

**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-2 SECTOR)**

Dated: 04.05.2022

**MINUTES OF THE 04th MEETING OF THE EXPERT APPRAISAL
COMMITTEE**

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 25th-26th April, 2022

**Venue: Ministry of Environment, Forest and Climate Change,
Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-
110003 through Video Conferencing (VC)**

(i) Opening Remarks by the Chairman: The Chairman made hearty welcome to the Committee members and appreciated the efforts of the Committee. After opening remarks, the Chairman opened the EAC meeting for further deliberations.

(ii) Confirmation of minutes: The EAC, having taken note that final minutes were issued after incorporating comments received from the EAC members on the minutes of its 03rd Meeting of the EAC (Industry-2) held during 12th -13th April, 2022 conducted through Video Conferencing (VC), confirmed the same.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

Details of the proposals considered during the meeting **conducted through Video Conferencing (VC)**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under: -

25th April, 2022 (Monday)

Agenda No. 4.1

Proposed Onshore Development & Production oil & gas from 105 wells in 12 nomination PML blocks in Sipahijala, West Tripura and Gomati districts of Tripura and 10 wells & Khubal GCS in NELP PML of North Tripura districts, Tripura by M/s. Oil and Natural Gas Corporation Limited (ONGC) - Consideration of Environment Clearance.

[IA/TR/IND2/134348/2019, J-11011/450/2019-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. ABC Technolabs India Pvt. Ltd, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Proposed Onshore Development & Production oil & gas from 105 wells in 12 nomination PML blocks in Sipahijala, West Tripura and Gomati districts of Tripura and 10 wells & Khubal GCS in NELP PML of North Tripura districts, Tripura by M/s. Oil and Natural Gas Corporation Limited (ONGC).

All Offshore and Onshore oil and gas exploration, development & productions are listed at S.N. 1(b) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC)-Industry 2, MoEF&CC.

The ToR has been issued by Ministry vide letter No. IA-J-11011/450/2019-IA-II(I) Dated 10th March 2020. Public Hearing for the proposed project has been conducted by the Tripura State Pollution Control Board on 27.12.2021 & 29.12.2021 (Sepahijala), 31.12.2021 & 3.1.2022 (West Tripura), 6.1.2022 (North Tripura) and 9.2.2022 (Gomati) Districts respectively and chaired by Additional District Magistrate & Collector in all six Districts. The main issues raised during the public hearing are related to Drinking water facilities, deep tube wells, solar street light, Health camp, kitchen in school, employment, water tanks, upgradation of local roads etc. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

There will be as such no manufacturing activities involved so, no product generated. Following area is under the 12 nomination PML blocks in Sipahijala, West Tripura and Gomati districts of Tripura and 10 wells and Khubal GCS in NELP PML of North Tripura district, Tripura for Gas extraction:

Sl. No	Block name	Existing area (sq.km)	Proposed (sq.km)	Total (sq.km)
1	12 nomination PML blocks in Sipahijala, West Tripura and Gomati districts of Tripura and 10 wells and Khubal GCS in NELP PML of North	1261.9326	-	1261.9326

	Tripura Tripura	district,			
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Co-Ordinates of Proposed Wells

SI No	Block	No.	Points	Latitude	Longitude	Districts	No. of Wells	
1	Agartala Dome (AD-1)	1	H	23°45'52.00" N	91°20'23.00" E	West Tripura, Siphajjala	12	
		2	I	23°45'46.00" N	91°20'53.00" E			
		3	J	23°42'58.00" N	91°21'45.00" E			
		4	K	23°42'32.00" N	91°21'09.00" E			
		5	L	23°42'52.00" N	91°21'08.00" E			
		6	M	23°43'51.00" N	91°19'46.00" E			
		7	N	23°45'42.00" N	91°19'46.00" E			
		8	O	23°45'41.00" N	91°19'57.00" E			
2	Agartala Dome (AD-4)	1	A	23°43'02.00" N	91°24'12.00" E		West Tripura, Siphajjala	6
		2	B	23°45'18.00" N	91°21'54.00" E			
		3	Q	23°45'18.00" N	91°22'45.00" E			
		4	P	23°46'30.00" N	91°22'45.00" E			
		5	O	23°46'30.00" N	91°21'54.00" E			
		6	C	23°46'48.00" N	91°21'54.00" E			
		7	D	23°46'48.00" N	91°20'38.00" E			
		8	E	23°45'18.00" N	91°18'44.00" E			
		9	F	23°42'04.00" N	91°20'16.00" E			
		10	G	23°42'04.00" N	91°23'10.00" E			
3	Agartala Dome Extn-II	1	A	23°48'00.98" N	91°25'00.00" E		12	
		2	B	23°40'00.00" N	91°25'00.00" E			
		3	C	23°40'00.00" N	91°16'37.06" E			
		4	D	23°48'07.50" N	91°16'37.06" E			
4	Baramura	1	A	23°51'36.30" N	91°33'28.00" E	West Tripura, Siphajjala, Gomati	5	
		2	B	23°51'36.30" N	91°34'12.00" E			
		3	C	23°46'57.00" N	91°33'28.00" E			
		4	D	23°46'57.00" N	91°34'12.00" E			
5	Baramura Extn - IV	1	A	23°55'16.24" N	91°34'11.02" E			5
		2	B	23°40'00.00" N	91°36'13.47" E			
		3	C	23°40'00.00" N	91°32'51.42" E			
		4	D	23°55'16.24" N	91°30'48.98" E			
6	Kunjaban	1	A	23°44'27.33" N	91°13'44.02" E	Agartala	15	
		2	B	23°50'51.78" N	91°25'00.00" E			
		3	C	23°55'00.00" N	91°25'00.00" E			
		4	D	23°55'00.00" N	91°20'00.00" E			
		5	E	23°59'00.00" N	91°20'00.00" E			
		6	F	23°59'00.00" N	91°18'16.80" E			
7	Konaban	1	A	23°44'26.09" N	91°09'41.29" E	Siphajjala	30	
		2	B	23°42'47.61" N	91°09'14.82" E			
		3	C	23°41'24.13" N	91°09'25.41" E			
		4	D	23°41'24.13" N	91°12'23.29" E			
		5	E	23°44'26.09" N	91°12'20.93" E			
		6	F	23°44'09.43" N	91°13'18.72" E			
8	Rokhia-Manikyanagar (RO-2)	1	A	23°38'54.00" N	91°12'30.00" E	Siphajjala	5	
		2	B	23°38'54.00" N	91°12'12.00" E			
		3	C	23°38'42.00" N	91°12'09.00" E			
		4	D	23°38'42.00" N	91°11'31.50" E			
		5	E	23°39'11.25" N	91°11'39.75" E			
		6	F	23°39'18.75" N	91°11'12.00" E			
		7	G	23°39'15.00" N	91°11'04.50" E			
		8	H	23°39'18.45" N	91°10'35.25" E			
		9	I	23°38'31.50" N	91°10'52.50" E			
		10	J	23°37'43.50" N	91°12'12.75" E			
9	Rokhia (RO-19)	1	A	23°38'54.00" N	91°12'30.00" E		1	
		2	J	23°37'43.50" N	91°12'12.75" E			
		3	K	23°37'50.27" N	91°12'40.00" E			
10	Rokhia (RO-15)	1	M	23°36'22.00" N	91°13'12.50" E		2	
		2	N	23°36'22.00" N	91°13'40.50" E			
		3	O	23°35'51.50" N	91°13'40.50" E			
		4	P	23°35'51.50" N	91°13'12.50" E			
11	Sundalbari Agartala Dome	1	A	23°43'22.51" N	91°27'20.00" E	Siphajjala, Gomati		
		2	B	23°43'22.51" N	91°29'10.16" E			
		3	C	23°31'42.42" N	91°29'40.41" E			

