ALLIANZ DISTILLERY LTD

Regd Office: [illegible] Delhi [illegible] Ph.: [illegible]
Corporate Office: [illegible] Sector [illegible] Noida [illegible] (U.P.), Ph.: [illegible]

To,
The Director (S)
Ministry Of Environment, Forest & Climate Change (MoEF&CC)
Regional Office (Central Region)
Kendriya Bhawan, [illegible] Floor, Sector-H,
Aliganj, Lucknow
Uttar Pradesh.

Date [illegible] June, 2023

Sub: Submission of six monthly Compliance Report Condition of Environmental Clearance (for period of Upto March 2023) for Grain based Ethanol (Bio fuel) Plant ([illegible] KLPD) along with cogeneration power plant ([illegible] MW) by M/s Allianz Distillery Ltd at Village-[illegible], Tehsil - Chhata, District - Mathura, UP. M/S ALLIANZ DISTILLERY LIMITED

Dear Sir,

In accordance with the condition of Environmental Clearance received from Ministry of environment, Forest and Climate Change, New Delhi, vide EC identification no. [illegible] File No. [illegible] dated [illegible] November 2021, We are submitting here with six monthly Compliance report of stipulated condition of Environmental Clearance (in soft copy) for the period of [illegible] March 2023 for above said project.

Thanking you

Yours Sincerely

For ALLIANZ DISTILLERY LIMITED

For ALLIANZ DISTILLERY LTD

Authorized Signatory
Director/Authorised Signatory

CC :

1. The Member Secretary, Uttar Pradesh Pollution Control Board, Building No. [illegible], Vibhuti Khand, Gomti Nagar, Lucknow – [illegible]
2. The Secretary, SEAC, Directorate of Environment of U.P., Dr. Bhim Rao Ambedkar Paryavaran Parisar, Vineet Khand 1, Gomti Nagar, Lucknow
3. The Chairman, Central Pollution Control Board Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - [illegible]

Six-Monthly Environmental Compliance Report
Against Stipulated Conditions of Environmental Clearance
(October 2022 to March 2023)

FOR

GRAIN BASED ETHANOL [BIO FUEL] PLANT [100 KLPD] ALONG WITH COGENERATION POWER PLANT [4 MW] AT VILLAGE–BAHARAWALI, TEHSIL - CHHATA, DISTRICT - MATHURA, U.P

BY

M/S ALLIANZ DISTILLERY LTD

EC Identification No.: [illegible]
File No.: [illegible]
Date of Issue: 01/11/2022

Submission to:

UP State Level Environment Impact Assessment Authority

Submitted by:

M/S Allianz Distillery Ltd

June, 2023

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CHAPTER-1

INTRODUCTION AND PROJECT DESCRIPTION

1.1 INTRODUCTION

M/s Allianz Distillery Ltd. (ADL) has planned to set up a new standalone grain based 108 KLD distillery (Ethanol production) plant with ZLD system (zero liquid discharge) along with 4.0 MW captive power generation located at Village-Baharawadi, Tehsil - Chhata, District -Mathura, Uttar Pradesh. The main product, Ethanol, will be sold to fuel oil marketing companies under Ethanol Blended Petrol Program of the Government of India.

According to the MOEF&CC notification S. No. 2339(E) dated 16th June, 2021, "Grain based distilleries with Zero Liquid Discharge producing ethanol, solely to be used for Ethanol Blended Petrol Program of the Government of India shall be considered under B2 Category" and as per the requirement of the notification, the project proponent has submitted a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Program.

This project has been granted environmental clearance vide EC **Identification No. EC22A060UP188416,** dated 01[st] November, 2022 (File no: IA-J-11011/382/2022-IA-II(I)) by the Ministry of Environment, Forest and Climate Change. Copy of same is attached as **annexure 1.**

1.2 PROJECT DESCRIPTION

The proposed 108 KLD grain based distillery will utilize broken rice, wheat, maize etc. as the basic raw material to produce Fuel Grade Ethanol. The plant will be based on Batch Fermentation Technology considering overall availability of grains with 'Wash to Ethanol MPR-MSDH Distillation' technology with ZLD for production of anhydrous ethanol (bio-fuel) for use of blending in automobile fuel, confirming to Indian standard IS:15464(2004) for supply to OMCs.
The by-products considered for manufacturing of fuel grade Ethanol are Distiller's Wet Grain with Soluble (DWGS)/ Distilleries Dry Grain with Solubles (DDGS), CO2 and Fusel oil (by-products). The process will adopt ZLD system (zero liquid discharge) and no process effluent will be discharged outside. The process will be based on Dry Milling Technology.

Table 1.1: Details of Products and Capacity of the Proposed Plant

S. No.	Name of the unit	Name of the product/ by-product	Production capacity
1.	Distillery	Ethanol	108 KLPD
2.	Co-generation Power plant	Power	4 MW
3.	DWGS dryer	DDGS – By product	48 TPD
4.	Fermentation unit	Carbon di-oxide- By product	50 TPD

Total Land area is 12.45 acres (5.09 Ha). Total Fresh water requirement 573 m3/day. Power Requirement is 3.15 MW. The estimated capital cost for the project is INR 128.9 Crores. Total Employment will be 166 persons as direct & indirect.

1.3 PROJECT LOCATION

The distillery project is coming up at Khasra no 677, 679, 680, 681, 682, 683, 686, 687/m1, 688, 689, 690 at Village- Baharaswali, Tehsil - Chhata, District Mathura, Uttar Pradesh – 281 401.

1.4 PRESENT STATUS

Project is in initial stage of construction. Site Development work is started.

1.5 PURPOSE OF THE REPORT

This six-monthly report is being submitted as per the condition stipulated in the Environmental Clearance letter.

Further, the study will envisage the environmental impacts that have generated in the local environment due to the project.

The environmental assessment is being carried out to verify:-

- That the project does not have any adverse environmental impacts in the project area and its surrounding
- Compliance with the conditions stipulated in the Environmental Clearance Letter.
- The Project Management is implementing the environmental mitigation measures as suggested in the approved Form-1, PFR, Environmental Management Plan (EMP).
- The project proponent is implementing the environmental safeguards in true spirit.
- Any non-conformity in the project with respect to the environmental implication of the project.

CHAPTER 2

COMPLIANCE OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE

Name of Project	**Grain based Ethanol (Bio fuel) Plant (100 KLPD) along with cogeneration power plant (4 MW) by M/s Alfaaz Distillery Ltd at Village-Baharawadi, Tehsil - Chhata, District Mathura, UP**
EC Identification No.	**[illegible]**, dated 01st November, 2022
Period of compliance Report	October 2022 to March 2023

1. Statutory compliance

1.	As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.	The proposed project is for setting up a 100 KLD Grain based Ethanol Plant unit. The product ethanol will be only used for fuel ethanol manufacturing as per the EBP Programme. The affidavit has been already submitted with the EC application. The condition will be complied with true spirit.
2.	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	All the environmental protection measures and safeguards as per the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project will be complied.
3.	EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. CLU certificate shall be obtained before start of construction activities.	The proposed project is being set up on the land for which actual land documents has been submitted to the ministry at the time of EC application. CLU certificate has been obtained, copy of the same is attached as **Annexure 02**.
4.	NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board/ Pollution Control Committees shall not issue the Consent to	Permission has been obtained for drawing of the ground water vide Reg. no. [illegible] valid from 26/08/2022 to 25/08/2027 from Ground water department U.P. Copy of the same is attached as **Annexure 03**.

	Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.	
5.	Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production which will be met from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 1000m3 capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.	It will be ensured that the water requirement for the project will not exceed the mentioned limit. Rain water storage tank of 1000 cum will be constructed for storing the rain water which will be reused within the project site.
6.	Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spent lees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for makeup water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. ETP shall be installed to treat the sewage generated from factory premises.	DDGS obtained will be sold as cattle feed. Industrial effluent will be treated and entirely recycled. The sewage generated will be treated in the onsite STP and treated sewage will be recycled in the green area. ZLD system will be adopted and no effluent will be discharged outside.
7.	ESP of 5 fields with a stack height of 55 meters will be installed with 30 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. SO2 and NOx emissions shall be less than 100 mg/Nm3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.	The ESP with proper stack height of 55 m will be installed with the proposed 30 TPH Boiler for controlling the particulate emissions within the statutory limit. During the operation phase of the project, performance assessment of pollution control devices/systems will be conducted annually and submitted with the EC compliance report.
8.	Boiler ash will be used for brick manufacturing and supplied to brick manufacturers in covered trucks. PP shall use biomass as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/ adjacent /nearby areas.	During operation phase, boiler ash generated will be supplied to brick manufacturing unit in covered trucks. Biomass will be used as fuel for the boiler except in case of availability of biomass, coal will be used. Provision for installation of solar panels will be made at appropriate stage of development
9.	CO2 generated will be bottled and supplied to authorized vendors.	CO_2 generated will be scrubbed, liquefied and sold to end users.

(x).	PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.	As the construction of project is in initial stage. At least 50 lakh/ annum will be allocated for occupational health safety. All the prevention measures like training of workers regarding safety, compulsory use of PPEs, first aid arrangements, safety harnesses, work permit system, etc. for occupational health safety will be taken care off.
(x).	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.	Training of workers regarding safety and health aspects of chemicals handling will be provided. Mock drill will be conducted.
(x).	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.	Arrangements for protection against the possible fire hazards during manufacturing process in material handling will be made. Approval from PESO and Fire department will be obtained before start of operation.
(x).	Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. Filter press shall be installed for drying of sludge.	Filter press shall be installed as directed. ETP and STP sludge will be used as manure in green areas within premises. No hazardous waste will be generated except limited quantity of used oil which will be sold to authorized recyclers.
(x).	The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste. (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high-pressure hoses for equipment cleaning to reduce wastewater generation.	Proper strategies for waste minimization measures will be adopted during operation phase. By products like DDGS will be sold as cattle feed and Carbon dioxide will be liquefied and sold.
(x).	The green belt of at least 5-10 m width shall be developed in 2.04 Ha i.e., nearly 40% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.	Green belt will be developed as per the condition imposed. Two tier greenbelt as per CPCB guidelines with selection of native plant species will be developed at appropriate stage of development.

	Greenbelt development shall be completed before commissioning of the plant.	
16.	PP proposed to allocate Rs. 1.3 Crores towards Extended EMP (CSR) which shall be spent as submitted in CSR plan for monitorable activities like upgradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CSR shall be completed before the commissioning of the plant in consultation with District Administration.	As per the proposal INR 1.3 crore will be allocated towards CSR cost under which activities like development of roads, providing training for generating skilled employment, distribution of IT gadgets, installation of solar panels, free health checkups, upgradation of drinking water facility etc. will be done in nearby villages. Necessary communication and finalization regarding the CSR activities will be made with the district administration.
17.	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. As proposed, 4.0 % area is earmarked for parking with facilities like rest rooms etc within the project site and dedicated additional 5 acres parking area will be provided separately outside the plant premises, which is located 1.3 KM away.	Adequate parking space as proposed in the EC application (4% of plot area) will be provided within the project premises. Additionally, parking will be provided on a separate land of area 5 acre owned by the company.
18.	Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stackpiles should be constructed over impermious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.	Storage area for the raw materials with all the appropriate arrangements to prevent the dust pollution and other fugitive emissions will be made. The internal roads will be paved. It will be ensured that the Air Pollution Control System kept interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
19.	Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with right vision	Continuous online (24x7) monitoring system for stack emissions/effluent will be installed. For online continuous monitoring of effluent, the unit shall install web camera with right vision capability and flow meters in the channel/drain

	capability and flow meters in the channel/drain carrying effluent within the premises.	carrying effluent within the premises.
(ii)	A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Managing Director/CEO as per company hierarchy.	Separate Environmental Management Cell have been formed and is being headed by head of Environment.
(i).	The demolition waste shall be disposed in compliance with the provisions of C&D Waste Management Rules, 2016. Since, proposed site is located in the existing leather factory operational 8 years ago, TCLP test shall be conducted of soil in plant site.	TCLP test has been done as directed. No major demolition waste will be generated as existing industrial shed will be modified and reused. Any rubble generated during the construction activity will be used in road making/ construction activities. TCLP report is attached as **Annexure 08.**
(ii).	PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEF&CC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.	As the project is in initial stage of Construction. Same will be complied at appropriate stage of site development.
B.	**General Conditions**	
(i)	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/ SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	The condition will be complied with in true spirit. No deviation or alteration will be made with respect to the submitted proposal.
(ii)	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	Preferably LED lighting will be used in the project.
(iii)	The overall noise levels in and around the plant	The condition will be complied.

Table 3.9: Physico-Chemical Characteristics of Soil in the Study Area

S. No.	Parameter	Test Method	Results	Unit
1.	pH	IS 2720 P-26 (1987)	7.94	-
2.	Conductivity	IS 14767 (RA 2016)	774.0	µS/cm
3.	Moisture	IS 2720 P-2 (1973)	88.4	% by mass
4.	Water Holding Capacity	[illegible]	15.2	%
5.	Specific Gravity	IS 2720 P-3 (1980)	1.86	-
6.	Bulk density	[illegible]	1.39	gm/cc
7.	Chloride	[illegible]	242.0	mg/kg
8.	Calcium	[illegible]	1252.0	mg/kg
9.	Sodium	[illegible]	128.0	mg/kg
10.	Potassium	[illegible]	76.4	mg/kg
11.	Magnesium	[illegible]	196.0	mg/kg
12.	Organic matter	IS 2720 P-22 (1972)	0.70	% by mass
13.	Cation Exchange Capacity (CEC)	[illegible]	15.6	meq/100gm
14.	Available nitrogen	IS 14684 (1999)	58.2	mg/kg
15.	Available Phosphorous	[illegible]	7.18	mg/kg
16.	Iron as Fe	[illegible]	1222.0	mg/kg
17.	Copper as Cu	[illegible]	88.0	mg/kg
18.	Zinc as Zn	[illegible]	26.1	mg/kg
19.	Texture	[illegible]		% by mass
	Sand		60.1	
	Clay		25.3	
	Silt		14.6	
20.	Sodium Absorption Ratio(SAR)	[illegible]	0.09	By calculation

3.6.4 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.

ANNEXURE I

Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The Director
ALLIANZ DISTILLERY LIMITED
[illegible], Basement, Jagrit Enclave, Delhi-110092, East Delhi-110092

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number [illegible] dated 17 Aug 2022. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	[illegible]
2.	**File No.**	[illegible]
3.	**Project Type**	New
4.	**Category**	B
5.	**Project/Activity including Schedule No.**	5(g)(ii) (b) Non-molasses based distilleries for Ethanol manufacturing
6.	**Name of Project**	Grain based Ethanol (Bio fuel) Plant ([illegible] KLPD) along with cogeneration power plant ([illegible] MW) by M/s [illegible] Distillery Ltd at Village [illegible], Tehsil - [illegible], District Mathura, UP
7.	**Name of Company/Organization**	ALLIANZ DISTILLERY LIMITED
8.	**Location of Project**	Uttar Pradesh
9.	**TOR Date**	N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 01/11/2022

(e-signed)
[illegible]
Scientist [illegible]
IA - (Industrial Projects - 2 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.

