

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

Dated: 02.12.2022

**Meeting ID: IA/IND2/13394/28/11/2022
MINUTES OF MEETING OF THE EXPERT APPRAISAL COMMITTEE
(INDUSTRY-2 SECTOR PROJECTS)
HELD ON 28th - 29th November, 2022**

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

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

(ii) Confirmation of minutes: The EAC, having taken note that final minutes were issued after incorporating comments received from the EAC members on the minutes of its Meeting (ID: IA/IND2/13379/14/11/2022) held on 14th -15th November, 2022 conducted through Video Conferencing (VC), confirmed the same. After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

(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: -

28th November, 2022 (Monday)

Agenda No. 1

Proposed project for Grain Based 330 KLPD of ethanol & Co-generation power plant of 5.5 MW capacity located at Village-Jahangir, Tehsil Dhuri, District Sangrur, Punjab by M/s. Harp Chemicals Pvt. Ltd. - Consideration of Environmental Clearance

[IA/PB/IND2/ 406973/2022, IA-J11011/236/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Chandigarh Pollution Testing Laboratory (Certificate No. – NABET/EIA/2225/ RA 0250 valid upto 12th February, 2025 made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 330 KLPD of ethanol & a co-generation power plant of 5.5 MW capacity located at Village- Jahangir, Tehsil Dhuri, District Sangrur, Punjab by M/s. Harp Chemicals 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 Section	Name of product/by-product	Production capacity
1.	Distillery	Ethanol	330 KLPD
2.	Co-generation power plant	Power	5.5 MW
3.	DWGS dryer	DDGS	152 TPD
4.	Fermentation Unit	Carbon di-oxide	135 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 area of 15.0 acres has been earmarked for establishment of the distillery Project. 6.09 acres out of total project area which is approximately 40.62 % of total area will be used for green belt purpose. The estimated project cost is Rs. 240 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 24.02 Cr. and the recurring cost (operation and maintenance) will be about Rs 266.2 lakhs. Industry proposes to allocate Rs 2.4 Crore towards Corporate Environment Responsibility, which is included in the EMP. Total employment will be 250 persons.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Protected and Reserve forests etc. within 10 km distance from the project site. One water body at i.e. Kotla Branch (Sirhind Canal) at a distance of 943 m in south direction. Another water body Moharana Drain at a distance of 800 m in south direction. PP has obtained letter no. 10414-16-1-WG (spl) dated 17.11.2022 issued by Executive Engineer Drainage Cum – Mining Division, Sangur stating that site is around 800m from Mahorana Drain. As per available record, this site does not fall under flood prone area. However, before developing the site, the drainage plan may be got approved from the Competent Authorities of the Department so that there is no obstruction to sheet flow and necessary arrangements may be made.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.1 $\mu\text{g}/\text{m}^3$ with respect to PM_{10} . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1577 m^3/day which will be met from Tubewell. Further, PP has reduced the fresh water requirement to 1199 m^3/day . Permission for abstraction of ground water from PWRDA has been obtained. Effluent (Condensate/spent lees/blowdown etc.) of 1758 m^3/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 2000 KLPD. Raw stillage (2045 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.

During construction phase, about 50 KW power will be required which will be met from temporary connection from PSPCL. There is proposal to install a co-generation power plant of 5.5 MW capacity to meet the power requirement during operation phase. The total power requirement during operation phase will be 5500 kwh. Electro Static Precipitator (ESP) with a stack height of 35 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for the proposed three boiler of capacity 20 TPH, 25 TPH and 25 TPH. 3x1000 kVA DG set will be used as standby during power failure and stack height (3 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 35 m 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 (84 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) (152 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (60 TPD) will be used for brick manufacturing in brick kilns/given to farmers for soil stabilization and filling low lying areas.

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 330 KLPD will be used for manufacturing fuel ethanol only.

Total land of 15.0 acres or 6.07 ha is under possession of the company. CLU for the same has been obtained from Department of Town and Country Planning, Punjab. EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- Letter no. 10414-16-1-WG (spl) dated 17.11.2022 issued by Executive Engineer Drainage Cum – Mining Division, Sangur stating that site is around 800m from Mahorana Drain. As per available record, this site does not fall under flood prone area. However, before developing the site, the drainage plan may be got approved from the Competent Authorities of the Department so that there is no obstruction to sheet flow and necessary arrangements may be made.
- Revised fresh water consumption @ 4 KL/KL of ethanol production shall be submitted. Accordingly, water balance to be modified. Further, PP has reduced the fresh water requirement to 1199 m³/day.
- Land lease/ ownership documents shall be submitted.
- PP shall allocate Rs. 50 Lakhs for OHS.
- Revised total capital cost & recurring cost of EMP shall be submitted as EMP cost is on lower side. Accordingly, PP has revised the EMP cost to Rs. 24.02 Crore and recurring cost to 266.2 Lakh per annum. Which includes cost of CER activities @ Rs. 2.4 Crores.
- As per Letter no.149 DTP(s)/LPDH-136 dated 8.9.2022 issued by Department of Town and Country Planning, Punjab, PP has to leave space for road widening @5 meters as no construction zone.

