GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-2 SECTOR)
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Dated: 16.02.2023

Meeting ID: IA/IND2/13444/13/02/2023

MINUTES OF MEETING OF THE EXPERT APPRAISAL COMMITTEE

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 13th - 14th February, 2023

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 Meeting (ID: IA/IND2/13429/24/01/2023) held on 24th - 25th January, 2023 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.

(iii) 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: -

13th February, 2023 (Monday)

Agenda No. 01

Expansion of Distillery (105 KLPD to 350 KLPD) for Ethanol Production by using C / B Heavy Molasses/ Cane Juice along with enhancement in Cane Crushing (4900 TCD to 10,000 TCD) & Capacity of Cogeneration Plant (14.5 MW to 24.5 MW) by M/s. Shri Dutt India Pvt. Ltd. (SDIPL) At.: Pimpalwadi (Sakharwadi), Tal.: Phaltan, Dist.: Satara, Maharashtra State- Re-consideration of Environmental Clearance.

[IA/MH/IND2/400929/2022, IA-J-11011/115/2020-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its EAC meeting ID: IA/IND2/13410/21/12/2022 held on 21st -22nd December, 2022 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

No.	ADS by MoEFCC	Reply by PP
1.	The Committee noted that as per CCR report issued by IRO, PP has not provided detailed action plan to achieve 33 % of greenbelt. During presentation, it was informed that greenbelt has been developed in 5.2 ha and additional greenbelt to be developed in 5.5 ha. Accordingly, the Committee suggested them to provide time bound month wise action plan for greenbelt development in 5.5 ha along with budgetary provisions. Details of plant Species to be elaborated in the action	• As per IRO; MoEFCC Nagpur report; Green Belt (GB) Status as on date of site visit (23.11.2021) was - 5.2 Ha GB area implemented and 5.5 Ha as proposed by the PP. • Subsequently, industry undertook some plantation to enhance the GB area. • Existing Plantation (7.1 Ha) : 5.2 Ha [3 Zones (4.6 Ha) + Misc. Areas (0.6 Ha)] + 1.9 Ha New Planation after RO Visit. • Thus, presently there is 7.1 Ha area under GB (i.e. 5.2 Ha as inspected by RO; MoEFCC, Nagpur plus additional plantation thereafter). • Total GB planning after expansion project works out to be 16.3 Ha (33%). • Hence, 9.2 Ha GB will be implemented to complete the condition of 33%. • As directed by Hon. Committee, time bound month wise action plan for GB development on 9.2 Ha with budgetary provision is presented including details of plant species.

No.	ADS by MoEFCC	Reply by PP
	plan. Environmental Consultant shall also check the existing Greenbelt developed in 5.2 ha and action plan to be submitted for densification of greenbelt.	• Status of existing GB developed is checked by the consultant while conducting tree census and species & no. of trees are identified. Also, action plan is suggested for densification of existing GB. • Industry Plot is divided in to 3 Zones : Zone-I (1.8 Ha), Zone-II (1.7 Ha) & Zone-III (1.1 Ha) for identifying existing plantation and in to 3 Pockets (Pocket A, B & C) for showing proposed plantation. • From data in above Tables, existing GB at industry works out to be 7.1 Ha [1.8 Ha (Zone-I) + 1.7 Ha (Zone-II) + 1.1 Ha (Zone -III) + 0.6 Ha (Miscellaneous Areas) + 1.9 Ha (New Plantation in the Zones)]. • In the said GB area, 12,350 trees are present. • PP had planted **9,200 trees** till date, subsequent to taking over possession of the industry in Dec. 2019. • Hindrance of COVID-19 lockdowns in 2020 & 2021 adversely affected the PP's planning not only of GB augmentation but also of industrial infrastructure development. Despite this, in last monsoon, industry took steps towards planting more trees to enhance GB in the premises. However, while doing this, certain plant species that are not as per CPCB guidelines were planted by our industry. This happened inadvertently in the haste w.r.t. procuring trees from nurseries to take advantage of monsoon months when the survival rate of plants is more. Here, our consultant also warned us regarding the type, nature & age of trees to be planted for developing GB. • As directed during EAC Meeting, the industry now will go for tree plantation with species that are strictly as per stipulations mentioned in the Report - Guidelines for Development of GB by CPCB, March 2000. • Photographs of plantation under existing GB are presented. Detailed future GB plan is submitted with timeline & costing. Also,

No.	ADS by MoEFCC	Reply by PP
		demarcation of the GB areas is shown on layout of the Industrial Plot. • The above trees will be planted on areas marked in Figure -1 as Pocket-A, Pocket-B & Pocket-C. Here, an aggregate area of 3.90 Ha is available as vacant place for the entirely new mass plantation whereupon as many as 9,800 trees will be planted. • Further, for GB densification in Zone-I, Zone-II & Zone-III as well as GB along internal roads, around parking places & bagasse yard and peripheral places of the Industry Plot (to achieve density of 2500 Trees/Ha); 19,750 new trees will be planted. • As directed by Hon. Committee Members, proposed plantation for augmentation, densification & development of new Green Belt will comprise mostly indigenous, evergreen, semi-evergreen & specific tree species for control of dust, SO_2 and noise. • Also, for better survival of trees, drip irrigation will be provided as per the present practice adopted in the industry. As advised by Hon. Committee Members, Industry will grow plants which are suitable for this region. • Thus, as many as 29,550 new trees will be planted in next 6 Months for achieving the GB Density of 2500 Trees/Ha. • Here, Rs. 2.5 Cr. will be spent on the new GB plantation. The plants will be periodically & adequately supplied with fertilizer doses. No tree cutting will be done during any period of expansion project implementation. • Moreover, detailed progress report w.r.t. the Green Belt implementation including photographic evidences will be submitted to the Ministry once in three months period (two reports).

No.	ADS by MoEFCC	Reply by PP
2	PP shall submit the detailed point wise compliance report to the other non- compliance and 6 partial compliance observed by IRO in CCR.	Detailed point wise compliance report to the other non- compliance and 6 partial compliance observed by IRO in CCR is submitted.
3	The Committee noted that there is discharge of treated water from the existing and proposed sugar unit. The Committee suggested them to submit an action plan to utilize the treated effluent generated from the existing and proposed sugar unit for the proposed distillery. Accordingly, water balance to be modified.	• As per discussion happened during the meeting, industry will further upgrade the existing ETP by providing advanced tertiary treatment in the form of UF & RO Plant. This will enable subsequent improvement in quality of the effluent thereby rendering the same fit for reuse in Sugar Factory. Revised ZLD Plan of entire Sugar Factory complex & Distillery Water Balance is submitted. • As committed during the meeting, no any discharge of effluent will be let outside the industrial premises.
4	It was informed that wet scrubber to be replaced by ESP. Accordingly, it was suggested to carry out incremental GLC of the existing boiler to understand the impact on air quality after modification.	As per the suggestion of EAC committee, the GLC of the existing Boilers of 28 TPH & 55 TPH after removing of existing 'Wet Scrubber' and introduction of 'ESP' to understand the impact on air quality is submitted.
5	Risk assessment to be carried out and mitigation measure to contain the fire impact within the boundary of the project site to be proposed.	The requisite details w.r.t. risk assessment and mitigation measures are presented. As discussed & directed during the meeting, the location of Alcohol Storage Area was given a revised though & same has been changed now so as to contain the expanse of threat zone within the industry premises. Thus, after the relocation of proposed alcohol storage area, in case of any disaster happening, no risk causing factors will go beyond the plot of sugar factory where dense population resides.

No.	ADS by MoEFCC	Reply by PP
6	Accordingly revised EMP report alongwith budget earmarked for EMP and recurring cost to be submitted.	Revised EMP report alongwith budget earmarked for EMP and recurring cost is submitted**.**

Time Line for Trees to be planted under Proposed Green Belt is as given below:

No.	Month & Year	No. of Trees
1	February 2023	6,000
2	March 2023	6,000
3	April 2023	4,550
4	May 2023	3,000
5	June 2023	3,000
6	July 2023	7,000
	Total	29,550 Nos.

Industry Plot is divided in to 3 Zones : Zone-I (1.8 Ha), Zone-II (1.7 Ha) & Zone-III (1.1 Ha) for identifying existing plantation and in to 3 Pockets (Pocket A, B & C) for showing proposed plantation.

Here, Rs. 2.5 Cr. will be spent on the new GB plantation. The plants will be periodically & adequately supplied with fertilizer doses. No tree cutting will be done during any period of expansion project implementation.

EAC found the response submitted by PP for ADS satisfactory.

The Project Proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. (NABET Certificate no. : NABET/EIA/2124/SA 0177 and validity 10.10.2024) 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 Distillery (105 KLPD to 350 KLPD) for Ethanol Production by using C / B Heavy Molasses/ Cane Juice along with Enhancement in Cane Crushing (4,900 TCD to 10,000 TCD) & Capacity of Cogeneration Plant (14.5 MW to 42 MW) located At.: Pimpalwadi (Sakharwadi), Tal.: Phaltan, Dist.: Satara, Maharashtra State by M/s. Shri Dutt India Pvt. Ltd. (SDIPL).

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

The details of products and capacity as under:

No.	Name of unit	Name of the product/byproduct	Existing Production capacity	Additional production capacity	Total production capacity
1	Distillery	Molasses/ Sugarcane Syrup based: **RS / ENA**	105 KLPD	-	105 KLPD
		C & B Molasses / Sugarcane Syrup based: **Ethanol**	105 KLPD	245 KLPD	350 KLPD
2	Co-generation power plant	Power	14.5 MW	10.0 MW	24.5 MW
3	Sugar mill	Sugarcane juice / syrup	4,900 TCD	5,100 TCD	10,000 TCD
4	Fermentation unit	Carbon dioxide	87 TPD	176 TPD	263 TPD
5	ATFD	Conc. Spentwash Powder	127 TPD	73 TPD	200 TPD

Note: Capacity of distillery shall not exceed 350 KLPD.

Ministry has issued Environmental Clearance to the existing Industry for Establishment of 105 KLPD Molasses/ Cane Juice vide File No. F. No. J-11011/115/2020-IA-II (I) dated 04.02.2021 Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Nagpur vide File No-EC-1292/RON/2021-NGP/9384 dated 02.03.2022.

Action Taken report has been submitted to IRO, MoEFCC; Nagpur dated 11.05.2022 for 2 Non-Compliance & 6 partial compliance. With regard to allocation pertains to Sugar Plant and not for distillery, PP informed that most of the water requirement is being made from the recycling water of sugar unit. PP has presented compliance report to the other non – compliance and 6 partial compliance points. EAC found the information satisfactory.

Existing Sugar Factory & Co-gen Plant is operational on the basis of Consent to Operate because the sugar factory crushing capacity is 4900 TCD & C-gen plant capacity is 14.5 MW. Hence, Environmental Clearance is not applicable. Latest CTO (air and water) has been issued on 17.09.2022 and is valid till 31.07.2023. Certified CTO compliance report has been issued dated 24.05.2022 from Sub-Regional Officer; MPCB, Satara (MS). EAC found the information satisfactory.

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project.

Total plant area after expansion will be 48.82 Ha (existing plant area - 32.89 Ha and additional land required – 15.93 Ha. for proposed capacity) which is under possession of the company and converted to industrial use. Out of the total plant area, 16.3 Ha. i.e. 33% of total plant area is to be under green belt. 7.1 Ha. i.e. 15% of the total plant area has already been developed as green belt and 9.2 Ha. i.e. 18% of total plant area will be developed under greenbelt & plantation in and around plant premises. The estimated project cost is Rs 305 Crores. Capital cost of EMP would be Rs. 35 Crores and recurring cost for EMP would be Rs. 4.0 Crores per annum. Industry proposes to allocate Rs. 3.1 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 765 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Protected Forest is at 4.3 Km; NE & 4.6 Km; SW from project site. Nira Right Bank Canal is at 1.5 Km; South from project site. Nira River is flowing at a distance of 2.7 Km from West to East direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.395 µg/M^3, 0.099 µg/M^3, 2.802 µg/ M^3 and 0.214 µg/ M^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 1099 M^3 /day (sugar mill 27 M^3/day and distillery 1072 M^3/day) which will be met from Nira Right Bank Canal. NOC has been obtained from Irrigation Dept.; Maharashtra vide letter no. 1814/ Year 2020 dated 29.05.2020 for the sugar unit. Existing effluent generation is 305 M^3/day from sugar mill treated in full-fledged ETP and 1056 M^3/day from distillery which is treated existing Condensate Polishing Unit (CPU). Proposed total effluent generation from sugar factory after expansion will be 694 M^3/day which will be treated in existing ETP (capacity 750 M^3/day) and that from the distillery will be 3101 M^3/day which will be treated through existing CPU (capacity – 1200 M^3/day) & Proposed CPU (capacity – 3000 M^3/day). In molasses based & Sugarcane Syrup operation, spent wash generated from the analyzer column during distillation will be concentrated in Multi Effect Evaporator and concentrated spent wash will be dried in ATFD to form powder (For 250 KLPD) & Incinerated in Incineration Boiler (For 100 KLPD). Domestic waste water will be treated in STP (Capacity of STP in 30 KLD). The plant is being based on Zero Liquid discharge system and treated effluent/water is not to be discharged outside the factory premises.