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This has reference to your online proposal no. IA/UP/IND1/286236/2022, dated 17th August, 2022 for environmental clearance to the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the the project proposal seeking environmental clearance for setting up of 100 KLPD Grain based Ethanol Plant with 4 MW Co-generation power plant [fuel - Biomass or coal in case of unavailability of biomass] located at Village-Baharawati, Chhata Shergarh Road, Tehsil - Chhata, Dist. -Mathura, UP - 281 401 by M/s Allianz Distillery Limited.

3. As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provision in the EIA Notification, 2006-(Schedule 5 (ga), Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committees (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

4. The details of products and capacity for proposed plant are as under:

S. No.	Name of unit	Name of the product /by-product	Production capacity
1	Distillery	Ethanol	100 KLPD
2	Co-generation power plant	Power	4 MW
3	DWGS dryer	DDGS	48 TPD
4	Fermentation unit	Carbon di-oxide	50 TPD

5. Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that no litigation is pending against the project.

6. Total land area identified is 12.45 Acre (5.09 ha). Greenbelt will be developed in total area of 4.5 acre i.e., 36% of total project area. The estimated project cost is INR 128.9 Crores. Capital cost of EMP would be Rs. 7.26 Crores and recurring cost for EMP would be Rs. 1.08 Crores per annum. Industry proposes to allocate Rs. 1.3 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 166 persons as direct & indirect.

7. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserve forests/protected forests: Shernagar R.F at an aerial distance of 13.08 Km on North, Bathain R.F at an aerial distance of 14.6 Km on NW, Nandgaon R.F at an aerial distance of 14.8 Km on SW. The project site is located outside the TTZ. Water bodies: i)Shergarh Canal is at an aerial distance of 610 m on East, ii) Yamuna River

is situated at an aerial distance of 13.26 km on NE, iii) Kosi drain is at an aerial distance of 2.6 Km on SW, iv) Agra canal is at an aerial distance of 8.7 Km on SW, iv) Tal Guhali is at an aerial distance of 8.5 Km on SW.

8. AAQ modelling study for point source emissions [Fuel rice husk] indicates that the maximum incremental GLCs after the proposed project would be 0.126μg/m³, 0.075μg/m³, 0.883 μg/m³ and 1.90μg/m³ with respect to PM10, $PM_{2.5}$, SO_2 and NO_x. The baseline concentration and resultant concentrations of PM_{10} and $PM_{2.5}$ are slightly higher than the National Ambient Air Quality Standards (NAAQS). PP explained the reasons for higher PM_{10} level of 160 micro gram/m³ that ambient air quality monitoring was done during summer season in the month of May. Air borne /wind laden dust contains high concentration of particulate matter (PM10 and PM2.5). The wind direction was from west to east. Loose soil from non-irrigated agriculture land adds on to concentration of suspended particulate matter in air.

9. Total fresh water requirement will be 573 m³/day including domestic & green area usage [60 KLD] which will be met through onsite ground water abstraction. PP has applied vide application no. MTHR0722NEN00078 dated 22/07/2022 for obtaining ground water abstraction approval. Effluent (Condensate/spent lees/blowdown etc.) of 993m3/day quantity will be partly recycled and partlytreated through Condensate Polishing Unitof capacity 1100 KLPD. Raw stillage 558 KLD [quantity of raw spent wash from distillation] will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 20KLDwill be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

10. Power requirement will be 3.15 MW and will be met from proposed 4.0MW cogeneration power plant, will be installed. APCE [ESP] with a stack height of 55 m will be installed with 30TPH boiler [Fuel - biomass or coal in case of unavailability of biomass] for controlling the particulate emissions within the statutory limit of 50 mg/Nm³. 2 nos. @ 250 kVA each DG set will be used as standby during power failure and stack height (15m) will be provided as per CPCB norms to the proposed DG sets.

11. Details of process emissions generation and its management:

- APCE [ESP] with a stack height of 55 m will be installed for controlling the particulate emissions from boiler.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (50 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers, liquified and shall be sold to authorized vendors.

12. Details of Solid waste/Hazardous waste generation and its management:

- DDGS (Distilled Dried Grains Stillage) (48 TPD) will be sold as cattle feed / poultry feed.

- Fly ash from boiler [approx. 35-40 TPD from coal or 20-25 TPD from biomass] will be generated. The same will be used in infrastructure base fill material/brick manufacturing unit set up by the project proponent in collaboration with local brick manufacturing unit.
- Bottom ash [approx. 26 TPD from coal or 15 TPD from biomass] will be generated and disposed for landfilling/road making activities.
- Used oil (approx. 1Kl/annum) will be sold to authorized recyclers.
- ETP sludge (50 Kg/day) and STP Sludge (1.5 Kg/day) will be used as manure.

13. As per Notification S.O 2339(E), dated 16thJune, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 100 KLPD will be used for manufacturing fuel ethanol only.

14. Total land of 12.45 Acre (5.09 ha) is under possession of the company. Khasra nos. 686, 688, 689, 690 and application submitted vide letter dated 09.09.2022 for conversion of land to Industrial usage for the Khasra nos. 677, 679, 680, 681, 682, 683, 687mi.

15. During deliberations, EAC discussed the following issues:

(i) No ground water shall be extracted without approval.

(ii) Regarding PM10 level of 160 micro gram/m3 PP informed that ambient air quality monitoring was done during summer season in the month of May. Air borne /wind laden dust contains high concentration of particulate matter (PM10 and PM2.5). The wind direction was from west to east. Loose soil from non-irrigated agriculture land adds on to concentration of suspended particulate matter in air. PP informed that all the air pollution control measures shall be taken to achieve prescribed air emission prescribed by the CPCB and SPCB. ESP of five fields to be installed to achieve the particulate emission levels of 30 mg/m3. Fugitive air emissions shall be controlled by adopting good housekeeping and planting of additional trees within the plant and along the road.

(iii) Regarding revised GLC considering 0.5 % sulphur in fuel coal, the GLC calculation was done considering 0.58% sulphur in coal under worst case scenario. However, they have further conducted GLC calculation of 0.5 % sulphur.

(iv) Details of revised CER has been submitted.

(v) ESP of five fields to be installed.

(vi) Ash shall be collected in silo and transported through covered truck.

(vii) PP informed that the existing leather factory was operated 8 years ago in the same land. Some of the infrastructure will be used for the proposed project.

The committee was satisfied with the response provided by PP on above information.

16. The proposal was considered by the EAC Ind-II in Meeting ID: IA/IND2/13327/01/09/2022 held during 01st – 02nd September, 2022in the Ministry, wherein the project proponent and their environmental consultant namely M/s. Sd Engineering Services Pvt Ltd., presented the case under B2 category. The Committee **recommended** the project for grant of environmental clearance.

17. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

18. The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

19. The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

20. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project **proposed100 KLPD Grain based Ethanol Plant with 4MW Co-generation power plant [fuel - Biomass or coal in case of unavailability of biomass] located at Village–Buharawali, Chhata Shergarh Road, Tehsil - Chhata, Dist. -Mathura, UP - 281 401 by M/s Allianz Distillery Limited,** under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-

A. Specific Condition:

(i) As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by

the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii)The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii) EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. CLU certificate shall be obtained before start of construction activities.