SI No	Block	No.	Points	Latitude	Longitude	Districts	No. of Wells				
		4	D	23°31'53.51" N	91°25'43.35" E		8				
		5	E	23°30'54.45" N	91°25'43.35" E						
		6	F	23°30'54.45" N	91°26'50.51" E						
		7	G	23°27'35.51" N	91°26'12.49" E						
		8	H	23°27'35.51" N	91°24'00.00" E						
		9	I	23°32'52.24" N	91°25'05.29" E						
		10	J	23°32'52.24" N	91°24'05.23" E						
		11	K	23°32'52.24" N	91°19'11.88" E						
		12	L	23°38'00.00" N	91°19'11.88" E						
		13	M	23°38'00.00" N	91°20'50.88" E						
		14	N	23°40'00.00" N	91°20'50.88" E						
		15	O	23°40'00.00" N	91°25'00.00" E						
		16	P	23°43'22.51" N	91°25'00.00" E						
		12	Manikyanagar-Sonamura Extn-I	1	A			23°40'31.62" N	91°14'24.71" E	Sipahijala	4
				2	B			23°28'52.14" N	91°19'06.18" E		
				3	C			23°27'55.95" N	91°16'07.06" E		
4	D			23°36'12.97" N	91°12'39.11" E						
5	E			23°35'32.07" N	91°11'04.41" E						
6	F			23°36'07.55" N	91°10'13.23" E						
7	G			23°39'14.59" N	91°10'07.06" E						
8	H			23°39'10.54" N	91°11'37.94" E						
9	I			23°38'40.54" N	91°11'30.88" E						
10	J			23°38'42.97" N	91°12'08.82" E						
11	K			23°38'55.13" N	91°12'13.23" E						
12	L			23°38'55.13" N	91°12'32.65" E						
13	M			23°40'31.62" N	91°12'35.29" E						
13	Khubal	1	A	24°17'00.00" N	92°05'00.00" E	North Tripura	10				
		2	B	24°17'00.00" N	92°12'00.00" E						
		3	C	24°11'00.00" N	92°12'00.00" E						
		4	D	24°11'00.00" N	92°09'00.00" E						
		5	E	24°12'00.00" N	92°09'00.00" E						
		6	F	24°12'00.00" N	92°07'00.00" E						
		7	G	24°11'00.00" N	92°07'00.00" E						
		8	H	24°11'00.00" N	92°05'00.00" E						
Total							115				

Existing Block area is 1261.9326 sq. Km, Additional 0 sq.km land will be used for proposed expansion. Industry will develop greenbelt in an area of 33% out of total area of the camp sites. The estimated project cost is Rs 3281.32 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 82.8 Crores and the Recurring cost (operation and maintenance) will be about Rs. 17.25 Crores per annum. Total Employment will be 50 persons as Direct & 0 persons indirect. Industry proposes to allocate Rs. 4.94 Crore @ of 0.15% towards Corporate Environment Responsibility.

PP has reported that there is Sepahijala WLS, Clouded Leopard NP, Rowa & Trishna WLS. All protected areas Final Notification has been published for which details are as follows:

Sepahijala Wildlife Sanctuary & Clouded Leopard National Park is at 5.5 Km. Ministry Notification Vide S.O. 789(E) dated 19th February, 2021 of Sepahijala Wildlife Sanctuary and Clouded leopard National Park reports that the Eco-sensitive Zone shall be to an extent of 10 metres to 50 metres around the boundary of Wildlife Sanctuary and the area of the Eco-sensitive Zone is 3.12 square kilometres. Trishna WLS is at 5.5 Km. Ministry Notification Vide S.O. 4077(E) dated 08th November, 2019 of Trishna Wildlife Sanctuary reports that the Eco-sensitive Zone shall be to an extent of 0 (zero) metre to 500 metre around the boundary of Sanctuary and the area of the Eco-sensitive Zone is 91.83 square