Total power requirement of distillery & sugar mill after expansion will be 19.3 MW which will be sourced from 42 MW co-generation power plant. Existing sugar mill has 28 TPH, 55 TPH & 140 TPH bagasse fired boilers. 40 TPH Spentwash & Coal/ bagasse fired boiler will be installed in distillery. Individual Wet Scrubbers as APCE with a common stack height of 40 M are installed with 28 TPH & 55TPH capacity boilers while ESP with a stack height of 72 M is installed with the existing 140 TPH boiler for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm^3. APCE as ESP with a stack height of 85 M will be installed with the proposed 40 TPH Spentwash & Coal/ bagasse fired boiler for controlling the particulate matter emissions within the statutory limit of 30 mg/Nm^3. Industry has existing 500 KVA & 380 KVA, proposed 750 KVA (2 nos.) DG sets which will be used as

standby during power failure and stack height (5 M, 3 M, 5 M & 5 M) are provided as per CPCB norms to the DG sets.

Details of Process emissions generation and its management:

- APCE as two Wet Scrubbers with a common stack of 40 M height is installed for the existing 28 TPH & 55 TPH boilers & ESP with a stack of 72 M height is installed for the existing 140 TPH boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. APCE as ESPs with a stack of height of 85 M will be installed for proposed 40 TPH Incineration boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3.
- Online Continuous Emission Monitoring System is installed with the stack and data transmitted to CPCB/SPCB servers.
- CO_2 (263 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and /collected in installed bottling plant.

Details of solid waste/Hazardous wastegeneration and its management:

- Concentrated spent wash (400 M^3/day) from 250 KLPD distillery will be converted to powder by ATFD & Remaining Concentration Spentwash (160 M^3/day) from 100 KLPD distillery will be Incinerated in Incineration boiler.
- Boiler ash (2070 TPM) from Bagasse fire boiler after expansion will be Used as Manure / Given for brick manufacturing. Also, Spentwash & Coal ash from distillery boiler after expansion (1440 TPM) will be Used in Potash recovery/ Given for brick manufacturing.
- Used oil (0.7 MT/M) will be sold to authorized recycler.
- CPU sludge (93 MT/M) and STP Sludge (1 MT/M) will be Used as manure
- Press mud (12,000 MT/M) will be used as manure in sugar mill.
- Bagasse (90,000 MT/M) will be used as fuel in sugar mill.
- Molasses (5,880 MT/M) will be used as raw material in 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 expansion capacity of 245 KLPD & 5100 TCD will be used for manufacturing fuel ethanol only.

Capital cost and recurring cost of EMP are given below:

Sr. No.	Description	Capital Cost in Crores Recurring Cost	Recurring Cost in Crores /Annum
1.	APC: (ESP & Stack of height 85 M) & OCMS, 2 ESPs replacing WS	15.50	2.00
2.	WPC: Distillery CPU, Sugar CPU, STP, MEE, Spentwash Tank & OCMS	15.00	1.50
3.	Noise Pollution Control	0.50	0.05
4.	Environmental Monitoring & Management	0.50	0.05
5.	Occupational Health & Safety	1.00	0.10
6.	Green Belt Development	2.50	0.30
	Grand Total	**Rs. 35 Cr.**	**Rs. 4.0 Cr.**

Details of CER with proposed activities and budgetary allocation:

Sr. No.	Proposed Activity	Proposed Budget in Lacs
1.	**Non- Conventional Energy Promotions** (5 Villages; Sakharwadi, Phadtarwadi, Khamgaon, Kharadewadi, Suravadi): Provision of Solar Street Lights with Gadget – 1 MS Pole, 18-20 W LED Lamp, Battery, Solar Panel, Wiring etc. 5 Villages X 40 Nos./Village = Total 200 Solar Street Lights X Rs. 30,000/- per No. = **Rs. 60 Lakhs**	Rs. 60
2.	**Solar Photovoltaic Electricity Generation System:** 400 KW @ Rs.40,000 per KW to be installed at Grampanchayat, School Bldg. & PHC Bldg. Cost: 400 KW x Rs. 40,000/- = **Rs. 160 Lakhs**	Rs. 160
3.	**Drinking Water Supply Infrastructure** (10 Villages): Safe Drinking Water Units with Filtration,	Rs. 90

	RO Module & Storage Tank (1 Unit/ Village @ 500 Lit/Hr) - 30 Units X Rs. 3 Lakhs = **Rs. 90 Lakhs**	
	Grand Total	**Rs. 310 Lakhs**

During deliberations, EAC discussed following issues:

- PP shall submit Traffic Management Plan. Accordingly, PP has submitted traffic management plan. The impact of vehicular emissions on the ambient air quality has not been assessed in modelling
- PP shall submit the detailed breakup of Steam Balance for Sugar Factory, Cogeneration Plant & Distillery. Accordingly, PP has submitted steam balance report.
- PP shall submit ambient noise level data on surrounding environment in study area.
- Green Belt shall be intensified along the plot boundaries of the industry. An attention shall be given that the GB along industry plot periphery will comprise of 3 to 4 rows of trees.
- PP shall ensure Green Belt shall be intensified along the plot boundaries of the industry and 3 to 4 rows of trees.
- As per direction of the EAC, the Industry hereby gives a commitment that through the proposed spentwash incineration boiler of 40 TPH capacity; power generation of 5 MW will take place and for the existing 140 TPH Boiler; one new 5 MW turbine will be fitted. Thus, there will be increase of 10 MW only over & above the present Cogeneration Plant Capacity of 14.5 MW. Hence, after the expansion of Distillery under B2 Cat. for Ethanol manufacturing; the eventual capacity of power generation under cogeneration activity will be 24,5 MW. Here, the entire power generation of 24.5 MW will take place through existing Sugar Factory Boilers (28 TPH, 55 TPH & 140 TPH). Thus, no any new boiler will be added in Sugar Factory under expansion.
- Commitment given by Industry, the bagasse storage area near boiler shall be provided with a permanent type structure comprising of covered shed made out of MS fabrication, GI & PUF cladding from sides and GI sheet roofing. Accordingly, the dedicated storage area of about 2,511 Sq. M. shall be provided.
- Wet scrubber connected with the existing 28 TPH and 55 TPH

boilers shall be replaced by the efficient ESP to meet the particulate emission within the norms of 30 mg/m^3.

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

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 245 KLPD & 5100 TCD 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). As proposed, Cogeneration power plant capacity after expansion will be increased from 14.5 MW to 24.5 MW.

(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). 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. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(v). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface water for the distillery activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.

(vi). Total fresh water requirement after expansion of sugar, distillery and cogeneration power plant shall not exceed 1099 m^3/day, which will be met from Nira Right Bank Canal. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vii). In molasses based & Sugarcane Syrup operation, spent wash generated from the analyzer column during distillation will be concentrated in Multi Effect Evaporator and concentrated spent wash will be dried in ATFD to form powder (For 250 KLPD) & Incinerated in Incineration Boiler (For 100 KLPD). Effluent from the sugar unit will be treated in the ETP and treated effluent shall be utilised in the distillery process. The MEE condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). STP of 30 KLD capacity shall be installed to treat domestic wastewater. The sugar, distillery and cogeneration power plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(viii). Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be conducted on monthly basis and report submitted to SPCB and RO, MOEFCC. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office.

(ix). As proposed, PP shall replace existing wet scrubber to ESP for the existing 28 TPH & 55 TPH Boilers to meet particulate emission within 50 mg/Nm^3. ESP alongwith stack of 85 m will be installed with proposed 40 TPH boiler incineration boiler for controlling particulate emission within 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(x). Boiler ash (2070 TPM) from Bagasse fire boiler after expansion will be used as Manure / given for brick manufacturing. Also, Spentwash & Coal ash from distillery boiler after expansion (1440 TPM) will be Used in Potash recovery/ Given for brick manufacturing. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(xi). CO_2 (263 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and /collected in installed bottling plant.

(xii). PP shall allocate at least Rs. 1.0 Crore/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.

(xiii). 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.

(xiv). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xv). 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.

(xvi). 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.

(xvii). The green belt of at least 5-10 m width has already been developed in 16.3 hectares i.e., 33 % of total project area shall be maintained with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. As proposed, PP shall develop greenbelt as per month-wise action plan submitted for 3 Zones i.e. Zone-I (1.8 Ha), Zone-II (1.7 Ha) & Zone-III (1.1 Ha).

(xviii). PP proposed to allocate Rs. 3.1 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xix). 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.

(xx). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xxi). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xxii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxiii). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 02

Proposed 200 KLPD grain-based Fuel Ethanol plant and 1 x 6.0 MW of captive power plant (Biomass/coal), located at Survey No.s: 524/1, 524/2, 526, 538/1, 538/2, 542 Peddavaram Village, Nandigama Mandal, NTR District, Telangana by M/s. Venkata Sudheer Bio Products Private Limited – Re-consideration of Environmental Clearance.

[IA/AP/IND2/401224/2022, IA-J-11011/390/2022-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its EAC meeting ID: IA/IND2/13429/24/01/2023 held on 24th - 25th January, 2023 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

S.NO	ADS by MOEFCC	Reply of PP
1.	The Committee noted that there are discrepancies in the layout map and KML file provided to the members which are not matching.	They have submitted the updated Google map showing the project site and Plant lay out for your kind reference.
2	The Committee suggested that	They have confirmed that source of

	PP shall meet the fresh water requirement from surface water instead of ground water.	water will be Krishna river only. We will obtain the permission from Irrigation Department, Govt. of Andhra Pradesh before commissioning of the Project.
3	NOC to be obtained from Revenue Department for road passing through the plot area	The road passing through the site is formed due to the movement of the private vehicles and people. They have obtained NOC from the Village Revenue officer, Revenue Department, Govt. of Andhra Pradesh confirming that there is no official road is passing through the proposed project site.
4	Filter Press shall be installed in place of Sludge drying beds proposed in the waste water treatment system.	They confirmed that they will install Filter Press in place of Sludge drying beds proposed in the waste water treatment system.
5	Solar Panels shall be installed for generation of 15 % of the total power requirement of the plant.	They confirmed that 15 % of the total power requirement will be met through Solar energy.
6	List of plant species to be planted for the proposed greenbelt along with action plan to be provided.	Total greenbelt area proposed is 7 acres. They propose to plant 7000 nos. of plants as a part of Greenbelt development The following plants will be grown as a part of Greenbelt development ➢ *Albizialebbeck* ➢ *Anthocephaluscadamba* ➢ *Artocarpusheterophyllus* ➢ *Azadirachtaindica* ➢ *Ficusreligiosa* ➢ *Mangiferaindica* ➢ *Meliadubia* ➢ *Mimusopselengi* ➢ *Pongamiapinnata*

		➢ *Samaneasaman* ➢ *Swieteniamacrophylla* ➢ *Syzygiumcumini* ➢ *Terminaliaarjuna* ➢ *Terminaliabellirica* ➢ *Terminaliacatappa* *Local DFO will be consulted for selecting the native plant species.*
7	Details of CER to be revised after removing mineral water plants.	We are here with submitting the revised CER budget proposal for your kind reference.

EAC found the response submitted by PP for ADS satisfactory.

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited (NABET / EIA/ 1922 / SA 0148 valid upto 11-03-2023) , made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 200 KLPD grain-based Fuel Ethanol plant and 1 x 6.0 MW of captive power plant (Biomass/coal), located at Survey No.s: 524/1, 524/2, 526, 538/1, 538/2, 542 Peddavaram Village, Nandigama Mandal, NTR District, Telangana by M/s Venkata Sudheer Bio Products Private Limited.

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.

The details of products and capacity as under:

S.	NAME OF	NAME OF THE PRODUCT	PRODUCTION

NO.	UNIT		CAPACITY
1	Distillery plant	Ethanol	200 KLPD
2	Power plant	Electricity	6.0 MW
BY-PRODUCTS			
1	Distillery plant	DDGS	160 TPD
2	Distillery plant	CO_2 recovery	152 TPD

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project.

Total land required is 8.41 Ha. (20.80 acres). Greenbelt will be developed in total area of 2.83 Ha. (7.0 acres) i.e 33 % of total project area. The estimated project cost is Rs. 248.9 crores. Capital cost of EMP would be Rs. 32.9 crores and recurring cost of EMP would be Rs. 2.64 Crores per annum. Industry proposes to allocate Rs. 2.50 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment will be 150 persons.

There are no National parks / Wild life sanctuaries, Biosphere Reserves, Tiger reserves / Elephant reserves, Wildlife corridors etc. within 10 Km radius of project site. Venkataya palem RF is at a distance of 3.0 Kms, Jaggayyapeta RF is at a distance of 2.0 Kms, Gudimetla RF is at a distance of 5.9 Kms and Krishna river is at a distance of 1.6 Kms. Few tanks/ ponds are present within 10 Km. radius of the project site. As per topo map 2 streams are passing through the site but nothing in the project site. Water Resources Department Govt. of Andhra Pradesh has issued NOC duly confirming that there are no streams passing through the project site vide letter no. EE/SPL/VJA/DB/TO/37 dated 13-01-2023.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.1 µg/m^3, 0.1 µg/m^3, 0.4 µg/m^3, and 0.4 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The net resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 800 m^3/day which will be sourced from Ground water & Surface water. Application has been submitted to SGWB for drawing Ground water & Irrigation Department, Govt. of Andhra Pradesh for drawing water from Krishna river. Effluent

(Condensate/spent lees/blow down etc.) of 1183 m^3/day quantity will be treated through Condensate Polishing Unit of capacity 1200 KLPD. Raw stillage (1200 KLPD quantity of raw spent wash from distillation) will be treated in decanter followed by MEE and then dryer to produce DDGS. STP of capacity 10 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

The power requirement will be 6 MW and will be met from the proposed 1 x 6.0 MW captive power plant. 1 x 50 TPH Biomass / Coal fired boiler will be installed. APCE Electro Static Precipitator with a stack height of 59 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler. 2 x 1000 KVA DG set will be used as standby during power failure and stack height (3 m above building) will be provided as per the CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP (5- fields) with a stack height of 59 meters will be provided to boiler for effective dispersion of sulphur dioxide emission into the atmosphere.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 generated (152 TPD) during the fermentation process will be collected by utilizing CO2 scrubbers and sold to authorized vendors (dry ice manufacturers/soft drink manufacturers).