(iv) NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v) Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production which will be met from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 1000m^3 capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi) Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

(vii) ESP of 5 fields with a stack height of 55 meters will be installed with 30 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. SO_2 and NOx emissions shall be less than 100 mg/Nm3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii) Boiler ash will be used for brick manufacturing and supplied to brick manufacturers in covered trucks. PP shall use biomass as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix) CO_2 generated will be bottled and supplied to authorized vendors.

(x) PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(xi) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(xii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii) Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. Filter press shall be installed for drying of sludge.

(xiv) The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

(xv) The green belt of at least 5-10 m width shall be developed in 2.04 Ha i.e., nearly 40% of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored

through remote sensing map. Greenbelt development shall be completed before commissioning of the plant.

(xvi) PP proposed to allocate Rs. 1.3 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii) 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. As proposed, 4.0 % area is earmarked for parking with facilities like rest rooms etc within the project site and dedicated additional 5 acres parking area will be provided separately outside the plant premises, which is located 1.5 KM away.

(xviii) Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix) Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.

(xx) A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Managing Director/CEO as per company hierarchy.

(xxi) The demolition waste shall be disposed in compliance with the provisions of C&D Waste Management Rules, 2016. Since, proposed site is located in the existing leather factory operational 8 years ago, TCLP test shall be conducted of soil in plant site.

(xxii) PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

B. <u>General Condition</u>:

(i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

(ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.

(iii) 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. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

(iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

(v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

(vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body

and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

(vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

(viii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

(ix) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

(x) The project authorities 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 and the date of start of the project.

(xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

21. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

22. 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 clearance and attract action under the provisions of Environment (Protection) Act, 1986.

23. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

24. The above conditions will 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, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

25. This issues with the approval of the competent authority.

(A. N. Singh)
Scientist 'E'

Copy to: -

1. The Secretary, Department of Environment, Government of Uttar Pradesh, 601, Bapu Bhawan, Secretariat, Vidhan Sabha Marg, Lucknow (UP) – 1
2. The Regional Officer, Ministry of Env., Forest and Climate Change, Integrated Regional Office, Kendriya Bhawan, 5th Floor, Sector "H", Aliganj, Lucknow - 226020
3. The Chairman, Central Pollution Control Board Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
4. The Member Secretary, Uttar Pradesh Pollution Control Board, Building No. TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow – 10
5. The Member Secretary, Central Ground Water Authority, 18/11, Jamnagar House, Mansingh Road, New Delhi – 11
6. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
7. The District Collector, District Mathura, Uttar Pradesh
8. Guard File/Monitoring File/Parivesh portal/Record File.

(A. N. Singh)
Scientist 'E'
E-mail: adithya.narayan@nic.in
Tel. No. 11-24642176

ANNEXURE II

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न्यायालय

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विषय :- [redacted]

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BHULEKH
Uttar Pradesh

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	area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Necessary enclosure will be provided wherever possible. DG sets will be provided with inbuilt acoustic enclosure.
xi)	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	As committed during EC application, CER activities will be undertaken in nearby villages. Details of the same will be submitted in the subsequent compliance report as and when the activities will be taken up.
xi)	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	As proposed, Capital cost of EMP would be approx. INR 7.26 Crore and recurring cost for EMP would be approx. INR 1.08 Crore per annum.
xii)	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	Copy of the EC letter has been already sent to the Baharawali Panchayat Office, Zilla Parishad.
xiii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	Six monthly compliance report shall be submitted time to time. Six Monthly Compliance Report will be uploaded on the web site in due course of time.
xiii)	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State	Once the unit starts operation, Environmental Statement in Form V will be submitted every year.

	Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by email.	
xi)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Advertisement of EC letter in two local newspaper has been done. Copy of the same is attached as **Annexure-05**.
xii)	The project authorities 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 and the date of start of the project.	Noted same will be complied.
xiii)	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted.

CHAPTER 3

DETAILS OF ENVIRONMENTAL MONITORING

3.1 AMBIENT AIR QUALITY MONITORING

3.1.1 Ambient Air Quality Monitoring Stations

Ambient air quality monitoring has been carried out at one location, near main gate to assess the ambient air quality of Project Site in the Month of March 2023. This will enable to have an analytical understanding about air quality and the changes in the air environment in the study area with respect to the condition prevailing. The location of the ambient air quality monitoring station is given in **Table 3.1**.

Table 3.1 Details of Ambient Air Quality Monitoring Stations

S. No.	Location Code	Location Name/ Description	Environmental Setting
1.	AAQ-1	Project Site	Commercial

3.1.2 Ambient Air Quality Monitoring Methodology

Monitoring was conducted in respect of the following parameters:

- Particulate Matter 2.5 ($PM_{2.5}$)
- Particulate Matter 10 (PM_{10})
- Sulphur Dioxide (SO_2)
- Nitrogen Dioxide (NO_2)
- Carbon Monoxide (CO)

The duration of sampling of PM2.5, PM10, SO_2 and NO_2 was 24 hourly continuous sampling per day and CO was sampled for 1 hour. 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 sample was 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 APM 550 instruments have been used for monitoring Particulate Matter 2.5 (PM2.5 i.e. <2.5 microns), and Respirable Dust Sampler APM 450 was used for sampling Respirable fraction (<10 microns), gaseous pollutants like SO_2 and NO_2. Bladder and Aspirator bags were used for collection Carbon monoxide samples. Gas Chromatography techniques have been used for the estimation of CO.

Table 3.2: Techniques used for Ambient Air Quality Monitoring

SN	Parameter	Technique	Technical Protocol
1	Particulate Matter 2.5	Fine Particulate Sampler APM 550, Gravimetric Method	[illegible]
2	Particulate Matter 10	Respirable Dust Sampler APM 450, with cyclone separator, Gravimetric Method	IS-5182 (Part-23)
3	Sulphur dioxide	Modified West and Gaeke	IS-5182 (Part - 2)
4	Nitrogen dioxide	Jacob & Hochheiser	IS-5182 (Part-6)
5	Carbon Monoxide	Gas Chromatography	[illegible]

3.1.3 Ambient Air Quality Monitoring Results

The detailed on-site monitoring results of PM 2.5, PM 10, SO_2, NO_2 and CO are presented in **Table 3.3**.

Table 3.3: Ambient Air Quality Monitoring Results

S. No.	Location Code	Location	PM10 (µg/m³)	PM2.5 (µg/m³)	SO_2 (µg/m³)	NO_2 (µg/m³)	CO (mg/m³)
		Limit	100	60	80	80	4
1	AAQ1	Project Site	171	87	37.1	22.0	0.81

3.1.4 Discussion on Ambient Air Quality in the Study Area

The levels of PM10 and PM2.5 near main gate of project site is above than permissible limit of 100 µg/m³ 60 µg/m³ respectively (for residential, rural and other areas as stipulated in the National Ambient Air Quality Standards). SO_2, NO_2, Co were observed within the corresponding stipulated limits (Limit for SO_2 and NO_2: 80 µg/m³ and CO: 4mg/m³) at monitoring location. Station wise variation of ambient air quality parameters has been pictorially shown in **Figure 3.1**.

Figure 3.1: Variation of Ambient Air Quality

3.2 AMBIENT NOISE MONITORING

3.2.1 Ambient Noise Monitoring Locations

The main objective of noise monitoring in the study area is to assess the present ambient noise levels in project site due to various construction allied 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 at the near main gate of the project in the Month of March 2021, site as given in **Table 3.4**.

