



सत्यमेव जयते

File No: J-11011/338/2006-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 02/12/2024



To,

Mr. N.B. Singh
M/s BAJAJ HINDUSTHAN SUGAR LIMITED
Bajaj Hindusthan Sugar Ltd. Gola Gokarannath, Lakhimpur Kheri, U.P. , KHERI, UTTAR PRADESH,
, 262802
nbsingh.gol@bajajhindusthan.com

Subject: Expansion of Distillery from 160 KLPD C-heavy molasses & 200 KLPD (B-heavy Molasses/Sugar Syrup) to 350 KLPD (B-heavy Molasses/ C-heavy molasses/ Sugar Syrup/Grain) along with Co-generation Power Plant from 3.0 MW to 6.0 MW under Ethanol Blending Programme at village Athadama, Tehsil Rudhauri, District Basti, Uttar Pradesh by M/s. Bajaj Hindusthan Sugar Limited (Rudhauri Distillery Division) – Consideration of Environment Clearance reg.

Sir/Madam,

This is in reference to your application for Grant of EC under the provision of the EIA Notification 2006-regarding in respect of project Expansion of Distillery from 160 KLPD C-heavy molasses/ 200 KLPD (B-heavy Molasses/Sugar Syrup) to 350 KLPD (B-heavy Molasses/ C-heavy molasses/ Sugar Syrup/Grain) along with Co-generation Power Plant from 3.0 MW to 6.0 MW under Ethanol Blending Programme At Village Athadama, Tehsil Rudhauri, District Basti, Uttar Pradesh by M/s. Bajaj Hindusthan Sugar Limited (Rudhauri Distillery Division) submitted to Ministry vide proposal number IA/UP/IND2/463341/2024 dated 05/03/2024.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24C2503UP5309029N
(ii) File No.	J-11011/338/2006-IA II (I)
(iii) Clearance Type	EC
(iv) Category	B2
(v) Project/Activity Included Schedule No.	5(g) Distilleries
(vi) Sector	Industrial Projects - 2 Expansion of Distillery from 160 KLPD C-heavy molasses/ 200 KLPD (B-heavy Molasses/Sugar Syrup) to 350 KLPD (B-heavy Molasses/ C-heavy molasses/ Sugar Syrup/Grain) along with Co-generation Power Plant from 3.0 MW to 6.0 MW
(vii) Name of Project	

	under Ethanol Blending Programme At Village Athadama, Tehsil Rudhauri, District Basti, Uttar Pradesh by M/s. Bajaj Hindusthan Sugar Limited (Rudhauri Distillery Division)
(viii) Name of Company/Organization	BAJAJ HINDUSTHAN SUGAR LIMITED
(ix) Location of Project (District, State)	BASTI, UTTAR PRADESH
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	no
(xiii) Applicability of Specific Conditions	no

3. The Ministry of Environment, Forest and Climate Change has examined the proposal seeking Environmental Clearance for the expansion of the Distillery from 160 KLPD C-heavy molasses & 200 KLPD (B-heavy Molasses/Sugar Syrup) to 350 KLPD (B-heavy Molasses/ C-heavy molasses/ Sugar Syrup/Grain) along with Co-generation Power Plant from 3.0 MW to 6.0 MW under Ethanol Blending Programme at village Athadama, Tehsil Rudhauri, District Basti, Uttar Pradesh by M/s. Bajaj Hindusthan Sugar Limited (Rudhauri Distillery Division).

4. As per EIA Notification 2006 and its amendment thereof the project falls under Schedule 5 (g) Category A; however, as per MoEFCC Notification S.O. 345(E), dated 17th January 2019; notification number S.O. 750(E), dated the 17th February 2020; S.O. 980 (E) dated 02nd March 2021 & S. No. 2339(E) 16th June 2021, a special provision in the EIA Notification, 2006 is given for "Expansion of sugar manufacturing units or distilleries for production of ethanol, having Prior Environment Clearance (EC) for the existing unit, to be used completely for Ethanol Blended Petrol (EBP) Programme only, as per self-certification in form of an affidavit by the Project Proponent, shall be appraised as category 'B2' projects.

