F C	0.35	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	BDL	0.1 - 5	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed 2023 - 5530 C	BDL	0.001-0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed 2023 - 4500 SO ₄ ²⁻ E	28.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2320 B	264.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2340 C	236.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.19	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.03	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.36	0.05 - 15	5	15



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Test Report Ref No.: ETRC/1301/12700/2024

24	Cadmium as Cd	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed 2023 - 3112 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2	0.01	0.05
29	Total Chromium as Cr	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	E. coli	MPN/ 100 ml	IS: 1622:1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
31	T. coli	MPN/ 100 ml	IS: 1622:1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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ETRC/PM09/TEST-REP/FT/42

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/1602/12701/2024		Date of Report: 16/02/2024	
Name /Address/Type of Industry		M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Near Main Gate	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1(a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	55	55
(d)	Average ambient temperature (°C)	18	18
(e)	Time of Sampling Started (Hours)	09:43 am (08.02.2024)	09:43 am (08.02.2024)
(f)	Time of Sampling completed (Hours)	09:22 am (09.02.2024)	09:22 am (09.02.2024)
2	Total time of sampling (Minutes)	24 hour (1408 minutes)	24 hour (1424 minutes)
3	Average Air sampling rate (m ³ /minute)	1.150	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM (m ³)	• 1618.74	• 23.458
	• GAS (liter)	• 703.8	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2022	µg/m ³	84.5	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	52.43	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-02): 2001 Reaffirmed: 2022	µg/m ³	14.56	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-06): 2006 Reaffirmed: 2022	µg/m ³	20.19	6.0 - 750	For 24 hour =80

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(Sandeep Kr Verma)
Lab-Incharge



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TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/1602/12702/2024		Date of Report: 16/02/2024	
Name /Address/Type of Industry		M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Usra Bazar	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM₁₀	DETAILS-PM_{2.5}
1(a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	55	55
(d)	Average ambient temperature (°C)	18	18
(e)	Time of Sampling Started (Hours)	09:51 am (08.02.2024)	09:51 am (08.02.2024)
(f)	Time of Sampling completed (Hours)	09:30 am (09.02.2024)	09:30 am (09.02.2024)
2	Total time of sampling (Minutes)	24 hour (1414 minutes)	24 hour (1414 minutes)
3	Average Air sampling rate (m ³ /minute)	1.165	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM (m ³)	• 1647.543	• 23.568
	• GAS (liter)	• 707.1	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2022	µg/m ³	78.4	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	47.95	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-02): 2001 Reaffirmed: 2022	µg/m ³	13.69	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-06): 2006 Reaffirmed: 2022	µg/m ³	18.55	6.0 - 750	For 24 hour =80

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TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/1602/12703/2024		Date of Report: 16/02/2024	
Name /Address/Type of Industry		M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Loniatala	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1(a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	53	53
(d)	Average ambient temperature (°C)	19	19
(e)	Time of Sampling Started (Hours)	09:40 am (09.02.2024)	09:40 am (09.02.2024)
(f)	Time of Sampling completed (Hours)	09:25 am (10.02.2024)	09:25 am (10.02.2024)
2	Total time of sampling (Minutes)	24 hour (1405 minutes)	24 hour (1405 minutes)
3	Average Air sampling rate (m ³ /minute)	1.165	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM (m ³)	• 1636.359	• 23.408
	• GAS (liter)	• 702.3	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2022	µg/m ³	79.4	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	47.85	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-02): 2001 Reaffirmed: 2022	µg/m ³	12.38	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-06): 2006 Reaffirmed: 2022	µg/m ³	18.94	6.0 - 750	For 24 hour =80

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TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/1602/12704/2024		Date of Report: 16/02/2024	
Name /Address/Type of Industry		M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Majhgawan	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM₁₀	DETAILS-PM_{2.5}
1(a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	53	53
(d)	Average ambient temperature (°C)	19	19
(e)	Time of Sampling Started (Hours)	09:53 am (09.02.2024)	09:53 am (09.02.2024)
(f)	Time of Sampling completed (Hours)	09:34 am (10.02.2024)	09:34 am (10.02.2024)
2	Total time of sampling (Minutes)	24 hour (1409 minutes)	24 hour (1409 minutes)
3	Average Air sampling rate (m ³ /minute)	1.160	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM (m ³)	• 1634.208	• 23.482
	• GAS (liter)	• 704.4	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2022	µg/m ³	75.5	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	48.54	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-02): 2001 Reaffirmed: 2022	µg/m ³	12.89	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-06): 2006 Reaffirmed: 2022	µg/m ³	18.63	6.0 - 750	For 24 hour =80

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ETRC/PM09/TEST-REP/FT/43

TEST REPORT STACK EMISSION MONITORING AND ANALYSIS REPORT


Test Report Ref No.: ETRC/1602/12705/2024		Date of Report: 16/02/2024
Name /Address/Type of Industry		M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)
Monitored by		ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
1.(a)	Date of monitoring	08.02.2024
(b)	Stack material	RCC
(c)	Height of stack from ground level	72.0 mts
(d)	Source to which stack attached	Boiler
(e)	No of boiler attached with capacity	01 No. (35.0 TPH)
(f)	Type and quantity of fuel used	Slop & Bagasse
(g)	Details of APCS installed	Bag Filters
2.	PARAMETERS	VALUES
(a)	Ambient temperature (°C)	19.0
(b)	Stack gas temperature (°C)	130.0
(c)	Stack gas velocity (m/sec)	11.89
(d)	Flow rate (LPM)	17
(e)	Sampling time (minutes)	62
(f)	Volume of air sampled (liters)	1054

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing / Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm ³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	42.63	2.0 - 1000	150

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ETRC/PM09/TEST-REP/FT/44

TEST REPORT AMBIENT NOISE MONITORING AND ANALYSIS REPORT

Test Report Ref No.: ETRC/1602/12706/2024		Date of Report: 16/02/2024	
Name /Address/Type of Industry		M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)	
Monitored by		ETRC, Lucknow	
Sr. No.	GENERAL INFORMATION	DETAILS	
(a)	Date of monitoring	09/02/2024 (06:00 AM) to 10/02/2024 (06:00 AM)	
(b)	Sample Description	Ambient Noise	
(c)	Sampling Location	At Plant Premises	
(d)	Environmental Condition	Normal	
(e)	Monitoring Protocol	IS: 9989: 1981, Reaffirmed: 2020	

TEST RESULT

Ambient Noise Level				
Sr. No.	Parameter	Unit	Results	Results
			Day Time (06:00 AM - 10:00 PM)	Night Time (10:00 PM - 06:00 AM)
1	Equivalent sound level	dB(A)	61.59	48.58

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

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ETRC/PM09/TEST-REP/FT/45

TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No.: ETRC/1602/12707/2024	Date of Report: 16/02/2024
Name /Address/Type of Industry	M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	ETRC
3	Sample received date	10.02.2024	7	Analysis Start Date	10.02.2024
4	Sample Quantity	5.0 liters	8	Analysis End Date	15.02.2024

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed 2023 - 4500 H ⁺	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed 2023 - 2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 2023	394.4	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	0.5 - 100	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	54.4	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed 2023 - 3500 Mg, B	28.18	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed 2023 - 4500-Cl ⁻ B	24.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed 2023 - 4500 F ⁻ C	0.40	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	BDL	0.1 - 5	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed 2023 - 5530 C	BDL	0.001-0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed 2023 - 4500 SO ₄ ²⁻ E	28.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2320 B	276.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2340 C	252.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.15	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.04	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.45	0.05 - 15	5	15



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(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015)

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Test Report Ref No.: ETRC/1602/12707/2024

24	Cadmium as Cd	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed 2023 - 3112 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2	0.01	0.05
29	Total Chromium as Cr	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	E. coli	MPN/ 100 ml	IS: 1622:1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
31	T. coli	MPN/ 100 ml	IS: 1622:1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	

BDL=Below Detection Limit

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

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- Complain register is available in our laboratory.