Table 3.4: Details of Ambient Noise Monitoring Stations

S. No.	Location Code	Location Name/ Description	Present Landuse
1	AAQ1	Project site	Commercial

3.2.2 Methodology of Noise Monitoring

Noise levels were measured using integrated sound level meter manufactured by Envirotech Instrument Pvt. Ltd. The integrating sound level meter is an integrating/ logging type with frequency range of 'A' type as per IS 15677 (Part 1) 2005. This instrument is capable of measuring the Sound Pressure Level (SPL), Leq and SD, on digital display.
Noise level monitoring was carried out continuously for 24 hours with one hour interval starting at 12.00 hrs to 11.00 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. Lday (Ld), Lnight (Ln) and Ldn values were computed using corresponding hourly Leq. Monitoring was carried out at 'A' response and fast mode.

3.2.3 Ambient Noise Monitoring Results

The locations wise ambient noise monitoring result are summarized in **Table** 3.3. The location-wise variation of noise levels are graphically presented in **Figure** 3.2.

Table 3.3: Ambient Noise Monitoring Results

Sr. No.	Test Locations	Day Time - dB(A)		Night Time - dB(A)	
		Results	Limits as per CPCB guideline	Results	Limits as per CPCB guideline
1	Near Main Gate	55.3	65	42.8	55

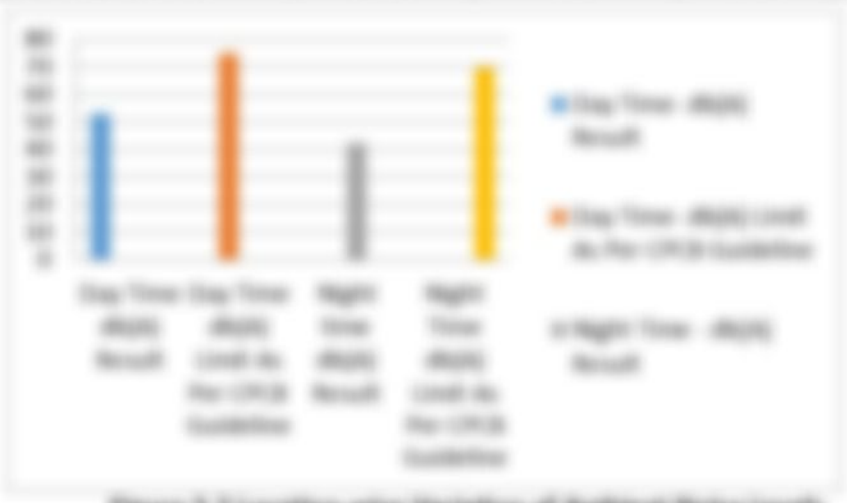

Figure 3.2 Location-wise Variation of Ambient Noise Levels

3.2.4 Discussion on Ambient Noise Levels in the Study Area

Day Time Noise Levels (L_{day})
The day time noise level near main gate was within the limit for industrial area i.e. 75 dB(A).

Night Time Noise Levels (L_{night})
The night time noise level at near main gate was within the limit for industrial area i.e. 70 dB(A).

3.3 GROUNDWATER QUALITY MONITORING

3.3.1 Groundwater Quality Monitoring Locations

Keeping in view the importance of groundwater as an important source of drinking water to the local population, 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 1 location from nearby project area. The sample was analysed for various parameters to compare with the standards for drinking water as per IS: 10500 for ground water sources. The details of water sampling locations are given in **Table 3.6**.

Table 3.6 Details of Water Quality Monitoring Station

S. No.	Locn. Code	Location Name/ Description
1.	GW 1	Nearby project area

3.3.2 Methodology of Groundwater Quality Monitoring

Sampling of ground water was carried out on March, 2023. Samples were collected as grab sample and sampling forms are filled in as per the sampling plan. The preservative sample were properly added to preserve as per standard operating procedures (SOP) and stored immediately in ice boxes, which were ensured for appropriate temperatures. Sample for chemical analysis was collected in polyethylene carboys. Sample collected for metal content were acidified to <2 pH with 1 ml HNO_3. 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 MBDH Noida 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 analysed 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 3.7**.

3.3.3 Groundwater Quality Monitoring Results

The detailed groundwater quality monitoring results are presented in **Table 3.7**

Table 3.7 Groundwater Quality Monitoring Results

S. No.	Parameter	Test Protocol	Results	Unit	Requirements as per IS 10500 : 2012	
					Acceptable limits (Max)	Permissible limits(Max)
1.	pH	IS 3025 (P-11) 1983	7.82	--	6.5-8.5	No Relaxation
2.	Turbidity	IS 3025 (P-10) (1984)	16.7	NTU	1	5
3.	Total Hardness	IS 3025 (P-21) (2009)	396.0	mg/l	200	600
4.	Total Dissolved Solids (TDS)	IS 3025 (P-16) 1984)	880.0	mg/l	500	2000
5.	Calcium as Ca	IS 3025 (P-40) (1991)	73.6	mg/l	75	200
6.	Magnesium as Mg	IS 3025 (P-46) (1994)	51.71	mg/l	30	100
7.	Total Alkalinity as CaCO3	IS 3025 (P-23) (1986)	300.0	mg/l	200	600
8.	Chloride as Cl	IS 3025 (P-32) (1988)	228.0	mg/l	250	1000
9.	Boron as Bo	Annex F of IS 13428	<0.05	mg/l	0.5	No Relaxation
10.	Ammonia as N	IS 3025 (P-34) (1988)	<0.1	mg/l	0.5	No Relaxation
11.	Sulphate as SO4	IS 3025 (P-24) (1986)	62.0	mg/l	200	400
12.	Nitrate as NO3	IS 3025 (P-34) (1988)	11.6	mg/l	45	No Relaxation
13.	Fluoride as F	APHA 23rd Edition	0.65	mg/l	1	1.5

14.	Iron as Fe	IS 3025 (P-53) 2003	0.12	mg/l	1.0	No Relaxation
15.	Aluminium as Al	IS 3025 (P-55) 2003	<0.01	mg/l	0.03	0.2
16.	Anionic Detergent	Annex K of IS 13428	<0.05	mg/l	0.2	1
17.	Phenolic Compounds	IS 3025 (P-43) 1992	<0.001	mg/l	0.001	0.002
18.	Boron as B	IS 3025 (P-57) 2005	<0.1	mg/l	0.5	2.4
19.	Chromium as Cr	IS 3025 (P-52) 2003	<0.01	mg/l	0.05	No Relaxation
20.	Lead as Pb	IS 3025 (P-47) 1994	<0.01	mg/l	0.01	No Relaxation
21.	Copper as Cu	IS 3025 (P-42) 1992	<0.01	mg/l	0.05	1.5
22.	Mercury as Hg	IS 3025 (P-48) 1994	<0.001	mg/l	0.001	No Relaxation
23.	Manganese as Mn	IS 3025 (P-59) 2006	<0.01	mg/l	0.1	0.3
24.	Zinc as Zn	IS 3025 (P-49) 1994	<0.01	mg/l	5	15
25.	Arsenic as As	IS 3025 (P-37) 1988	<0.01	mg/l	0.01	No Relaxation
26.	Nickel as Ni	IS 3025 (P-54) 2003	<0.01	mg/l	0.02	No Relaxation
27.	Cadmium as Cd	IS 3025 (P-41) 1992	<0.001	mg/l	0.003	No Relaxation

3.3.4 Discussion on Groundwater Quality in the Study Area

From the above tables, it is observed that all physical and chemical parameters are found within the permissible limits. However, parameters like Total Hardness, Total Dissolve Solids, Total Alkalinity, Mg, and Ca exceeds the acceptable limit as per IS10500 standards.