5. The details of products and capacity are placed in Annexure-II.

6. The Ministry has issued Environmental Clearance to the existing industry for a capacity of 160 KLPD vide F. no. J-11011/338/2006-IA II (I) dated 7th December, 2006. Amendment in Environmental Clearance was obtained from the Ministry of Environment & Forests for the implementation of Bio-Methanation in three Distillery units each of capacity 160 KLPD at Gangnauli (Sahranpur), Khambhar Khera (Lakhimpur kheri) and at Rudauri (Basti) in Uttar Pradesh vide F. no. J-11011/339/2006-IA II (I) dated 14th November 2008. As per notification S.O. 980 (E) dated 2nd March 2021, issued by the Ministry of Environment Forest & Climate Change (GOI) the company obtained expansion of the Distillery under No increase in Pollution load, vide ref no. 17/UPHOC6/EIA/BASTI/2021 dated 12/07/2021, from 160 KLPD to 200 KLPD B-heavy Molasses/Sugar Syrup based Operation and if using C-heavy Molasses as raw material the production capacity will be 160 KLPD. Certified Compliance report of Existing EC has been obtained from the Integrated Regional Office, MoEFCC, Lucknow vide File no. V/ENV/UP/IND-105/280/2008/207 dated 31.07.2023 and Certified Compliance report for Sugar mill has been obtained from Integrated Regional Office, MoEFCC, Lucknow vide File no. IV/ENV/UP/IND-107/282/2008/05 dated 03.04.2024. EAC found compliance status satisfactory.

7. Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 16th June 2021.

There is one court case (Case no. 3488/2018) pending in the court – Uttar Pradesh Pollution Control Board vs Bajaj Hindusthan Sugar Limited & others. The latest date of hearing of the court case was on 6th April 2024 & the next hearing date is 28th June 2024 given by the court.

Details of the court case are given below:

- (a) Name of the Court: Special Judicial Magistrate (Pollution/CBI) Lucknow
- (b) Case No. 3488/2018
- (c) Orders/directions of the Court: Pending

UTTAR PRADESH POLLUTION CONTROL BOARD
VS

The Uttar Pradesh Pollution Control Board filed a complaint case on 13.12.2018 against Bajaj Hindusthan Sugar Ltd., Distillery unit at Rudhauri & others in the Court of Special Judicial Magistrate (Water and Air Pollution Control), Lucknow alleging therein that the company was erratically discharging its untreated effluent and polluted matter (trade effluents) into Satnaria Nullah, in violation of provisions of the Water (Prevention and Control of Pollution) Act, 1974.

The factory of Bajaj Hindusthan Sugar Ltd., Distillery unit at Rudhauri was not in operation w.e.f. 29.06.2018 in pursuance to the order dated 29.06.2018 passed by the Central Pollution Control Board and no production was going on in the factory. The impugned allegation was made on the wrong premise that the factory was operational without the Air/Water consent, whereas, in the inspection report dated 30/08/2018, it has been specifically mentioned that on the date of inspection no production/manufacturing activities were going on in the factory. It is pertinent to mention here that no compliance of provision of Section 21 of the Water (Prevention & Control of Pollution) Act, 1974 had been done by the Officials of U.P.P.C.B. which vitiates the whole process of collection of samples and initiation of proceeding in subsequence thereto.

- The Court of Special Judicial Magistrate (Water and Air Pollution Control)/CBI, Lucknow vide order dated 01.09.2022 took the cognizance of the complaint and summoned the BHSL (Distillery Unit), Rudhauri through its Occupier and the other officers.
- Being aggrieved by the Order of Special Magistrate (Pollution and CBI), BHSL (Rudhauri Distillery) filed Application under section 482 of Cr. P.C before the Allahabad High Court at Lucknow Bench, on the ground that the Trial Court has passed the summoning order on the wrong premises that the factory was operational without Consent, whereas in the inspection report dated 30.08.2018, itself, it has been mentioned that on the date of inspection no production was going on in the factory.
- The Hon'ble High Court vide its Order dated 18.07.2023 has quashed the Summoning Order dated 1.9.2022 and has remanded the case before the Trial Court for re-hearing.
- Thus, the complaint filed by the U.P.P.C.B. has no substance and is filed on frivolous allegation and will in every likelihood be dismissed by the Trial Court. However, any Direction/Order given by the Learned Court will be complied with.