Authorized Signatory
(Sandeep Kr. Verma)
Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM



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ETRC/PM09/TEST-REP/FT/46

TEST REPORT SOIL ANALYSIS

Test Report Ref No.: ETRC/1602/12708/2024	Date of Report: 16/02/2024
Name /Address/Type of Industry	M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)

SAMPLE DETAILS

1	Sampling Location	Near Project Site	5	Packing Condition	Sealed
2	Sample Description	Soil Sample	6	Sample Collected By	ETRC
3	Sample received date	10.02.2024	7	Analysis Start Date	10.02.2024
4	Sample Quantity	500 gm	8	Analysis End Date	15.02.2024

TEST REPORT

Sr. No.	Test Parameter	Unit	Protocol/ Test Method	Result	Range of testing /limit of detection
1	pH	-	IS: 2720 (Part-26):1987 Reaffirmed: 2021	7.4	1 - 14
2	Electrical Conductivity	µmhos/cm	IS: 14767: 2000 Reaffirmed: 2021	296.0	1.0 - 40000
3	Moisture content	%	IS: 2720 (Part-2):1973 Reaffirmed: 2020	3.08	1.0 - 50
4	Sulphur	Kg/Hec	IS: 14685: 1999 Reaffirmed: 2019	12.86	5.0 - 100
5	Boron	mg/kg	Method Manual of Soil Testing in India	1.56	1.0 - 100
6	Copper	mg/kg	Method Manual of Soil Testing in India	0.35	0.3 - 500
7	Zinc	mg/kg	Method Manual of Soil Testing in India	8.26	1.0 - 500
8	Iron	mg/kg	Method Manual of Soil Testing in India	141.0	5.0 - 500
9	Manganese	mg/kg	Method Manual of Soil Testing in India	18.26	5.0 - 500

Method Manual of Soil Testing in India (Department of Agriculture and Corporation Ministry of Agriculture, Government of India), 4.6.3 (16b): 2022

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

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ETRC/PM09/TEST-REP/FT/45

TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/10634/2024	Date of Report: 18/03/2024
Name /Address/Type of Industry	M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)

SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected By	Industry Self
3	Sample received date	13.03.2024	7	Analysis Start Date	13.03.2024
4	Sample Quantity	5.0 liters	8	Analysis End Date	18.03.2024

TEST RESULT

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
						Desirable	Permissible
Physico-chemical Parameters							
1	Colour	Hazen	IS: 3025 (Part-04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 th Ed 2023 - 4500 H ⁺	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 th Ed 2023 - 2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solid (TDS)	mg/l	IS: 3025 (Part-16): 2023	402.0	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	0.5 - 100	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 th Ed 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	54.4	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 th Ed 2023 - 3500 Mg, B	30.13	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 th Ed 2023 - 4500-Cl ⁻ B	26.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 th Ed 2023 - 4500 F ⁻ C	0.39	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	BDL	0.1 - 5	0.2	1.0
13	Nitrate as NO ₃	mg/l	IS: 3025 (Part-34): 1988 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APHA 24 th Ed 2023 - 5530 C	BDL	0.001-0.005	0.001	0.002
15	Sulphate as SO ₄	mg/l	APHA 24 th Ed 2023 - 4500 SO ₄ ²⁻ E	26.0	1.0 - 500	200	400
16	Alkalinity as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2320 B	284.0	2.0 - 1000	200	600
17	Total Hardness as CaCO ₃	mg/l	APHA 24 th Ed 2023 - 2340 C	260.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.18	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.06	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	0.95	0.05 - 15	5	15



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Test Report Ref No.: ETRC/EPA/10634/2024

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25	Lead as Pb	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 th Ed 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 th Ed 2023 - 3112 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2	0.01	0.05
29	Total Chromium as Cr	mg/l	APHA 24 th Ed 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
Microbiological Parameters							
30	E. coli	MPN/ 100 ml	IS: 1622:1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be detected in any 100 ml sample	
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Lab-Incharge




Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL MANAGEMENT PLAN

Cost for Environmental Protection Measures:

- **Capital Cost: Rs. 5600.0 Lakhs**
- **Recurring Cost: Rs. 320.0 lakh per annum**

S. No.	Description	Capital Cost	Recurring Cost / Annum
1.	Air Pollution Control Equipment (APC) in the form of ESP and Stack	250 Lakhs	50 Lakhs
2.	Secondary effluent treatment plant	250 Lakhs	60 Lakhs
3.	Environmental Monitoring and Management	10 Lakhs	5 Lakhs
4.	Green Belt Development	20 Lakhs	5 Lakhs
5.	Occupational Health & Safety	30 Lakhs	10 Lakhs
6.	MEE, DDGS Dryer and Incineration	3790 Lakhs	305 Lakhs
Total		4350 Lakhs	435 Lakhs

PUBLIC HEARING MINUTES, ITS ACTION PLAN WITH BUDGET, TIMELINE



Sr. No.	Name of Person	Points raised/Statements	Reply to the issues/suggestions by Environmental Advisor/Industry	Action plan along with budgetary allocation.
1.	श्री. आनन्द प्रकाश मिश्रा, ग्राम: बढया बुजुर्ग, देवरिया	द्वारा यह पूछा गया कि उद्योग के लगने से एवं उसके संचालन से आम जन-जीवन के स्वास्थ्य पर कोई विपरीत प्रभाव तो नहीं पड़ेगा।	उद्योग प्रतिनिधि के तकनीकी विशेषज्ञ द्वारा अवगत कराया गया कि उद्योग में नवीनतम तकनीकी का प्रयोग करते हुए ई० एस० पी० की स्थापना की जाएगी, जिससे की प्रदूषण का स्तर मानकों के अनुरूप रहेगा एवं जन स्वास्थ्य पर कोई भी विपरीत प्रभाव नहीं पड़ेगा।	Major pollution from the proposed industry will be Air and water pollution. Air Pollution: for air pollution control from boiler, industry will install ESP along with adequate stack height. For Air Pollution Measure industry allocated fund of Rs 250 Lakhs. Water Pollution: Proposed Distillery will be based on Zero Liquid Discharge. During Molasses based operation, Spent wash will be concentrated in MEE and then concentrate will be utilized as fuel in Slop fired boiler. Other effluent like spent lees, MEE Condensate, Washing and Blow down will be treated in Condensate Polishing unit. For Water Pollution Measure industry allocated fund of Rs 435 Lakhs.