3.4 SOIL MONITORING

3.4.1 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. One sample of soil was collected from the project site for studying soil characteristics, the location of which is listed in **Table 3.8**.

Table 3.8 Details of Soil Quality Monitoring Location

S. No.	Location Code	Location Name/ Description
1	S1	Site Office

3.4.2 Methodology of Soil Monitoring

The sampling has been done in line with IS: 2720 & Methods of Soil Analysis, Part-1, 2nd edition, 1986 of American Society for Agronomy and Soil Science Society of America. The homogenized samples were analyzed for physical and chemical characteristics (physical, chemical and heavy metal concentrations). The soil samples were collected in the month of March, 2023.

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 and Inductive Coupled Plasma Analyzer.

3.4.3 Soil Monitoring Results

The physico-chemical characteristics of the soil, as obtained from the analysis of the soil sample, are presented in **Table 3.9**.

ANNEXURE III

GROUND WATER DEPARTMENT
(Western Ganga Canal Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form-II (E)
[Copy Rule 12(2)]

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

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO.: XXXXXXXX
VALID FROM DD/MM/YYYY TO DD/MM/YYYY
[SERIES of the Uttar Pradesh Ground Water Management and Regulation Act, 2019]

Registration No.: XXXXXXXXXX			
Name of the Owner	[•][•][•] - [•][•][•]		
Company Name (M/F/Ltd./Etc	[•][•][•][•] [•][•][•][•] [•][•][•]	Corporate Address (M/F/Ltd./Etc)	Village, [•][•][•][•][•], [•][•][•][•][•], [•][•][•][•]
Address of the Applicant	[•][•], [•][•][•][•][•][•][•][•][•]	Applicable e-Form No. No.	[•][•][•]-[•][•][•][•]-[•]
Date of Submission	[•][•]/[•][•]/[•][•][•][•]	Specimen Signature	
Location Particulars			
District	[•][•][•][•]	Block	[•][•][•][•]
Plot No./Khasra No.	[•][•][•][•], [•][•], [•][•], [•][•], [•][•], [•][•]	Nearest/Key Person's name	[•][•]
Mouza/ Village/ No.		Village	[•][•][•][•][•]
Particulars of the Proposed Well and Pumping Device			
Date of Construction/ Drilling of the Well	[•][•]/[•][•]/[•][•][•][•]		
Type of Well	[•][•][•][•][•][•][•][•][•][•]	Depth of the Well (in meter)	[•][•].[•][•]
Purpose of well	[•][•][•][•][•][•]	Assembly Bandhu Tara Model	
Borne Particles (Pre/ Tube Well)			
Type of Prime Mover	[•][•][•][•][•][•]	Unit of the Pump	[•][•]
Agricultural Bandas	[•][•][•][•], [•][•][•][•]	Rate of Withdrawal (in Rs.)	[•][•].[•][•]
Date of Energization (in Case of Electric Pump)		[•][•]/[•][•]/[•][•][•][•]	
Maximum Allowable Rate of Withdrawal (in Rs.)	[•][•][•]	Maximum Allowable Pumping Hours Per Day	[•][•]
Maximum Allowable Annual Extraction of Ground Water	[•][•][•][•]	Recharge Required	[•][•][•].[•][•]

GENERAL CONDITIONS

This certificate is electronically generated and does not require digital signature

ANNEXURE IV

IND RESEARCH & DEVELOPMENT HOUSE PVT. LTD.
MoEF&CC Recognized Laboratory
(ISO 9001:2015/ISO14001:2015/ ISO 45001:2018)
[illegible], Sector-6, Noida-201301 (U.P.)
Tel.: +91 120 [illegible], E-mail: [illegible]@gmail.com

TEST REPORT

(TCLP)

Report No. :	[illegible]
Date of Reporting	[illegible]
Issued to	M/s Ind Tech House Consult, [illegible], Ground Floor, Sector 11, Rohini, Delhi 110085
Project Name	Grain based Ethanol (Bio Fuel) Plant (100 KLPD) along with cogeneration power plant (X MW) by M/s [illegible] Distillery Ltd. at Village [illegible], Tehsil : Chhata, District: Mathura, UP
Nature of Sample	TCLP
Identification of Sample	[illegible] waste
Date of Sampling	[illegible]
Method of sampling	USEPA method
Date of testing	[illegible] To [illegible]
Sampled by	IR&DH – Team

RESULTS

S.No.	Parameter	Test Protocol	Results	Unit
1.	Chloride as Cl	APHA 23rd Edition	190.0	mg/l
2.	Sulphate as SO_4	APHA 23rd Edition	87.0	mg/l
3.	Iron as Fe	APHA 23rd Edition	0.7	mg/l
4.	Fluoride as F	APHA 23rd Edition	0.2	mg/l
5.	Nitrate as NO_3	APHA 23rd Edition	26.4	mg/l
6.	Boron as B	APHA 23rd Edition	<0.1	mg/l
7.	Lead as Pb	APHA 23rd Edition	<0.01	mg/l
8.	Copper as Cu	APHA 23rd Edition	0.1	mg/l
9.	Zinc as Zn	APHA 23rd Edition	1.2	mg/l
10.	Arsenic as As	APHA 23rd Edition	<0.01	mg/l
11.	Cadmium as Cd	APHA 23rd Edition	<0.001	mg/l
12.	Chromium as Cr	APHA 23rd Edition	<0.01	mg/l

End of Report

Dr. [illegible]
Authorized Signatory

1. Test Report is limited to the item(s) mentioned/tested.
2. Test Report cannot be reproduced in part or as whole by any user without laboratory permission.
3. Samples shall be retained for 4 weeks after test report submitted.

TC No. 8912

IND RESEARCH & DEVELOPMENT HOUSE PVT. LTD.

[illegible]
[illegible]
C-10, 2nd Floor, Sector-8, Noida-201301 (U.P.)
Tel.: +91 120-4210486, E-mail: contact.irdh@gmail.com

TEST REPORT

(Water)

Report No. :	IRDH-2023-CONS-WQ-711
Date of Reporting	28/02/2023
Issued to	M/s Ind Tech House Consult, B-8/6, Ground Floor, Sector-11, Rohini, Delhi 110085
Project Name	Grain based Ethanol (Bio fuel) Plant (100 KLPD) along with cogeneration power plant (4 MW) by M/s Allianz Distillery Ltd. at Village-Baharawali, Tehsil - Chhata, District: Mathura, UP
Nature of Sample	Ground Water
Identification of Sample	Water collected from nearby Project site
Date of Sampling	11/02/2023
Method of sampling	As per standard method
Date of testing	11/02/2023 To 28/02/2023
Sampled by	IRdDH - Team

RESULTS

S.No.	Parameter	Test Protocol	Results	Unit	Requirements as per IS 10500: 2012	
					Acceptable limits (Max)	Permissible limits (Max)
1.	pH	IS 3025 P-11 1983	7.82	-	6.5-8.5	No Relaxation
2.	Turbidity	IS 3025 P-10 (1984)	<0.5	NTU	1	5
3.	Total Hardness	IS 3025 P-21 (2009)	396.0	mg/l	200	600
4.	Total Dissolved Solids (TDS)	IS 3025 P-16(1984)	880.0	mg/l	500	2000
5.	Calcium as Ca	IS 3025 P-40 (1991)	73.6	mg/l	75	200
6.	Magnesium as Mg	IS 3025 P-46 (1994)	51.31	mg/l	30	100
7.	Total Alkalinity as $CaCO_3$	IS 3025 P-23 (1986)	360.0	mg/l	200	600
8.	Chloride as Cl	IS 3025 P-32 (1988)	228.0	mg/l	250	1000
9.	Barium as Ba	Annex F of IS 13428	<0.05	mg/l	0.7	No Relaxation
10.	Ammonia as N	IS 3025 P-34 (1988)	<0.1	mg/l	0.5	No Relaxation
11.	Sulphate as SO_4	IS 3025 P-24 (1986)	62.0	mg/l	200	400
12.	Nitrate as NO_3	IS 3025 P-34 (1988)	13.6	mg/l	45	No Relaxation

IND RESEARCH & DEVELOPMENT HOUSE PVT. LTD.