kilometres. (Zero extent of Eco-sensitive Zone is due to Indo-Bangladesh International Border). Gomati Wildlife Sanctuary is at 10.2 Km. Ministry Notification Vide S.O. 4076(E) dated 08th November, 2019 of Gomati Wildlife Sanctuary reports that the Eco-sensitive Zone shall be to an extent of 0 (zero) to 1.20 kilometres around the boundary of Gomati Wildlife Sanctuary and the area of the Eco-sensitive Zone is 58.91 square kilometres (Zero extent of Eco-sensitive Zone is due to international boundary with Bangladesh in East and South-East border of the Sanctuary). Rowa Wildlife Sanctuary is at 0.6 Km. Ministry Notification of Rowa Wildlife Sanctuary Vide S.O. 1566(E) dated 08th May, 2017 reports that the extent of the Eco-sensitive Zone varies from 10 metres to 100 metres from the boundary of the Rowa Wildlife Sanctuary and the area of the Eco-sensitive Zone is 62.75 acres etc. within 10 km distance from the block boundaries. No wells are proposed to be drilled within any notified ESZ and forest area as submitted by PP. Khowai, Dondra, Haora, Dadku, Bijoy, Gomati, Muhuri, Deo, Kalapania rivers are flowing through the block area.

Ambient air quality monitoring was carried out at 14 locations during 8th December 2020 to 7th March 2021 and the baseline data indicates the ranges of concentrations as: PM10 (39-59 µg/m³), PM2.5 (16-32 µg/m³), SO₂ (5.1- 8.1 µg/m³) and NO₂ (10.1-17.2 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.447 µg/m³, 0.237 µg/m³ and 0.894 µg/m³ with respect to PM10, SO₂ and NO_x for 12 PML block area and 2.2155 µg/m³, 1.174 µg/m³ and 4.43 µg/m³ with respect to PM10, SO₂ and NO_x for Khubal PML block area. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement is 25 m³/day of which fresh water requirement of 25 m³/day will be met from Tanker Supply. Effluent of 6 m³/day quantity will be treated through mobile ETP system. The plant will be based on Zero Liquid discharge system.

Power requirement after operation will be 5600 KVA including existing 0 KVA and will be met from DG sets. Proposed 4 X 1400 KVA DG sets DG sets are used as standby during developmental drilling activities. Stack will be provided as per CPCB norms to the proposed DG sets.

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

Hazardous waste details per well

Hazardous waste	Category	Quantity	Method of disposal
Used oil & spent Oil	5.1	1 m ³ per well	Used oil will be collected in metal drums kept in secured area and will be disposed through Metal

Hazardous waste	Category	Quantity	Method of disposal
			Scrap Trading Corporation authorised recycler.
Wastes/residues containing oil	5.2	5-10 Kg/Well	Waste containing oil will be collected and kept in secured area and will be disposed through Metal Scrap Trading Corporation authorised recycler

Solid Waste details and disposal methods

Non-Hazardous waste	Quantity	Method of disposal
Kitchen Waste	10-20 kg per day	Will be stored in compost pits on a daily basis or disposed off nearby municipal disposal site via local vendors
Recyclable waste like papers, plastics,	Negligible	Proper segregation and storage of recyclable waste in designated bins onsite. Recyclables will be periodically sold to local waste recyclers.
Packaging wastes	2.3 m ³ /well	Proper segregation and storage at designated stackyard onsite. Packaging wastes will be periodically sold to local waste recyclers.
Drill cutting generated from Water based Mud, not contaminated with oil.	150-600 m ³ /well	Drill cuttings which are inert materials of shale, sand, and clay will fall into the lined waste pits. The drilling fluids left over at the end of the particular well will be discharged into the lined waste pits and dried.
Waste Drilling Mud	450-900 m ³ /well	The mud will be tested for hazardous contaminants and will be disposed as per S No. 72 C.1.a Schedule I Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005

During deliberations EAC sought the following information/commitments from PP:

- All PH commitments shall be completed before commissioning of the project.
- Effluent treatment shall be detailed.
- Clarification on hydrocarbon and VOC values reported in EIA/EMP Report.

- Details regarding ambient air quality (AQ) stations selected and clarification on IMD data used for selecting AQ stations.
- Details regarding instruments used for AQ monitoring.
- Block wise assessment of biodiversity, emission impacts and greenbelt species to be developed.
- Details regarding mitigation measures to be adopted for flora/fauna/schedule 1 species before commencement of drilling operations.

PP has submitted the desired information as sought above and EAC has found the information/commitments satisfactory.

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 EIA/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 EIA/EMP 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.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also 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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance and subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). All PH commitments shall be completed before commissioning of the project.
- (ii). Action plan submitted for protected areas and their species conservation i.e. flora and fauna shall be implemented strictly.
- (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). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (v). Total fresh water requirement shall not exceed 25 m³/day will be met from Tanker Supply. Prior permission shall be obtained from the concerned regulatory authority.
- (vi). 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. Mobile ETP coupled with RO shall be installed to reuse the treated water in drilling system. Size of the waste shall be equal to the hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.
- (vii). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (viii). The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- (ix). Approach road shall be made pucca to minimize generation of suspended dust.
- (x). The project proponent shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.

- (xi). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.
- (xii). Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.
- (xiii). Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xiv). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xv). The project proponent shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xvi). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xvii). On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations.
- (xviii). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility (Rs. 4.94 Crores), 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.

- (xix). No lead acid batteries shall be utilized in the project/site.
- (xx). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xxi). Oil content in the drill cuttings shall be monitored and report & shall sent to the Ministry's Regional Office.
- (xxii). The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

Agenda No. 4.2

Establishment of 100 KLPD Grain based Distillery & 3 MW Electricity Generation by M/s. Quadrangle Biofuel Pvt. Ltd. located at Khasra No. 491, 495, 497, 498, 519, 520, Jaswadi Road, Village-Lohari, Tehsil and District-Khandwa, Madhya Pradesh - Consideration of Environment Clearance.

[IA/MP/IND2/257928/2022, J-11011/69/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Establishment of 100 KLPD Grain based Distillery & 3 MW Electricity Generation by M/s. Quadrangle Biofuel Pvt. Ltd. located at Khasra No. 491, 495, 497, 498, 519, 520, Jaswadi Road, Village-Lohari, Tehsil and District-Khandwa, Madhya Pradesh.