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 330 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). PP shall comply with the condition stipulated in the Letter no.149 DTP(s)/LPDH-136 dated 8.9.2022 issued by Department of Town and Country Planning, Punjab, for which, PP has to leave space for road widening @5 meters as no construction zone.
- (v). PP shall comply with conditions prescribed in the Letter no. 10414-16-1-WG (spl) dated 17.11.2022 issued by Executive Engineer Drainage Cum – Mining Division, Sangur.
- (vi). NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
- (vii). Total Fresh water requirement shall not exceed 1199 m³/day which will be met from Tubewell/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.
- (viii). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP of 15 KLD Capacity will be installed for

treating 9 KLD domestic waste generation and ETP of capacity 2000 KLD shall be installed for treatment of waste water.

- (ix). Electrostatic precipitator (5 field & 99.9% efficiency) with a stack height of 35meters will be installed with the proposed boilers of capacities 20 TPH, 25 TPH and 25 TPH Rice Husk/paddy straw fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
- (x). Boiler ash (60 TPD) will be used for brick manufacturing in brick kilns/given to farmers for soil stabilization and filling low lying areas. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.
- (xi). CO₂ (84 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.
- (xii). 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.
- (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 shall be developed in nearly 6.09 acres i.e., 40.62 % of the 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. Greenbelt development shall be completed before commissioning of the plant.
- (xviii). PP proposed to allocate Rs. 2.4 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.
- (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. 2

Establishment of 400 KLD Multi feed (Juice/Grains) Based Distillery unit within the existing premises of M/s. Belgaum Sugars Pvt. Ltd. located at Sy. Nos. 56/2, 59/1, 59/2, 59/3, 59/4, 59/5, 59/6, 60/1, 60/2, 60/3, 60/4, 60/5, 65/1, 65/3, 65/6, 68/3, 68/6+5B, 68/5B, 68/10, 68/7,68/4A, 68/4B, 68/4C, 68/4D, 69/1, 69/2, 69/3, 69/4, 69/5, 69/7, 69/9 of Hudali Village,

Belagavi Taluk, Belagavi District, Karnataka by M/s. Belgaum Sugars Pvt. Ltd. – Re-consideration of Environmental Clearance

[IA/KA/IND2/289824/2021, IA-J-11011/409/2021-1A-II(I)]

This proposal was earlier considered by the EAC (Ind-2) in its Meeting ID: IA/IND2/13342/26/09/2022 held on 26th – 28th September, 2022 wherein EAC recommended the project for grant of environmental clearance. However, during processing, competent authority referred the proposal to EAC for deliberation of the following issues:

- Action plan along with budgetary allocation to all the written representations received for the PH that were forwarded by the SPCB.

The proposal was re-considered in EAC meeting (Meeting ID: IA/IND2/13379/14/11/2022) held on 14th – 15th November, 2022. PP has informed that due to unavoidable circumstances they will not be able to attend EAC meeting. Accordingly, the proposal was deferred.

The proposal was again considered in EAC meeting (Meeting ID: IA/IND2/13394/28/11/2022) held on 28th – 29th November, 2022 wherein EAC noted following details submitted by PP:

Compliance to the Observations raised during the Public Hearing held on 25.05.2022 at Project Site:

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
1	Paramesh Surappa Hooli, Suldhali Village	He said that, our brothers are employed in this company, further the proposed Distillery unit will be beneficial to us, as it will provide jobs to youths who have completed PUC and Degree courses.	Positive Response	--
2	Ramanagouda Patil, B K Khanagaon Village	He said that, we will get employment by establishment of this proposed distillery and there will be no	Positive Response	--

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
		difficulties among us.		
3	Shrikanth Ramappa Dandu, Ramapur Village	He said that, there are no difficulties to our farmers from proposed distillery unit and it is beneficial to our youths who have completed degree courses.	Positive Response	--
4	Pirappa Nayak, Kabalapur Village	He said that, the establishment of proposed distillery unit is beneficial to us, most of our youths are unemployed and they are finding difficulties to travel to Belgaum to work, which is at a distance of 20 Km from our village, it is beneficial to us to get job opportunities.	Positive Response	--
5	Sunil Buddapur, Tumaraguddi Village	He said that, the establishment of this proposed distillery unit will not negatively effect on our environment, it will improve our school and our economic conditions.	Positive Response	--
6	H. Madhubabu, Environmental Social Activist, Hyderabad	He welcomed Hon'ble ADC and Villagers present in the meeting. He said that, I had mailed to Karnataka Pollution Control Board, Bangalore about my support to proposed distillery unit and I congratulate Belgaum Sugars Pvt. Ltd., Hudali.	Positive Response	--

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
		The proposed unit will help the community to protect our nature by planting more trees and providing employment to youths, Thank you		

Compliance to the Observations raised by the NGO's to RO, Belgaum, KSPCB regarding the Public Hearing held on 25.05.2022 at Project Site:

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
1	Rural Environment Education and Health Awareness Society, Hyderabad	<p>1. The consultant, please take health states of village people in 10 Km radius around is must, why because it is very use useful in future.</p> <p>2. Please take crop production details from near Agriculture lands also</p> <p>3. For operation of the project water requirement is 7363.33 m³/day, it is taking from Markandeya River, in summer season chance to down fall water level so please arrange rainwater harvesting systems.</p> <p>4. Please utilize waste water to</p>	Positive Response	<p>➤ Health status of the surrounding villages is studied and included in the report.</p> <p>➤ Crop production details will be done from nearby agricultural lands.</p> <p>➤ Rain Water harvesting provision is already done and the trade effluent is treated in CPU of capacity 2400 KLD and recycled back into the process ensuring ZLD. Hence the fresh water demand will be less.</p> <p>➤ The excess treated water will</p>