(NABL/MoEF&CC Recognised Laboratory)

(ISO 9001:2015/ISO 14001:2015/ ISO 45001:2018)

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Tel. : +91 120 4210486, E-mail : [illegible]

TC No. [illegible]

S.No.	Parameter	Test Protocol	Results	Unit	Requirements as per IS 10500: 2012	
					Acceptable limits (Max)	Permissible limits (Max)
13.	Fluoride as F	APHA, 23rd Edition	0.65	mg/l	1	1.5
14.	Iron as Fe	IS 3025 P-53 (2003)	0.12	mg/l	1.0	No Relaxation
15.	Aluminium as Al	IS 3025 P-55(2003)	<0.01	mg/l	0.03	0.2
16.	Anionic Detergent	Annex K of IS 13428	<0.05	mg/l	0.2	1
17.	Phenolic Compounds	IS 3025 P-43 (1992)	<0.001	mg/l	0.001	0.002
18.	Boron as B	IS 3025 P-57 (2005)	<0.1	mg/l	0.5	2.4
19.	Chromium as Cr	IS 3025 P-52 (2003)	<0.01	mg/l	0.05	No Relaxation
20.	Lead as Pb	IS 3025 P47 (1994)	<0.01	mg/l	0.01	No Relaxation
21.	Copper as Cu	IS 3025 P42 (1992)	<0.01	mg/l	0.05	1.5
22.	Mercury as Hg	IS 3025 P-48 (1994)	<0.001	mg/l	0.001	No Relaxation
23.	Manganese as Mn	IS 3025 P-59 (2006)	<0.01	mg/l	0.1	0.3
24.	Zinc as Zn	IS 3025 P-49 (1994)	<0.01	mg/l	5	15
25.	Arsenic as As	IS 3025 P-37 (1988)	<0.01	mg/l	0.01	No Relaxation
26.	Nickel as Ni	IS 3025 P-54 (2003)	<0.01	mg/l	0.02	No Relaxation
27.	Cadmium as Cd	IS 3025 P-41 (1992)	<0.001	mg/l	0.003	No Relaxation

End of Report

Dr. [illegible]

Authorized Signatory

1. [illegible]
2. [illegible]
3. [illegible]

TC No. 3912

IND RESEARCH & DEVELOPMENT HOUSE PVT. LTD.

(MoEF&CC Recognised Laboratory)
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E-19, 2nd Floor, Sector 8, Noida-201301 (U.P.)
Tel.: +91 120 4215486, E-mail : contact.irdh@gmail.com

TEST REPORT
(Soil)

Report No. :	IRDH-2023-COM-SL-711
Date of Reporting	18/03/2023
Issued to	M/s Ind Tech House Consult, E-8/8, Ground Floor, Sector 11, Rohini, Delhi 110085
Project Name	Grain based Ethanol (Bio fuel) Plant (100 KLPD) along with cogeneration power plant (4 MW) by M/s Allianz Distillery Ltd. at Village-Baharawali, Tehsil - Chhata, District: Mathura, UP
Nature of Sample	Soil
Identification of Sample	Soil sample collected from Project site
Date of Sampling	11/03/2023
Method of sampling	As per standard method
Date of testing	11/03/2023 To 18/03/2023
Sampled by	IRDH - Team

RESULTS

S. No.	Parameter	Test Method	Results	Unit
1.	pH	IS 2720 P-26 (1987)	7.66	--
2.	Conductivity	IS 14767 (RA 2016)	274.0	µS/cm
3.	Moisture	IS 2720 P-2 (1973)	08.4	% by mass
4.	Water Holding Capacity	IRDH/SOP-SL/07	13.2	%
5.	Specific Gravity	IS 2720 P-3 (1980)	1.86	-
6.	Bulk density	IRDH/SOP-SL/06	1.29	gm/cc
7.	Chloride	IRDH/SOP-SL/14	202.0	mg/kg
8.	Calcium	IRDH/SOP-SL/17	1231.0	mg/kg
9.	Sodium	IRDH/SOP-SL/11	128.0	mg/kg
10.	Potassium	IRDH/SOP-SL/12	36.6	mg/kg
11.	Magnesium	IRDH/SOP-SL/16	196.0	mg/kg
12.	Organic matter	IS 2720 P-22 (1972)	0.59	% by mass
13.	Cation Exchange Capacity(CEC)	IRDH/SOP-SL/09	13.6	meq/100gm
14.	Available nitrogen	IS 14684(1999)	38.2	mg/kg
15.	Available Phosphorous	IRDH/SOP-SL/10	7.38	mg/kg

Head Office: E-8/8, Ground Floor, Sector-11, Rohini, Delhi-110085
Tel.: [illegible]
E-mail : [illegible]

IRD RESEARCH & DEVELOPMENT HOUSE PVT. LTD.

[illegible] Recognised Laboratory)

(ISO 9001:2015/ISO 14001:2015/ ISO 45001:2018)

C-10, 2nd Floor, Sector-6, Noida-201301 (U.P.)

Tel. : +91 120 4215486, E-mail : contact.irdh@gmail.com

TC No. 3912

Report No. : [illegible] Page [illegible]

S. No.	Parameter	Test Method	Results	Unit
16.	Iron as Fe	IRDH/SOP-SL/22	1222.4	mg/kg
17.	Copper as Cu	IRDH/SOP-SL/21	38.0	mg/kg
18.	Zinc as Zn	IRDH/SOP-SL/20	26.1	mg/kg
19.	Texture	IRDH/SOP-SL/08		% by mass
	Sand		60.1	
	Clay		20.3	
	Silt		19.6	
20.	Sodium Adsorption Ratio(SAR)	IRDH/SOP-SL/13	1.09	By calculation

End of Report

(Dr. Shiv Ravi)

Authorised Signatory

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TC No. 9912

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C-19, 2nd Floor, Sector 6, Noida-201301 (U.P.)
Tel.: +91 120 4215495, E-mail : contact.irdh@gmail.com

TEST REPORT
(Ambient Air)

Report No.	IRDH-0323-CON-AAQ-711
Date of Reporting	18/03/2023
Issued to	M/s Ind Tech House Consult, G-8/6, Ground Floor, Sector 11, Rohini, Delhi 110085
Project Name	Grain based Ethanol (Bio fuel) Plant (100 KLPD) along with cogeneration power plant (4 MW) by M/s Allianz Distillery Ltd. at Village Baharawali, Tehsil - Chhata, District: Mathura, UP
Location	Project site
Date of Sampling	11/03/2023 to 12/03/2023
Type of Monitoring	Ambient Air Monitoring (24 hourly)
Parameters to be sampled	PM_{10}, $PM_{2.5}$, SO_2, NO_2, CO
Weather condition	Clear sky
Method of sampling	As per standard Method
Sample drawn by	IRDH Team