8. Total plant area after expansion is 24.3 Ha (60 Acres). No additional land will be required for the expansion project as the same will be done within existing plant premises. Out of the total plant area, 8.02 hectares i.e., ~33% of the plant area is being/will be developed as greenbelt & plantation. The estimated project cost is Rs. 312.25 Crores. Capital cost of EMP would be Rs. 30.0 Crores and recurring cost for EMP would be Rs. 3.0 Crores per annum. Industry proposes to allocate Rs 4.0 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 290 persons as direct.

9. There are No National Parks, Protected Forests (PF), Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km radius. Water bodies: Ami Nadi is at a distance of ~0.5 km in East direction, Suraj Canal is at a distance of ~4.0 km in WSW direction, Garehia Nala is at a distance of ~4.5 km in WSW, Jamawar Nadi is at a distance of ~4.5 km in East direction. NOC has been obtained from the Office of the Executive Engineer, Rudhauri, Basti vide letter no.165 ashulipik/ dated 19.07.2023 stating that the industry does not fall in flood-prone zone since years.

10. Existing 60 TPH conc. Spent wash/ bagasse fired boiler is already present in the plant premises. During molasses/sugar syrup-based operations, spent wash will be concentrated in MEE and burnt in existing 60 TPH conc. Spent wash/ bagasse fired boiler. 90 TPH bagasse-fired boiler is already installed at the adjacent sugar mill which will be sufficient for the additional requirement. Hence, steam requirement for the plant will be met by existing 60 TPH conc. Spent wash/ bagasse fired boiler & 90 TPH bagasse fired boiler installed at adjacent sugar mill. Since no boiler or stacks new proposed, air modelling is not required for the expansion project.

11. Total fresh water requirement after expansion will be 1436 CMD (during B-heavy Molasses based Distillery operation) or 1148 CMD (during Sugar syrup-based Distillery operation) or 1357 CMD (during Grain based Distillery operation) which will be met from groundwater. As suggested by EAC, integrated water balance for sugar & distillery unit has been submitted. Freshwater consumption has been revised from 4.9 KL/KL to 4.0 KL/KL production. NOC has been

obtained by the company from the Groundwater Department (Namami Gange & Rural Water Supply Dpt.), Ministry of Jal Shakti vide NOC no. NOC046515& NOC038253 valid from 07.06.2021 to 06.06.2026 for the abstraction of 875 KLPD and 700 KLPD respectively. Application has also been submitted to the Groundwater Department (Namami Gange & Rural Water Supply Dpt.), Ministry of Jal Shakti for additional abstraction of 1050 KLPD groundwater vide Application No. BSTI0623NIN0008. Existing effluent generation is 1600 CMD which is treated through Condensate Polishing Unit /Effluent Treatment Plant of capacity 1900 CMD. After expansion, effluent generation will be 2147 CMD which will be treated through Condensate Polishing Unit of Capacity 2600 CMD. In Molasses/sugar syrup-based operation, spent wash generated from the analyzer column during distillation will be concentrated in Multi Effect Evaporator and concentrated spent wash will be burnt in incineration boiler. In grain based operation, raw stillage will be sent to decanter followed by MEE followed by dryer to produce DDGS. Domestic wastewater is being/will be treated in STP of capacity 30 KLPD. The plant is being/will be based on Zero Effluent discharge system and treated effluent/water is being/will not be discharged outside the factory premises.