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
		<p>plantation, sprinkling on roads. It controls Dust Pollution when your vehicles transport time.</p> <p>5. Your taking 17 Acres (33.33%) plantation for Green belt is good, it is CPCB norms, but I am requesting to increase if any possible.</p> <p>6. You take avenue plantation to near villages, road side, it is used to save environment. Plant fruit bearing and medicinal value trees.</p> <p>7. Please give employment opportunities to local people first. And conduct skilled programs for local youth like ITI, Diploma. They will get job opportunities other industries also.</p> <p>8. Give medical facilities to near villages, conduct Medical Camps Regularly.</p> <p>9. Give drinking water facility to</p>		<p>be used for plantation, sprinkling on roads to suppress the dust.</p> <ul style="list-style-type: none"> ➤ Greenbelt is provided as per the CPCB norms. ➤ Avenue plantation will be done around the periphery of lake, roads. ➤ Priority of employment is given to local population. ➤ Health checkup camps will be organized in nearby villages. ➤ Drinking water facility to nearby villages will be provided. ➤ Distribution of laptops, projectors will be provided to government schools of Hudli, Tumaraguddi, Ranghadholi, Haranakol Villages. ➤ Development of roads will be done. ➤ Action Plan for implementation of CER activities is

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
		<p>near villages.</p> <p>10. Give good education to near village children.</p> <p>11. Develop all main roads and street roads of near villages.</p> <p>12. The project will contribute additional revenue to the state & central govt.</p> <p>13. For using of CSR & CER budget Must utilize effected area only, please form Co-ordination committee with village people, Govt. officials and company people, and find necessary works for villages not target oriented works.</p>		<p>prepared along with physical targets for 5 years.</p>

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
2	Save Earth Metro Urban & Rural Development Society, Telangana	<p>1. Your consultant as already conducted base line survey of air, water, land it is very good my request is please collect the data of the health status of the people & crop production status & ground water availability</p> <p>2. Please construct water harvesting structures and storage rain water it is useful for you usage in industry and also develop ground water levels in this area.</p> <p>3. Please take up village plantation in nearby villages and also avenue plantation for internal roads you should give priority fruit bearing and medicinal value plants.</p> <p>4. Please give top priority to the local educated unemployed youth to give employment in your industry.</p> <p>5. Please</p>	Positive Response	<p>➤ Health status of the surrounding villages is studied and included in the report.</p> <p>➤ Rain Water harvesting provision is already done and the trade effluent is treated in CPU of capacity 2400 KLD and recycled back into the process ensuring ZLD. Hence the fresh water demand will be less.</p> <p>➤ Avenue plantation will be done around the periphery of lake, roads.</p> <p>➤ Priority of employment is given to local population.</p> <p>➤ Education, Skill Development Programs to youths and Social Welfare Activities will be done in surrounding villages.</p> <p>➤ Distribution of laptops, projectors will be</p>

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
		<p>promote skill development training to unemployed youth to better skill useful to get employment chance to your industry remaining youth to get in other industries.</p> <p>6. CSR funds should go through the village committees for developments to the effected villages.</p> <p>7. Please conduct health camps and motivate health immunity development awareness programs.</p> <p>8. Please support rural primary education for weaker section.</p>		<p>provided to government schools of Hudli, Tumaraguddi, Ranghadholi, Haranakol Villages.</p> <p>➤ Action Plan for implementation of CER activities is prepared along with physical targets for 5 years.</p>

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
3	Metro Urban & Rural Development Society, Hyderabad	<p>1. We want to take steps to prevent the release of pollution into the environment as per government regulations.</p> <p>2. Conduct skill development training programs for unemployed youth and provide employment to eligible candidates.</p> <p>3. CSR funds for development of affected villages should go through village committees.</p> <p>4. Health camps should be organized among the people of the surrounding villages.</p> <p>5. And we want to grow greenery around the company and nearby villages with fruit bearing and medical plants..</p> <p>6. Today unemployment is the major pollution in India. That way I am supporting the industrial sector, please provide the local employment.</p>	Positive Response	<ul style="list-style-type: none"> ➤ Air Pollution Control Equipment is installed. ➤ Education, Skill Development Programs to youths and Social Welfare Activities will be done in surrounding villages. ➤ Action Plan for implementation of CER activities is prepared along with physical targets for 5 years. ➤ Health checkup camps will be organized in nearby villages. ➤ Greenbelt is provided as per the norms. ➤ Priority of employment is given to local population.

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
4	Centre for Environmental Society, Telangana	<p>1. We want to take steps to prevent the release of pollution into the environment as per government regulations.</p> <p>2. Conduct skill development training programs for unemployed youth and provide employment to eligible candidates.</p> <p>3. CSR funds for development of affected villages should go through village committees.</p> <p>4. Health camps should be organized among the people of the surrounding villages.</p> <p>5. And we want to grow greenery around the company and nearby villages with fruit bearing and medical plants.</p> <p>6. Today unemployment is the major pollution in India. That way I am supporting the industrial sector, please provide the local employment.</p>	Positive Response	<ul style="list-style-type: none"> ➤ Air Pollution Control Equipment is installed. ➤ Education, Skill Development Programs to youths and Social Welfare Activities will be done in surrounding villages. ➤ Action Plan for implementation of CER activities is prepared along with physical targets for 5 years. ➤ Health checkup camps will be organized in nearby villages. ➤ Greenbelt is provided as per the norms. ➤ Priority of employment is given to local population.