PUBLIC HEARING MINUTES, ITS ACTION PLAN WITH BUDGET, TIMELINE



Sr. No.	Name of Person	Points raised/Statements	Reply to the issues/suggestions by Environmental Advisor/Industry	Action plan along with budgetary allocation.
2.	श्री. पन्ने लाल , ग्राम: बुजुर्ग, देवरिया	द्वारा यह जिज्ञासा की गई कि उद्योग के लगने से स्थानीय लोगों को रोजगार संबंधी लाभ प्राप्त होगा अथवा नहीं।	उद्योग के प्रोपराइटर श्री तनमय मोदी द्वारा यह अवगत कराया गया कि उद्योग की स्थापना एवं संचालन में स्थानीय लोगों को उनकी योग्यता के आधार पर वरीयता दी जाएगी।	<p>For the establishment of proposed distillery local people will be employed directly/indirectly</p> <p>Education Awareness program can be conducted to make the population aware and better treatment for livelihood.</p> <p>Vocational training session can be organized to provide self-employment to the women and unemployment youth.</p> <p>Natural Resource Management and Environmental Conservation.</p> <p>On the basis of qualification and skills local youths can be employed.</p> <p>Long term and short term employments can be generated.</p> <p>Industry allocated fund of Rs 14 Lakhs .</p>

PUBLIC HEARING MINUTES, ITS ACTION PLAN WITH BUDGET, TIMELINE



Sr. No.	Name of Person	Points raised/Statements	Reply to the issues/suggestions by Environmental Advisor/Industry	Action plan along with budgetary allocation.
3.	श्री. लाल चन्द ग्राम: बढ़या बुजुर्ग, देवरिया	द्वारा यह प्रश्न उठाया गया कि उद्योग के संचालन से जनित जल एवं वायु प्रदूषण की रोक-थाम कैसे की जाएगी।	उद्योग के तकनीकी सलाहकार द्वारा यह उत्तर दिया गया कि प्रस्तावित उद्योग शून्य उत्प्रवाह पद्धति पर आधारित होगा। उद्योग में जल के शुद्धिकरण हेतु ई० टी० पी० एवं घरेलू जल मल के शुद्धिकरण हेतु एस० टी० पी० की स्थापना की जाएगी। उद्योग के परिसर के बाहर कोई भी जल का उत्प्रवाह नहीं किया जाएगा। वायु प्रदूषण की रोक-थाम हेतु नवीनतम तकनीकी इलेक्ट्रो स्टैटिक प्रेसीपिटेटर (ई० एस० पी०) की स्थापना की जाएगी एवं चिमनी से निकालने वाले धुँएँ में प्रचालको की मात्रा मानको के अनुरूप होगी।	Major pollution from the proposed industry will be Air and water pollution. Air Pollution: for air pollution control from boiler, industry will install ESP along with adequate stack height. For Air Pollution Measure industry allocated fund of Rs 250 Lakhs. Water Pollution: Proposed Distillery will be based on Zero Liquid Discharge. During Molasses based operation, Spent wash will be concentrated in MEE and then concentrate will be utilized as fuel in Slop fired boiler. Other effluent like spent lees, MEE Condensate, Washing and Blow down will be treated in Condensate Polishing unit. For Water Pollution Measure industry allocated fund of Rs 435 Lakhs.

PUBLIC HEARING MINUTES, ITS ACTION PLAN WITH BUDGET, TIMELINE



Sr. No.	Name of Person	Points raised /Statements	Reply to the issues/suggestions by Environmental Advisor/Industry	Action plan along with budgetary allocation.
4.	श्री. राकेशधर द्विवेदी , निवासी: देवरिया, जनपद : देवरिया	द्वारा उद्योग के जनित ध्वनि प्रदूषण के संदर्भ में प्रश्न किया गया।	उद्योग के तकनीकी सलाहकार द्वारा यह अवगत कराया गया कि ध्वनि प्रदूषण की रोक-थाम हेतु डी० जी० सेट एकास्टिक ईन्क्लोसरयुक्त होगा एवं उद्योग परिसर में सघन वृक्षारोपण किया जाएगा।	All Noise pollution sources will be provided with acoustic enclosure or installed in covered shed. Industry allocated fund of Rs 20 Lakhs to mitigate Noise Pollution.
5.	श्री. राम निवास यादव , ग्राम: बड़या बुजुर्ग, देवरिया	द्वारा यह पूछा गया कि उद्योग द्वारा भूमिगत जल का दोहन करने पर आस-पास के नलकूपों पर कोई प्रतिकूल प्रभाव तो नहीं पड़ेगा।	प्रश्न के उत्तर में उद्योग के तकनीकी सलाहकार द्वारा यह अवगत कराया गया कि वर्तमान में प्रस्तावित उद्योग के आस-पास भूमिगत जल का स्तर काफी अच्छा है एवं उद्योग की स्थापना के साथ ही परिसर में रेन वॉटर हार्वेस्टिंग की स्थापना की जाएगी। उद्योग के आस-पास के गावों के तालाबों का जीर्णोद्धार व नये तालाबों का निर्माण कराया जाएगा।	Major pollution from the proposed industry will be Air and water pollution. Water Pollution: Proposed Distillery will be based on Zero Liquid Discharge. During Molasses based operation, Spent wash will be concentrated in MEE and then concentrate will be utilized as fuel in Slop fired boiler. Other effluent like spent lees, MEE Condensate, Washing and Blow down will be treated in Condensate Polishing unit. For Water Pollution Measure industry allocated fund of Rs 435 Lakhs. So no any adverse effect will take place on the tube wells nearby project site during operation.