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

- DDGS (Distilled Dried Grains Stillage) of 160 TPD will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (110.4 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.3 TPD) and STP Sludge (0.08 Kg/day) will be used as manure.

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 200 KLPD will be used for manufacturing fuel ethanol only.

Total land of 8.41 Ha. (20.80 acres) is registered with the company name and entire land is converted to non agricultural land. EAC found the response satisfactory.

Details of capital and recurring cost of EMP:

S.NO	ITEM	Capital Cost (Rs in Crores)	Recurring cost (Rs in Crores/Annum)
1.	Air emission control systems (ESP, stack, bag filters, dust suppression, etc.)	4.00	0.50
2.	Ash handling & management	2.40	0.60
3.	Effluent Treatment Plant	22.00	1.00
4.	Fire fighting	1.50	0.1
5.	Online monitoring equipment (CEMS& OEMS)	0.50	0.25
6.	Greenbelt development	0.50	0.04
7.	Occupational Health & Safety	2.00	0.15
TOTAL		**32.9**	**2.64**

Details of CER activities:

S.NO.	Proposed Activity	Proposed Budget (Rs. in Crores)
1	Community & Infrastructure Development such as strengthening of village roads **in Peddavaram village, Cheruvukommupalem village, Ramanayyapeta village & Konayapalem village**	0.40
2	**for Health & Hygiene of the community** (Potable Water plants, construction toilets in **Peddavaram village, Cheruvukommupalem village,**	0.60

	Ramanayyapeta village & Konayapalem village)	
3	**Skill Development** **A Community Centre will be established in Konnayapalem village which will consist of the following:** i)Vocational Training Institute with latest tools, machinery & softwares etc. for making them Industry ready. ii)Workshop centre with latest tailoring machines for training women (like tailoring, stitching etc.) iii)Skill development / Computer / IT Training Centre for improving computer knowledge and making Industry ready.	1.00
4	**for Education & Sports** (Construction of class rooms in schools, providing computers in class rooms, development of library facility in **Peddavaram village, Cheruvukommupalem village, Ramanayyapeta village & Konayapalem village)**	0.50
	Total	**2.50**

During deliberations, EAC discussed following issues:

- CER budget shall be increased to Rs. 2.50 Crores. Accordingly, revised details shall be submitted.
- PP shall confirm that source of water shall be Krishna river and shall be used only after necessary approval.
- 15% of the total power requirement shall be met through Solar energy.
- PP shall confirm the fuel for Boiler will be combination of Biomass and Coal. Coal quantity will not be more than 15% of the total fuel requirement on annual basis.
- PP shall confirm that they shall provide filter press instead of sludge drying beds in the proposed CPU.

- Fly ash generated from the Boiler shall be utilized in the Brick manufacturing unit proposed in the site premises.

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

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 200 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). 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. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.

(v). Total fresh water requirement shall not exceed 800 m^3/day, which will be sourced from Irrigation Department, Govt. of Andhra Pradesh for drawing water from Krishna river. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water

storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). 10 KLPD STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(vii). ESP (five fields) with a stack height of 59 meters will be installed with the 50 TPH Biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually. As proposed, coal quantity will not be more than 15% of the total fuel requirement on annual basis.

(viii). Boiler ash (110.4 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant 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 by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.

(ix). CO_2 (152 TPD) generated during the fermentation process is being/will be collected by utilizing CO_2 scrubbers and sold to authorized vendors/collected in proposed bottling plant.

(x). PP shall allocate at least Rs. 2 Crore/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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed 2.83 hectares i.e., 33.0 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.

(xvi). PP proposed to allocate Rs. 2.50 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). 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.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 03

Proposed 100 KLPD Grain based Ethanol Plant & 2.5 MW Co-generation power plant (fuel to be used) located at Village Tatiparthi, Tehsil Thottambedu, District Tirupati (Erstwhile Chittoor) District, State Andhra Pradesh by M/s. Obel Agro Industries Private Limited – Consideration of Environmental Clearance.

[IA/AP/IND2/414483/2023, IA-J-11011/352/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. SV Enviro Labs & Consultants (NABET certificate no. NABET/EIA/2124/RA0240 and validity 24.10.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 100 KLPD Grain based Ethanol Plant & 2.5 MW Co-generation power plant (fuel to be used) located at Village Tatiparthi, Tehsil Thottambedu, District Tirupati (Erstwhile Chittoor) District, State Andhra Pradesh by M/s. Obel Agro Industries Private Limited

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.

The details of products and capacity as under:

S. No.	Name of the unit	Name of the product/ by-product	Production Capacity
1.	Distillery (Grain as Raw material)	Ethanol	100 KLPD
2.	Co-generation power plant	Power	2.5 MW
3.	DWGS Drier	DDGS	48.0 TPD
4.	Fermentation Unit	Carbon di-oxide	75.0 TPD

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project.

Total land area required is 8.15 hectares. Greenbelt will be developed in total area of 2.72 hectares i.e., 33 % of total project area. The estimated project cost is Rs. 102.0 Crores. Capital cost of EMP would be Rs. 19.85 Crores and recurring cost for EMP would be Rs. 1.81 Crores per annum. Industry proposes to allocate Rs. 1.0 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 120 persons as direct & indirect

There are no National parks / Wild life sanctuaries, Biosphere Reserves, Tiger reserves / Elephant reserves, Wildlife corridors etc. within 10 Km radius of project site. Anjuru Reserve forest at a distance of 8.25 km due SE. Telugu Ganga Canal is at a distance of 265 meters due North direction for which NOC obtained from NTR TGP Division Srikalahasti vide vide leter No. EE/TGP Dvn/SKHT/AEE (T)/No. 23 M Dated: 17.01.2023 for establishing the industry with certain conditions. Dry Tank – 0.6 km – NE; Gumadigunta Cheruvu – 1.00 km – SE; Punabaka Cheruvu – 3.65 km – NE; Pedda Kanali Cheruvu – 2.00 km – SW; Swarnamuki River – 6.55 km – North & West are located within 10 km distance.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.74 µg/m^3, 0.49 µg/m^3, 1.69 µg/m^3 and 1.85 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement will be 1765 m^3/day (Fresh Water – 395 m^3/day & Recycled Water – 1370 m^3/day) which will be met from Surface Water. NOC has been obtained from surface water from NTR TGP Division Srikalahasti vide Lr. No. EE/TGP Dvn/SKHT/AEE (T)/No. 478 SE Dated: 30.12.2022. Effluent (Condensate/spent lees/blowdown etc.) of 637 m^3/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 700 m^3/day. Raw stillage (772 KLPD: quantity of raw spent wash

from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement during the operation phase will be 2.5 MW and will be met from cogeneration power plant (Captive Source). During the construction phase the power will be met through Andhra Pradesh State Power Distribution Corporation Limited (APSPDCL) for the same necessary permissions will be obtained. A 25.0 TPH (Rice Husk/Coal) fired boiler will be installed with Electros Static Precipitator as APCE with a stack height of 60 m for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler. A 1 x 1000 KVA DG set will be used as standby during power failure and stack height (7 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Electro Static Precipitator (5 fields) with a stack height of 60 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 (75.0 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant

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

- DDGS (Distilled Dried Grains Stillage) (48.0 TPD) will be sold as cattle feed/ fish feed /Prawn feed.
- Fly ash (30.0 TPD) will be supplied to brick manufacturers.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers. The CPU rejects will be used for Ash Quenching or returned back to MEE for further treatment.

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.

Total land of 8.15 Hectares is under possession of M/s. Obel Agro Industries Private Limited represented by its Director, Sri Obulu Reddeppa Reddy. Sale deed was executed on 23.09.2022 and Land conversion was completed vide proceedings No. D. Dis. (A)/807/2022 Dated: 12.12.2022. EAC found the response satisfactory.

Details of capital and recurring cost of EMP:

S. No.	Description	Capital Cost in Lakhs	Recurring Cost in Lakhs/Annum
1.	Air Pollution		
	Pollution Control Equipment for 25 TPH Boiler (ESP & Stack height – 60 meters)	200.0	12.0
	OCEMS	15.0	3.0
	Dust Suppression	--	3.0
2.	Water Pollution		
	Rain water collection pond along with peripheral pipeline network.	25.0	2.0
	CPU, MEE & RO	1600.0	120.0
3.	Noise Pollution		
	PPE (Ear Plugs, Ear muffs, Insulations, Barriers)	50.0	3.0
4.	Decanter, DWGS Handling, DDGS Drying, Handling, Storage, weighing bagging etc..,	60.0	5.0
5.	Environmental Monitoring & Management		
	Ambient Air, Stack, Noise, Soil, Water & Waste Water etc..,	--	20.0
6.	Landscaping/Green Belt Development		
	Plantation	15.0	5.0
7.	Occupational Health & Safety		
	Annual health Check-up, OHC, Fire Fighting	20.0	8.0
	Sub Total	**1985.0**	**181.0**

Details of CER activities:

S. No.	Activity	Budget
1.	Green Belt Development with maintenance along the	30.0 Lakhs

	approach road of Telugu Ganga Canal of 2.0 km stretch.	
2.	Collection of wet waste from Tatiparthi village in collaboration with gram panchayat for vermicomposting.	50.0 Lakhs
3.	Provision of Sanitation facilities (Toilets) in the Govt. school in Tatiparthi Village	10.0 Lakhs
4.	Solar System to the Govt. School in Tatiparthi Village	10.0 Lakhs
	Total	**100.0 Lakhs**

During deliberations, EAC discussed following issues:

- PP shall confirm that he would be utilizing only surface water. PP assured that 5 exiting bore wells would be closed.
- PP informed that biomass i.e. rice husk/bagasse (130 TPD) will be used as fuel for the proposed boiler and coal (100 TPD) will be used as an auxiliary fuel only. Imported coal will be used.
- Domestic waste water generated from the plant shall be 18.00 KLD, which will be treated in the aeration tank of Condensate Polishing Unit (CPU) and the treated water shall be used in the process and cooling tower make up.
- PP shall submit a revised EMP Budget & CER Activities plan.
- PP shall ensure that approach road to the project site to the nearest highway shall be maintained by the Industry.
- PP shall develop green belt of 2.72 Hectares (33.43%) and ensure plantation of 2500 plants per hectare.
- PP shall ensure that no recharge pit will be constructed within the plant premises. Rain water harvesting collection pit shall be installed to reuse the rain water in the manufacturing process.
- Culvert on the canal will be constructed without obstructing the flow of canal.

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

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). PP shall comply with the conditions stipulated in the NOC issued vide letter No. EE/TGP Dvn/SKHT/AEE (T)/No. 23 M Dated: 17.01.2023 for the canal flowing at a distance of 265 m .

(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. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(v). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.

(vi). Total fresh water requirement shall not exceed 395 m^3/day, which will be sourced from Surface water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vii). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used

as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). STP shall be installed to treat domestic wastewater. The plant shall be based on 'Zero Liquid Discharge' system and no effluent/treated water shall be discharged outside factory premises.

(viii). ESP (five fields) with a stack height of 60 meters will be installed with the 25 TPH Rice Husk/Coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(ix). Boiler ash (30 TPD) will be supplied to brick manufacturers. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.

(x). CO2 (75.0 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(xi). PP shall allocate at least Rs. 20 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.

(xii). 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.

(xiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiv). 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.

(xv). 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.

(xvi). The green belt of at least 5-10 m width shall be developed 2.72 hectares i.e., 33.0 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.

(xvii). PP proposed to allocate Rs. 1.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xviii). 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.

(xix). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xx). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xxi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxii). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 04

Proposed 50 KLPD Molasses/Sugar cane Juice based Distillery/Ethanol plant located at Village Balligeri, Tal. Athani, Dist. Belgaum, Karnataka by M/s. Sri Basaveshwara Sugars Ltd. – Consideration of amendment of Environmental Clearance

[IA/KA/IND2/ 244694/2021, IA-J-11011/67/2021-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. EC Identification No. EC22A022KA168908 dated 25th February, 2022 for the project proposed 50 KLPD Molasses/Sugar cane Juice based Distillery/Ethanol plant located at Village Balligeri, Tal. Athani, Dist. Belgaum, Karnataka by M/s. Sri Basaveshwara Sugars Ltd.

The project proponent has requested for amendment in the EC with the details are as under;

S. No	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons
1.	**Specific condition V.**	CO_2 bottling plant shall be installed within plant premises.	Carbon di oxide capturing and utilization (CCU) single vessel technology to convert liberated CO_2 from distillery into calcium carbonate ($CaCO_3$).	PP wants to change the technology proposed to scrub the liberated CO_2 from the distillery. As per the granted EC industry was going to bottle the liberated CO_2 from the distillery in the CO_2 bottling plant. Whereas, in the amendment industry wishes to propose Carbon di oxide capture and utilization (CCU) single vessel technology to convert liberated CO_2 from distillery into calcium carbonate ($CaCO_3$).

