



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

To,

The Director

BIHAR DISTILLERS & BOTTLERS PVT. LTD.

SCO 140-141, Sector 34A, Chandigarh,,Chandigarh,Chandigarh-160022

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 IA/BR/IND2/274130/2012 dated 21 May 2022. The particulars of the environmental clearance granted to the project are as below.

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| 1. EC Identification No. | EC22A060BR137570 |
| 2. File No. | J-11011/98/2012-IA II (I) |
| 3. Project Type | Expansion |
| 4. Category | A |
| 5. Project/Activity including Schedule No. | 5g(a)-Grain Based distilleries for Ethanol Blended Petrol |
| 6. Name of Project | Expansion of Grain based Distillery from 650 KLPD to 1320 KLPD & Co-generation Power Plant from 20 MW to 40 MW at Village Devadi, Block Garhani, Anumandal Ara, District Bhojpur, Bihar by M/s Bihar Dis |
| 7. Name of Company/Organization | BIHAR DISTILLERS & BOTTLERS PVT. LTD. |
| 8. Location of Project | Bihar |
| 9. TOR Date | 08 Aug 2012 |

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

Date: 17/10/2022

(e-signed)
A N Singh
Scientist E
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/BR/IND2/274130/2012, dated 21st May, 2022 for environmental clearance to the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the project proposal seeking environmental clearance for expansion of Grain based Distillery from 650 KLPD to 1320 KLPD & Co-generation Power Plant from 20 MW to 40 MW (biomass based) at Village Devadi, Block Garhani, AnumandalAra, District Bhojpur, Bihar by M/s. Bihar Distillers & Bottlers Private Limited.

3. As per EIA Notification 2006 (Schedule 5 (g) Category A); however, as per in the MoEFCC Notification S.O. 345(E), dated the 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 "Expansion of sugar manufacturing units or distilleries for production of ethanol, having Prior Environment Clearance (EC) for 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.

4. The details of products and capacity as under:

S. No.	Name of unit	Name of the product/ byproduct	Existing Production capacity	Additional Capacity	Total production capacity
1	Distillery (Grain based)	Ethanol, Rectified Spirit/ Extra Neutral Alcohol/ Impure Spirit/ DS/SDS/ Fusel oil	650 KLPD (Ethanol, Rectified Spirit/ Extra Neutral Alcohol/ Impure Spirit/ DS/SDS/ Fusel oil)	670 KLPD (Ethanol)	1320 KLPD
2	Co-generation Power Plant for distillery	Power	20 MW	20 MW	40 MW
3	DWGS dryer	DDGS	275 TPD	280 TPD	555 TPD
4	Fermentation unit	Carbon di- oxide	455 TPD	470 TPD	925 TPD

5. Ministry has issued Environmental Clearance to the existing 660 KLPD Grain based plant & 20 MW Co-generation Power Plant at Village Devadi, Block Garhani, AnumandalAra, District Bhojpur (Bihar) letter no. J-11011/98/2012-IA II (I) dated 1st May 2014 & validity of EC extension was issued on 6th May, 2021 and extended till 30th April, 2024. Certified Compliance report of Existing EC has been obtained from Regional Office, MoEFCC, Ranchi vide letter no. 105-107/13/EPE/124 dated 25.02.2022. Action Taken Report has been submitted to MoEFCC, New Delhi dated 28.04.2022 for 9 partial compliances and Closure report from IRO, MOEFCC, Ranchi has been obtained vide letter no. 105-107/488 dated

24.08.2022.

6. Standard ToR and Public Hearing 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 proposal.

7. Total plant area is 18.21 hectares. No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 6.01 hectares i.e. 33% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained in and around plant premises. The estimated project cost is Rs. 248.0 Crores. Capital cost of EMP would be Rs. 79.95 Crores and recurring cost for EMP would be Rs. 1.12 Crores / annum. Industry proposes to allocate Rs 4.0 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 500 persons as direct.

8. PP reported that there are no national parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Reserve forests/protected forests, Wildlife Corridors etc. within 10 km distance. Water bodies: Banas Nadi is at a distance of 2.0 km in NE direction, Gangi Nadi is at a distance of 9.5 km in NW direction & some Distributary/Nala are present within 10 km radius.

9. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $0.53 \mu\text{g}/\text{m}^3$, $0.21 \mu\text{g}/\text{m}^3$, $0.80 \mu\text{g}/\text{m}^3$ and $0.97 \mu\text{g}/\text{m}^3$ with respect to PM_{10} , $\text{PM}_{2.5}$, SO_2 and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

10. Total fresh water requirement after expansion will be 5982 CMD which will be met from groundwater. Existing effluent generation is 705 CMD from distillery which is treated through Wastewater Treatment Plant of Capacity 1200 CMD. After Expansion, effluent generation will be 1415 CMD from distillery which will be treated through Wastewater Treatment Plant of Capacity 1700 CMD. The Process condensate (5162 KLPD) will be recycled into process use. In grain based operation, raw stillage (9152 KLPD) will be sent to decanter followed by MEE followed by dryer to produce DDGS. Domestic waste water will be treated in existing STP of 15 & 25 KLPD & proposed STP of capacity 20 KLPD. The plant is being/will be based on Zero Liquid discharge system and treated effluent/water is being/will not be discharged outside the factory premises.