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
5	Sneha Rural Development Society, Andrapradesh	<p>1. We want to take steps to prevent the release of pollution into the environment as per government regulations.</p> <p>2. Conduct skill development training programs for unemployed youth and provide employment to eligible candidates.</p> <p>3. CSR funds for development of affected villages should go through village committees.</p> <p>4. Health camps should be organized among the people of the surrounding villages.</p> <p>5. And we want to grow greenery around the company and nearby villages with fruit bearing and medical plants.</p> <p>6. Today unemployment is the major pollution in India. That way I am supporting the industrial sector, Please provide the local employment</p>	Positive Response	<ul style="list-style-type: none"> ➤ Air Pollution Control Equipment is installed. ➤ Education, Skill Development Programs to youths and Social Welfare Activities will be done in surrounding villages. ➤ Action Plan for implementation of CER activities is prepared along with physical targets for 5 years. ➤ Health checkup camps will be organized in nearby villages. ➤ Greenbelt is provided as per the norms. ➤ Priority of employment is given to local population.

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
6	Fight Against Global Warming, Telangana	<p>1. The Company Management should not release dust, Sound, Noise pollution into the environmental according KSPCB & norms.</p> <p>2. Personal protective equipments like safety shoes, goggles, respirators/Masks, aprons etc.,. Development of Green belt/plantation around the project site and along the haul road areas.</p> <p>3. Water sprinkling on haul roads 2 to 3 times per day in the construction area and providing Temporary barricades to reduce the dust deposition on crops and trees.</p> <p>4. The Management should maintain rain water harvesting plan will be implement scientific</p> <p>5. The Company Management should provide pre & post</p>	Positive Response	<ul style="list-style-type: none"> ➤ Air Pollution Control Equipment is installed as per norms. ➤ Personal protective equipment is like safety shoes, goggles, masks are provided to all the employees. ➤ Water sprinkling is regularly done. ➤ Rain Water harvesting provision is made. Greenbelt is provided as per the norms. ➤ Health checkup camps will be organized in nearby villages. ➤ Priority of employment is given to local population. ➤ Action Plan for implementation of CER activities is prepared along with physical targets for 5 years.

Sl. No.	Name	Observation Raised / Information Sought during Public Hearing	Compliance	Action Plan
		<p>Medical check ups will be done of all the employees. Employees will be regularly examined and the Medical records will be maintained for each employee.</p> <p>6. Please give employment opportunities to local people first.</p> <p>7. For using of CSR budget please form a co-ordination committees with village people, Govt officials and company people, and find necessary works for village not target oriented works.</p>		

Action Plan for implementation of CER activities:

Sl. No.	Physical Measurable Target	Physical Measurable Target	Total Budget	Time Period/ Target/Budget			Measurable	
				Year 1	Year 2	Year 3	Year 4	Year 5
1	Construction of toilets with water facilities will be done in government schools of Hudli, Tumaragudd	16 No's	32 L	8 L 4 No	6 L 3No	6 L 3 No	6 L 3 No	6 L 3 No

Sl. No.	Physical Measurable Target	Physical Measurable Target	Total Budget	Time Period/Target/Budget			Measurable	
				Year 1	Year 2	Year 3	Year 4	Year 5
	i, Ranghadholi, Haranakol.							
2	Distribution of projectors, laptops, infrastructure development like construction of portico, auditorium to government schools of Hudli, Tumaraguddi, Ranghadholi, Haranakol Villages.	16 No's	48 L	12 L 4No	9 L 3 No	9 L 3 No	9 L 3 No	9 L 3 No
3	Plantation activity around canal passing adjacent through the project site, Urabinahatti Lake, Honnur Lake, Kanabargi Lake, Lakkundi Lake and Kangrali B K Lake.	6 No's	25 L	8.32 L 2 No	4.2 L 1 N	4.16 L 1 No	4.16 L 1 No	4.16 L 1 No

Sl. No.	Physical Measurable Target	Physical Measurable Target	Total Budget	Time Period/Target/Budget				
				Year 1	Year 2	Year 3	Year 4	Year 5
4	Creation of farm ponds in Hudali, Suldhal, Rampura, Tumarguddi, Haranakol, Budihal, Malamardi, Gujanal, Ranghadholi, Ankalgi, Yallapur, Baramapura, Kabalpur, Sulebhavi, Gajapati.	100 No's	100 L	20 L 20 No	20 L 20 No	20 L 20 No	20 L 20 No	20 L 20 No
5	Installation and Maintenance of Solar lights for the Hudali, Suldhal, Rampura, Tumarguddi, Budihal, Malamardi, Gujanal, Ranghadholi, Ankalgi, Baramapura Villages.	10 No's	30 L	6 L 2 No	6 L 2 No	6 L 2 No	6 L 2 No	6 L 2 No
6	Education, Skill Development Programs to youths and Social Welfare Activities in	15 No's	60 L	12 L 3 No	12 L 3 No	12 L 3 No	12 L 3 No	12 L 3 No

Sl. No.	Physical Measurable Target	Physical Measurable Target	Total Budget	Time Period/Target/Budget				
				Year 1	Year 2	Year 3	Year 4	Year 5
	Hudali, Suldhali, Rampura, Tumarguddi, Haranakol, Budihal, Malamardi, Gujanal, Ranghadholi, Ankalgi, Yallapur, Baramapura, Kabalpur, Sulebhavi, Gajapati Villages.							
7	Awareness about Single Use Plastic with KSPCB	1 No.	2 L	2L	-	-	-	-
	Total		2.97 Cr	68.32 L	57.2 L	57.16 L	57.16 L	57.16 L

EAC found the above details submitted by PP satisfactory.

