



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

To,

The DGMBIOFUELS  
M/S. BHARAT PETROLEUM CORPORATION LTD., ODISHA  
Biofuels2ndfloor,A installation SewreeFortRoad,Mumbai City,Maharashtra-  
400015

**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/OR/IND2/221065/2021 dated 25 Aug 2021. The particulars of the environmental clearance granted to the project are as below.

- |  |   |
|--|---|
| 1. EC Identification No.                   | EC21A060OR123573  |
| 2. File No.                                | IA-J-11011/351/2017-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                         | M/s. Bharat Petroleum Corporation Limited (BPCL)          |
| 7. Name of Company/Organization            | M/S. BHARAT PETROLEUM CORPORATION LTD., ODISHA            |
| 8. Location of Project                     | Orissa  |
| 9. TOR Date                                | N/A   |

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

Date: 24/11/2021

(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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and Virtuous Environment Single-Window Hub)



This has reference to your online proposal no. IA/OR/IND2/221065/2021, dated 25<sup>th</sup> August, 2021 for environmental clearance to the above mentioned project.

**2.** The Ministry of Environment, Forest and Climate Change has examined the Proposed expansion of Bio-Ethanol Refinery of 100 KLPD by M/s. Bharat Petroleum Corporation Limited located at Plot no. 610 and plot no. 598 (Part-I), Baulsingha Village, Bhatli Tehsil, Bargarh District, Odisha.

**3.** As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> 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 16<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

**5.** Ministry had issued EC earlier vide letter no. IA-J-11011/351/2017-IA-II(I) dated 10/08/2018 to the existing project of Ligno-cellulosic 2G Ethanol Plant of 100 KLPD.

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

Sr. No.	Product / By-product	Unit	Quantity (Capacity)			Remark
			Existing (2G)	Proposed (1G)	Total	
1	Ethanol	KLPD	100	100	200	Product
2	Fusel oil	L/d	200	200	400	By Product
3	DDGS	TPD	0	51	51	Co-Product

**7.** Existing land area is 227150 m<sup>2</sup> and no additional land will be required for proposed expansion. Industry will develop greenbelt in an area of 33 % i.e., 20424 m<sup>2</sup> (To meet the 33% Green Belt requirement, Green belt of 5.04 acres (20424 sq.m) in being developed inside the plot while remaining Green belt of 15.28 acres (61835 sq.m) is being developed in additional Land allotted outside the plot area through Department of Forest) out of total area of the project. The estimated project cost is Rs. 170 Cr. including existing investment of Rs.747.46 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 3.4 Cr. and the Recurring cost (operation and maintenance) will be about Rs. 0.34 Cr per annum. Total additional employment will be 25 persons per shift (Skilled: 10 nos. per shift + Unskilled: 15 nos. per shift) after expansion. Industry already allocated/spent more than Rs. 4.25Cr (more than @ of 2.5 %) towards Corporate Social Responsibility in the state of Odisha in current financial year.

**8.** There is Debrigarh wildlife sanctuary away from plot area by distance of 7.6 km towards NEE direction. Eco Sensitive Zone (notified vide dated 07<sup>th</sup> June, 2017) around sanctuary is away from plot area by distance of 2.65 km towards NEE direction. Danta river is flowing in the NEE (3.4 km) and Jira river is 7.86 km in SSW from the project site.

**9.** Water requirement for 1G ethanol plant is 2139 CMD (Fresh – 395 CMD & Recycled-1744 CMD) will be met from canal ~ 7 km Bargarh canal. Total Industrial Effluent of 46.978 m<sup>3</sup>/Hr (1128 CMD) quantity will be treated through existing ETP of capacity: 67m<sup>3</sup>/hr i.e. 1608 CMD; complying with MoEF&CC/CPCB norms. Treated process condensates & treated effluent shall be recycled. The plant will be based on Zero Liquid discharge system.

**10.** Power requirement after expansion will be 18 MW including (Existing 15 MW + Proposed 3 MW) and will be met from Western electricity Supply Company of Odisha Limited (WESCO). Also 3 MW captive power plant (CPP) shall be proposed for catering the power requirement (1G Ethanol plant). Existing unit has 2 DG sets of 2500 KVA capacity each and same shall be utilized for proposed plant also. Stack height (16 m) will be provided as per CPCB norms to the DG sets. Existing unit has 2 boilers of capacity 48 TPH and fuel as Mixture feed (Syrup: 250 TPD + Lignin cake: 380 TPD + Rice straw: 262 TPD). Additionally 1 boiler of capacity 30 TPH and fuel as Rice Husk/Straw (210 TPD) will be used. ESP with a stack of height of 90 m (common stack) for 48 TPH boiler and 39 m for 30 TPH boiler will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm<sup>3</sup> for the proposed boilers.

**11. Details of process emissions generation and its management:**

CO<sub>2</sub> shall be emitted and adequate measures shall be taken. Biogas shall be generated which shall be flared/burned in boiler

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

**Non- Hazardous Waste**

Sr. No	Type of Waste	Quantity (TPD)			Source of Generation	Disposal
		Existing	Proposed	Total		
1.	Dewatered Sludge	12 TPD	3 TPD	15 TPD	Process Condensate Treatment Plant	as manure for agricultural fields
2.	Boiler Ash	120 TPD	35 TPD	155 TPD	From Boiler	Sale to Brick Manufacturer Industry
3.	Mud	21 TPD	0	21 TPD	-	Landfilling

**Hazardous Waste:** There is no Hazardous Waste from site

**13.** Details of Certified compliance report submitted by RO, MoEF&CC. – CCR received from MoEF&CC RO-Bhubaneshwar vide letter dated File No. 101-1034/EPE/955 dated 18/08/2021.

**14.** As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 100 KLPD will be for manufacturing of fuel ethanol only.

**15.** The proposal was considered by the EAC in its 42<sup>th</sup> meeting held on 20<sup>th</sup>–22<sup>nd</sup> October, 2021 in the Ministry, wherein the project proponent and their consultant M/s. Sd Engineering Services Pvt. Ltd., 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 Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. 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

Page 3 of 8

Climate Change hereby accords environmental clearance to the project for **Proposed expansion of Bio-Ethanol Refinery of 100 KLPD by M/s. Bharat Petroleum Corporation Limited located at Plot no. 610 and plot no. 598 (Part-I), Baulsingha Village, Bhatli Tehsil, Bargarh District, Odisha**, 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 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 100 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 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). 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.
- (iv). Total fresh water requirement shall not exceed 395 KLPD will be met from Bargarh canal. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed.
- (vi). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vii). 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.

- (viii). 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.
- (ix). 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.
- (x). 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.
- (xi). 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.
- (xii). 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.
- (xiii). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.
- (xiv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products as per CPCB norms and no parking to be allowed outside on public places.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

- (xvi). 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.
- (xvii). 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 31<sup>st</sup> 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.

**(Ashok Kr. Pateshwary)**  
**Director**

**Copy to: -**

1. The Principal Secretary, Department of Forest and Environment, Government of Odisha, Bhubaneswar (Odisha)
2. The Regional Officer, Ministry of Env., Forest and Climate Change, Integrated Regional Office, A/3, Chandrasekharpur, Bhubaneswar - 23 (Odisha)
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Odisha State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit - VIII, Bhubaneswar -12 (Odisha)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
6. District Collector, Bargarh, Odisha
7. Guard File/Monitoring File/ Parivesh Portal /Record File

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