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.

Standard ToR and public Hearing is not applicable as the project falls under category B2 as per Notification S.O. 2339(E), dated 16th June, 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

Industrial Unit	Products & By-products	Units	Quantities
Distillery (100 KLPD)	Ethanol	KLPD	100
	By-product		
	DDGS (10% Moisture)	MT/D	70
	CO ₂	MT/D	45
Co-gen Plant	Electricity	MW	3

Total plot land area is 54,659.45 m² and proposed built- up area is 15,819.29 m². Industry will develop greenbelt in an area of 33% i.e. 18,215.29 m² out of total plot area. The estimated project cost is Rs. 112 Crores. The distillery will be operated for 330 days. Total capital cost earmarked towards environmental pollution control measures under proposed project will be Rs.17.20 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.19 Crores per annum. Total Employment will be 150 persons as direct & indirect under proposed project. Industry proposes to allocate Rs. 180 Lakh @ of 1.6% towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 Km distance from the project site. Aabna River is flowing at a distance 1.5 Km from West to East.

Total water requirement is 1098 CMD. Out of which 403 CMD will be fresh water taken from Ground Water Source. For proposed Distillery; Wet Cake from decantation operation and Thick Slop from MEE will be mixed together and this mixture known as DDGS will used as Cattle Feed. Lees generated from grain base distillery operations along with other effluent @ 587 M3/Day will be treated in proposed CPU. Treated effluent from CPU will be reused for industrial operations, thereby achieving Zero Liquid Discharge (ZLD) for process effluent. This wet cake further dried in dryers will result in to loss of moisture thereby forming Distillers Dry Grains with Soluble (DDGS- 10% moisture) @ 70 MT/D. This DDGS has more shelf life & sold as cattle feed.

Power requirement for proposed project will be 3 MW which will be met from own Turbine Generation Plant. One DG set of 500 KVA which will be

operated only during failure. Stack 5 M ARL will be provided as per CPCB norms to the proposed DG Set. New boiler of 30 TPH will be installed under proposed distillery unit. Fuel for the same will be Rice Husk / Bagasse / Coal. ESP with a stack of height of 72 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the boiler.

Details of process emissions generation and its management:

The CO₂ generation shall take place in fermenters of the distillery. CO₂ to the tune of 45 MT/Day shall be released from 100 KLPD distillery plant. CO₂ shall be bottled and supplied to manufacturers of beverages.

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

Details of Solid waste generated & its management

No.	Description	Quantity (MT/D)	Disposal Facility
1	Boiler Ash	180	In-house brick manufacturing unit shall be installed.
1	CPU Sludge	0.6	Use as manure

No any Hazardous waste is generated from Distillery.

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 100 KLPD will be used for manufacturing fuel ethanol only.

PP has reported that land has already been acquired and land use conversion has been completed. EAC found the information satisfactory.

During deliberations EAC sought the following information/commitments from PP:

- Final Land use conversion document shall be submitted.
- Commitment that PP shall start construction activities only after obtaining Ground Water permission.
- Commitment that coal will be used only in case of biomass unavailability.
- Steam and power balance.
- Commitment that ash will be utilised in briquetting plant inside plant premises as discrepancy was found in documents regarding disposal of ash.
- Revised GLC calculations based on coal as fuel.

PP has submitted the desired information as sought above and EAC has found the information/commitments satisfactory.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project.
- (v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production and will be met from ground water. Company shall obtain ground water permission before start of construction activities and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. ESP shall be installed with the boiler. Brick manufacturing unit shall be installed within premises. 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 only in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). 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.
- (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. PESO certificate shall be obtained.

- (xi). 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.
- (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). PP proposed to allocate Rs. 1.80 Crores towards CER which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (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. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (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.

Agenda No. 4.3

Establishment of Grain based Distillery of capacity 120 KLD to produce Ethanol under EBP Programme of Govt. of India by M/s. Gujarat Ambuja Exports Limited located at Survey Nos. 157/1, 156/1,156/2, 155/2, 155/1B, 155/3, 155/1A, Hulasogi village, Shiggaon Taluk, Haveri District, Karnataka - Consideration of Environment Clearance.

[IA/KA/IND2/266055/2022, J-11011/114/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Environmental Health and Safety Consultants Pvt. Ltd., Bangalore, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Establishment of Grain based Distillery of capacity 120 KLD to produce Ethanol under EBP Programme of Govt. of India by M/s. Gujarat Ambuja Exports Limited located at Survey Nos. 157/1, 156/1,156/2, 155/2, 155/1B, 155/3, 155/1A, Hulasogi village, Shiggaon Taluk, Haveri District, Karnataka.

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.

Standard ToR and public Hearing is not applicable as the project falls under category B2 as per Notification S.O. 2339(E), dated 16th June, 2021. It was informed that no litigation is pending against the project.

PP reported that in Karnataka the existing industry is at Survey Nos. 157/1, 156/1,156/2, 155/2, 155/1B, 155/3, 155/1A Hulasoggi Village, Shiggaon Taluka, Haveri Dist. Karnataka which has the production of maize starch and modified starch, liquid Glucose, High malto corn syrup, Malto Dextrin, Dextrose monohydrate, Dextrose Anhydrate, Sorbitol, Dextrine white/yellow & High malto powder and by products such as corn oil/cake/germ, Gluton, wet fibre, Dry Fibre, Corn Steep Liquor. The proposed industry will source power and effluent treatment facilities from existing industry. The existing Industry is not covered under EIA Notification, 2006 and operating based on CFE & CFO obtained from KSPCB, details of the CTO obtained are as below:

SI no	Issuing Authority	Products and Capacity			Consent No & date of issue
		S.No	Product	Quantity /Month	
Consent for Operation (CFO)	KSPCB, Bengaluru	1	Co-generation power plant	3600 MWH	AW-328856 dt 22/12/2021
		2	Corn oil / cake / germ	1600 MT	
		3	Corn steep liquor	2250 MT	
		4	Dry fiber	3416 MT	
		5	Gluton	1600 MT	
		6	LG, HMCS, MD, Dextrose Monohydrate, Dextrose Anhydrate, Sorbitol, Dextrine w/y & hmp	10416 MT	
		7	Maize Starch & Modified Starch	14250 MT	
		8	Wet Fibre	9083 MT	