12. The total power requirement after expansion for Molasses based distillery will be 6.73 MW, which will be sourced from 6 MW distillery Co-generation power plant & 21 MW Sugar mill Co-generation power plant. Existing distillery has 60 TPH Slop/bagasse fired boiler & existing sugar mill has 90 TPH Bagasse fired boiler. APCE Electrostatic Precipitator (ESP) with stack height of 90 m has been installed with existing distillery boiler for controlling the particulate emissions. APCE Wet scrubber with stack height of 65 m has been installed with existing sugar mill boiler for controlling the particulate emissions. The industry has proposed 2 x 1250 KVA DG Sets as part of expansion which will be used as standby during power failure and stack height (8 m) will be provided as per CPCB norms.

13. Details of Process emissions generation and its management:

- For existing operations of 160 KLPD/200 KLPD Distillery, 60 TPH Conc. Slop/Bagasse fired Boiler has already been installed inside plant premises with ESP as APCE & stack height of 90 m to control the particulate and gaseous emissions within 50 mg/Nm³. APCE Wet scrubber with stack height of 60 m has been installed with existing sugar mill boiler of 90 TPH for controlling the particulate emissions within the statutory limit.
- Online Continuous Emission Monitoring System is already installed with the stack and data transmitted to CPCB/SPCB servers.
- CO₂ generated (270 TPD) during fermentation process is being/will be collected and sold to vendors as per local demand.

14. Details of solid waste/Hazardous waste generation and its management:

- Solid waste from the Grain-based operations generally comprises of fibres and proteins in the form of DDGS (165 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- During C-heavy Molasses/B-heavy Molasses/Sugar Syrup based operation- Spent wash will be concentrated in the multi-effect evaporator and then burnt in the Incineration Boiler.
- CPU sludge will be dewatered in Filter press and will used as manure.
- Fly ash generated from B-heavy Molasses/Syrup-based operations will be supplied to nearby farmers in covered vehicles only to use as a fertilizer. Fly ash generated from Grain-based operation will be supplied to nearby brick manufacturers in covered vehicles.
- Used or spent oil (1.0 Ton/Annum) generated from plant machinery/gearboxes/Plant operations as hazardous waste is being/will mixed with bagasse and burnt in boiler.

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

16. During deliberations, EAC discussed following issues:

- As suggested by EAC, PP informed that the distillery & adjacent interlinked sugar mill is completely based on “Zero Effluent Discharge”. No effluent shall be discharged outside the plant premises.
- The production capacity based on feedstock shall not exceed the following capacities:
- Modes of operations:

Particulars	Ethanol Production Capacity		
	Mode-1	Mode-2	Mode-3
Mode			
Input Material of Distillery	C-Hy: 160 KLPD + Grain: 190 KLPD	B-Hy/ Sugar Syrup: 350 KLPD	Grain: 350 KLPD
Product	RS/Ethanol	RS/Ethanol	RS/Ethanol

- Industry shall conduct quarterly ambient air quality monitoring in sensitive receptors including schools, health care facilities, religious places etc. around the plant through NABL approved laboratory as part of post project monitoring plan. Further, the Industry shall also conduct monitoring (pre-monsoon & post-monsoon) of adjacent fisheries pond & results will be submitted with half yearly compliance report. The aforementioned data shall be submitted to IRO in 6 monthly compliance reports.
- Fly ash generated from boiler operations shall be kept covered or stored through designated ash silos inside the plant before dispatching to the farmers/granulation plants.
- Industry shall install 660 kW in the form of solar power within plant or nearby areas.
- The company has increased the CER budget from Rs. 3.2 Crores to Rs. 4.0 Crores for socio-economic development activities in nearby areas before the commissioning of the plant and funds will be spent while partnering with Government administration.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments satisfactory.

17. The proposal was considered by the EAC (Meeting ID: EC/AGENDA/EAC/315544/4/2024) held on 23rd – 24th April, 2024 in the Ministry, wherein the project proponent and the accredited Consultant M/s. J.M. EnviroNet Pvt. Ltd. (NABET certificate no. NABET/EIA/2326/RA 0308 and validity till 07th August, 2026), presented the case. The Committee recommended the project for grant of environmental clearance.

18. 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.

19. 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.

20. 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.