Further, during deliberations, EAC discussed following issues:

- PP informed that 2 non compliance points observed by IRO, KSPCB have been complied. Flowmeter has been installed at outlet of ETP. Another point is Storm water management. Further, as per advice of the Committee, PP submitted details for constructing rain water storage pond of 60 days capacity for harnessing accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP committed to implement ZLD in existing and expansion of sugar factory and cogeneration plant including proposed Distillery.

Committee was satisfied with the response of project proponent. 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, 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). 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. All public hearing issues shall be properly addressed as per timeline and budget submitted.
- (ii). 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.
- (iii). NOC from the Concerned Local authority for surface water supply shall be obtained before start of the construction of plant, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
- (iv). Total Fresh water requirement shall not exceed 2.5 KL/KL of alcohol production i.e. 1000 m³/day which will be met from Markandeya 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.
- (v). Spent wash shall be concentrated to form DWGS in grain based operations and in cane juice based operations, concentrated spent wash will be spray dried to form powder. The condensate, spent lees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water from integrated unit of sugar mill and distillery shall be

discharged outside the premises and Zero Liquid Discharge shall be maintained for both the units. STP shall be installed to treat sewage generated from factory premises. PP shall ensure to implement Zero Liquid Discharge (ZLD) in existing and expansion of sugar factory and cogeneration plant including proposed Distillery.

- (vi). Electro Static Precipitator with a stack of height of 85 m is installed with 80 TPH bagasse fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm. At no time, the emission shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
- (vii). Bottom ash (32 TPD) generated from the existing boiler shall be supplied to nearby brick manufacturers in closed vehicles only. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.
- (viii). CO₂ generated shall be collected by CO₂ recovery plant.
- (ix). 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.
- (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. Firefighting 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. Filter press shall be installed for drying of sludge.
- (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 in nearly 6.07 hectares i.e., 33.33% of the 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. Reserve forest is adjacent to project site, 20 m wide greenbelt towards Reserve Forest shall be developed. Greenbelt development shall be completed in 1 year.
- (xvi). PP proposed to allocate Rs. 2.97 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, 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/ Managing 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. 3

Expansion of Existing 150 KLPD Molasses based Distillery to 400 KLPD Molasses Based Distillery / 400 KLPD Grain based Distillery producing Ethanol for EBP at Gut No. : - 61/A village Akiwat, Takaliwadi Road, Takaliwadi in Shirol tahsil of Dist.:- Kolhapur, State- Maharashtra by M/s. Shri. Gurudatt Sugars Ltd – Consideration of Environment Clearance reg.

[A/MH/IND2/400306/2022, IA-J-11011/368/2022-IA-II (I)]

The proposal was earlier considered by the EAC (Ind-2) in its meeting ID IA/IND2/13349/11/10/2022 held on 11 Oct., 2022 wherein EAC recommended the project for grant of environmental clearance. However, during processing competent authority referred the proposal to EAC for deliberation of the following issues:

- Additional land for greenbelt development.
- Detailed time bound action plan for development of greenbelt in 33% of total plant area.

Accordingly, the proposal was again considered in EAC meeting (Meeting ID: IA/IND2/13394/28/11/2022) held on 28th – 29th November, 2022.

During EAC deliberation PP has submitted the following response:

Sr. No.	ADS by MOEFCC	Reply of PP
1	It may be noted that IRO mentioned that as per existing EC, plot area of the existing unit is 55 acres and so far PP has developed greenbelt in 3.4 acres of land only. And during EAC (Ind.-2) meeting, PP wants to include 31 acres of additional area. As per information provided in Parivesh portal, total land area	i. Time bound Action plan for Green Belt development - We have undertaken a program of Monthly Green (Plantation) to Cover area of 24 Acres as follows; a. Preparation of Site & excavation -15.12.2022 b. Each month plantation program for 4 Acres completing

	<p>required for the proposed project is 5.40 hectares. In view of above, PP is requested for the following information on priority:</p> <p>i. Please furnish time-bound action plan (month wise) for development of 33% green belt as per observation of IRO.</p> <p>ii. Details of existing plot area and additional plot area to be amended in this expansion proposal including layout plan.</p>	<p>24 Acres plantation – 15.06.2023</p> <p>ii. In Addition to present 55 Acres of land, we have additional 31 Acres of land, totaling to 86 Acres of Land. The location of plan as well as Layout Plan showing Area statement, including Green Belt development for the both plot as follows; The Green Belt development as shown in Drawing is following table;</p>
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Sr. No.	Total Plot Area	Present use of area	Existing Proposed Belt Area	& Green	GPS Location of Area
1.	55 Acre	Industrial	Existing 4.46 Acre		16.620975 74.599472
2.	31 Acre	Open Land	Proposed 24 Acre		16.624669 74.589526
			Total 28.46 Acre		

EAC found the above details submitted by PP satisfactory.

Further, during deliberations, EAC discussed following issues:

- PP shall submit month wise action along with budgetary allocation for development of green belt. Accordingly, PP has submitted month wise action plan vide letter no SGSL/ENVI/653/2022-23 dated 30.11.2022 to achieve 33 % greenbelt. Action plan covers for the period from November, 2022 to March 2023 in which, PP will develop greenbelt in the plot area of 28.46 acre with a budget of Rs. 57.75 lakh.

