



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

To,

The Authorized Signatory
ETH BIOFUELS PRIVATE LIMITED
SCO 51-52, First Floor, Sector 8C, Chandigarh,,Chandigarh,Chandigarh-
160009

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/PB/IND2/237750/2021 dated 12 Nov 2021. The particulars of the environmental clearance granted to the project are as below.

- | | |
|---|---|
| 1. EC Identification No. | EC22A060PB168714 |
| 2. File No. | IA-J-11011/472/2021-IA-II(I) |
| 3. Project Type | New |
| 4. Category | A |
| 5. Project/Activity including Schedule No. | 5g(a)-Grain Based distilleries for Ethanol Blended Petrol |
| 6. Name of Project | Proposed 400 KLPD Grain based Ethanol Plant along with 6.0 MW Cogeneration Power Plant at Village Louhka, Tehsil Patti, District Tarn Taran, Punjab by M/s ETH Biofuels Private Limited |
| 7. Name of Company/Organization | ETH BIOFUELS PRIVATE LIMITED |
| 8. Location of Project | Punjab |
| 9. TOR Date | N/A |

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

Date: 31/01/2022

(e-signed)
A.K Pateshwary
Director
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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PARIVESH

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and Virtuous Environment Single-Window Hub)



This has reference to your online proposal no. [IA/PB/IND2/237750/2021, dated 12th November, 2021 for environmental clearance to the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the Proposed 400 KLPD Grain based Ethanol Plant along with 6.0 MW Cogeneration Power Plant by M/s. ETH Biofuels Private Limited located at Village Louhka, Tehsil Patti, District Tarn Taran, Punjab. The same will be installed in two phases i.e., 100 KLPD Grain Based Ethanol Plant along with 2.0 MW Co-generation Power Plant in 1st phase and 300 KLPD Grain Based Ethanol Plant along with 4.0 MW Co-generation Power Plant in 2nd phase.

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 Committee (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. 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.

5. The details of products and capacity are as under: -

Unit	Capacity	Product
Grain Based Ethanol Plant	400 KLPD (I st phase 100 KLPD & II nd phase 300 KLPD)	Product- Ethanol (Bio-fuel) By-product- DDGS & CO ₂
Co-generation Power Plant	6.0 MW (I st phase 2.0 MW & II nd phase 4.0 MW)	Power

6. Total project area is 8.0 hectares (80000 m²) for proposed project. Industry will develop greenbelt in an area of 33% i.e. 2.64 ha (26400 m²) out of total area of the project. The estimated project cost is Rs.140 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 13.10 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.32 Crores / annum. No. of working days will be 350 days/annum. Total Employment will be 150 persons (Permanent 125 & temporary 25) during operation phase. Industry proposes to allocate Rs. 2.8 Crores of total project cost towards Corporate Environment Responsibility (CER).

7. There are no National Parks, Wildlife Sanctuaries, Reserved Forests (RF)/ Protected Forests (PF), Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius. Patti Nala (Adjacent in West direction),

Kasur Branch lower (Upper Bari Doab Canal) (~3.5km in NW direction), Tarn Taran Distributary (~5.5 km in NW direction), Kasur Nala (~7.5 km in NW direction), Kairon Drain (~4.5 km in WSW direction), Rasulpur Distributary (~1.5 km in West direction), Sirhali Distributary (~6.5 km in SSE direction), Patti distributary (~2.5 km in ESE direction) are the water bodies found within 10 km radius.

8. Total fresh water requirement for proposed ethanol plant will be 1600 KLPD. Total fresh water requirement for 1st phase will be 400 KLPD (380 Process & 20 KLPD Domestic) for 100 KLPD Ethanol plant & for 2nd phase will be 1200 KLPD (1180 Process & 20 KLPD Domestic) for 300 KLPD Ethanol plant which will be sourced from groundwater. Total Effluent generation will be of 2247 m³/day. Effluent generation for 1st phase for 100 KLPD Ethanol plant will be 552 m³/day & 1695 m³/day for 2nd phase for 300 KLPD Ethanol plant which will be treated through state of art CPU/Effluent Treatment Plant of 700 m³/day & 1800 m³/day capacity respectively. The plant will be based on Zero Liquid discharge system.

9. The total power requirement for the plant will be 6.0 MW out of which 2.0 MW will be required for 1st phase whereas remaining 4.0 MW will be required for 2nd phase will be sourced from proposed 2.0 MW & 4.0 MW Co-generation Power plant. D.G. sets of 2 x 1000 KVA will be installed for power backup. Adequate Stack height (6.5 m) will be provided as per CPCB norms. During 1st phase of installation of 100 KLPD Ethanol plant, 15 TPH boiler of 40 m height & ESP as APCE will be proposed & in 2nd phase of installation of 300 KLPD Ethanol plant, 40 TPH Boiler with Stack of adequate height (50m) & ESP as APCE will be proposed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³.