EAC found the justification for amendment sought satisfactory and recommended for amendment in EC as proposed by the project proponent.

After detailed deliberation, the Committee recommended the project proposal with additional conditions:

(i). The proposed carbon di-oxide capturing and utilizing (CCU) unit shall be installed as a pilot plant. The outcomes/performance of the pilot plant study for CUU unit shall be shared with the Expert Appraisal Committee (Industry-2).

(ii). ESP should be installed inplace of wet scrubber. ESP shall meet the particulate emissions within the statutory limit of 50 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(iii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(iv). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(v). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the

project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(vi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

All other terms and conditions issued vide EC Identification No. EC22A022KA168908 dated 25th February, 2022 remain unchanged.

Agenda No. 05

Proposed 300 KLPD Grain based Ethanol Plant & 7 MW Co-generation power plant (biomass based) located at village Balluana, Tehsil and District Bathinda, Punjab by M/s. WEWIN Biofuels. – Consideration of Environmental Clearance.

[IA/PB/IND2/400933/2022, IA-J-11011/389/2022-IA-II(I)]

The project proponent and the accredited Consultant M/s. Enviro Infra Solutions Pvt. Ltd. (NABET certificate no. NABET/EIA/1922/RA0157 and validity upto 14th May, 2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 300 KLPD Grain based Ethanol Plant & 7 MW Co-generation power plant (biomass based) located at village Balluana, Tehsil and District Bathinda, Punjab by M/s. WEWIN Biofuels.

PP has informed that total land of 6.55 Hectares is under possession of the company through a long-term lease deed valid for 25 years. EAC opined that its not feasible to establish a distillery project of 300 KLPD capacity in the proposed land area of 6.55 Hectares. In this regard, committee suggested that at least 21 Acre land is required for installation of distillery project of 300 KLPD capacity.

Further, EAC also noted that the Lease deed document is not clearly reflecting the name of company owners. Therefore, PP should furnish

complete land ownership document.

In view of above, committee suggested to return the proposal in present form. Accordingly, proposal was returned in present form.

Agenda No. 06

Greenfield Project of 120 KLD Grain Based Ethanol Plant along with 3.4 MW Co-generation Power Plant located at Plot No. 6, 7 & 8, Hargarh Industrial Area, Tehsil Sihora, Distt. Jabalpur, MP by M/s. Vardhinni Fuels Private Limited – Consideration of Environmental Clearance.

[IA/MP/IND2/414740/2023, IA-J-11011/362/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Ascenso Enviro Pvt Ltd (NABET certificate no. NABET/EIA/2124/SA 0175 and validity Dec 21,2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 120 KLPD Grain based Ethanol Plant & 3.4 MW Co-generation power plant (Biomass as rice husk, bagasse and agrowaste, and during unavailability of biomass, Coal will also use) located at Plot No. 6, 7 & 8, Hargarh Industrial Area, Tehsil Sihora, Distt. Jabalpur, MP by M/s. Vardhinni Fuels Private Limited.

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.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity

1	Distillery(using grains as Raw material)	Ethanol	120 KLPD
2	Co-generation power plant	Power	3.4 MW
3	DWGS dryer	DDGS	54 TPD
4	Fermentation unit	Carbondi-oxide	66 TPD

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project.

Total land area required is 5.5275 hectares. Greenbelt will be developed in total area of 1.92 hectares i.e., 33.0 % of total project area. The estimated project cost is Rs.125 Crores. Capital cost of EMP would be Rs. 7.15 Crores and recurring cost for EMP would be Rs.1.40 Crores per annum. Industry proposes to allocate Rs.1.25 Crores towards Extended EMP (Corporate Environment Responsibility).Total Employment will be 250 persons as direct & indirect.

There are NO national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserve forests/protected forests: Hargarh RF–Approx. 0.4 Km towards North & Dhanwani RF- 3.8 km in North East direction. The NIL national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. NBWL application has been submitted dated NA (if applicable). Water bodies: Heran River - Approx. 1.23 Km towards SSE & Belkund Nadi- Approx. 2.39 Km towards East etc. River Heran is at a distance of 1.23 Km.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 5.94µg/m3, 2.43µg/m3 and 3.14µg/m3 with respect to PM10, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards(NAAQS).

Total fresh water requirement will be 513 KLD which will be met from Hargarh Industrial Area, MPIDC. NOC for withdrawal of water from MPIDC has been obtained vide letter no.MP IDC/ROJ/Engg/2022/2467 Jabalpur dated 08.08.2022. Effluent (Condensate/spent lees/blowdown etc.) of 900

KLD quantity will be treated through Condensate Polishing Unit of capacity CMD. Raw stillage (950 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS.STP of capacity 10 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3.4MW and will be met from co-generation power plant. 34 TPH rice husk fired boiler will be installed. APCE ESP- with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. 1000 kVA DG set will be used as standby during power failure and stack height (14 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE ESP with a stack height of 60 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 (66 TPD) generated during the fermentation process will be collected by utilizingCO2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (54 TPD) will be sold as cattle feed/fish feed/prawn feed.
- Boiler ash (48TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/given to farmers to be used as manure.
- Used oil (0.5 Kilo litres per annum) will be sold to authorized recyclers.
- CPU sludge (65.2kg) and STP Sludge (10 kg) will be used as manure.

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.

Total land of 5.5275 Hectares is under possession of the company and project area comes in Industrial area.

Capital cost and recurring cost of EMP are given below:

S. No	Particulars	Capital Cost In Rs lacs	Annual Recurring Cost in Rs lacs
1	Air pollution control system ESP with 34 TPH boiler	150	25
2	Spent wash treatment including concentration using MEE (Multiple effect evaporator).	175	50
3	Scrubbing system, compressing system, liquefying system and storage for CO_2 removal	50	10
4	CPU (Condensate Polishing Unit)	60	10
5	Installation of Water treatment plant (RO)	35	5
6	Rainwater harvesting systems and STP	20	5
7	OCEMS- Online Continuous Emission/Effluent Monitoring System	20	5
8	Occupational Health Management	40	10
9	Green Belt Development	25	5
10	Environment monitoring	-	10
11	Solid/ hazardous waste management	15	5
12	CER	125	-
	Total	**715**	**140**

Details of CER with proposed activities and budgetary allocation:

Activities	1st Year (INRCr)	2nd Year (INRCr)	Expenditure (INRCr)
Infrastructure development in Govt schools & classroom development, Provision of digital education in school & laptop distribution, sanitation facilities, safe drinking water, Solar power installation in schools & Panchayat bhavan, rainwater harvesting system etc.	0.20	0.20	0.40
Health facilities- Distribution of medical instruments, oxygen	0.30	0.25	0.55

cylinders to nearby health centre and hospitals			
Solar Lightsin Villages	0.15	0.15	0.30
TOTAL			**1.25**

During deliberations, EAC discussed following issues:

- The Committee noted that the information circulated is entirely different, which uploaded on the website or presented by the Environmental Consultant. Committee recommended that matter may be referred to the QCI for necessary action.
- The Committee suggested to restrict the fresh water requirement upto 4 KL per KL of alcohol produced.
- PP shall furnish action plan for the greenbelt to be developed in 1 year instead of 5 years.
- Domestic wastewater shall not be treated in soak pit. PP shall propose STP.
- Steam balance to be provided.
- PP shall revise the EMP and CER.
- PP shall provide details of Fuel to be used in boiler.
- Risk assessment and Risk mitigation plan to be provided. The Committee deliberated the risk assessment report provided by the PP and found that the submitted report is not satisfactory. Accordingly, the Committee suggested to submit revise Risk assessment and Risk mitigation plan.

Accordingly, proposal was deferred for want of above additional information. Above all additional information shall be submitted online to the PARIVESH portal for further consideration by EAC.

<u>Agenda No. 07</u>

Expansion of Molasses based Distillery (30 to 300 KLPD) using C / B Heavy Molasses/ Cane Syrup for Ethanol Production along with 6 MW Captive Power Generation, Enhancement in Cane crushing (3,500 to 7,500 TCD) by M/s. Nira Bhima Sahakari Sakhar Karkhana Ltd. (NBSSKL); At: Shahajinagar, PO: Redni, Tal.: Indapur, Dist.: Pune, Maharashtra State - Consideration of Environmental Clearance.

[IA/MH/IND2/413481/2023, IA- J-11011/197/2008-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. (NABET Certificate no. : NABET/EIA/2124/SA 0177 and validity 10.10.2024) 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 existing Molasses based Distillery unit from 30 to 300 KLPD using C / B Heavy Molasses/ Cane Syrup for Ethanol Production along with 6 MW Captive Power Generation, Sugar Mill from 3,500 to 7,500 TCD located At: Shahajinagar, PO: Redni, Tal.: Indapur, Dist.: Pune, Maharashtra State by M/s. Nira Bhima Sahakari Sakhar Karkhana Ltd. (NBSSKL).

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

The details of products and capacity as under:

No.	**Name of unit**	**Name of the product/byproduct**	**Existing Production capacity**	**Additional production capacity**	**Total production capacity**
1	Distillery	Ethanol	30 KLPD (C Heavy Molasses based)	270 KLPD (C/B-Heavy Molasses / Sugar Syrup)	300KLPD (C/B-Heavy Molasses / Sugar Syrup)
		RS / ENA	30 KLPD (C-Molasses	---	30 KLPD (C-Molasses

			based)		based)
2	Co-generation power plant for Distillery	Power	--	6 MW	6 MW
	Co-generation power plant for sugar mill	Power	18 MW	-	18 MW
3	Sugar mill	Sugarcane juice / syrup	3,500 TCD	4,000 TCD	7,500 TCD
4	Fermentation unit	Carbon dioxide	23 TPD	202 TPD	225 TPD
5	Bio-composting unit	Bio-compost	34,993 MT/D	-	34,993 MT/D

Note: capacity of distillery shall not exceed 300 KLPD.

Ministry has issued Environmental Clearance to the Establishment of 30 KLPD Molasses based Distillery vide File No. F. No. J-11011/197/2008-IAII (I) dated 17.03.2009 & Establishment of 18 MW bagasse based Co-generation Power Plant vide File No. SEAC-2012/CR-177/TC2 dated 21.01.2014. Certified Compliance report of existing ECs have been obtained from Integrated Regional Office, MoEFCC, Nagpur vide File No-5-169/2009 (ENV)/10885 dated 06.01.2023. Action Taken report has been submitted to IRO; MoEFCC 16.01.2023 for 2 partial compliance and 1 non-compliance.

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project.

Total plant area after expansion will be 43.52 Ha which is under possession of the company and converted to industrial use. No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area, 14.60 Ha. i.e. 33% of total plant area is to be under green belt. 12.60 Ha. i.e. 29% of the total plant area has already been developed as green belt and 2.00 Ha. i.e. 4% of total plant area will be developed under greenbelt & plantation in and around plant premises. The estimated project cost is Rs 290 Crores. Capital cost of EMP would be Rs. 38.75 Crores and recurring cost for EMP would be Rs. 3.84

Crores per annum. Industry proposes to allocate Rs. 3.12 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 1053 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, ESZ, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Reserve Forests/Protected Forests etc. within 10 km distance. Bhima River is flowing at 8 Km from North to South direction. Nira River is flowing at 5.5 Km from west to East direction. NOC vide letter No. PID/PB-6/33/2022 dated 30.09.2022 issued by Asst. Supritending Engineer, Pune Irrigation Circle, Pune with certain conditions for left Nira Canal has been submitted by PP.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.667 µg/M^3, 0.167 µg/M^3, 3.75 µg/ M^3 and 0.209 µg/ M^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 1124 M^3 /day (sugar mill 10 M^3/day and distillery 1114 M^3/day) which will be met from Bhima River. NOC has been obtained from Irrigation Dept.; Maharashtra vide letter no. AY101482 dated 01.11.2021. Existing effluent generation is 268 M^3/day from sugar mill treated in full-fledged ETP and 59 M^3/day from distillery which is treated existing ETP under Sugar Factory. Proposed total effluent generation from sugar factory after expansion will be 472 M^3/day which will be treated in existing ETP (capacity 700 M^3/day) and that from the distillery will be 2565 M^3/day which will be treated through proposed CPU (capacity – 3000 M^3/day). In molasses based & Sugarcane Syrup operation, spent wash generated from the analyser column during distillation will be concentrated in Multi Effect Evaporator and concentrated spent wash will be incinerated in incineration boiler. Domestic waste water will be treated in existing STP (Capacity of STP in 30 KLD). The plant is being based on Zero Liquid discharge system and treated effluent/water is not to be discharged outside the factory premises.

Total power requirement of distillery & sugar mill after expansion will be 19.2 MW which will be sourced from existing 18 MW Co-generation power plant & 6 MW Captive Power generation. Existing sugar mill has 66 TPH & 40 TPH bagasse fired boilers. Proposed 30 TPH bagasse fired boiler & 70 TPH Incineration boiler will be installed under Sugar Factory & Distillery

respectively. APCE as ESP & Wet Scrubber with a stack of height of 75 M & 60 M are installed with the existing 66 TPH & 40 TPH boilers respectively for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3. APCE as 2 separate ESPs with a stack height of 70 M & 100 M will be installed to proposed 30 TPH & 70 TPH boilers for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 & 30 mg/Nm^3 respectively for the proposed boilers. Industry has already 500 KVA DG set which is used as standby during power failure and stack height (14 m AGL) is be provided as per CPCB norms to the DG sets.