The details of proposed products and capacity are as under:

S.No	Units	Proposed Capacity
1	Distillery (Ethanol)	120 KLD

**Note: ETP and power facilities will be sourced from adjacent unit.*

Existing land area is 35.12 acres, additional 12 acres land will be used for proposed expansion totaling to 47.12 Acres. Industry will develop greenbelt in an area of >33 % i.e., 11.35 Acres in existing industry and 5 Acres proposed for greenbelt. The estimated project cost is Rs 60 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 1.20 Crores and the Recurring cost (operation and maintenance) will be about Rs 41 lakhs per annum. Total Employment will be 60 persons as direct & 100 persons indirect after expansion. Industry proposes to allocate Rs 2 Crores @ 3.35 % towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Bankapura Peacock Conservation Reserve is located at a distance of 17 Km from the project site. River/ water body

Varada is flowing at a distance of 31.56 Km in South east direction.

Total water requirement is 1260 m³/day of which fresh water requirement of 1000 m³/day will be met from Bachanaki Dam. Effluent of 900 KLD (Existing) + 600 KLD (Proposed) quantity will be treated in existing 1500 KLD ETP. The plant is based on Zero Liquid discharge system.

Power requirement after expansion will be 2000 KW including existing and the same will be sourced from existing power plant of 6.9 MW capacity (4.9 MW from boiler & 2 MW from ETP Biogas). The source of power back-up in case of power failure is 750 KVA of D.G. set which is used only during power failure. Stack of height 25 mt AGL is already provided as per CPCB norms to the existing DG set. Existing unit has 55 TPH AFBC fired boiler. Multi cyclone separator/ bag filter Four field ESP with RCC chimney of height 70 mtrs is already installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the existing boiler.

Details of process emissions generation and its management:

SI. No	Parameter	Units	Boiler 55 TPH
1	Stack Height	m	70
2	Stack Diameter	m	1.34
3	Stack gas temperature	⁰ C	122
4	Stack exit gas velocity	m/s	8.24
5	Fuel Type	-	Rice Husk/Imported Coal
6	Concentration		
	PM	µg/Nm ³	75.36
	SO ₂	µg/Nm ³	13.80
	NO ₂	µg/Nm ³	14.52
7	Air Pollution Control Device	-	ESP with RCC Chimney of 70 mt

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

SI No	Solid waste	Quantity TPD	Method of collection	Mitigation measures	
				Method of Storage	Mode of disposal
Solid waste					
1	Boiler-Ash from cogen plant	28	Mechanical conveyor into common silo for further disposal	Storage yard	Disposed to farmers to use as soil conditioning

SI No	Solid waste	Quantity TPD	Method of collection	Mitigation measures	
				Method of Storage	Mode of disposal
2	ETP Sludge	3.0	Sludge drying beds	Storage yard	Used as manure for greenbelt development
3	Domestic solid waste	0.030	Collection bins	Collected in separate bins for organic and inorganic waste	Nearby municipal agencies & recyclers.
Distillery					
1	Yeast Sludge	30	Mechanical conveyor	Storage yard	Dried and sold as cattle feed
2	DDGS	70	Mechanical conveyor	Storage yard	Dried and sold as cattle feed
Hazardous waste					
1	Used oil from DG sets	20Ltr	Stored in leak proof sealed barrels	Hazardous waste storage area	Used as lubricants within the industry and excess disposed to KSPCB approved recyclers

As per the 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 120 KLD will be used for manufacturing fuel ethanol only.

Land and land use conversion documents have been submitted. EAC found the information satisfactory.

During deliberations EAC found that certified CTO compliance report of existing unit is currently not available with PP. PP assured that they will submit it in due course. Further, EAC sought the following additional information from PP:

During deliberations EAC sought the following information/commitments from PP:

- Extension certificate of accredited consultants.
- Certified compliance report of CTO by RO, SPCB.
- Distillery is a separate entity, commitment shall be submitted for the same and physical demarcation shall be done.
- Mutual agreement for facilities like co-gen and ETP.

- Detailed justification for BOD values and justification for baseline values discrepancy.
- Revised EMC hierarchy.
- Revised CER break up detailing activities in specific schools and villages.
- Revised EMP break up.

PP has submitted the information as sought above. CCR of CTO by RO, SPCB is still to be submitted by PP.

Accordingly, proposal was recommended by EAC subject to submission of the information desired.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 120 KLD 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). Proposed distillery is a separate industry, hence physical demarcation shall be done within the complex and mutual agreement shall be followed for sourcing power and ETP facilities.
- (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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. After obtaining LU conversion only, construction shall be started.
- (vi). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production and will be met from Bachanaki Dam. Company shall obtain surface water permission before start of construction activities. 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. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vii). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. ESP shall be installed with the boiler. Brick manufacturing unit shall be installed within premises. 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.

- (viii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (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. Firefighting 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.
- (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). 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.
- (xv). PP proposed to allocate Rs. 2.0 Crores towards CER which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (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 stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xviii). 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.
- (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.

Agenda No. 4.4

Proposed Expansion of sugarcane crushing capacity from 5000 TCD to 10000 TCD to augment to molasses and sugarcane syrup requirement of the distillery unit by M/s Vijayanagar Sugar Pvt. Ltd. at Karnataka, District: Gadag - Consideration of Environment Clearance

[IA/KA/IND2/266748/2022, J-11011/366/2007-IA-II(I)]

PP has informed that the above proposal will be withdrawn due to many discrepancies noticed in the proposed configurations of mass and water balance during finalization of the data with the project consultant. Hence, PP will correct the data in the EMP report, Form 1 and 2 and resubmit it. Therefore, EAC has decided to return the proposal in present form.