10. Details of process emissions generation and its management:

CO₂ (313 TPD) generated during the fermentation process will be collected and sold to authorized vendors.

11. 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 (180 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash (50 TPD) generated from boilers will be supplied to brick manufacturers.
- Used oil & grease (1.0 KL/Annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

12. As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 400 KLPD will be for manufacturing of fuel ethanol only.

13. During deliberations EAC sought the following commitments from PP:

- 33% of total plant area will be developed as greenbelt and plantation. Development of greenbelt will be completed along with commissioning of the project.
- 15% area to be reserved for truck parking inside the plant premises.
- Electro-Static Precipitator (ESP) with stack of adequate height will be installed with proposed boilers.
- Fund for occupational health and safety will be Rs. 40 Lakhs per annum.
- Biomass to be used as fuel for proposed boilers. No coal to be used as fuel.
- Proposed budget for social developmental activities will be Rs. 2.8 Crores which will be spent within 2 years instead of 3 years for 2nd phase of project. The entire budget to be spent on Energy Conservation with implementation of energy efficient system & Solar power; providing proper educational facilities including distribution of computers to the nearby schools; Plantation in nearby villages, common land and schools & along village Roadside; and Drinking Water Facility in the nearby village schools which will be implemented while partnering with Government Agencies, NGOs and Local Panchayats.
- The company will produce solar power to the tune of 10% of total power consumption of the unit in form of solar lights/solar panels etc.
- Company will store rain water in storage tanks and reuse this water in process and plant activities.
- CO₂ plant will be installed to capture CO₂ generated during fermentation process.
- Ash to be transferred in covered vehicles to the nearby brick manufacturers.

PP has submitted the desired information as sought above and EAC found it to be in order and recommended the proposal for grant of EC.

14. The proposal was considered by the EAC in its 44th meeting held on 22nd November, 2021 in the Ministry, wherein the project proponent and their consultant M/s. J.M. EnviroNet Pvt. Ltd., presented the case under B2 category. The Committee **recommended** the project for grant of environmental clearance.

15. 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.

16. 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.

17. 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.

18. 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 for **Proposed 400 KLPD Grain based Ethanol Plant along with 6.0 MW Cogeneration Power Plant by M/s. ETH Biofuels Private Limited located at Village Louhka, Tehsil Patti, District Tarn Taran, Punjab**, 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 OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 400 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of an 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 will produce solar power to the tune of 10% of total power consumption of the unit in the form of solar lights/solar panels etc.
- (iii). 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.
- (iv). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.

- (v). Total fresh water requirement for proposed ethanol plant will be 1600 KLPD. Total fresh water requirement for 1st phase will be 400 KLPD (380 Process & 20 KLPD Domestic) for 100 KLPD Ethanol plant & for 2nd phase will be 1200 KLPD (1180 Process & 20 KLPD Domestic) for 300 KLPD Ethanol plant which will be sourced from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. Company will store rain water in storage tanks and reuse this water in process and plant activities.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Ash to be transferred in covered vehicles to the nearby brick manufacturers. Electro-Static Precipitator (ESP) with stack of adequate height will be installed with proposed boilers. Biomass to be used as fuel for proposed boilers. No coal to be used as fuel.
- (vii). CO₂ plant will be installed to capture CO₂ generated during fermentation process.
- (viii). 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. Fund for occupational health and safety will be Rs. 40 Lakhs per annum.
- (ix). 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.
- (x). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). 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.

- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiv). Proposed budget for CER will be Rs. 2.8 Crores which will be spent within 2 years instead of 3 years for 2nd phase of project. The entire budget to be spent on Energy Conservation with implementation of energy efficient system & Solar power; providing proper educational facilities including distribution of computers to the nearby schools; Plantation in nearby villages, common land and schools & along village Roadside; and Drinking Water Facility in the nearby village schools which will be implemented while partnering with Government Agencies, NGOs and Local Panchayats.
- (xv). 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. 15% area to be reserved for truck parking inside the plant premises.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvii). Continuous online (24x7) monitoring system for stack emissions 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.
- (xviii). 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.

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.

19. 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.

20. 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.

21. 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.

22. 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.

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

(Ashok Kr. Pateshwary)
Director

Copy to: -

1. The Secretary, Department of Science, Technology & Environment, Government of Punjab, Chandigarh

2. The Regional Officer, Ministry of Env., Forest and Climate Change, Integrated Regional Office, Bays No.24-25, Sector 31-A, Dakshin Marg, Chandigarh - 160030
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala, 147001 (Punjab)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
6. District Collector, Tarn Taran, Punjab
7. Guard File/Monitoring File/ Parivesh Portal /Record File

(Ashok Kr. Pateshwary)
Director
E-mail: ak.pateshwary@gov.in
Tel. No. 24695290