Details of Process emissions generation and its management:

- APCE as ESP & Wet scrubber with a stack height of 75 M & 60 M is installed with the existing 66 TPH & 40 TPH boilers for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. APCE as two separate ESPs with a stack of height of 70 M & 100 M will be installed with the proposed 30 TPH & 70 TPH boilers for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 & 30 mg/Nm^3 for the proposed boiler respectively.
- Online Continuous Emission Monitoring System is installed with the stack and data transmitted to CPCB/SPCB servers.
- CO_2 (225 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and /collected in installed bottling plant.

Details of solid waste/Hazardous wastegeneration and its management:

- Concentrated spent wash (480 M^3/day) will be burnt in incineration boiler.
- Boiler ash (138 TPD) from incineration boiler after expansion will be used for potash recovery / Sold to Brick Manufacturer. Also, bagasse ash from sugar factory boilers after expansion (33 TPD) will be for manure / Sold to Brick Manufacturer.
- Used oil (428 Kg/Month) will be sold to authorized recycler.
- CPU sludge (2.46 MT/D) and STP Sludge (0.03 MT/D) will be Used as manure
- Press mud (300 MT/D) will be sold as manure.

- Bagasse (2,138 MT/D) will be used as fuel in sugar mill.
- Molasses (140 MT/D) will be used as raw material in 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 expansion capacity of 270 KLPD & 4000 TCD will be used for manufacturing fuel ethanol only.

Capital cost and recurring cost of EMP are given below:

No.	Description	Cost Component (Rs. Lakh)	
		Capital	Annual O & M
1	Air Pollution Control: 2 Nos. ESPs, 100 M & 70 M stacks, OCMS, CO_2 Bottling Plant	1500	150
2	Water Pollution Control – Proposed Distillery CPU, MEE, Sugar Factory CPU, Spent wash Storage Tank and OCMS.	2000	200
3	Noise Pollution Control	50	5
4	Environmental Monitoring & Management	75	7
5	Occupational Health & Safety	75	7
6	Green Belt Development	75	5
7	Rainwater Harvesting Infrastructure	100	10
	(13 % of Rs. 290 Cr; Expansion Investment) Total	**3,875**	**384**

Details of CER with proposed activities and budgetary allocation:

No	CER Activity Details	Amount
1	Non- Conventional Energy Promotions (5 Villages; Lakhewadi, Bhodani, Reda, Vakilwasti, Redani): Provision of Solar Street Lights with Gadget – 1 MS Pole, 18-20 W LED Lamp, Battery, Solar Panel, Wiring etc. 5 Villages X 35 Nos./Village = Total 175 Solar Street Lights X Rs.30,000/- per No. = Rs. 52.5 Lakhs	Rs. 52.5
2	Solar Photovoltaic Electricity Generation System: (5 Villages; Kati, Jadhavwadi, Reda, Redani, Chakati) :400 KW @ Rs.40,000 per KW to be installed at Grampanchayat, School Bldg. & PHC Bldg. Cost: 400 KW x Rs. 40,000/- = Rs. 160 Lakhs	Rs. 160
3	Drinking Water Supply Infrastructure (10 Villages:	Rs. 100

	Lakhewadi, Shetaphal Havel, Surwad, Reda, Redani, Survad, bawada, Chakati, Jadhavawadi & Sarafwadi): Safe Drinking Water Units with Filtration, RO Module & Storage Tank - 40 Units X Rs.2.5 Lakhs = Rs.75 Lakhs	
	(1 % of Capital Investment 290 Cr.) Total Amount	**Rs. 312.5 Lakhs**

During deliberations, EAC discussed following issues:

- Bio composting shall be abandoned in the existing plant within 2 years. PP shall provide commitment.
- Action plan for replacing existing Wet scrubber with ESP.
- NOC vide letter No. PID/PB-6/33/2022 dated 30.09.2022 issued by Asst. Supritending Engineer, Pune Irrigation Circle, Pune with certain conditions for left Nira Canal has been submitted by PP. Accordingly, PP shall comply with conditions.
- Steam balance for project.
- CPU for sugar unit has not been installed. Action plan to be submitted 100 % ZLD of sugar unit.
- Action plan for development of greenbelt by the end of 2023.
- Reasons for hign PM10 and NOX level in the ambient air.
- Bagass storage yard to be covered. Action plan to be submitted.
- Action plan for constructing pucca road inside the plant premises. Arrangement for mechanical sweeping and dust suppression system in the internal road.
- Ambient air quality modiling shall be done considering emission from boiler and traffic.
- Traffic management plan shall be provided.
- Revised EMP and CER to be submitted.
- Budget for occupational health shall be provided.
- Risk assessment and Risk mitigation Plan.

The Committee noted that document submitted by the PP after the EAC meeting is not satisfactory.

Accordingly, proposal was deferred for want of above additional information. Above all additional information shall be submitted online to the PARIVESH portal for further consideration by EAC.

Agenda No. 08

Proposed Expansion of Mumbai Refinery from actual 7.5 MMTPA to 9.5 MMTPA of crude capacity and installation of Propylene Recovery Unit (PRU) and Revamp of Captive Power Plant (CPP) of M/s. Hindustan Petroleum Corporation Ltd. at Mumbai Refinery – Consideration of amendment of Environmental Clearance

[IA/MH/IND2/ 296690/2023, IA- J-11011/413/2014-IA II (I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry, vide letter no. File no. J-11011/413/2014-IA II (I) dated January 31, 2017 for Proposed Expansion of Mumbai Refinery from actual 7.5 MMTPA to 9.5 MMTPA of crude capacity and installation of Propylene Recovery Unit (PRU) and Revamp of Captive Power Plant (CPP) of M/s. Hindustan Petroleum Corporation Ltd. at Mumbai Refinery.

The project proponent has requested for amendment in the EC with the details are as under;

S.No.	Para of EC issued by MoEFCC	Details as per the EC	To be revised/read as	Justification/Reasons
1	Page No. 1 - Product slate table in 3rd paragraph.	Pre-revamp product slate is mentioned in the table of the Environmental Clearance.	Environmental Clearance letter to include post revamp product slate.	HPCL hereby seeks amendment in Environmental Clearance to include post revamp product slate as included below:

Product	Production (000'TPA) for 9.5 MMTPA crude capacity (post revamp)
LPG + PROPYLENE	542
LAN	156.3
SCN	96
TREATED HEXANE	30
SOLVENT 1425	8.5
MS	1683

MTO	48
ATF	600
SKO	52
DIESEL	3441
LDO	0
RPO	0
IFO	969
SULPHUR	61
VG-10	234
VG-30	546
150 N GR-I	70
500 N GR-I	100
SPINDLE OIL-GR-I	15
SPINDLE OIL-GR-II	32
150 N GR-II	76
500 N GR-II	92
BRIGHT STOCK	50
IO-100	15
HP-DAK Solvents	38

The Committee noted that the proposal does not contain same product mix, which was discussed during EAC (ind-2) meeting earlier while granting EC dated January 31, 2017.

The Committee suggested to submit a fresh proposal under product mix change alongwith updated EIA-EMP report.

In view of above, committee suggested to return the proposal in present form. Accordingly, proposal was returned in present form.

Agenda No. 09

Proposed 320 KLD Grain Based Ethanol Plant along with 7.5 MW Co-generation Power Plant at Village Dulakheda & Rawatkheda, Tehsil & District Neemuch, Madhya Pradesh by M/s. Dhanuka Soya Private Limited – Consideration of Environmental Clearance.

[IA/MP/IND2/416180/2023, IA-J-11011/30/2023-IA-II(I)]

The Project Proponent and the accredited Consultant J.M. EnviroNet Pvt. Ltd. (NABET certificate no. NABET/EIA/2023/SA 0172 and validity till 7th August,

2023) 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 320 KLD Grain Based Ethanol Plant along with 7.5 MW Co-generation Power Plant at Village Dulakheda & Rawatkheda, Tehsil & District Neemuch, Madhya Pradesh by M/s. Dhanuka Soya Private Limited.

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.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/ by-product	Production capacity
1.	Distillery (Grains-broken rice, maize, bajra & sorghum)	Ethanol	320 KLPD
2.	Co-generation power plant	Power	7.5 MW
3.	DWGS dryer	DDGS	179 TPD
4.	Fermentation unit	Carbon di-oxide	246 TPD

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project.

Total land area required is 9.14 hectares. Greenbelt will be developed in total area of 3.02 hectares i.e., 33 % of total project area. The estimated project cost is Rs. 267.68 Crores. Capital cost of EMP would be Rs. 27.0 Crores and recurring cost for EMP would be Rs. 2.7 Crores per annum. Industry proposes to allocate Rs. 2.7 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 200 persons as direct.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Reserved Forests (RF)/ Protected Forests (PF), Tiger/ Elephant Reserves, Wildlife Corridors etc. present within 10 km distance. Water bodies: Jamuniya ka Khar is at a distance of 0.65 km in SSW direction. NOC has been obtained from Executive Engineer, Water Resources Division, Neemuch vide Letter no. 256/work479/Dhanuka/2023 dated 25.01.2023 stating that the site has not record of being affected by floods in last 25 years, the land is not prone to flooding during rainy season & no natural water body is present within 500 m of the proposed site.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.503 µg/m3, 0.201 µg/m3, 0.654 µg/m3 and 0.755 µg/m3 with respect to PM10, PM2.5, SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1500 CMD which will be met from Surface water. NOC has been obtained from Office Executive Engineer, Water Resources Division, Neemuch District (M.P.) for surface water supply of 1500 m3/day from the Khuman singh Shivji (Thikiriya) Reservoir via letter No. 158/work-38/Drinking water/2023 dated 16.01.2023. Effluent (Process Condensate & CT blowdown) of 1280 CMD will be treated through Condensate Polishing Unit /Process Condensate Treatment Plant of capacity 1500 CMD; Effluent (DM Plant Reject, Washing & Boiler Blow Down) of 205 CMD will be treated through Effluent Treatment Plant of capacity 230 CMD. Raw stillage (2071 KLPD) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 15 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Effluent discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 7.5 MW and will be met from proposed 7.5 MW Co-generation power plant. 65 TPH Agro waste (mustard straw/mustard husk/soya straw/ soya husk) or Coal fired boiler will be installed. APCE ESP with a stack height of 65 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 during coal based boiler operations. A 900 KVA DG set will be used as standby during power failure and stack height (6 m) will be provided as per CPCB norms to the proposed DG set.

Details of Process emissions generation and its management:

- APCE ESP with a stack height of 65 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 during coal based boiler operations.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (246 TPD) generated during the fermentation process will be collected & 60% will be recovered and sold to vendors as per local demand.

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

- DDGS (Distilled Dried Grains Stillage) (179 TPD) will be sold as cattle feed.
- Boiler Ash (125 TPD) generated from coal based operations will be given to nearby cement plant/brick manufacturers and Ash (65 TPD) generated during Agro waste based operations will be used in brick manufacturing.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (1.5 TPD), ETP Sludge (0.23 TPD) and STP Sludge (0.0075TPD) will be used as manure.

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 320 KLPD will be used for manufacturing fuel ethanol only.

Total land of 9.14 Hectares is under possession of the company and is converted to industrial use as per conversion orders from Court Sub-Divisional Officer, S.D.O. District Neemuch vide Application No. 22046639817 & 22046636601 dated 17.01.2023. EAC found the response satisfactory.

Capital cost and recurring cost of EMP are given below:

S.	Description	Capital	Recurring

No.			Cost (Crores)	Cost/annum (Crores)
1.	Air Pollution management	Boiler stack + ESP + Online Monitoring System	9.6	0.8
2.	Effluent Treatment	ZLD System, Condensate polishing unit, ETP and STP	12.8	1.4
3.	Environment monitoring	Lab instrument, Online monitoring System, Third party monitoring, audit	1.0	0.1
4.	Solid waste management	Ash handling & management	2.6	0.3
		Others		
5.	Greenbelt & plantation development	Plantation for greenbelt	0.5	0.05
6.	Rain water harvesting	Required infrastructure	0.5	0.05
	Total		**27**	**2.7**

Details of CER with proposed activities and budgetary allocation:

S. No.	PROPOSED ACTIVITIES	IMPLEMENTATION OF EMP FOR SOCIAL AND INFRASTRUCTURE DEVELOPMENT ON THE BASIS OF PHYSICAL TARGETS		TOTAL BUDGET ALLOCATED (RS. IN LAKHS)
		Year 1	Year 2	
1	**Repair & improvement of existing roads-** Repair works in nearby roads like potholes, ruts, corrugations, paving, widening of lanes etc.	Rs. 35 Lakhs Village- Rawatkheda (1.0 km stretch- Connecting road of village to NH-156)	Rs. 35 Lakhs Village- Dulakheda (1.0 km stretch- Connecting road of village to NH-156)	70
2	**Drinking Water Facility-** Installation of potable drinking water systems for provision of safe drinking water	Rs. 10 lakhs 3 nos.in Village- Dulakheda	Rs. 10 Lakhs 3 nos.in Village- Rawatkheda	20
3	**Social Infrastructure Development-** Installation of Solar	Rs. 25 Lakhs Village- Rawatkheda	Rs. 25 lakhs Village- Dulakheda (Rs. 6 Lakhs for	50