Committee was satisfied with the response of project proponent. 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, 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). Now total plot area of the existing and proposed project has been increased from 55 acre to 86 acre after addition of 31 acre. Out of which PP shall develop greenbelt in 28.46 acre to achieve 33% of greenbelt. As proposed vide letter no SGSL/ENVI/653/2022-23 dated 30.11.2022, PP shall comply with the month-wise action plan (November, 2022 to March 2023) submitted for the greenbelt development.
- (ii). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the expanded capacity of 250 KLPD molasses based distillery and proposed 400 KLPD grain based distillery 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.
- (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). NOC from the Concerned Local authority for surface water supply shall be obtained before start of the construction of plant, 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.
- (v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production which will be met 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 shall be dried to form DDGS to be used as cattle feed in grain based operation and in molasses based operation, concentrated spent wash will be dried to form powder. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.
- (vii). As committed, industry shall install air cooled condensers.
- (viii). ESP (5 field & 99.9% efficiency) & stack height of 61 m will be provided with 71 TPG bagasse fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
- (ix). In existing operation, boiler ash (50 TPD- Coal Ash) is supplied to brick manufacturers & potash rich ash which (4.5 TPD) is sold to Organic fertilizer manufacturer. For the proposed bagasse fired boiler, ash (10 TPD) will be utilized in proposed in-house brick manufacturing plant. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.
- (x). CO₂ generated (200 TPD) during the fermentation process will be collected in bottling plant.
- (xi). PP shall allocate at least Rs. 1 Crores/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. Filter press shall be installed for drying of sludge.
- (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 in nearly 28.46 acres i.e. 33% of the total project area by end of March, 2023 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. Greenbelt development shall be completed before commissioning of the plant.
- (xvii). PP proposed to allocate Rs. 2.5 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. 4

Proposed CDU Revamp from Existing 1.0 MMTPA to 1.2 MMTPA within the Existing Refinery Complex located at Village Noonmati, Tehsil Page 115 of 129 Guwahati, District Kamrup (Metro), State Assam by M/s. Indian Oil Corporation Limited, Guwahati Refinery (IOCL Guwahati refinery) – Re-consideration of Environmental Clearance

[IA/AS/IND2/263391/2019, J-11011/71/2012- IA II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its meeting ID: IA/IND2/13360/20/10/2022 held during 20th October, 2022 wherein EAC recommended the project for grant of environmental clearance. However, during processing competent authority referred the proposal to EAC for deliberation of the PH issues and time bound action plan for addressing the same.

Accordingly, the proposal was again considered in EAC meeting (Meeting ID: IA/IND2/13394/28/11/2022) held on 28th – 29th November, 2022.

During EAC deliberation PP has submitted the following response:

S.No	Issue in brief	Action Plan in Brief	Budget allocated and Timeline
1	Gajendia Nath Sarma, sector 2, Sankarnagar, Noonmati, Guwahati-20. He said that it is a good initiative of Guwahati refinery that it is going to	Sri Gajendra Nath Sarma has appreciated the initiative taken by GR in his opening remarks <ul style="list-style-type: none"> • However as pointed out by Sri Sarma the black particles and foul smell may be attributed to the vehicular traffic in the 	<ul style="list-style-type: none"> • Refinery is having continuous monitoring systems and these are maintained regularly to ensure 24*7

S.No	Issue in brief	Action Plan in Brief	Budget allocated and Timeline
	<p>take this step to increase the existing production capacity from 1.00 MMTPA to 1.2 MMTPA however, he said that during the winter season, a layer of black carbon (dust particles) is seen on the leaves and other surface. Sometimes around 2.30-3.30 am (at night) he has explained some smell of obnoxious gas emission .He also stated that approximately 10,000ltrs water is discharged near his residence. He has requested the concerned authorities to take the necessary actions for control of the probable pollution due to expansion of production capacity from 1.00 MMTPA to 1.2 MMPTA.</p>	<p>roads around the periphery of the refinery and also from the neighbouring industries of GR which deals with Carbon.</p> <ul style="list-style-type: none"> • Our existing practices are already in place and the same are given below GR has well established Online Continuous Ambient air monitoring System, Stack emission system and effluent analyser as per EMP and data is continuously going to CPCB and Pollution Control Board, Assam • Further GR has a VOC recovery system in place . • Additional 4 nos. of manual AAQMS is in place and monitoring done as per Statutory norms. • Periodic monitoring of ETP sample by Pollution Control Board Assam is carried out every month and there is no adverse report from PCB, Assam • As stated by Sri Nath on Water wastage ,Sankarnagar is approx. 3 Kms away from GR premises and GR has no water distribution network in that area.This water loss 	<p>connectivity with CPCB / SPCB servers.</p> <ul style="list-style-type: none"> • An expenditure of Rs. 30 Lacs / annum is incurred towards maintenance of CAAQMS, CEMS and expenses towards manual monitoring of ambient air quality too which is done in the neighbouring villages also and the same shall be continued in future too.