Accordingly, proposal was returned in present form.

Agenda No. 4.5

Expansion of molasses based distillery by M/s. Bannari Amman Sugars Limited located at Alaganchi village, Nanjangud Taluk, District Mysore, Karnataka - Amendment of Environment Clearance -Amendment in Environment Clearance.

[IA/KA/IND2/261618/2022, J-11011/71/2013-IA II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter No.J-11011/71/2013-IA II(I) dated

08.01.2018 and amendment to E.C No.J-11011/71/2013-IA II(I) dated 23.04.2019 for the project Expansion of Molasses based Distillery from 60-KLPD to 150-KLPD and installation of Spent wash / Bagasse / Coal Fired Boiler of 46.8 TPH located at Alaganchi Village, Nanjangud Taluk, Mysore District, Karnataka State in favour of M/s. Bannari Amman Sugars Limited.

2. The project proponent has requested for amendment in the EC with the details are as under:

Sl. No	Para of EC issued by MoEF & CC dt.08.01.2018	Details as per the EC	To be revised / read as (Proposed Amendment)	Justification / reasons
1	Page No. 02 – Para No. 07	<p>Waste – Boiler Ash</p> <p>Quantity – 80 TPD</p> <p>Utilization/ disposal - Used in Bio composting and also supplied to farmers for use as soil conditioner and soil nutrient.</p>	<p>Waste – Boiler Ash</p> <p>Quantity – 80 TPD</p> <p>Utilization / disposal - Used in Bio composting and supplied to farmers for use as soil conditioner and soil nutrient and shall also be utilized as manure through Potash Granulation unit.</p>	<p>The Incineration Boiler Ash is Rich in Potash containing about 20 – 30 %, which will be granulated in the Potash Granulation Unit as Potash Derived from Molasses (PDM) and sold to the farmers.</p> <p>The Ash is used to enrich the Potash content in the Bio-Compost which is produced from sugar plant Press Mud and Distillery Yeast Sludge</p> <p>The sugarcane growing farmers are also requesting to issue the Incineration Boiler Ash in bulk form without granulation for application in their lands.</p>

After details deliberations, EAC directed PP to stop bio-composting within two (02) years. Hence, complete ash shall be utilized in potash granulation unit after two (02) years. PP agreed and EAC **recommended**

the amendments in EC, as proposed by the project proponent, with all other terms and conditions remain unchanged.

26th April, 2022 (Tuesday)

Agenda No. 4.6

Expansion of Molasses/Grain Based Distillery capacity from 220 KLPD to 400 KLPD (manufacturing of Ethanol) by M/s. Dhampur Sugar Mills located at Village-Alhaipur , Tehsil- Dhampur , District - Bijnor, Uttar Pradesh - Consideration of Environment Clearance.

[IA/UP/IND2/71876/2017, J-11011/586/2017-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Enviro Infra Solutions Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion of Molasses/Grain Based Distillery capacity from 220 KLPD to 400 KLPD (manufacturing of Ethanol) by M/s. Dhampur Sugar Mills located at Village-Alhaipur , Tehsil- Dhampur , District - Bijnor, Uttar Pradesh.

All Distillery Projects are listed at SI. No. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification respectively under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC). As per the MoEF&CC Notification S.O. 980 dated 02nd March 2021 and S.O. 2339(E), dated 16th June, 2021, the proposal is to be appraised as B2 Category under EBP Programme.

Standard ToR and public Hearing is not applicable as the project falls under category B2 as per Notification S.O. 980 dated 02nd March 2021 and S.O. 2339(E), dated 16th June, 2021. It was informed that no litigation is pending against the project at present.

Ministry had issued EC earlier vide letter no. J-11011/586/2017-IA-II(I) dated 20.03.2019 to the project Expansion of Molasses/Grain based Distillery from 200 KLD to 350 KLD at Village Alhaipur, Tehsil Dhampur, District Bijnor (Uttar Pradesh) in favour of M/s. Dhampur Sugar Mills Ltd. PP reported that 220 KLPD is being operated currently. Therefore, PP has applied for expansion from 220 KLD to 400 KLD for ethanol production.

Certified Compliance Report has been issued by IRO, MOEFCC, Lucknow and site visit was conducted on 24.06.2021 and 25.06.2021. There are four (04) major non-compliances reported for which action taken report has been submitted to IRO, MOEFCC.

The details of products and capacity are as under:

S. No.	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1.	Fuel Grade Ethanol	220 KLPD	180 KLPD	400 KLPD
2.	Power generation	7.5 MW	5.5 MW	13.0 MW

The land area is 160000 sqm. Industry has developed greenbelt in an area of 52800 sqm. The estimated project cost is Rs. 14298 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 6612 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 259 Lakhs per annum. Man power requirement will be 200 persons. There is budgetary provision for Corporate Environmental Responsibility (CER) for Rs. 100 Lakh. The CER is calculated as per MoEF&CC notification dated 01st May, 2018.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Khoh River is flowing at a distance of 3.2 Km in East direction.

Total water requirement is 5912 m³/day of which fresh water requirement of 3000 m³/day will be met from Borewell. The plant will be based on Zero Liquid Discharge system.

The total power generation will be 13 MW (Existing 7.5 MW + new 5.5 MW) to meet power requirements. DG sets will be used as standby. 130 TPH Boiler [75 TPH (Existing) + 55 TPH (New)] capacity boiler with adequate stack height along with ESP (Electrostatic Precipitator) will be provided to control the particulate and gaseous emissions due to combustion of fuel.

Details of process emissions generation and its management:

CO₂ captured that is generated from the fermentation is scrubbed and treated to be sold as a bye product.

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

- Total fly ash generation would be 350 TPD during Rice Husk utilization as fuel in boiler, which will be provided to Cement Manufacturing / Cement Manufacturer.
- DDGS generation would be 20 TPD which will be used as cattle feed.
- ETP sludge will be dewatered in sludge drying beds and will be used as manure.
- Process condensate from MEE will be treated and recycled back in the process.
- Used oil & grease generated from plant machinery/Gear boxes as hazardous waste will be sold to the CPCB authorized recycler

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion capacity of 180 KLPD will be used for manufacturing fuel ethanol only.