	Street Light, Solar Lanterns, assistance to Anganwadi centres, Village Pond Infrastructure Development, etc.	(Rs. 6 Lakhs for 150 nos. solar street light, Rs. 5 Lakhs for local ponds development, Rs. 14 lakhs will be provided to give assistance to Anganwadi Centres)	150 nos. solar street light, Rs. 5 Lakhs local ponds development, , Rs. 14 lakhs will be provided to give assistance to Anganwadi Centres)	
4	**Greenbelt Development**– Greenbelt plantation/ Avenue plantation along roadside, tree plantation in nearby schools/colleges/vacant land/Panchayat bhavan, etc.	Rs. 15 lakhs Dulakheda (1500 nos. of plants to be planted)	Rs. 15 Lakhs Village- Rawatkheda (1500 nos. of plants to be planted)	30
5	**Skill development for youth**- Organising Training programmes for youth/residents in Skill Development centre	Rs. 25 Lakhs Village- Rawatkheda (Benefit to be extended to 150 persons)	Rs. 25 Lakhs Village- Dulakheda(Benefit to be extended to 150 persons)	50
6	**Up gradation of School infrastructure & Educational facilities**- Provide Interactive smart class equipments /gadgets/solar panels like desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, sports equipments etc. to students, Seating Benches, installation of potable water facilities, construction of sanitized toilets etc.	Rs. 40 Lakhs (Govt school at Village Dulakheda) (6 nos potable water facilities - Rs. 2 lakhs, 5 nos. sanitized toilets- Rs 10 lakhs, solar panels installation- Rs. 18 lakhs, Rs 10 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags,	Rs. 40 Lakhs (Govt school at Village Rawatkheda) (6 nos potable water facilities - Rs. 2 lakhs, 5 nos. sanitized toilets- Rs 10 lakhs, solar panels installation- Rs. 18 lakhs, Rs 10 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, sports equipments, etc)	80

		sports equipments, etc)		
			TOTAL	**300**

During deliberations, EAC discussed following issues:

- The company will provide solar power within plant and to the nearby areas to the tune of 15% of total power consumption of the unit in form of solar lights/solar panels/solar gadgets etc. as a part of socio economic developmental activities.
- The company will increase the budget for socio-economic development activities from Rs. 2.7 Crores to Rs. 3.0 Crores.
- Boiler ash will be given to nearby brick manufacturers in covered vehicles only. The company will also explore possibilities of installing briquetting plant inside the plant premises for proper fly ash management.
- 33% of total project area, i.e., 3.02 hectares will be developed as greenbelt within plant premises out of which greenbelt towards the boundary of the premises will be achieved within December 2023.
- The company will allocate Rs 50 lakhs/annum as Occupational Health & Safety budget& will be spent dedicatedly.
- The company has proposed 65 TPH Biomass (Agrowaste like mustard straw/mustard husk/soya straw/ soya husk) fired boiler along with ESP as APCE for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. As per EIA Notification, 2006 & subsequent amendment on 25th June, 2014 for Thermal power plants, 15% coal as auxiliary fuel can be used along with biomass for the thermal power plants upto 15 MW.

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

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 320 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). 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. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.

(v). Total fresh water requirement shall not exceed 1280 m^3/day (@4 KL per KL alcohol produced), which will be sourced from Surface water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(vii). APCE ESP (five fields) with a stack height of 65 meters will be installed with the 65 TPH Agro waste (mustard straw/mustard husk/soya straw/ soya husk) boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually. Coal will be used as auxiliary fuel.

(viii). Boiler Ash (125 TPD) generated from coal based operations will be given to nearby cement plant/brick manufacturers and Ash (65 TPD) generated during Agro waste based operations will be used in brick manufacturing. PP shall use biomass like Agro waste (mustard straw/mustard husk/soya straw/ soya husk) as fuel for the proposed boiler. 15 % Coal will be used auxiliary fuel. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.

(ix). CO2 (246 TPD) generated during the fermentation process will be collected & 60% will be recovered and sold to vendors as per local demand.

(x). 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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed 3.02 hectares i.e., 33.0 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.

(xvi). PP proposed to allocate Rs. 3.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). 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.

(xviii). Entry and exit of vehicles from the highway shall be through slip road.

(xix). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should

be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xx). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xxi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxii). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

14th February, 2023 (Tuesday)

Agenda No. 01

Proposed Grain Based Distillery Capacity 130 KLD Fuel Ethanol along with 3.0 MW Co-Gen Power Plant at Plot/Sr. No. - 83, 97, 98, 100, 107, 110, 130, 147, 148, 73, 62 Village-Amradandi, Tehsil -Gurh,

Dist-Rewa, Madhya Pradesh by M/s. Bhairav Bio Fuels Pvt. Ltd. – Consideration of Environmental Clearance.

[IA/MP/IND2/407631/2022, IA-J-11011/526/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. AmplEnviron Pvt. Ltd. (NABET certificate no. .: NABET/EIA/2023/IA0061 and validity 22th October, 2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 130 KLPD Grain based Ethanol Plant & 3.0 MW Co-generation power plant (fuel to be used) located at Village Amradandi, Tehsil Gurh, District Rewa, State Madhya Pradesh by M/s. Bhairav Bio Fuels Pvt. Ltd.

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.

The details of products and capacity as under:

S. No.	Name of Unit	Name of the product/by-product	Production capacity
1	Distillery (Grain Based)	Ethanol	130 KLPD
2	Co-generation power plant	Power	3.0 MW
3	DWGS dryer	DDGS	56 TPD
4	Fermentation unit	CO2	85 TPD

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project.

Total land area required is 24.44 hectares. Greenbelt will be developed in total area of 8.16 hectares i.e., 33.38 % of total project area. The estimated project cost is Rs. 160.0 Crores. Capital cost of EMP would be Rs. 16.64 Crores and recurring cost for EMP would be Rs.1.63 Crores per annum. Industry proposes to allocate Rs. 2.5 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 300 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserve forests/protected forests: Gurh Reserved Forest – 1.74 km, SW, Govindgarh Reserved Forest – 6.33 km, SW Hardi Protected Forest – 2.55 km, SW. Water bodies: Devdah Nala – 0.20 km, N, Canal near Bhusunwa – 1.34 km, NW, Pond near Hardua – 2.17 km, WNW, Bichia Nadi – 5.1 km, WNW. Devdah Nala is at a distance of 0.2 Km- for which NOC has been obtained from State Irrigation Department vide letter no. 77 dated 10/01/23 stating that No flood is observed in last 25 to 30 years in the area due to the Devdah Nala (If applicable).

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.29 $\mu g/m^3$, 2.75 $\mu g/m^3$ and 5.73 $\mu g/m^3$ with respect to PM_{10}, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 490 CMD which will be met from surface water. Application has been submitted to Superintendent Engineer dated 18.05.2023. Effluent (Condensate/spent lees/blowdown etc.) of 750 - CMD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 900 CMD. Raw stillage (850 KLPD :quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 10 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 2.0 MW and will be met from proposed 3.0 MW co-generation power plant. 32 TPH Biomass/Coal fired boiler will be installed. APCE ESP with a stack height of 58 m will be installed for controlling the

particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. 1200 kVA DG set will be used as standby during power failure and stack height (30-m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP (5 Fields) with a stack height of 58 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 (85 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (56 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (42 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure.
- Used oil (0.2- Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.08TPD) and STP Sludge (0.01TPD) will be used as manure.

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 130 KLPD will be used for manufacturing fuel ethanol only.

Total land of 24.44 Hectares is under possession of the company and land use conversion has been completed as it is an Industrial land.

Capital cost and recurring cost of EMP are given below:

S. No	Description	Capital Cost In Crores	Recurring Cost in lacs

1	Air pollution control system (ESP/Bag filter) on 32 TPH rice husk/biomass briquettes/Bagasse fired boiler	8.0	35
2	Scrubbing system, compressing system, liquefying system and storage for CO2 removal	3.0	25
3	Treatment system for spent wash, DWGS centrifuge decanter, DDGS dryer for ZLD system	3.0	20
4	CondensatePolishing unit for water treatment and recycle	1.0	20
5	Rainwater Harvesting Systems	0.30	8
6	Occupational Health Management	0.50	6
7	Noise Reduction Systems	0.25	4
8	Greenbelt Development	0.40	10
9	Environment Monitoring	-	15
10	Environment Management Cell	-	20
	Total	**16.45**	**163**

Details of CER with proposed activities and budgetary allocation:

Sr. No	Activity	Amount
1	Development of Library in village schools	INR 50.0 Lakhs
2	Plantation in Nearby Villages	INR 50.0 Lakhs
3	Developed drinking water Facility in the Villages	INR 50.0 Lakhs
4	Providing Solar lighting in the surrounding area	INR 50.0 Lakhs
5	Rainwater Harvesting Structure in the Surrounding Area	INR 50.0 Lakhs
	Total	**INR 250 Lakhs**
CER activities will be proposed to the villages are – Amradandi, Bhusunwa and Bhatigaon		

During deliberations, EAC discussed following issues:

- PP shall furnish reasons for high incremental level of SO2 and NOX. Re-conduct air quality modelling data. EMP for reducing the incremental levels of SO2 and NOx levels.

- Reorient the layout map of the proposed project considering 3 row of greenbelt towards road side.
- Details of fuel to be used in the proposed boiler. Steam balance of the proposed project.
- Action plan for fly ash generated from the boiler. Undertaking for installation of brick manufacturing plant inside the plant premises.
- Submit revised water balance chart.
- Revised budget for EMP and CER considering decanter, drier, OCMS to be submitted.

Accordingly, proposal was deferred for want of above additional information. Above all additional information shall be submitted online to the PARIVESH portal for further consideration by EAC.

Agenda No. 02

Proposed Grain Based Distillery Capacity 100 KLPD Fuel Ethanol along with 4.0 MW Co-Gen Power Plant at Village–Khavaspur, Bairia, Ballia, Uttar Pradesh by M/s. Doab Agro Foods Private Limited – Consideration of Environmental Clearance.

[IA/UP/IND2/415925/2023, IA-J-11011/28/2023-IA-II(I)]

The Project Proponent and the accredited consultant Sd Engineering Services Pvt Ltd (NABET certificate no. NABET/EIA/2023/ SA 0166 valid up to 12th August 2023), has made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance for the project for Grain Based Distillery Capacity 100 KLPD Fuel Ethanol along with 4.0 MW Co-Gen Power Plant by M/s. Doab Agro Foods Private Limited at Village–Khavaspur, Bairia, Ballia, Uttar 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.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product / by-product	Production capacity
1	Distillery	Ethanol	100 KLPD
2	Co-generation power plant	Power	4 MW
3	DWGS dryer	DDGS	42 TPD
4	Fermentation unit	Carbon di-oxide	TPD

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project.

Total land area identified is 13.08 Acre (5.3 ha). Greenbelt will be developed in total area of 4.3 acre i.e., 33 % of total project area. The estimated project cost is INR 136.73 Crores. Capital cost of EMP would be Rs. 13.90 Crores and recurring cost for EMP would be Rs. 3.63 Crores per annum. Industry proposes to allocate Rs. 2.08 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 129 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. No reserve forest and protected forest with in the 10 KM Distance. Water bodies: i) Ganga River is at an aerial distance of 4 km on South East, ii) Ghaghara River is situated at an aerial distance of 3.5 km on NE, iii) Sondi Nadi is at an aerial distance of 8.7 Km on NE, iv) Tengraha Nadi is at an aerial distance of 4 Km on North.

AAQ modelling study for point source emissions [Fuel Biomass/Coal in case of unavailability of Biomass] indicates that the maximum incremental GLCs after the proposed project would be (Fuel Coal) 0.088 µg/m^3, 0.053 µg/m^3, 2.089 µg/m^3 and 1.32 µg/m^3 and (Fuel Biomass) 0.148 µg/m^3, 0.088 µg/m^3, 0.323 µg/m^3 and 2.24 µg/m^3 with respect to PM10, PM2.5, SO2 and NOX respectively. The baseline concentration and resultant concentrations of PM

10 and PM 2.5 are within the prescribed limit of than the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 396 KLD including domestic & green area usage [20 KLD] which will be met through onsite ground water abstraction. PP has applied vide application no. BLIA0123NIN0001 dated 27/01/2023 for obtaining ground water abstraction approval. Effluent (Condensate/spent lees/blowdown etc.) of 961 KLD quantity will be partly recycled and partly treated (553 KLD) through Condensate Polishing Unit of capacity 600 KLD. Raw stillage 563 KLD [quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 10 KLD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3.2 MW and will be met from proposed 4.0 MW cogeneration power plant. 25 TPH boiler [fuel - biomass or coal in case of unavailability of biomass] will be installed. APCE [ESP] with a stack height of 40 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. 2 nos. DG Sets of 750 kVA and 250 KVA will be used as Emergency Backup and stack height will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE [ESP] with a stack height of 40 m will be installed for controlling the particulate emissions from boiler.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (45 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers, liquified and shall be sold to authorized vendors.

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

- DDGS (Distilled Dried Grains Stillage) (42 TPD) will be sold as cattle feed / poultry feed.

- Boiler Ash (approx. 35-40 TPD from coal or 20-25 TPD from biomass] will be generated. The Fly ash will be handed over to the local brick manufacturing unit.
- Used oil (approx. 1 Kl/annum) will be sold to authorized recyclers.
- ETP sludge (75 Kg/day) and STP Sludge (1 Kg/day) will be used as manure.

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.

Total land of 13.08 Acre (5.3 ha) is under possession of the company and present landuse is "Agriculture" (Land conversion is under process from to Agriculture to Industrial Use). EAC found the response satisfactory.