21. 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 for establishment of Expansion of Distillery from 160 KLPD C-heavy molasses & 200 KLPD (B-heavy Molasses/Sugar Syrup) to 350 KLPD (B-heavy Molasses/ C-heavy molasses/ Sugar Syrup/Grain) along with Co-generation Power Plant from 3.0 MW to 6.0 MW under Ethanol Blending Programme at village Athadama, Tehsil Rudhau, District Basti, Uttar Pradesh by M/s. Bajaj

Hindusthan Sugar Limited (Rudhauri Distillery Division), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions.

22. 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.

23. 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.

24. 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.

25. 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.

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

Copy To

1. The Secretary, Department of Environment, Government of Uttar Pradesh, 601, Babu 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 Bhavan, 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. Compliance and Monitoring Division, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.
7. The District Collector, District Basti, Uttar Pradesh.
8. Guard File/Monitoring File/Parivesh portal/Record File.

Annexure 1

Specific EC Conditions for (Distilleries)

1. Distilleries

S. No	EC Conditions
1.1	The project proponent shall abide by all orders and judicial pronouncements made from time to time in the case filed in the Court of Special Judicial Magistrate (Water and Air Pollution Control), Lucknow.
1.2	As per the Notification S.O. 2339(E), dated 16th June 2021, the project falls in category B2 and the proposed expansion of 150 KLPD/190 KLPD/350 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 the EBP Programme, or if ethanol is not being

S. No	EC Conditions
	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 production capacity based on feedstock shall not exceed as per details given above.
1.3	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 (Annexure-III).
1.4	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 the project. Conversion of land use (CLU) certificate shall be obtained before the start of construction activities.
1.5	NOC from the Concerned Local authority shall be obtained before the start of the construction of the plant and drawing water from Ground Water. State Pollution Control Board shall not issue the Consent to Operate (CTO) under the Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
1.6	The total freshwater requirement after expansion will be 1436 CMD (during B-heavy Molasses based Distillery operation) or 1148 CMD (during Sugar syrup-based Distillery operation) or 1357 CMD (during Grain based Distillery operation) which will be met from ground water. During the Sugar crushing Season, entire treated water from the Sugar unit shall be utilized in the Distillery, and the fresh water requirement shall not exceed 900 KLD. No groundwater recharge shall be permitted within the premises. Industry shall construct a rainwater storage and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
1.7	The spent wash from molasses-based distillery shall be concentrated in MEE and concentrated spent wash shall be incinerated in the incineration boiler. Other lean effluents Spent lees, MEE Condensates and utility effluents shall be treated in the condensate polishing unit (CPU) comprising of three-stage RO. No wastewater or treated water from integrated unit of the sugar mill and distillery shall be discharged outside the premises and Zero Liquid Discharge shall be maintained for all the units namely sugar, Distillery and Cogen Power Plant. STP shall be installed to treat sewage generated from factory premises.
1.8	Adequate numbers of groundwater quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be conducted on monthly basis and report submitted to SPCB and RO, MOEFCC. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office.
1.9	The Wet Scrubber as APCE with a stack of height of 65 m installed in sugar mill with 90 TPH bagasse fired boiler for controlling the particulate matter emissions within the limit of 50 mg/Nm ³ shall be replaced with ESP before 31/12/2025.. APCE as Electro Static Precipitator with a stack of height of 90 m is installed in distillery with 60 TPH Slop/bagasse fired boiler for controlling the particulate emissions within the limit of 50 mg/Nm ³ . Coal shall not be used as fuel. 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.