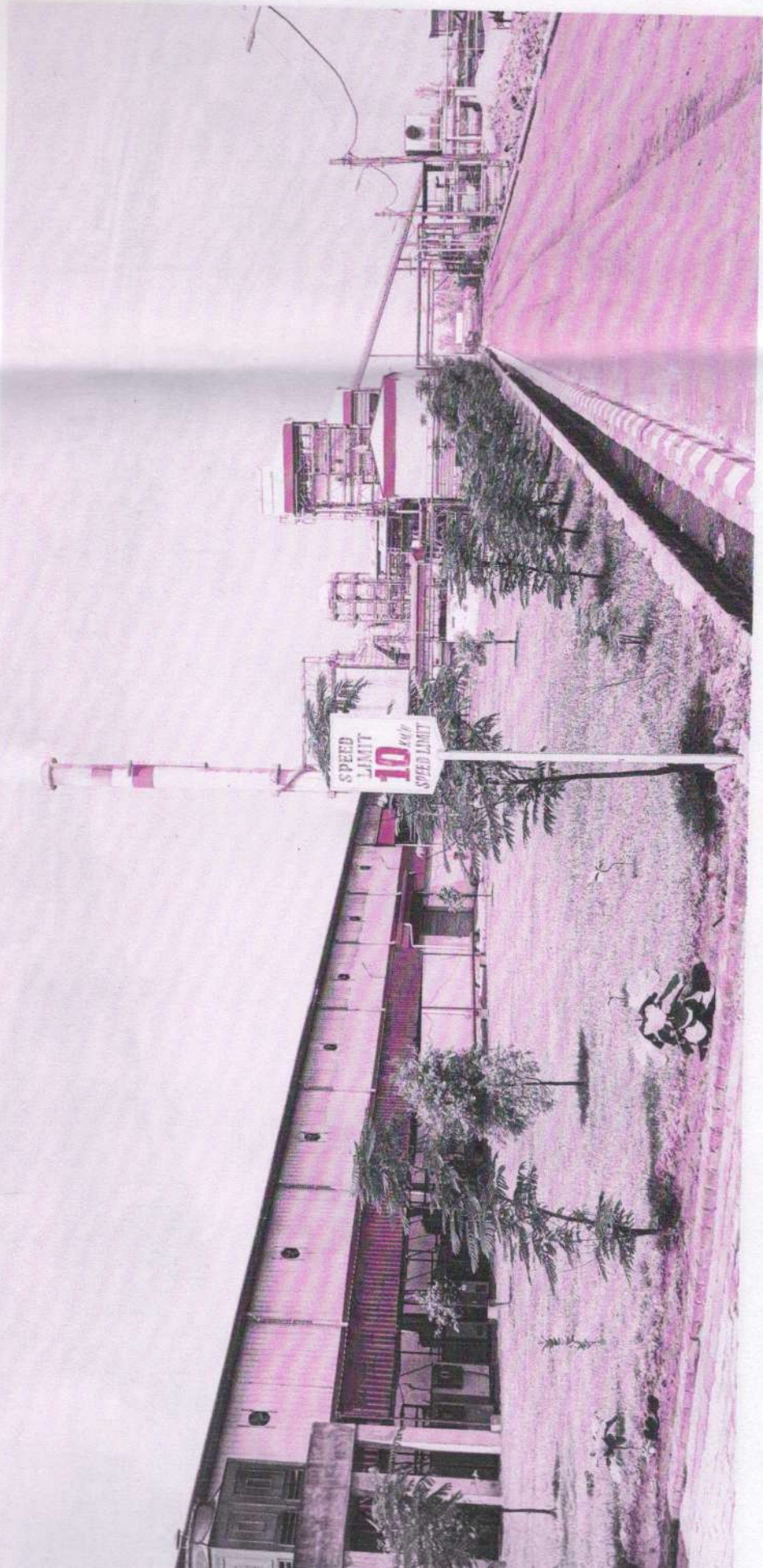
PUBLIC HEARING MINUTES, ITS ACTION PLAN WITH BUDGET, TIMELINE



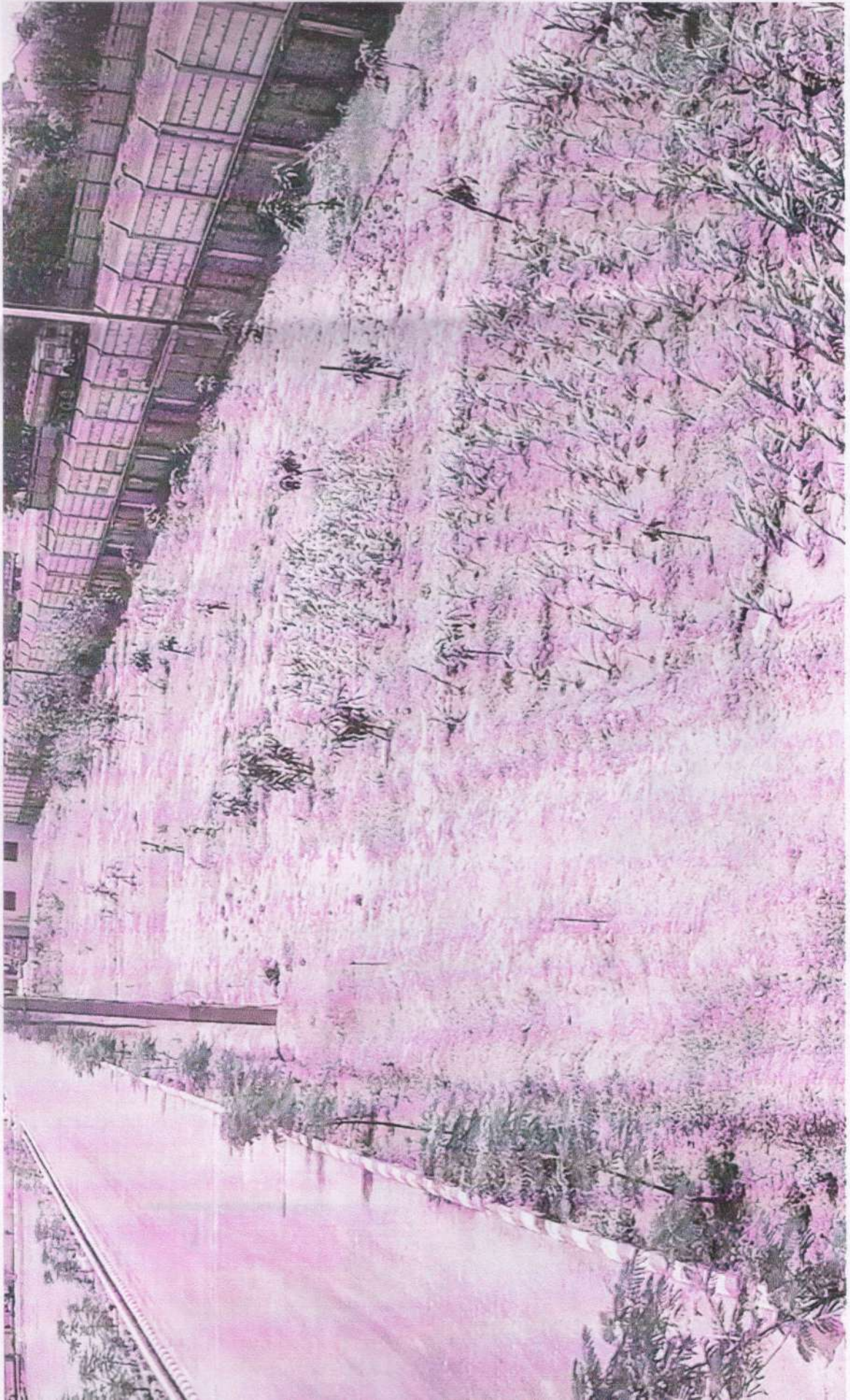
Sr. No.	Name of Person	Points raised/Statements	Reply to the issues/suggestions by Environmental Advisor/Industry	Action plan along with budgetary allocation.
6.	श्री. सौरभ मिश्रा , रुद्रपुर , देवरिया	द्वारा पुनः वायु प्रदूषण की रोक-थाम संबंधी प्रश्न किया गया ।	प्रश्न के उत्तर में उद्योग के तकनीकी सलाहकार द्वारा यह अवगत कराया गया कि चिमनी से निकालने वाले धुँएँ में प्रदूषण की मात्रा को मानकों के अनुरूप करने हेतु ई० एस० पी० लगाया जाएगा ।	Major pollution from the proposed industry will be Air and water pollution. Air Pollution: for air pollution control from boiler, industry will install ESP along with adequate stack height. For Air Pollution Measure industry allocated fund of Rs 250 Lakhs.