Capital cost and recurring cost of EMP are given below:

S. No.	Description	Proposed (Rs. in crore)	
		Capital cost	Recurring cost (annual)
1.	Air pollution control system (ESP) on 30 TPH low pressure boiler	4.5	0.5
2.	CO2 Scrubbing system, compressing system, liquefying system and storage	2.0	0.5
3.	Treatment system for DWGS centrifuge decanter, DDGS dryer for ZLD system	3.0	1.2
4.	Condensate Polishing unit for water treatment and recycle	1.8	0.75
5.	Rainwater harvesting systems	0.36	0.15
6.	Environment monitoring	-	0.06
7.	Occupational Health	0.3	0.06
8.	Green Belt Development	0.36	0.09
9.	Solid waste management	0.98	0.24
10.	STP	0.10	0.05
11.	Safety and Fire Fighting	0.5	0.03

	Total	**13.90**	**3.63**

Details of CER with proposed activities and budgetary allocation:

SN	Description	Value in INR (Cr)
1.	Development of roads, providing training for generating skilled employment, free health checkups, upgradation of drinking water facility in korrahUparwarand SitabDiaravillage	1.2
2.	Installation of solar panels in nearby korrahUparwarVillage	0.30
3.	Upgradation of medical facility in nearby villages [korrahUparwar and SitabDiaravillage]	0.40
4.	Development of smart class, distribution of benches, Fans, drinking water facilities, Upgradation of sanitary facility, Distribution of IT gadgets, Printers, Computers in selected schools present in korrahUparwar and SitabDiaravillage	0.18
	Total	**2.08**

During deliberations, EAC discussed following issues:

- PP submitted a key map dated 28.01.2023 authenticated by Tehsildar Balia, UP indicating the project site and connecting road. PP confirmed that land has been provided by panchayat to build connecting road. Road will be constructed by PP.
- Shrubs cannot be planted for greenbelt development.
- Cost of OCMS, Decanters shall be added in the EMP budget.
- Ground water recharging is not allowed. PP shall construct rain water storage tank and the same shall be used in manufacturing process.

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

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). 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. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.

(v). Total fresh water requirement shall not exceed 396 m^3/day, which will be sourced from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). 10 KLPD STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(vii). APCE ESP (five fields) with a stack height of 40 meters will be installed with the 25 TPH Biomass/Coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler Ash (approx. 35-40 TPD from coal or 20-25 TPD from biomass] will be generated. The Fly ash shall be handed over to local brick manufacturing unit. PP shall use biomass / Coal as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.

(ix). PP shall maintain the road connecting the plant and highway.

(x). CO2 (45 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers, liquified and shall be sold to authorized vendors.

(xi). PP shall allocate at least Rs. 30 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.

(xii). 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.

(xiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiv). 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.

(xv). 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.

(xvi). The green belt of at least 5-10 m width shall be developed 4.3 hectares i.e., 33.0 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.

(xvii). PP proposed to allocate Rs. 2.08 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xviii). 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.

(xix). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control

System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xx). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xxi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxii). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 03

Grain Based 250 KLD Fuel Ethanol Plant & 7.0 MW Co- Generation Power Plant (By Product: 180-190 TPD of CO2 Generation & DDGS : 188-192 TPD) located at Plot No 17,18,19,20 Phase-II SEZ Hargarh Industrial Area Dist Jabalpur Madhya Pradesh of M/s. A Infrastructure Limited – Consideration of Environmental Clearance.

[IA/MP/IND2/ 409702/2022, IA-J-11011/529/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Creative Enviro Services (NABET certificate no. NABET/EIA/2023/SA-0162 and validity 22.03.2023 made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the

project for 250 KLPD Grain based Ethanol Plant & 7.0 MW Co-generation power plant (fuel to be used) located at Plot No 17,18,19,20 Phase-II SEZ Hargarh Industrial Area Dist Jabalpur Madhya Pradesh of M/s. A Infrastructure Limited.

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.

The details of products and capacity as under:

Sr No	**Name of Unit**	**Name of the product/by product**	**Production Capacity**
1	Grain Based Fuel ethanol Unit	Ethanol	250 KLPD
2	Co-Generation Power Plant	Power	7 MW
3	DWGS Dryer	DDGS	180-190 TPD
4	Fermentation Unit	Carbon Di Oxide	188-192 TPD

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project.

Total land area required is 10.14 hectares. Greenbelt will be developed in total area of 3.40 - hectares i.e., 34% of total project area. The estimated project cost is Rs. 257.20 Crores. Capital cost of EMP would be Rs. 33.48 Crores and recurring cost for EMP would be Rs. 1.87 Crores per annum. Industry proposes to allocate Rs. 2.0 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 190+50 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors / Reserve forest/Protected forest

etc. within 10 km distance. Protected forest at a distance of 88 m from the project site. Water bodies: River Betwa is at a distance of 3.50 Km in Eastern direction. PP has submitted NOC dated 27.01.2023 issued by Addl. District Collector, Jabalpur.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 9.8 µg/m3 , 0.323 g/m3 , 3.92 µg/m3and 3.9 µg/m3 with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 955 m3 /day which will be met from MPIDC water supply system for which consent has been obtained from MPIDC of Govt of MP vide no MPIDC/ROJBP/Engg/2022/4122 dated 18.11.2022. Effluent (Condensate/spent lees/blow-down etc.) of 1300 m3 /day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 2300 KLPD. Raw stillage (1700 KLPD :quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 20 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 6.135 MW and will be met from proposed 7 MW cogeneration power plant. 60 TPH coal/rice husk fired boiler will be installed. APCE of ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. 2X750 KVA DG set will be used as standby during power failure and stack height (30 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE of ESP with a stack height of 60 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 (188-192 TPD) generated during the fermentation process will be collected by utilizing. CO2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (180-190 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (130 TPD) will be used for brick manufacturing in proposed brick manufacturing plant supplied to brick manufacturers to be used as manure.
- Used oil (1 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.2 TPD) and STP Sludge (0.05 TPD) will be used as manure.

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 250 KLPD will be used for manufacturing fuel ethanol only.

Total land of 10.14 Hectares is under possession of the company and is allotted by MPIDC, Jabalpur hence land use conversion is not required. EAC found the response satisfactory.

Capital cost and recurring cost of EMP are given below:

Capital Investment for proposed Environmental Protection (Rs. in Lacs)		
S. No.	**Particular**	**Proposed Cost**
1.	ESP along with Stack + On line monitoring system	280.00
2	M.E.E + Dryer	950.00
3	Waste Water Treatment Plant for Process Condensate	550.00
4	Decanter & Dryer	1450.00
5	Green Belt development	12.68 @ 13
6	Occupational Health & Safety	100.00
7	Misc RWH etc.	5.0

	Total	**3348**

Total Cost (EMP + Plantation + Monitoring)		
	Particular	**(Rs in Lacs) per annum – Recurring**
	Maintenance of Plantation and Plant site 8750 @ Rs 45/- per plant	3.93 @ 4.0
	Occupational health and Safety exp. @ 200 no. Rs 25000 per workers	50
	Environmental Monitoring cost	12.84 @ 13.0
	O&M cost for APC, CPU, etc.	120
	Grand Total	**187**

Details of CER with proposed activities and budgetary allocation:

S.N.	**Major Activity Heads**	**Physical Nos. & Village**	**Total (Rs. In Lakhs)**
1	RWH pits in the surrounding villages	4 nos. each in Hargarh, Ghughra , Darauli, Bichiya Villages	20.00
2.	Repair/ maintenance of School like library, playground and Laboratory	04 primary /middle school at village Hargarh, Ghughra , Darauli, Bichiya Villages	40.00
3.	Impart training to the local villagers for skill development & providing employment to them in the industry	Training to 50 unemployed youth of Hargarh, Ghughra , Darauli, Bichiya Villages	60 .00
4.	Deepening of existing bore wells/ponds in nearby villages for drinking water. Construction of new borewell in nearby villages as per requirement	04 villages namely Hargarh, Ghughra , Darauli, Bichiya Villages	20.00
5	Provision of solar units and lights at school and	Hargarh, Ghughra , Darauli, Bichiya	40.00

	streets of villages	Villages	
7	Plantation within the industrial area with 10000 plants	Hargarh Industrial Area	20.00
		Total	**200**

During deliberations, EAC discussed following issues:

- The PP has revised project cost from Rs. 295 Crore to Rs. 257.20 Crore.
- PP confirmed that no tree exist in the proposed site.
- PP confirmed that height of stack is 60 m.
- PP submitted the stem balance chart.
- PP has revised the EMP budget from Rs. 32.48 Crore to 33.48 Crore.

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

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 250 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). 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. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the water for the project activities from MPIDC water supply, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.

(v). Total fresh water requirement shall not exceed 955 m^3/day, which will be sourced from MPIDC water supply system. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). 20 KLPD STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(vii). APCE ESP (five fields) with a stack height of 60 meters will be installed with the 60 TPH Rice husk/Coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (130 TPD) will be used for brick manufacturing in proposed inhouse brick manufacturing plant. PP shall use rice husk / Coal as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power

requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.

(ix). CO2 (188-192 TPD) generated during the fermentation process will be collected by utilizing. CO2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(x). PP shall allocate at least Rs. 1.0 Crore/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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed 3.4 hectares i.e., 34.0 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest

Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Additional 10 m Thick greenbelt shall be developed towards Protected forest.

(xvi). PP proposed to allocate Rs. 2.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). 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.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring

functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 04

Proposed expansion of existing Molasses/Juice/Syrup based distillery unit from 30 KLPD to 140 KLPD (Additional 110 KLPD) capacity along with establishment of proposed 6.8 MW Co-generation Power Plant for distillery unit, while increasing the existing Sugarcane crushing capacity from 2500 TCD to 4850 TCD (Expansion of 2350 TCD) Under Ethanol Blending Programme(EBP) by M/s. Jai Bhavani Sahakari Sakhar Karkhana Limited (JBSSKL) at Village-Talewadi (Old village name-Gadhi), Taluka Georai, District Beed, Maharashtra - Consideration of Environmental Clearance.

[IA/MH/IND2/413347/2023, IA-J-11011/7/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. AmplEnviron Pvt. Ltd. (NABET certificate No. NABET/EIA/2023/IA0061 and validity 22nd October, 2023) 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 existing distillery unit from 30 KLPD to 140 KLPD, sugar mill from 2500 TCD to 4850 TCD & co-generation power plant for distillery 6.8 MW (using Bagasse & Biogas) located at Survey No.160,162,163,161,158,159,170, Village-Talewadi (Old village name-Gadhi), Taluka Georai, District Beed, Maharashtra by M/s. Jai Bhavani Sahakari Sakhar Karkhana Limited (JBSSKL).

As per EIA Notification 2006 (Schedule 5 (g) Category A); however, as per in the MoEFCC Notification S.O. 345(E), dated the 17th January, 2019, notification number S.O. 750(E), dated the 17th February, 2020, S.O. 980 (E) dated 02nd March, 2021 & S. No. 2339(E) 16th June, 2021, a special provision

in the EIA Notification, 2006 "Expansion of sugar manufacturing units or distilleries for production of ethanol, having Prior Environment Clearance (EC) for existing unit, to be used completely for Ethanol Blended Petrol (EBP) Programme only, as per self-certification in form of an affidavit by the Project Proponent, shall be appraised as category 'B2' projects.

The details of products and capacity as under:

S.NO.	Name of Unit	Name of The Product/By-Product	Existing Production Capacity	Additional Production Capacity	Total Production Capacity
1.	Distillery (Syrup and Molasses)	Ethanol	30 KLPD	110 KLPD	140 KLPD
2.	Co-generation Power Plant for Distillery	Power	0	6.8 MW	6.8 MW
3.	Fermentation Unit	Carbon Di-oxide	0	105.66 TPD	105.66 TPD
4.	ATFD	Conc. Spent Wash Powder	0	14 TPD (During Syrup based production) 66.66 TPD (During B-Molasses based Production) 92.5 TPD (During C-Molasses based Production)	14 TPD (During Syrup based production) 66.66 TPD (During B-Molasses based Production) 92.5 TPD (During C-Molasses based Production)

Existing industry is operational on the basis of Consent to Operate because the industry was started on year 1994. Latest CTO (air and water) has been issued on 22.11.2021 and is valid till 31.08.2024. Certified CTO compliance report has been issued dated 15.09.2022 from SRO, MPCB, Jalna.

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

Total plant area after expansion will be 19.99 Ha (existing plant area – 4.52 Hectares and additional land required – 15.47 Hectares for proposed capacity) which is under possession of the company and converted to industrial use. Out of the total plant area 7.2209 Hectares i.e. 36.12% of the total plant area will be developed under greenbelt & plantation in and around plant premises. The estimated project cost (Expansion) is Rs. 147.16 Crores. Capital cost of EMP would be Rs. 24.9256 Crores and recurring cost for EMP would be Rs. 1.1442 Crores per annum. Industry proposes to allocate Rs. 1.1037 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 100 persons as direct & indirect.