RESULTS

S. No	Parameter	Method	Results	Unit	Requirement (CPCB limits)*
1.	Particulate Matter as $PM_{2.5}$	IRDH/SOP/AA/29/01	47.0	µg/m³	60
2.	Particulate Matter as PM_{10}	IS 5182 P-23 (2006)	71.0	µg/m³	100
3.	Sulphur dioxide as SO_2	IS 5182 P-02 (2001)	07.2	µg/m³	80
4.	Nitrogen dioxide as NO_2	IS 5182 P-06 (2006)	22.0	µg/m³	80
5.	Carbon monoxide as CO	IRDH/SOP/AA/29/08	0.82	mg/m³	4.0

*Gazette notification published by MoEF&CC, New Delhi on 18 Nov. 2009

End of Report

Dr. Divya Bisht
Authorized Signatory

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2. Test Report cannot be reproduced in a part or as whole by client without laboratory permission.
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E-10, 2nd Floor, Sector-6, Noida-201301 (U.P.)
Tel.: +91 120 4215489, E-mail : contact.irdh@gmail.com

TC No. [illegible]

TEST REPORT
(Ambient Noise)

Report No	IRDH-2023-[illegible]
Date of Reporting	18/05/2023
Issued to	M/s Ind Tech House Consult, G-8/8, Ground Floor, Sector 11, Rohini, Delhi 110085
Project Name	Grain based Ethanol (Bio fuel) Plant (100 KLPD) along with cogeneration power plant (4 MW) by M/s Allianz Distillery Ltd. at Village Baharwadi, Tehsil - Chhata, District: Mathura, UP
Location	Project site(ANQ-1)
Date of Sampling	11/05/2023 to 12/05/2023
Type of Monitoring	Ambient Noise Monitoring
Method of sampling	IRDH/SOP-N5/22
Duration of Monitoring	24 hourly
Sample drawn by	IRDH Team

RESULTS (All values are in dB (A))

Sr. No.	Locations	Day Time (Leq) 06:00AM - 10:00PM	Night Time (Leqn) 10:00PM - 06:00AM
ANQ- 1	Project site	55.0	42.0

CPCB Limits			
Sr. No.		Day Time	Night Time
1.	Industrial area	75	70
2.	Commercial area	65	55
3.	Residential area	55	45
4.	Silence Zone	50	40

End of Report

Dr. [illegible]
Authorized Signatory

1. Test Report is limited to the item(s) submitted/tested.
2. Test Report cannot be reproduced in a part or as whole by [illegible] without laboratory permission.
3. Samples shall be retained for [illegible] weeks after test report submission.

Head Office: G-8/8, Ground Floor, Sector-11, Rohini, Delhi-110085
Tel.: +91 11 [illegible]
E-mail : [illegible]@hotmail.com

ANNEXURE V

बंदरों के हमले में युवक घायल

सामय पर दिए हुए आपके आयकर

राष्ट्र है विकास की राह पर अग्रसर

ANNEXURE VI

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

Certificate No. - **Dated: - 08/12/2022**
168922/UPPCB/Mathura(UPPCBRO)/CTE/MATHURA/2022

To.,

Shri SANJAY KUMAR

M/s ALLIANZ DISTILLERY LIMITED

KHASRA NO-677-690, VILLAGE-BAHRAWALI, CHHATA SHERGARH ROAD,CHATTA,MATHURA,MATHURA,281401

MATHURA

Sub : **"Consent to Establish" 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.**

Sir,

Kindly refer to the Consent to Establish application dated 22/11/2022 submitted for setting up of new molasses/non-molasses based distillery for the production of Rectified Spirit/Extra Neutral Alcohol/Absolute Alcohol/Ethanol. The unit has been issued Environmental Clearance by Ministry of Environment, Forest & Climate Change, Government of India/State Level Environment Impact Assessment Authority, UP under the provisions of EIA Notification S.O. 1533(E) dated 14.09.2006 as amended.

Unit proposes to install Zero Liquid Discharge System as per the directives of Central Pollution Control Board.

The "Consent to Establish" 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 is hereby issued for setting up of new molasses/non-molasses based distillery for the production of Rectified Spirit/Extra Neutral Alcohol/Absolute Alcohol/Ethanol for enlisted production capacity, raw material, manufacturing process, zero liquid discharge based effluent treatment system and emission control systems strictly as per the conditions of Environmental Clearance. The Consent to Establish shall be subject to following conditions:

1. Unit shall ensure compliance of the conditions imposed in Environmental Clearance issued by Ministry of Environment, Forest & Climate Change, Government of India/State Level Environment Impact Assessment Authority, UP.

2. The Distillery unit shall implement the project as per the proposal submitted and ensure strict compliance of zero liquid discharge system and no effluent shall be discharged outside the premises into any river/stream /surface water/land.

3. Unit shall operate 360 days per year for Incineration Boiler/Covered Bio-compost based zero liquid discharge system and for 270 days per year for uncovered Bio-compost based zero liquid discharge system.

4. The maximum permissible storage capacity for concentrated spent wash shall be 07 days equivalent to spent wash generation in case of Incineration Boiler based zero liquid discharge system and shall be 30 days equivalent to spent wash generation in case of Bio-composting based zero liquid discharge system.

5. Other process effluent streams shall be treated through Condensate Polishing effluent treatment unit and treated effluent shall be recycled and utilized in the process for irrigation as per the CPCB guidelines dated 04-10-2019 for utilization of treated effluent in irrigation to achieve zero liquid discharge.

6. Unit shall install effective Air Pollution Control System and adequate stack height from ground level as per the provisions of Environment (Protection) Rules, 1986 in order to ensure that the stack emissions conform to the prescribed norms.

7. Unit shall abstract ground water only with valid permission of Uttar Pradesh Ground Water Department under the provisions of Uttar Pradesh Ground Water (Management & Regulation) Act, 2019 as amended and ensure compliance of its conditions.

8. Installation and implementation of Online Continuous Monitoring System (OCMS) with at least 95% uptime, connected to the servers of the Central Pollution Control Board and State Pollution Control Board to report the real time quantity and quality of emission and discharges.

9. In case of Bio-composting based Zero Liquid Discharge System, the operation of Bio-composting shall be strictly in accordance with the Standard Operating Procedure of Central Pollution Control Board.

10. Unit shall obtain Consent to Operate from UPPCB under Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 prior to the commencement of production.

11. The validity of Consent to Establish shall be 05 (Five) years from the date of issue.

12. The industry shall ensure to install the roof top Rain Water Harvesting (RWH) system and piezometer within the premises.

13. The industry shall comply with the provisions of Environment (Protection) Amendment, Rules 2018 notified by MoEF& CC by notification no. 49 Dt. 25-01-2018, Environment (Protection) Act 1986, Water (Prevent and Control of Pollution), 1974 , Air (Prevent and Control of Pollution), 1981 as amended, Plastic Waste Management Rules, 2016 & Hazardous and Other Waste (Management and Transboundary Movement), Rules 2016 (Whichever is applicable).

14. The unit shall comply with the charter of CPCB prepared for the distillery units.

15. Unit shall deposit bank guarantee of Rs. 10 Lacs only for the compliance of above conditions within 15 days from issuance of this certificate.

Chief Environmental Officer

Copy to:

1. Director, Impact Assessment Division, Ministry of Environment, Forest & Climate Change, Government of India, New Delhi-110003.

2. Member Secretary, State Level Environment Impact Assessment Authority, UP

3. Excise Commissioner, Government of Uttar Pradesh, Lucknow

4. Regional Officer, UPPCB Mathura

Chief Environmental Officer