ANNEXURE-NO-204









10/16/2014



Forever Distillery Private Limited

पर्यावरण नीति

हम मेसर्स फॉरएवर डिस्टिलरी प्रा० लि०, प्लाट नं०-ए, औद्योगिक क्षेत्र उसरा, जनपद-देवरिया पर इस प्रकार से गुणवत्ता सेवा प्रदान करने हेतु बचनबद्ध हैं जो कि हमारे कर्मचारियों की सेहत एवं सुरक्षा हेतु कार्यस्थल आश्वस्त करता है तथा पर्यावरण पर हमारे शक्य प्रभाव को कम करता है। हम पर्यावरण के सभी विधानों के अनुरूप अपने कार्यों को परिवालित करेंगे और हम जो भी करते हैं उनमें प्रदूषण रोकथाम तथा पर्यावरण के सर्वोत्तम व्यवहारों में प्रयत्न करेंगे।

हम:-

1. पर्यावरणीय मुद्दों और प्रभावों से जुड़े विचार-विमर्श को हमारी सभी निर्णय प्रक्रियाओं तथा गतिविधियों में समाग्र करेंगे।
2. हमारे कर्मचारियों के मध्य पर्यावरणीय जागरूकता को बढ़ावा देंगे तथा उनको पर्यावरणीय जिम्मेदार ढंग से कार्य करने हेतु उत्साहित करेंगे।
3. अपने कर्मचारियों को उन पर्यावरणीय मुद्दों पर जो उनके कार्यों को प्रभावित करते हैं प्रशिक्षण, शिक्षा तथा सूचना देंगे।
4. पुनः प्रयोग के मार्गों से व्यर्थ को कम करेंगे तथा पुनःचक करेंगे तथा पुनःचकित को खरीदकर पुनःचक्रिय बनाने योग्य अथवा पुनःचमकाये पदार्थों तथा धातुओं को जहाँ यह विकल्प उपलब्ध, लाभ प्रदान तथा आश्रित है का प्रयोग करेंगे।
5. हमारी सुविधाओं में सभी वस्तुओं तथा उत्पादों जिनमें पानी, बिजली, कच्चा-माल तथा दूसरे साधन खास तौर पर जो नवीन होने अयोग्य हैं के प्रभावी प्रयोग को प्रोत्साहित करेंगे।
6. जोखिम पूर्ण समान व उत्पादों के अनावश्यक प्रयोग से हम बच कर रहेंगे, जहाँ तक साध्य हो उसका प्रतिस्थापी खोजेंगे और जब ऐसे समान को प्रयोग करना, भंडार करना तथा छुटकारा करना अनिवार्य हो, मानवीय सेहत एवं पर्यावरण को बचाने हेतु सभी उचित पग उठायेगे।
7. तदानुसार पर्यावरणीय जिम्मेदार उत्पादों की खरीद तथा प्रयोग करेंगे।
8. जहाँ विधान द्वारा जरूरत हो अथवा महत्वपूर्ण सेहत, सुरक्षा तथा पर्यावरणीय जोखिम हो संकट तथा छलकाव प्रत्युत्तर कार्यक्रम का विकास करेंगे और उन्हें बनाये रखेंगे।
9. आश्रितों, ग्राहकों तथा सामान्य जन में हमारी पर्यावरणीय बचनबद्धता का संचार करेंगे और उन्हें उनको समर्थन करने के लिये प्रेरित करेंगे।
10. पर्यावरणीय प्रदर्शन के निरंतर सुधार हेतु प्रयत्न करेंगे तथा हमारे वर्तमान एवं भविष्य में नियोजित कार्यवाहियों के प्रकाश में पर्यावरणीय नीति को समय-समय पर पुनरावलोकन कर गतिविधियों से होने वाले सामाजिक प्रभाव और नुकसान को कम करेंगे।

कृते फॉरएवर डिस्टिलरी प्रा० लि०,


P.N. PANDEY

General Manager

FOREVER DISTILLERY PVT. LTD.

Registered Office : Shop No 37,38, First Floor, Plot No. 623/624, Gulhariya, Gorakhpur 273013

CIN : U15132UP2020PTC126691 | PAN : AAECF0173C

E-mail : fdpl@ho.mbmail.net

ANNEXURE - 4

Ref. No. /FDPL/2024-25

Date: 03/05/2024

To,
The Joint Director
Ministry of Environment, Forest & Climate Change
Regional Office LKO. (U.P.)

Sub: Regarding Details of Members of Environment Cell with their designations & Qualifications.

Dear Mam,

This has reference to your Letter No. VII/Env/SCL-UP/2107 Point no. 7, i.e. to provide details of Member of Environment Cell with their designation and qualifications. Which is stated below:-

Environmental Cell
(Forever Distillery Pvt. Ltd.)

S.No.	Employee Name	Designation	Qualification
1.	Shri Manish Kedia	Director	C.A.
2.	Mr. Ajay Tiwari	Head Environment	B.Sc. Alcohol Tech.
3.	Mr. Amit Ranjan Chaturvedi	Section Head	Post Graduate, Diploma in Health Safety & Environment (EHS)
4.	Mr. Kushagra Kaushik	Environmental Engineer	B.Tech (EC)

Therefore these are the Details of the Members of Environment cell (FDPL).

As Per your request.

Thanking You
For Forever Distillery Pvt. Ltd.

Authorised Signatory



ENVIRONMENTAL STATEMENT

OF

FOREVER DISTILLERY PRIVATE LIMITED

**Plot No.-A, UPSIDA, Usar Bazar, Tehsil:
Rudrapur, District: Deoria, Uttar Pradesh.**

Financial Year 31st March 2023

**Submitted by :
Forever Distillery Private Limited
Plot No.-A, UPSIDA, Usar Bazar, Tehsil: Rudrapur,
District: Deoria, Uttar Pradesh**



ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office address:- 2/261, Vishwas khand, Gomti Nagar, Lucknow (U.P.)-226010

E-mail: ETRCLTH@YAHOO.IN | Web: www.etrcindia.com

ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015

Date: 09/12/2023

CERTIFICATE

The Environmental statement for year **2022-2023** of the **Forever Distillery Private Limited**, Plot No.-A, UPSIDA, Usar Bazar, Tehsil: Rudrapur, District: Deoria, Uttar Pradesh, has been prepared by us at the request of the factory management. The data on which this report is based was provided to us by the factory administration. The testing and analysis of the Ambient Air Quality, Ambient Noise level and Stack Emission was carried out by us.



Dr. Manoj Garg

ENVIRONMENTAL AUDITOR

Environmental & Technical Research Center, Lucknow (U.P.) India
(An ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 Certified,
NABL & MoEF Accredited Lab)

ENVIRONMENTAL STATEMENT

THE ISSUES, FOCUS & METHODOLOGY

INTRODUCTION

In Today's world of keen demand on financial and economic competitiveness through industrialization and simultaneous strong growing social awareness towards risks and environmental degradation associated with industrialization, the industry is under serious stress as to how to tackle it. Therefore, it is in the interest of every industry to have some formalized procedure, to provide the management, the vital knowledge of its compliance with environmental laws and procedures towards the environmental protection and their social acceptability. The formalized procedure to achieve the aforementioned objective is now popularly known as "**Environmental Audit**".

The concept of environmental audit is not some thing unheard of, rather it came into operation during the early 1970's in USA and industrialized European countries. However, it had a number of different approaches and names, like environmental reviews, environmental quality controls etc.

In view of the experience of developed nations where such procedure have benefited the industries and helped in reducing the environmental degradation there, the developing countries have also started taking initiatives in adopting such methodologies.

DEFINING ENVIRONMENTAL AUDIT

There is no single universally accepted definition of environmental audit, perhaps, because of absence of standard procedure and methodology to conduct this kind of study. However, the definition accepted by Internal Chamber of Commerce (ICC) is comprehensive and is as follows:

"Environmental Audit" is a management tool comprising a systematic documented, periodic and objectives evaluation of how well organizations, management systems and equipment are performing with the aim of:-

[1]Facilitating management control on environmental practices.

[2] Assessing compliance with company policies, including meeting regulatory requirements.

Environmental audit, therefore, has two basic components :

(a) Management Audit on Environmental philosophy of the organization.