There are No national parks, wildlife sanctuaries, ESZ, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Reserve Forest and Protected Forest etc. within 10 km distance. Water bodies: Sindewadi Talav is at a distance of 4.27 Km in SE direction, A sluice is present at a distance of 2.64 Km in NW direction and Vidrupa River is present at a distance of 3.35 km in NNW direction from Project site.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.26 µg/m3, 4.99 µg/m3, and 5.27 µg/m3 with respect to PM10, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 682.2 CMD which will be met from Govindwadi Minor Irrigation Tank. An agreement between Jai Bhavani Sakhar Karkhana Ltd. and Executive Engineer of Jayakwadi Project division (Water Resource Department) has made dated 04/02/2021. Existing effluent generation is 217.2 CMD from distillery which is treated through Effluent Treatment Plant (350 CMD). Total effluent generation (After expansion) will be 1369.2 CMD from distillery which will be treated through proposed Condensate Polishing Unit (1500 CMD). In molasses based operation, spent wash generated from the analyser column during distillation will be concentrated treated in Biomethanation plant followed by Multi Effect Evaporator and concentrated spent wash will be converted into powder form

by spray dryer (ATFD) technology. Domestic waste water is will be treated in Aeration tank of CPU. The plant is will be based on Zero Liquid discharge system and treated effluent/water will not be discharged outside the factory premises

Total power requirement of distillery after expansion will be 4.6 MW which will be sourced from proposed 6.8 MW co-generation power plant in distillery. Existing distillery is being operated using steam from boiler of sugar unit and proposed 35 TPH Bagasse and Biogas fired boiler will be installed in distillery. APCE- ESP with a stack of height of 45 m will be installed for proposed boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. Industry has 1000 KVA DG set which will be used as standby during power failure and stack height (6.5 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE- ESP with 99.9% efficiency with a stack height of 45 meters will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (105.66 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

Details of solid waste/Hazardous wastegeneration and its management:

- Concentrated spent wash (208.3 m3/day) will be converted to powder by ATFD
- Boiler ash (1173.1 TPA) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (0.2 Kilolitres per annum) is will be sold to authorized recyclers.
- CPU sludge (6430 TPA) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the

proposed expansion capacity of 110 KLPD & 2350 TCD will be used for manufacturing fuel ethanol only.

Capital cost and recurring cost of EMP are given below:

SR. NO.	Description	Capital Cost in Crores	Recurring Cost in Crores /Annum
1.	Air Environment- ➢ Construction of Stack of 45 meters height ➢ Installation of ESP with 99.9% efficiency ➢ Installation of CO2 Bottling Plant	9.86	0.25
2.	Water Environment- ➢ Construction of CPU ➢ Installation of MEE ➢ Installation of Spent wash dryer	9.60	0.30
3.	Noise Environment- Acoustic enclosures, Silencer pads, ear plugs etc.	0.10	0.03
4.	Environment monitoring and Management – ➢ Quarterly Environment Monitoring (Per Year) ➢ Installation of OCMS	0.15	0.06
5.	Occupational Health – Gloves, Breathing Masks, Gloves, Boots, Helmets, Ear Plugs etc. & annual health-medical check-up of workers, Occupational Health (training, OH center).	0.50	0.14
6.	Green belt development activity and Maintenance	1.4756	0.0242
7.	Solid Waste Management- Brick Manufacturing unit etc.	0.90	0.10
8.	Provision of rain water harvesting tank with 60 days storage capacity	0.50	0.04
9.	Installation of in-house solar system of 460 KW capacity	1.84	0.2
	TOTAL COST (INR, Cr)	**24.9256**	**1.1442**

Details of CER with proposed activities and budgetary allocation:

S. No	Proposed Activity	Proposed Budget in Cr (INR)
1	Providing basic amenities to ZP Primary School, Georai and ZP Primary School, Mirkala	0.3945
2	Provision of Solar Lights to Gadhi, Talewadi & Khopat Village	0.7092
	Grand Total	**1.1037**

During deliberations, EAC discussed following issues:

- Action plan to dismantle bio-composting yard in next 2 years.
- Month-wise action plan along with budget for greenbelt development to be provided.
- Revised EMP report for integrated sugar and distillery unit shall be submitted.
- Proposed layout map was not matching with KML file.
- Reasons for high incremental value of air quality modelling.
- Action plan to achieve ZLD in sugar factory and treated water of sugar unit shall be used in propose distillery plant in order to reduce the fresh water requirement.
- Assessment of impact due to increase in the traffic load.
- How to bring particulate emission level of the existing plant from 150 µg/m3 to 50 µg/m3? Please provide action plan.
- Greenbelt to be proposed towards village located at a distance of 250 m.
- Risk assessment report.

Accordingly, proposal was returned for want of above additional information. Above all additional information shall be incorporated in the revised EMP report and re-submitted online to the PARIVESH portal for further consideration by EAC.

Agenda No. 05

Proposed 200 KLPD Grain Based Ethanol Plant & 6 MW Cogeneration power plant located at 244/1, 244/2 and 245/4 village Neglur, Tal.

& Dist. Haveri, Karnataka by M/s. Prabhriti Ethanol Private Limited – Consideration of Environmental Clearance.

[IA/KA/IND2/415639/2023, IA-J-11011/478/2022-IA-II (I)]

The Project Proponent M/s. Prabhriti Ethanol Private Limited and the accredited Consultant M/s. MITCON Consultancy and Engineering Services Ltd. (NABET certificate no. NABET/EIA/2124/RA 0229_Rev 02 and validity 5.02.2024), made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 200 KLPD Grain Based Ethanol Plant & 6 MW Cogeneration power plant located at 244/1, 244/2 and 245/4 village Neglur, Tal. & Dist. Haveri, Karnataka by M/s. Prabhriti Ethanol Private Limited.

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.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/ by-product	Production capacity
1	Distillery	Ethanol	200 KLPD
2	Captive/Cogeneration power plant	Power	6 MW
3	DWGS dryer	DDGS	100 TPD
4	Fermentation unit	Carbon di-oxide	125 TPD

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project.

Total land area required is 7.78 hectares. Greenbelt will be developed in total area of 2.6 hectares i.e., 33% of total project area. The estimated project cost is Rs. 185 Crores. Capital cost of EMP would be Rs. 27.45 Crores and recurring cost for EMP would be Rs. 76 lakhs per annum. Industry proposes to allocate Rs. 3.0 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment will be 225 persons as direct & indirect.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, eco sensitive zones etc. within 10 km distance. Reserve forests/protected forests is at a distance of 4.5 km in SW direction. Water bodies Varada River is at a distance of 2.5 Km in NNE direction. Tungabhadra River is at a distance of 5.4 km in E direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.045 $\mu g/m^3$, 0.032 $\mu g/m^3$, 1.74 $\mu g/m^3$, 0.58 $\mu g/m^3$ and with respect to PM10, PM2.5, SO_2 and NOx respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 792 m^3/day which will be sourced from Tungabhadra River. Industry has applied for permission for water withdrawal to Water resource department dated 05.07.2022. Effluent (Total Condensate/spent lees/blowdowns/CO_2 scrubber/ Misc. etc.) of 1491 m^3/day quantity will be treated through Condensate Polishing Unit of capacity 1500 CMD. Raw stillage (1520 CMD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 5 CMD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 5.3 MW and will be met from proposed 6 MW Captive/Cogeneration power plant. Electro Static Precipitator (ESP) with a stack height of 56 m will be installed with 55 TPH boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1500 kVA X 2 DG set will be used as standby during power failure and stack height (12 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Electro Static Precipitator (ESP) with a stack height of 56 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 (125 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be collected in CO_2 bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) 100 TPD will be sold as cattle feed / poultry feed.
- Boiler ash Biomass: 33.6 TPD will be used as Manure/ brick manufacturer.
- Boiler ash Coal: 28.8 TPD will be used as brick manufacturer.
- Used oil ~0.0045 TPD will be sold to authorized recyclers.
- CPU sludge 3.3 TPD will be used as manure and STP Sludge (0.031 TPD) will be used as manure.

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 200 KLPD will be used for manufacturing fuel ethanol only.

Total land of 7.78 Hectares is under possession of the company Directors and its own land in the name company owner. EAC found the response satisfactory.

Capital cost and recurring cost of EMP are given below:

A	**Construction phase (with Break-up)**	**Capital Cost**	**O & M (Annual)**
		(Amount in lakhs)	**(Amount in lakhs)**
1.	Environmental monitoring	-	3
2.	During site preparation	5	3

3.	Noise and solid waste management	5	3
4.	Water and waste water	10	4.5
5.	Occupational health	5	5
6.	Greenbelt development	5	5
	Total	**30**	**23.5**
B	**Operation Phase (with Break-up)**	**Capital Cost (Amount in lakhs)**	**O & M (Amount in lakhs)**
1.	**Air pollution**		
a.	ESP	650	15
b.	Online Continuous Emission Monitoring System (OCEMS)	50	
2.	**Water pollution**		
a.	CPU	600	10
b.	STP	15	
c.	Decanter	120	
d.	Dryer	1000	
3.	Environmental Monitoring (Air, water, waste water, Soil, Solid waste, Noise)	60	5
4.	Occupation health	100	10
5.	Green belt	35	6
6.	Solid waste	35	5
7.	Rain water harvesting	50	1.5
	Total	**2715**	**52.5**
	Total A+ B	**2745**	**76**

Details of CER with proposed activities and budgetary allocation:

Sr. No.	**CER Activity**	**Location**	**Details**	**Quantities**	**Total Amount in Rs./-**
1	Providing Solar street lamps nearby	Neglur	Providing Solar street lamps nearby	8	8,30,000
		Kodabal		8	8,35,000
		Maradur		8	8,35,000
		Belavigi		8	8,35,000
		Marol			

				8	8,35,000
		Gullagundi		8	8,30,000
				48	50,00,000
2	Providing Water filters/ filtered water in nearby schools	Govt. high school Marol	Providing Water filters/ filtered water in nearby schools	5	4,40,000
		Govt. Kannada high primary school		5	4,40,000
		Govt. ITI Guttal		5	4,50,000
		Govt. Arts and Commerce College Guttal		5	4,40,000
		Govt. School Teredahalli		5	4,50,000
		Jnanaganga Public school		5	4,40,000
		Primary school, Mevundi		5	4,50,000
		Hp school Guduru		5	4,40,000
		Higher primary school Guyilagundi		5	4,50,000
				45	40,00,000
3	Providing Ambulance to the nearby Gov Hospitals	Govt. Hospital Negalur	Providing Ambulance to the nearby Gov Hospitals	8	20,00,000
		Govt. School Hosaritti		6	20,00,000
		Govt. Hospital Havanur		10	20,00,000
		Govt. Hospital Holalu		6	20,00,000
				30	80,00,000
4	Providing computers in nearby school/ colleges, necessary	Govt. high school Marol	Providing computers in nearby school/ colleges, necessary	8	8,00,000
		Govt. Kannada high primary school		8	8,00,000
		Govt. ITI Guttal		8	8,00,000
		Govt. Arts and Commerce College Guttal		8	8,00,000
		Govt. School Teredahalli			

	furniture, projectors, Air conditioners for computer lab, science lab equipment		furniture, projectors, Air conditioners for computer lab, science lab equipment	8	8,00,000
				40	40,00,000
5	Infrastructure development in the area, Roads, gutters etc.	Neglur	Infrastructure development in the area, Roads, gutters etc.	5	15,00,000
		Kodabal		5	15,00,000
		Maradur		5	15,00,000
		Belavigi		5	15,00,000
		Marol		5	15,00,000
		Gullagundi		5	15,00,000
				30	90,00,000
	TOTAL AMOUNT Rs.				**3,00,00,000**

During deliberations, EAC discussed following issues:

- Industry shall maintain the village road adjacent to the project site.
- As suggested, revised stack height with coal having 0.5% sulphur content is calculated**.** As per stack calculation, stack height is 52 m and provided stack height is 56 m.
- Industry will utilize Biomass & Coal as a fuel in proposed boiler. Coal is an optional fuel and will only be used in worst case scenario.
- The revised EMP cost is Rs. 27.45 Cr. from 15.70 Cr which is approximately 14.8% of total project cost.
- Revised CER cost is 3 Crore. CER activities will be executed before commissioning of the project**..**

- Two rain water harvesting tank will be provided with 60 days' storage capacity.
- Site specific risk mitigation measures**.**
- 15% of total power generation will be from renewable energy sources/ solar power (0.79 MW).
- Ash disposal agreement with brick manufacturer submitted.

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

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 200 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). 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. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.

(v). Total fresh water requirement shall not exceed 792 m^3/day, which will be sourced from Tungabhadra River. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). 5 KLPD STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.

(vii). ESP (five fields) with a stack height of 56 meters will be installed with the 55 TPH biomass /Coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash Biomass: 33.6 TPD will be handed over to the brick manufacturer. Boiler ash Coal: 28.8 TPD will be will be handed over to the brick manufacturer. PP shall use rice husk / Coal as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.

(ix). CO2 (125 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be collected in CO2 bottling plant.

(x). PP shall allocate at least Rs. 1.0 crore/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.

(xi). 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.

(xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

(xiii). 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.

(xiv). 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.

(xv). The green belt of at least 5-10 m width shall be developed 2.6 hectares i.e., 33.0 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.

(xvi). PP proposed to allocate Rs. 3.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for

uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xvii). 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.

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification

published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

ANNEXURE

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, Zilla Parishad/Municipal Corporation, Urban local

Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

(vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

(viii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

(ix) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

(x) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

(xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

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.	Shri. J.S. Kamyotra	Member
5.	Dr. Rahul Rameshrao Mungikar (One day 13.02.2023)	Member
6.	Dr. Sanjay V. Patil (VSI)	Member
7.	Dr. Seshagiri Rao Ambati (IIPE)	Member
8.	Dr. Siddhartha Singh (IMD) (One day 13.02.2023)	Member
9.	Shri A. N. Singh, Scientist 'E'	Member Secretary
MoEFCC		
10.	Dr. Mahendra Phulwaria	Scientist 'C'
11.	Mr. Kanaka Teja	Research Assistant

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