S. No	EC Conditions
1.10	Fly ash generated from B-heavy Molasses/Syrup-based operations will be supplied to nearby farmers in covered vehicles only to use as a fertilizer. Fly ash generated from Grain-based operation will be supplied to nearby brick manufacturers in covered vehicles. Industry shall install 660 kW in the form of solar power within the plant or nearby areas.
1.11	CO ₂ (270 TPD) generated during the fermentation process is being/will be collected by utilizing CO ₂ scrubbers and sold to authorized vendors/collected in the proposed bottling plant.
1.12	PP shall allocate at least Rs. 45 Lakhs as capital expenditure and Rs. 8 Lakhs per annum as operational expenditure 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.
1.13	Training shall be imparted to all employees on the safety and health aspects of chemical handling. Safety and visual reality training shall be provided to employees.
1.14	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. The fire fighting system shall be as per the norms. PESO certificate shall be obtained. The location of ethanol storage tanks shall be placed in such a way that in the event of any fire, accident, explosion or any unforeseen conditions the impact of such event should not go beyond the boundary of the plant i.e., the risk should be tolerable (acceptable) at the boundary.
1.15	The company shall maintain an Emergency Response Decision support system in such a way so that identification of the detector's network for the location of the leak source and the probable leaked quantity in real-time, followed by modelling of the dispersion of the plume and consequences as forecast is done in advance and thus, no leak accident may go unattended. Accordingly, Risk Mitigation plan shall be in place.
1.16	The company shall determine the distance of the fire hydrant while finalizing its location from ethanol storage tanks or any other hazardous storage substance shall be based on dispersion of Thermal Radiation so that during any unforeseen situation fire hydrant is always available to operate manually.
1.17	Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incineration. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. Sludge drying beds wherever proposed shall be replaced with filter press.
1.18	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.
1.19	The green belt of at least 5-10 m width shall developed in 8.02 hectares i.e., 33 % of the total project area with tree density @ 2500 trees per hectare, mainly along the plant periphery. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be

S. No	EC Conditions
	selected for plantation. PP shall develop at least 20 varieties of species as a part of the greenbelt. Saplings 4-6 feet high shall be planted. 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 a remote sensing map. Greenbelt development shall be completed before the commissioning of the plant.
1.20	PP proposed to allocate Rs. 4.0 Crores towards extended EMP, which shall be spent as submitted in the CER plan (Annexure-IV). Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with the District Administration.
1.21	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. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like restrooms etc. PP shall strengthen and maintain the road connecting the plant and highway.
1.22	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 the 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.
1.23	Industry shall conduct continuous ambient air quality monitoring at least at 03 locations to assess the impact on sensitive receptors including schools, health care facilities, religious places etc. Further, the Industry shall also conduct monitoring (pre-monsoon & post-monsoon) of adjacent fisheries pond & results will be submitted with half yearly compliance report. The aforementioned data shall be submitted to RO in 6 monthly compliance reports. 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.
1.24	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 the Head of Organization/ Director/CEO as per company hierarchy.
1.25	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 compliance of the 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 the concerned authority.

Standard EC Conditions for (Distilleries)

1. General Conditions

S. No	EC Conditions
1.1	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.
1.2	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
1.3	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).
1.4	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.
1.5	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.
1.6	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.
1.7	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.
1.8	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.
1.9	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

S. No	EC Conditions
	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.
1.10	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.
1.11	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.

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Existing	Proposed	Total	Unit	Mode of Transport / Transmission
Ethanol	Ethanol	160	190	350	Kilo Litre per Day (KLD)	Road
Ethanol	Ethanol	200	150	350	Kilo Litre per Day (KLD)	Road
Ethanol	Ethanol	0	350	350	Kilo Litre per Day (KLD)	Road
DDGS	DDGS	0	165	165	TPD	Road
Power	Power	3	3	6	Mega Watt (MW)	Cables
Carbon dioxide	Carbon dioxide	161	121	282	TPD	Road

The details of products and capacity are as under:

Units	Name of product/by-product	Existing Capacity	Additional production Capacity	Total production Capacity
Distillery	RS/Ethanol	200 KLPD B-Heavy Molasses/Sugar Syrup or 160 KLPD C-Heavy Molasses based operation	150 KLPD B-Heavy Molasses/Sugar Syrup or 350 KLPD Grain based Operation Product-Ethanol	350 KLPD B-Heavy* Molasses/Sugar Syrup/Grain based operation
Co-generation Power Plant	Power	3.0 MW	3.0 MW	6.0 MW
DWGS Dryer (During Grain based Operations)	DDGS	-	165 TPD	165 TPD
Fermentation unit	Carbon dioxide	TPD	109 TPD	270 TPD

*The company will operate on only 160 KLPD C-heavy molasses based plant

Modes of operations:

Particulars	Ethanol Production Capacity		
	Mode-1	Mode-2	Mode-3
Input Material of Distillery	C-Hy: 160 KLPD + Grain: 190 KLPD	B-Hy/ Sugar Syrup: 350 KLPD	Grain: 350 KLPD
Product	RS/Ethanol	RS/Ethanol	RS/Ethanol

Capital cost and recurring cost of EMP are given below:

S. No.	Description	Capital Cost (Crores)	Recurring Cost/annum (Crores)
1.	Effluent Treatment Facilities	Spent wash treatment facilities for Grain based Distillery, ZLD System implementation, Condensate polishing unit/ETP	24.0 2.45
2.	Fugitive Emission Management	Internal Road, Bagasse & Grain Handling System	1.2 0.12
3.	Environment monitoring	Lab instrument, Online monitoring System, Third party monitoring, audit	1.2 0.12
4.	Solid waste management	Ash handling & management, Others	2.5 0.3
5.	Greenbelt plantation & development	Plantation for greenbelt	0.1 0.01
6.	Rain water harvesting	Required infrastructure	1.0 -
	Total		30.0 3.0

Annexure - IV

Details of extended EMP (CER) with proposed activities and budgetary allocation:

CER PLAN TO BE UNDERTAKEN BY THE COMPANY				
S. No.	PROPOSED ACTIVITIES	IMPLEMENTATION OF EMP FOR SOCIAL AND INFRASTRUCTURE DEVELOPMENT ON THE BASIS OF PHYSICAL TARGETS		TOTAL BUDGET ALLOCATED (RS. IN LAKHS)
		Year 1	Year 2	
1	Up gradation of School infrastructure & Educational facilities- Provide Interactive smart class equipments /gadgets like desktop computers, projectors, Interactive White Boards and	Rs. 100 Lakhs (Govt school at Village Bharauli) (4 no's potable water facilities - Rs. 10 lakhs, 5 no's of sanitized toilets- Rs 15 lakhs, solar	Rs. 100 Lakhs (Govt school at Village Dandwara) (4 no's potable water facilities - Rs. 10 lakhs, 5 no's of sanitized toilets- Rs 15	200

	distributing study materials, school bags, sports equipments etc. to students, Seating Benches, installation of potable water facilities, construction of sanitized toilets, solar panels etc.	panels installation- Rs. 35 lakhs, Rs 40 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, sports equipments, White washing of School etc)	lakhs, solar panels installation- Rs. 35 lakhs, Rs 40 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, sports equipments, White washing of School etc)	
2	Social Infrastructure Development- Installation of Solar Street Light, Solar Lanterns, Village Pond & RWH pond Infrastructure Development, etc.	Rs. 45 Lakhs Village- Bharauli (Rs. 30 Lakhs for 550 nos. solar street light, Rs. 15 Lakhs for local ponds & RWH pond development)	Rs. 45 lakhs Village- Dunsi (Rs. 30 Lakhs for 550 nos. solar street light, Rs. 15 Lakhs for local ponds & RWH pond development)	90
3	Skill development for youth & women- Organizing Training programmes for youth/residents in Skill Development centre in collaboration with District/State government, Women empowerment & skill development, Training programmes for local villagers every quarter on environment monitoring/solid waste management/ ETP.	Rs. 20 Lakhs Village- Dunsii (Benefit to be extended to 100 persons)	Rs. 20 Lakhs Village- Bharauli (Benefit to be extended to 100 persons)	40
3	Provision of Mobile medical van	Rs. 20 Lakhs (Village Bharauli) (Mobile Medical Van Facility)	Rs. 20 Lakhs (Village Dunsii) (Mobile Medical Van Facility)	40
4	Plantation- Plantation/ Avenue plantation along	Rs. 15.0 lakhs Village Dunsii	Rs. 15.0 Lakhs Village- Bharauli	30

roadside, tree plantation in nearby schools/colleges/vacant land/Panchayat bhavan, etc.	(3000 no. of plants to be planted)	(3000 no. of plants to be planted)	
TOTAL			400