During deliberations, EAC found that PP has not complied many major points of earlier EC granted. Further, EAC sought the following additional information from PP:

- Details of boiler already existing and proposed for the expansion.
- As per non-compliance reported in CCR, greenbelt is still not developed in the premises. Hence, PP should submit detailed time bound action plan for greenbelt development along with species to be planted. This compliance shall be visible on satellite image also on Google Earth.
- There is litigation against the company. PP has to submit the revoke orders and complete details for the same.
- Emission of particulate matter and gases are high. Measures shall be submitted to control the emissions.
- CCR reports four (04) non-compliances. PP shall obtain certified action taken report from RO. MoEFCC, Lucknow.
- Stack height calculation shall be revised and submitted considering Flue Gas Desulphurization measure.
- GLC shall be revised based on revised stack height.

Accordingly, proposal was **returned** in present form.

Agenda No. 4.7

Proposal for Grain based Distillery plant capacity of 1X120 KLPD & 1X3.7 MW Cogeneration power plant by M/s. Rama Agrochem Private Limited Located at Khasara Nos. 123, 140, 142, 145/2, 146, 148, 155 & 170/3 in Dasapal Village, Bakawand Tehsil, Bastar District, Chhattisgarh– Consideration of Environment Clearance.

[IA/CG/IND2/267592/2022, J-11011/133/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Proposal for Grain based Distillery plant capacity of 1X120 KLPD & 1X3.7 MW Cogeneration power plant by M/s. Rama Agrochem Private Limited Located at Khasara Nos. 123, 140, 142, 145/2, 146, 148, 155 & 170/3 in Dasapal Village, Bakawand Tehsil, Bastar District, Chhattisgarh.

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.

Standard ToR and public Hearing is not applicable as the project falls under category B2 as per Notification S.O. 2339(E), dated 16th June, 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

S. NO.	NAME OF UNIT	NAME OF THE PRODUCT	PRODUCTION CAPACITY
1	Distillery plant	Ethanol	120 KLPD
2	Power plant	Electricity	3.7 MW
<u>BY-PRODUCTS</u>			
1	Distillery plant	DDGS	96 TPD
2	Distillery plant	CO ₂ recovery	68 TPD

Total land area of 9.42 Ha. (23.27 acres) is allocated for the proposed project, which will be used for proposed Grain Based Distillery Project. Number of operational days of plant will be 350 per annum. Industry will develop greenbelt in an area of 33 % i.e., 7.6 Acres out of total area of the project. The estimated project cost is Rs 173.28 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 16.26 Crores and the Recurring cost (operation and maintenance) will be about Rs 1.77 Crores per annum. Total Employment will be 120 persons as direct & indirect. Industry proposes to allocate Rs. 1.73 Crores @ 1.0 % towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance.

Total water requirement is 480 m³ /day which will be met from ground water & Indravati River. Effluent of 994.8 m³ /day quantity will be treated through MEE and Condensate Polishing Unit. The plant will be based on Zero Liquid discharge system.

The power required for the proposed project is estimated to be 3.7 MW. The power requirements will be met from 3.7 MW captive power plant proposed. Change over to CSPDCL connection is proposed to facilitate start-up operations and as a backup option. 2 Nos. 500 KVA DG sets will be used in case of emergency. 27 TPH Coal/Biomass based Boiler will be installed and ESP with a stack of height of 49 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/NM³ for the proposed boiler. Travelling Grate Boiler will be equipped

with ESP for controlling process emission. Bag filters with dust collectors will be installed in Grain handling & milling area and DDGS Dryer section to minimize fugitive emissions. Boiler Ash & ETP Sludge will be generated as solid waste from the proposed distillery project. Waste lube oil from DG Sets will be generated as Hazardous Waste. Boiler ash will be sold to cement manufacturing units / fly ash brick manufacturers / ceramic industry. ETP Sludge will be reused as biocompost for green belt development.

Details of process emissions generation and its management:

- ESP with a stack height of 49 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated (68 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

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

- Solid waste from the Grain based operations generally comprises of fibers and proteins in the form of DDGS, which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash generated from boiler will be utilized in brick manufacturing unit.
- Used oil & grease generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

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 120 KLPD will be used for manufacturing fuel ethanol only.

PP reported that land is under their possession and land use conversion application has been submitted to Sub Divisional Magistrate (Revenue) Govt. of Chattisgarh. EAC found the information satisfactory and directed the PP to start construction activities only after obtaining LU conversion.

During deliberations EAC sought the following information/commitments from PP:

- Greenbelt shall be developed in 1 year i.e. before commissioning of the project. Species specific to environment of industry and area shall be submitted.
- Commitment to not discharge any effluent/waste into the irrigation canal within the project site.
- There is an irrigation canal passing through the project site. PP shall develop 10 m width greenbelt around the canal and shall not

divert the canal. PP shall also obtain NOC from State Irrigation Department for the canal reported.

- Commitment to switch to surface water source from ground water after two years /establishment of pipeline to project site. Ground water shall be used for two years only.
- Commitment to obtain LU conversion before construction will start.
- Revised CER break up detailing activities in specific schools and villages.
- Steam power balance.
- Revised GLC as per emission standard of 30 mg/Nm³ shall be submitted.
- Commitment to not cut trees/plantation.
- Revised EMP break up.
- Details of village road with dimensions and development of metalled road.