S.No	Issue in brief	Action Plan in Brief	Budget allocated and Timeline
		cannot be attributed to GR .Moreover GR is maintaining strict monitoring on water loss and conducts regular water survey and awareness programme amongst the public continuously which was highly appreciated by Chairman and Member Secretary ,Pollution Control Board ,Assam	
2	<p>MOLEY BARUA, CHAIRPERSON, EARLY BIRD NGO.</p> <p>He said that many industries in Assam have been closed. He mentioned that some industries namely GOGIGHOPA PAPER MILL, KAMRUP SUGAR (NAGCON) Mill, GAGIROAD PAPER MILL (nagoon paper mill of M/S HPCL), APOL etc have closed by themselves. He admired the authority of Guwahati refinery for their extensive CSR activities such as providing bore wells to many residential areas and institutions, health camps. Etc. He opened that by this time Guwahati refinery should have</p>	<p>Sri Barua has appreciated the environmental and social measures adopted by GR.</p> <p>Regarding the pollution control measures to be taken by GR ,GR has always taken the required measures for meeting Statutory compliances and assures that in future also GR will maintain the same</p>	<ul style="list-style-type: none"> • Refinery has continuously taken pollution control measures for protection of Environment. • For the year 2021-22, a total of Rs. 10 lacs / annum was incurred towards tree plantation, effluent treatment, LDAR programme, EIA studies etc.

S.No	Issue in brief	Action Plan in Brief	Budget allocated and Timeline
	<p>increased its production capacity from 15.00 to 20.00 MMPTA like other refineries of the country. However, the present proposed revamp of CDU unit from its existing capacity from 1.00 MMPTA to 1.2 MMPTA has been supported by him and advised to take all necessary pollution control measures for abatement of probable pollution due to its proposed enhancement.</p>		
3	<p>SHRI BEPRIL KR. CHOUDHURY Bishnurabhe Nagar, Noonmati, Guwahati -20. He stated that the existing capacity of the Guwahati refinery is very less. It is a very old refinery but over the period of 58 years of its operation its production capacity has not been increased to the expected level. However, the present proposal of expansion of production capacity from 1.00 MMTPA to 1.2 MMTPA has been supported by him</p>	GR appreciates the support received from public	-

S.No	Issue in brief	Action Plan in Brief	Budget allocated and Timeline
	voluntarily.		
4	<p>GIBON NARAYAN KONWARA Anbanger, Noonmati, Guwahati 20</p> <p>He said that over the 35 years he has never been a part of such a meeting. He said refinery in an asset for all. He stressed that the Human Resource should not be affected due to the proposed expansion because health is wealth. Therefore, at the cost of health no wealth or development is expected. He told that they are laymen and they are not aware and have lack of knowledge regarding means to control and about pollution control board and other concerned government department should advice the Guwahati refinery by adopting appropriate mitigating measures. He has requested that in future also people, and public should be informed</p>	<ul style="list-style-type: none"> • GR appreciates the fact that Sri Konwar has regarded GR as an asset for all. • GR assures that no human health will be affected with the upcoming project. • GR regularly conducts awareness programmes on Health Safety and Environment in different forums amongst the public and masses in general . • However GR shall conduct more such awareness programmes in the nearest future amongst the public continuously. • Also GR is conducting health camps regularly. 	<ul style="list-style-type: none"> • Refinery has allocated total of Rs 5lakhs towards public awareness programmes on Health including health camps during and after COVID and Environment awareness like Drama for reduction of plastic usage, Workshop on water conservation etc in a continuous manner. • Regular offsite mockdrill covering safety health and environment aspects is conducted in coordination with District authorities. • Next offsite

S.No	Issue in brief	Action Plan in Brief	Budget allocated and Timeline
	before taking such initiatives.		mock drill is due in Dec'2022

EAC found the details submitted above satisfactory.

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

- (i). 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.
- (ii). The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18th March, 2008 and G.S.R.595(E) dated 21st August, 2009 as amended from time to time, shall be followed.
- (iii). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. For emission control and management, use of FG/NG in heater as fuel, adequate stack height, use of Low NOX burners in heater & boiler, continuous stack monitoring, Sulphur recovery plant, etc. shall be installed/ensured. As proposed, PP shall use 50% FG instead of 25% of FG.
- (iv). NOC from the concerned authority for surface water supply shall be obtained before start of the construction of plant, 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.
- (v). Total fresh water requirement for the proposed project shall not exceed 3792 m³/day to be met from River Brahmaputra. Necessary

permission in this regard shall be obtained from the concerned regulatory authority.

- (vi). Effluent of 3768 m³/day + 96 m³/day quantity after expansion shall be treated through existing Effluent Treatment plant. Domestic waste water is/ being will be treated in existing ETP of capacity 13200 m³/d (wet weather flow), 8760 m³/d (dry weather flow). The plant will be based on Zero Liquid discharge system and treated effluent will not be discharged outside the factory premises. No discharge in Brahmaputra river shall be done after expansion of this project.
- (vii). Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (viii). Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.
- (ix). Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (x). Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided. The ash from boiler shall be sold to brick manufacturers/cement industry.
- (xi). The company shall undertake waste minimization measures as below
(a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xii). The green belt of 5-10 m width shall be developed in the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. The project proponent shall ensure 33% greenbelt area vis-à-vis the project area through afforestation in the

degraded area. The Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

- (xiii). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility (Rs. 0.3 Crores), and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.
- (xiv). For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xv). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (xvi). Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xvii). Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.
- (xviii). The PP should improve the efficiency of ETP Plant and the water discharge should be as per prescribed CPCB Norms. They should also install 24x7 hours monitoring system (of the discharge) and the same should be connected to the server of SCPB/CPCB.
- (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. 5

Proposed project 120 KLPD Grain Based Ethanol Plant and 3.0 MW Cogeneration Power Plant located at Vill. Gahanpalli, Block- Buguda, Dist- Ganjam of Odisha State by M/s. Tarangini Distilleries Private Limited (TDPL) – Re-consideration of Environmental Clearance

[IA/OR/IND2/403070/2022, IA-J-11011/454/2022-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its meeting ID: IA/IND2/13379/14/11/2022 held on 14th -15th November, 2022. During deliberation the Committee noted that EIA Coordinator was not present in the meeting, for presenting the EIA-EMP report as per QCI NABET accreditation process. It was suggested to defer the project for the next meeting.