11. Total power requirement of distillery mill after expansion will be 24 MW which will be sourced from 40 MW Co-Generation Power Plant. Existing distillery has 52 TPH, 95 TPH & 6 TPH biomass such as rice husk/ paddy straw/ wood chips/coal fired boiler having 55 meters stack height and ESP as air pollution control device. A new 120 TPH biomass such as rice husk/ paddy straw/ wood chips/coal fired boiler will be installed in distillery. ESP with a stack of height of 55 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of $50 \text{ mg}/\text{Nm}^3$. ESP with a stack height of 60 m will be installed with new 120 TPH boiler for controlling the particulate emissions within the statutory limit of $30 \text{ mg}/\text{Nm}^3$. Industry has existing 1000 KVA DG set &

proposed 1250 KVA which will be used as standby during power failure and Stack height (6.5 m) for existing & (7.0 m) for expansion will be provided as per CPCB norms to the proposed DG sets.

12. Details of process emissions generation and its management:

- ESP with a stack of height of 55 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm³. ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm³ for the proposed boiler.
- Online Continuous Emission Monitoring System is being/will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ (925 TPD) generated during the fermentation process is being/will be collected by utilizing CO₂ scrubbers and sold to vendors as per local demand.

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

- DDGS (555 TPD) is being/ will be sold as cattle feed/fish feed/prawn feed.
- Boiler ash (218 TPD) is being /will be supplied to nearby brick/paver tiles manufacturers. The Company has entered into an agreement with Ash lifting Contractor who is supplying fly ash generated from the boiler to the nearby villages for brick manufacturing/ paver tiles manufacturing, in covered vehicles.
- Used oil & grease (2.5 KL/annum) is being/will be sold out to the CPCB authorized recyclers.
- CPU sludge (1.7 TPD) and STP Sludge (0.03 TPD) is being/will be used as manure.

14. 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 capacity of 670 KLPD will be used for manufacturing fuel ethanol only.

15. The proposal was considered by the EAC in 07th meeting held during 08th - 09th June, 2022 and in EAC Meeting ID: IA/IND2/13341/23/09/2022 held on 23rd September, 2022 wherein Project Proponent and the accredited Consultant M/s. JM EnviroNetPvt. Ltd. (NABET/EIA/2023/RA 0186 and validity till 7th February, 2023)., presented the case under B2 category. The Committee **recommended** the project for grant of environmental clearance.

16. 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.

17. 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.

18. 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.

19. 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 proposal for **expansion of Grain based Distillery from 650 KLPD to 1320 KLPD & Co-generation Power Plant from 20 MW to 40 MW (biomass based) at Village Devadi, Block Garhani, AnumandalAra, District Bhojpur, Bihar by M/s. Bihar Distillers & Bottlers Private 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 670 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). 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.
- (iv). Total Fresh water requirement for expansion project shall not exceed 4 KL/KL of ethanol production i.e. 2680 m³/day 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 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption. PP shall explore installation of air-cooled condensers in distillery.
- (v). 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.
- (vi). Electrostatic precipitator (5 field and 99.9% efficiency) with a stack height of 60 meters will be installed with 120 TPH biomass such as rice husk/ paddy straw/ wood chips/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm³. SO₂ and NO_x 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.
- (vii). Boiler ash (218 TPD) is being /will be supplied to nearby brick/paver tiles manufacturers. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.
- (viii). CO₂ (925 TPD) generated during the fermentation process is being/will be collected by utilizing CO₂ scrubbers and sold to vendors as per local demand.
- (ix). 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.

- (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.
- (xi). 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.
- (xii). 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.
- (xiii). 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.
- (xiv). Out of the total plant area 6.01 hectares i.e. 33% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained in and around plant premises. The green belt of at least 5-10 m width shall be developed 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.
- (xv). PP proposed to allocate Rs. 4.0 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, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xvi). 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 rest rooms etc.
- (xvii). 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.

- (xviii). 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.
- (xix). 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/ Director/CEO as per company hierarchy.
- (xx). 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. General Condition:

- (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.

20. 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.

21. 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.

22. 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.

23. 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.

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

(A. N. Singh)
Scientist-'E'

Copy to: -

1. The Secretary, Forests & Environment Department, Government of Bihar, 1st Floor, N.H Bhawan, Vishweshwaraiya Complex, Bailey Road, Patna -1 (Bihar)
2. The Regional Officer, Ministry of Env., Forest and Climate Change, Integrated Regional Office, Bunglow No. A-2, Shyamali Colony, Ranchi-834002
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Bihar State Pollution Control Board, Beltron Bhawan, 2nd Floor, Lal Bahadur Shastri Nagar, Patna - 800 023 (Bihar).
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, JorBagh Road, New Delhi
7. District Collector, Bhojpur, Bihar
8. Guard File/Monitoring File/ Parivesh Portal /Record File.

(A. N. Singh)
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