PP has submitted the desired information as sought above and EAC has found the information/commitments satisfactory.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per Notification S.O 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 120 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). PP shall also obtain NOC from State Irrigation Department before start of construction activities for the canal reported within the project site. PP shall develop 10 m width greenbelt around the canal and shall not divert the canal.
- (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. PP shall not discharge any effluent/waste into the irrigation canal within the project site.
- (v). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. LU conversion shall be obtained before starting construction activities.
- (vi). Total Fresh water requirement shall not exceed @4.0 KL/KL and will be facilitated from ground/surface water. Prior permission shall be obtained for ground water withdrawal before start of construction activities. PP shall switch to surface water source from ground water after two years /establishment of pipeline to project site. No ground water recharge shall be permitted within the premises. Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

- (vii). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. ESP shall be installed with the boiler. 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. Ash shall be stored in silos and used in brick manufacturing plant within the premises. PP shall meet 10% of the total power requirement from solar power.
- (viii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (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. Firefighting 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.
- (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). 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. Greenbelt shall be developed in 1 year/before commissioning of the operations and no trees/plantation shall be cut on proposed project site.
- (xv). PP proposed to allocate Rs. 1.73 Crores towards CER which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms,

playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

- (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. Approach road to the project site shall be paved.
- (xvii). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xviii). 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.
- (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.

Agenda No. 4.8

Proposed 100 KLD Grain Based Distillery & 3.5 MW Cogeneration Plant by M/s. Chandrika Power Private Limited (CPPL) located at Fatehli, Block- Biharsharif, Dist – Nalanda, Bihar - Consideration of Environment Clearance.

[IA/BR/IND2/237463/2021, J-11011/464/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Paramarsh Servicing Environment & Development, Lucknow, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Proposed 100 KLD Grain Based Distillery & 3.5 MW Cogeneration Plant by M/s. Chandrika Power Private Limited (CPPL) located at Fatehli, Block-Biharsharif, Dist – Nalanda, Bihar.

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.

Standard ToR and public Hearing is not applicable as the project falls under category B2 as per Notification S.O. 2339(E), dated 16th June, 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

S. No.	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1	Ethanol	0	100 KLD	100 KLD
2	Power Cogeneration	0	3.0 MW	3.0 MW
3	DDGS	0	42 TPD	42 TPD

Total land area is 6.68 Ha. which will be used for proposed Grain Based Distillery Project. Permission for land conversion has been obtained from Govt. of Bihar vide letter No. 293, Dt: 02.03.2022. Industry will develop greenbelt in an area of 33 % i.e., 2.20 Ha. (22000 m²) out of total area of the project. The estimated project cost is Rs 150 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 15.0 Crores and the Recurring cost (operation and maintenance) will be about Rs 1.6 Crores per annum. Total Employment will be 100 persons as direct & 25 persons indirect. Industry proposes to allocate Rs. 2.0 Crores towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Panchane is flowing at a distance of 4 Km. in west direction.

Total water requirement is 1330 m³/day of which fresh water requirement of 400 m³/day will be met from proposed 2 nos. Borewells. Effluent of 390 m³/day quantity will be treated through MEE and Condensate Polishing Unit followed by ACF & PSF. The plant will be based on Zero Liquid Discharge system.

Power requirement will be 3200 KVA and will be met from Captive Power Plant. DG sets will be used as standby during power failure. Stack (height 15 m.) will be provided as per CPCB norms to the proposed DG sets. 30 TPH Rice Husk/Bio mass briquette will be installed. ESP with a stack of height of 60 m. will be installed for controlling the particulate emissions within the statutory limit of 50 mg/NM³ for the proposed boiler. Boiler will be equipped with ESP for controlling process emission. Bag filters with dust collectors will be installed in Grain handling & milling area and

DDGS Dryer section to minimize fugitive emissions. Boiler Ash (30 TPD) & ETP Sludge (50 Kg/Day) will be generated as solid waste from the proposed distillery project. Waste lube oil from DG Sets will be generated as Hazardous Waste. Boiler ash will be sold to fly ash bricks manufacturing units. ETP Sludge will be reused as biocompost for green belt development.

Details of process emissions generation and its management:

CO₂ generated during the fermentation process will be collected and sold to authorized vendors.

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

- Solid waste from the Grain based operations generally comprises of fibers and proteins in the form of DDGS, which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash generated from boiler will be utilized in brick manufacturing unit.
- Used oil & grease generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

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 100 KLD will be used for manufacturing fuel ethanol only.

PP has reported that the land for the proposed project has been allotted by Govt. of Bihar and Land use conversion has been done by SDM, Biharsharif, Dist. Nalanda. EAC found it satisfactory.

During deliberations EAC sought the following information/commitments from PP:

- Revised EMP break up including cost of CEMS.
- GLC is reported in gram per seconds, convert to mg/Nm³ and submit.
- Commitment that no coal shall be used as a fuel.
- Revised CER break up detailing activities in specific schools and villages.

PP has submitted the desired information as sought above and EAC has found the information/commitments satisfactory.

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.

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.

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.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). As per Notification S.O 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLD 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). 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project.
- (v). Total Fresh water requirement shall not exceed @4.0 KL/KL and will be met from ground water. 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. Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. ESP shall be installed with the boiler. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. No coal shall be used. Ash shall be stored in silos. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall meet 10% of the total power requirement from solar power.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). 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.
- (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. PESO certificate shall be obtained.
- (xi). 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.
- (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). PP proposed to allocate Rs. 2.0 Crores towards CER which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (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. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (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.

GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE

- (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, ZillaParishad/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.

List of the Expert Appraisal Committee (Industry-2) members participated during Video Conferencing (VC) meeting

S. No.	Name and Address	Position
1.	Shri S. C. Mann	Chairman
2.	Dr. J. S. Sharma	Member
3.	Prof. Y. V. Rami Reddy	Member
4.	Prof. Sanjeev Chaudhari	Member
5.	Dr. Onkar Nath Tiwari	Member
6.	Shri J. S. Kamyotra	Member
7.	Dr. Rahul Ramesh Rao Mungikar	Member
8.	Dr. Sanjay V. Patil (VSI)	Member
9.	Dr. Siddhartha Singh (IMD)	Member
10.	Shri Ashok Kr. Pateshwary, Director, MoEFCC	Member Secretary
MoEFCC		
11.	Dr. Mahendra Phulwaria	Scientist 'C'
12.	Ms. Meetika Gupta	Research Associate