(b) Technical Audit of the plant, equipment, facilities & operating practices compliance.

Environmental Audit differs from Environmental Impact Assessment (EIA), in that, the latter is predicative concept, carried out during the planning phase before an operation starts, while the audit is systematic examination of performance during the operational phase of industrial activity, including verification of adequacy of the suggested Environmental Management Plan ((EMP) generated during EIA phase.

WHY AUDIT

As the definition of environmental audit suggests, it is required to be carried out by the desire of the company's management either on regulatory pressure or by its own consciousness/anxiety to have an assurance that the company's environmental management phase is adequately and satisfactorily operating. Thus prima facie the audit programme provides assurance to the company's managements the conformance to the enforced regulatory requirements, the consistency and adequacy of its environmental protection and pollution control systems and effectiveness of information reporting procedures.

BENEFITS OF AUDIT

The benefits of environmental audit to the pursuing industry are as broad as the audit objectives. As an example, a typical audit program objective could be related to verification for the compliance status of individual facilities only or could be more comprehensive and define the changes necessary to reduce the wastage in production process itself.

The benefit of this study however would not end with just the identification and documentation of compliance status but will result in increased

environmental effectiveness through improved compliance record, reduced occupational hazards, fewer legal actions, timely corrective actions for correction of faulty operating equipment/ instruments/ systems. The benefits influenced by audit are generally quantifiable, tangible and real. The reduced legal actions brought against company and/ or individuals, reduced fines/ penalties, reduced accidents, reduced incidences of environmental hazards, improved workers health, increase in worker productivity, reduced insurance rate etc., to list only a few . The intangible benefits would include better reputation, favorable publicity, improved relations with regulatory authorities, increased job satisfaction for workers, increased involvement in day to day environmental related activities and greater commitments etc. thus industries have to realize that a strong environmental performance can help both within the company and outside the company.

AUDIT AS A PART OF ENVIRONMENTAL MANAGEMENT PLAN (EMP)

From the benefits an environmental audit brings to the industry, it is amply clear that audit should not be perceived as just a regulatory requirement, rather it is to the company's own advantage to include auditing in its Environmental Management Plan (EMP). Environmental Management Plan is an overall framework, involving well defined group of personnel assignment with specific responsibilities to develop, installed and monitor environment related plans for the company.

As any other management system, EMP also involves planning, organizing, guiding, directing, communicating and finally controlling and reviewing to achieve the goals for which this management system is devised. The audit evidently falls in the controlling and reviewing function of EMP, because this function involves measuring results, comparing performances, diagnosing problems, taking corrective action based on the feedback and finally improving the system.

Although auditing may appear small part of EMP yet it is perhaps the most significant part of EMP. It has direct influence on the other functions of EMP and all other functions have to be reviewed/ redesigned based on audit recommendations.

Form V
for
Environmental Audit Report

It has been stated in the beginning that Environmental audit has a number of benefits. This, besides improving the Environmental Management of an organization, also increases the organizations's profitability in tangible as well as intangible terms. India is one of the developing countries, working towards a high economic growth rate by taking certain steps. Most important of these steps would call for further rapid industrialization.

The Government of India has notified the requirement for carrying out Environmental Audit for all the operating industries vide their Gazette Notification No.120 dated March 13, 1992. This is an amendment under the Environment Protection Act 1986. To help the industry in formulating the requisite information regarding its raw material usage, product profile, production process, waste discharge, pollution control system etc. a prescribed Performa is enclosed with the notification. The Performa has been prepared primarily to cover only the regulatory compliance requirements on the basis on data reported and presented by the industry.

The environmental statement is to be submitted in Form V , which has nine parts, namely Part A, B, C, D, E, F, G, H & I.

Part A contains the name and address of the owner and the date of the last environmental audit report submitted.

Part B pertains to the consumption of waste and raw materials. water consumption is to be given separately for process, cooling, and domestic uses, in m³/day and also in terms of water consumption/unit of product, for the various products. Similarly information's on raw materials consumption, product-wise per unit of output is to be provided.

Part C relates to the quantities of hazardous wastes generated, separately from the process and from pollution control facilities.

Part D deals with the quantities of solid wastes generated from the process as well as pollution control facilities,.

Part E deals which the quantities of solid wastes generated from the process as well as pollution control facilities, and seeks to know also about the quantities recycled or reutilized.

All the Parts from B to E require comparisons of the current year performance with that of the pervious year.

Part F seeks information regarding characteristics (in terms of concentration and quantum) of Hazardous and solid wastes and about the practice adopted for the disposal of both these categories of wastes.

Part G calls for information on the impact of pollution measures on the conservation of natural resources and consequently on the cost of production.

The industry is required to indicate, in Part H, its future proposals for investment in environmental protection, including abatement of pollution.

In the last Part, I, any other particulars, in respect of environmental protection and abatement of pollution may be given.

CONCLUSIONS

Taking advantage of the requirements of regulatory bodies the industry can take concrete steps now, to derive full benefits of Environmental Audit to become Environmental Friendly and yet more competitive. Environmental Audit, therefore, is not a restrictive requirement, but indeed a very useful and potent tool for building up the competitiveness in our industry .

LEGAL PROVISIONS

Ministry of Environment and Forests, Noti. No. G.S.R.945 (E), dated February 12, 1992, published in the Gazette of India Extra. Part II, Section 3(i),dated 12 February, 1992, p.2(No. Q - 14011(1)/90—CPA.) :-

In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986(29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely :—

[1] (i) These rules may be called the Environment (Protection) Rules, 1992.

(ii) They shall come into force on the date of their publication in the Official Gazette.

[2] In Rule 3 of the environment (protection) Rules, 1986, after sub rule the following sub rules will be added, namely :—

[(6) Notwithstanding any thing contained in sub rule (3), an industry operation process which commenced production on or before 16th May, 1981 and has shown adequate proof of a least commencement of physical work for establishment of facilities of meeting the specified standards with in a time—bound programe, to the satisfaction of the concerned state pollution control board, shall comply with such standards latest by the 31st day December, 1993.]

[(7) Notwithstanding anything contained in sub—rule(3) or sub rule (6) industry, operation of process which has commenced production after the 16th day of may, 1991 but before the 31st day of December, 1991 and has shown adequate proof of a least commencement of physical work of establishment of facilities to meet the specified standards with in a time—bound programe, to the satisfaction of the concerned state pollution control Board, shall comply with such standards latest by the 31st day of December, 1992.]

Ministry of Environment and Forests, Noti. No. G.S.R. 329(e) dated March 13, 1992, published in the Gazette of India , Extra. , Part II , Section 3(i), deed 13th March 1992, Sl . No. 120, pp.3-4(F. No.q.15015/1/90—CPA).

In exercise of the powers conferred by Sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:-

[1] 1. These rules may be called the Environment (Protection) (Second Amendment) Rules, 1992.

2. They shall come into force on the date of their publication in the Official Gazette.

[2] In the environment (protection) Rules, 1986 after rule 13, the following rule shall be inserted,

"14, Submission of Environmental Audit Report:-

Every person carrying on an industry, operation or process requiring consent under section 25 of the water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, (14 of 1981) or both authorization under the Hazardous wastes (Management and Handling) Rules, 1989, issued under the Environment (Protection) Act, 1986 (29 of 1986) shall submit an environmental audit report for the financial year ending the 31st March in form V to the concerned state pollution control board on or before the 15th day of May every year, beginning , 1993.

Ministry of Environment and Forest

New Delhi : the 28th April, 1994 G.S.R. 329 (E), In exercise of the powers conferred by Sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the environment (Protection) Rule 1986, namely :—

[1] **1. These rules may be called the Environment (Protection) Amendment Rules, 1993 .**

2. They shall come into force on the date of their publication in the Official Gazette.

[2] **In the Environment (Protection) Rules, 1986, (a) In rule 14,**

For the word audit report whenever they occur the word "statement" shall substituted.

(ii) For the figure letters and word "15th day of May" the word the "30th day of September" shall be submitted.

(FORM – V)
(See Rule 14)

Environmental statement report for the financial year ending
the 31st March 2023

PART – A

i	Name and Address of the Owner / Occupier of Industry operation or Process	Mr. Manish Kedia (Occupier) In Operation M/s Forever Distillery Private Limited Plot No.-A, UPSIDA, Usar Bazar, Tehsil: Rudrapur, District: Deoria, Uttar Pradesh
ii	Production Capacity of the plant	100 KLD (RS/ENA/AA) Co gen Power : 4.5 MW
iii	Year of establishment	2023
iv	Date of last Environmental statement submitted.	Not applicable
v	Industry Category Primary : (STC code) Secondary : (STC Code)	Secondary

**RAW MATERIAL CONSUMED
AND
PRODUCT MADE AT A GLANCE**

PARTICULARS	2021 - 2022	2022 - 2023
Molasses Consumed (Qtl)	Not applicable	96900
Product Made (BL)	Not applicable	2179890
Product Made (KL)	Not applicable	2179.890

(PART – B)

I. Water and Raw Material Consumption

i	Water Consumption	564 m ³ /day at 100 % Utilization (5.64 m ³ /KL of product)	
ii	Process (461 m ³ /day)	} 561 m ³ /day	
iii	Cooling (100 m ³ /day)		
iv	Domestic	3 m ³ /day	
Water Consumption per Unit Products			
Name of Product		Water consumption per KL of product made	
		2021 - 2022	2022 - 2023
Rectified Spirit / ENA/Absolute Alcohol		NA	8.0 KL/KL of RS/ENA/AA

II. Raw Material Consumption

Sr. No.	Name of Raw Material	Name of Products	Consumption of Raw Material per unit of Product	
During the Financial Year				
			2021 - 2022	2022 - 2023
1	Molasses	RS/ENA/AA	NA	0.0445 Qtl/BL

(PART – C)

Pollution Discharged to Environment/Unit of Output in the financial year 2022 - 2023

Pollutant	Quantity of Pollutants discharged (Mass/Day)	Concentration pollutant in Discharge (mass/volume)	Percentage of Variation from prescribed standard with reasons
a) Waste water (Average of 10 Samples in the year) 2022 - 2023			
<p>----- ZERO EFFLUENT DISCHARGE -----</p> <p>The distillery will be based on “ZERO EFFLUENT DISCHARGE”</p> <p>Distillery is based on Zero Liquid Discharge system.</p> <p>During Molasses based operation, Spent wash will be concentrated in MEE and then concentrate will be utilized as fuel in Slop fired boiler. Other effluent like spent lees, MEE Condensate, Washing and Blow down will be treated in Condensate Polishing unit.</p>			
b) Stack Air (Average of 06 Samples in the year) 2022 - 2023			
PM* (Stack)	45.12 mg/Nm ³		Within the max limit of 150 mg/Nm ³ (69.92 % below the limit)

* *PM for Particulate Matter*

Pollutant	Quantity of Pollutants discharged (Mass/Day)	Concentration pollutant in Discharge (Mass/volume)	Percentage of Variation from prescribed standard with reasons
c) Noise Level (Average of 06 Samples in the year) 2022 - 2023			
Average of 24 hourly Sampling	55.03 db		Within the limit of 75 db (26.62 % below the limit)
d) Ambient Air Quality Monitoring (Average of 6 Samples in the year at 04 sampling Point) 2022 - 2023			
PM ₁₀	82.57 µg/m ³	100 µg/m ³ (Max Limit)	17.43 % below the limit
PM _{2.5}	50.18 µg/m ³	60 µg/m ³ (Max Limit)	16.36 % below the limit
SO ₂	13.73 µg/m ³	80 µg/m ³ (Max Limit)	82.84 % below the limit
NO _x	20.01 µg/m ³	80 µg/m ³ (Max Limit)	74.98 % below the limit

➤ All the parameters were found within the standards stipulated by U.P.C.B , it shows that our Waste water treatment scheme and Air pollution control system is working perfectly & efficiently.

➤ **Zero Liquid Discharge Scheme :**

During Molasses based operation, Spent wash will be concentrated in MEE and then concentrate will be utilized as fuel in Slop fired boiler. Other effluent like spent lees, MEE Condensate, Washing and Blow down will be treated in Condensate Polishing unit.

Other Effluent : Like Spent Lees , MEE Condensate , blow downs is being treated in CPU & RO, after treatment 100.0 % recycling is being done.

(PART – D)
HAZARDOUS WASTES
(as per under Hazardous wastes/ Management & Handling rules, 1989)

Hazardous Wastes		Total Quantity (Kg)	
During the financial year			
		2021 - 2022	2022 - 2023
a)	From Process	NIL	NIL
b)	From Pollution control facilities (i.e. ETP) in the Form of Oil & Grease emulsion	NIL	0.5 T/Annum

**PART – E
SOLID WASTES**

Solid Wastes		Total Quantity	
		During previous financial year	During current financial year
		2021 - 2022	2022 - 2023
(a) From Process (Fermenter Sludge)		NA	10.0 MT/Day
(b) From Pollution Control facilities			
i	Fly Ash	NA	35.0 MT/Day
(c) Uses of Solid Wastes			
i	Fly Ash	100% Fly ash are being used in granulation plan.	
ii	Fermenter Sludge	100% Sludge are being used in granulation plant.	

PART – F

Hazardous as well as solid waste and Indicate Disposal Practice adopted for both these Categories

The non hazardous solid waste, which are generated from Fermenter sludge, Boiler ash are being 100 % consumed as manure by local farmer .

PART - G

Impact of pollution control measures on conservation of natural resources and consequently on the cost of production.

We have taken the following steps :

1. Segregation and separation of unpolluted water thus bringing down considerable quantity of effluent flowing into the treatment system .
2. We have installed CPU along with RO for the treatment of other effluent, therefore currently we are recycling 100% treated water from CPU
3. By adopting the concentration and incineration scheme for Spent wash treatment, we have reduced the risk of water pollution through leaching and now a day we are running industry for 350 days in year.
4. Through following change in treatment scheme for spent wash and other effluent, we have reduced fresh water requirement from 15 KL/KL of product to 5.64 KL/KL of product.

PART – H
Additional investment Proposal for Environmental Protection
including statement of Pollution

Factory has invested huge amount in our concentration and incineration system to achieve zero liquid discharge. Concentrate from MEE is being utilized in bio composting . The effluent treatment through incineration process has ensured zero discharge and has eliminated any effluent disposal mode. The whole of primary treated effluent through MEE is pumped to slop fired boiler whereby it gets consumed as fuel. unit has installed 35.0 TPH boiler which is Slop fired along with bagasse. Surplus steam from the boiler is being utilized for co gen power.

Besides this the industry has full fledged Secondary waste water treatment system for the treatment of other effluent like Spent lees, MEE condensate, blow downs. CPU unit comprises of Equalization tank , Anaerobic digester, Primary clarifier, diffused aeration tank , secondary clarifier, sand media filter and activated carbon filter , ultrafiltration and followed by reverse osmosis plant.

The impact has resulted in converting the total pollution load to effluent into useful electricity and use full manure and thereby has completely done away with conventional effluent discharge process.

Hence this method of treatment is a close loop system has finally ensured.

“ZERO POLLUTION AND ZERO DISCHARGE EFFLUENT “

PART – I

Any other Particulars in respect of Environmental protection and abatement of Pollution

- (1) We are complying all the suggestions given by the UPPCB and Getting regular Water and Air consent from UPPCB.
- (2) Plantation are being done regularly.
- (3) Regular Monitoring of Noise , Waste water and stack gases are being done as per the table given below.

Sr. No.	Process /Unit	Sampling Point	Parameter Analyzed	Frequency of Sampling
Waste water treatment plant				
1.	CPU	Outlet & inlet	Chemical testing	Monthly
2.	MEE	Outlet and Inlet	Chemical testing	Monthly
3.	Sludge & Fly ash	Division	Chemical Quality	Weekly
Air Pollution Control Device				
4.	ESP	Stack	P.M.	Continuously
Noise Level Monitoring				
5.	At the different points of the sources and Nearby areas	Noise Level		Weekly
Ground water quality				
6.	Testing of ground water near the site	Required Parameters		Weekly



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

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

ETRC/PM14/TES-REP/FT/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/EPA/8216/2023		Date of Report: 24/03/2023	
Name /Address/Type of Industry		M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Near Plant Premises	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM ₁₀	DETAILS-PM _{2.5}
1(a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	54	54
(d)	Average ambient temperature (°C)	28	28
(e)	Time of Sampling Started (Hours)	10:20 am (16.03.2023)	10:20 am (16.03.2023)
(f)	Time of Sampling completed (Hours)	10:05 am (17.03.2023)	10:05 am (17.03.2023)
2	Total time of sampling (Minutes)	24 hour (1426 minutes)	24 hour (1426 minutes)
3	Average Air sampling rate (m ³ /minute)	1.145	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM (m ³)	• 1632.312	• 23.752
	• GAS (liter)	• 712.8	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	83.6	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	52.21	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-02): 2001 Reaffirmed: 2017	µg/m ³	14.26	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-06): 2006 Reaffirmed: 2017	µg/m ³	20.36	6.0 - 750	For 24 hour =80

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ETRC/PM14/TES-REP/FT/37

TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/EPA/8217/2023		Date of Report: 24/03/2023	
Name /Address/Type of Industry		M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Near Main Gate of Bottling Unit	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM₁₀	DETAILS-PM_{2.5}
1(a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	54	54
(d)	Average ambient temperature (°C)	28	28
(e)	Time of Sampling Started (Hours)	10:45 am (16.03.2023)	10:45 am (16.03.2023)
(f)	Time of Sampling completed (Hours)	10:34 am (17.03.2023)	10:34 am (17.03.2023)
2	Total time of sampling (Minutes)	24 hour (1418 minutes)	24 hour (1418 minutes)
3	Average Air sampling rate (m ³ /minute)	1.165	NA
4	TOTAL VOLUME OF AIR SAMPLED • PM (m ³) • GAS (liter)	• 1651.737 • 708.9	• 23.623

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	85.8	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	52.91	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-02): 2001 Reaffirmed: 2017	µg/m ³	14.08	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-06): 2006 Reaffirmed: 2017	µg/m ³	21.32	6.0 - 750	For 24 hour =80

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TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/EPA/8218/2023		Date of Report: 24/03/2023	
Name /Address/Type of Industry		M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)	
Monitored by		ETRC, Lucknow	
Location of Sampling points		Near Sai Baba Temple	
Sr. No.	GENERAL OBSERVATIONS	DETAILS-PM₁₀	DETAILS-PM_{2.5}
1(a)	Weather conditions	Clear	Clear
(b)	Wind direction	West to East	West to East
(c)	Average humidity (%)	55	55
(d)	Average ambient temperature (°C)	27	27
(e)	Time of Sampling Started (Hours)	10:19 am (17.03.2023)	10:19 am (17.03.2023)
(f)	Time of Sampling completed (Hours)	10:11 am (18.03.2023)	10:11 am (18.03.2023)
2	Total time of sampling (Minutes)	24 hour (1414 minutes)	24 hour (1414 minutes)
3	Average Air sampling rate (m ³ /minute)	1.145	NA
4	TOTAL VOLUME OF AIR SAMPLED		
	• PM (m ³)	• 1619.259	• 23.559
	• GAS (liter)	• 707.1	

TEST RESULT

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM ₁₀)	IS: 5182 (Part-23): 2006 Reaffirmed: 2017	µg/m ³	78.3	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM _{2.5})	IS: 5182 (Part-24): 2019	µg/m ³	45.42	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO ₂)	IS: 5182 (Part-02): 2001 Reaffirmed: 2017	µg/m ³	12.85	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO _x)	IS: 5182 (Part-06): 2006 Reaffirmed: 2017	µg/m ³	18.36	6.0 - 750	For 24 hour =80

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ETRC/PM14/TES-REP/FT/36

TEST REPORT STACK EMISSION MONITORING AND ANALYSIS REPORT

Test Report Ref No.: ETRC/EPA/8219/2023		Date of Report: 24/03/2023
Name /Address/Type of Industry		M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)
Monitored by		ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
1.(a)	Date of monitoring	17.03.2023
(b)	Stack material	RCC
(c)	Height of stack from ground level	72.0 mts
(d)	Source to which stack attached	Boiler
(e)	No of boiler attached with capacity	01 No. (35.0 TPH)
(f)	Type and quantity of fuel used	Slop & Bagasse
(g)	Details of APCS installed	Bag Filters
2.	PARAMETERS	VALUES
(a)	Ambient temperature (°C)	30.0
(b)	Stack gas temperature (°C)	136.0
(c)	Stack gas velocity (m/sec)	11.79
(d)	Flow rate (LPM)	17
(e)	Sampling time (minutes)	62
(f)	Volume of air sampled (liters)	1054

TEST RESULT

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing / Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm ³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	45.12	2.0 - 1000	150

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TEST REPORT AMBIENT NOISE MONITORING AND ANALYSIS REPORT

Test Report Ref No.: ETRC/EPA/8220/2023		Date of Report: 24/03/2023
Name /Address/Type of Industry		M/s Forever Distillery Private Limited Plot No: A, UPSIDA, Usra Bazar Tehsil: Rudrapur District: Deoria (Uttar Pradesh)
Monitored by		ETRC, Lucknow
Sr. No.	GENERAL INFORMATION	DETAILS
(a)	Date of monitoring	17/03/2023 (6:00 AM) to 18/03/2023 (6:00 AM)
(b)	Sample Description	Ambient Noise
(c)	Sampling Location	At Plant Premises
(d)	Environmental Condition	Normal

TEST RESULT

Ambient Noise Level				
Sr. No.	Parameter	Unit	Results	Results
			DAY TIME (6:00 AM - 10:00 PM)	NIGHT TIME (10:00 PM - 6:00 AM)
1	Equivalent sound level	dB(A)	60.25	49.82

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

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