Accordingly, the proposal was again considered in EAC meeting (Meeting ID: IA/IND2/13394/28/11/2022) held on 28th – 29th November, 2022.

The Project Proponent and the accredited Consultant M/s Enviro Infra Solutions Pvt. Ltd., Ghaziabad (NABET Certificate No. NABET/EIA/1922/RA 0157 and validity 13th November, 2022) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project 120 KLPD Grain Based Ethanol Plant

and 3.0 MW Cogeneration Power Plant (Rice Husk / Biomass Briquette based) located at Village Gahanpalli, Block Buguda, District Ganjam, State Odisha by M/s. Tarangini Distilleries Private Limited (TDPL).

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 Product / By Product	Production Capacity
1	Distillery (grains like maize / broken rice)	Ethanol	120 KLPD
2	Co-generation Power plant	Power	3.0 MW
3	DDGS Dryer	DDGS	65 TPD
4	Fermentation Unit	CO ₂	65 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 5.94 Hectares. Greenbelt will be developed in total area of 2.18 hectares i.e., 36 % of total project area. The estimated project cost is Rs. 149.38 Crores. Capital cost of EMP would be Rs. 8.34 Crores and recurring cost for EMP would be Rs. 1.5 Crores per annum. Industry proposes to allocate Rs. 1.5 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 125 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: Gocha at a distance of 1 km in NE

direction, Panchubhuti at a distance of 1 km in NW direction, Karachuli at a distance of 2 km in SW direction, Kriamba at a distance of 0.5 km in E direction. Water bodies: Baghua Dam Reservoir is at a distance of 3 Km in S direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $19.52 \mu\text{g}/\text{m}^3$, $19.52 \mu\text{g}/\text{m}^3$, $13.32 \mu\text{g}/\text{m}^3$ and $17.96 \mu\text{g}/\text{m}^3$ with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). (base line data for air)

Total fresh water requirement will be $480 \text{ m}^3/\text{day}$ which will be met from Baghua Dam Reservoir. Application has been submitted to Office of Supdt. Engineer, Bhanjanagar Irrigation Division, Bhanjanagar, Odisha dated 22.09.2022. Effluent (Condensate/spent lees/blowdown etc.) of $470 \text{ m}^3/\text{day}$ quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity $600 \text{ m}^3/\text{day}$. 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 25 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 2.6 MW and will be met from proposed 3 MW cogeneration power plant. 30 TPH Rice husk/briquette fired boiler will be installed. ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of $50 \text{ mg}/\text{Nm}^3$ for the proposed boiler. 500 kVA DG set will be used as standby during power failure and stack height (3.5 m ARL) 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.
- CO_2 (65 TPD) generated during the fermentation process will be collected by utilizing CO_2 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) (65 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (42 TPD) will be supplied to brick manufacturers.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.075 TPD) and STP Sludge (0.025 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 120 KLPD will be used for manufacturing fuel ethanol only.

Total land of 5.94 Hectares is under possession of the company and land use conversion has been application has been submitted to Office of The Tahsildar, Buguda, Ganjam, Odisha dated 18.10.2022.

During deliberations, EAC discussed following issues:

- PP has not submitted details of water bodies that are found nearby the project site. As per kml file, a natural nala is passing just beside the boundary of the proposed project site. PP shall obtain NOC from concerned irrigation department for the same.
- Layout of green belt plan submitted was not covering entire boundary of the project site. PP shall submit the revised layout of green belt.
- It was noted that existing connectivity for the proposed project site to the nearest highway is a narrow pathway, which cannot be used for regular movement of vehicles transportation as the proposed site is surrounded by agricultural fields. PP should provide the detail plan to construct the road by acquiring the land and also obtain permission from revenue department for the same.
- Discrepancies were observed in the incremental GLC values submitted for AAQ modelling study carried out. PP shall re-conduct AAQ modelling study afresh and submit the results of AAQ modelling alongwith inputs data. PP shall also submit baseline data of the project area.

Accordingly, proposal was returned in present form.

Agenda No. 6

Proposed capacity of 1 x 300 KLPD under EBP programme under B2 category of grain-based Fuel Ethanol and 1 x 9 MW of captive power plant, to be installed at Survey No: 206/1B2, 206/1B3, 206/1C, 206/1D, 206/1E, 207/1, 207/2, 208/1A, 208/1C, 208/4A, 208/4B, 208/5, 208/6, 210/4, 210/5, 210/6, 210/6B, 210/7B, 210/8, 210/9, 210/10B, 210/11, 210/12B, 210/12C, 211/1A, 211/1B, 211/1C, 211/1D, 211/2, 211/3, 211/4A, 211/4B, 211/4C, 211/4D, 211/5, 212/3A, 212/4A1, 212/4A2, 212/4A3, 212/5, 212/6, 212/7A, 212/7B, 230/3B, 231/1, 231/2, 231/3, 231/4 & 231/6, Gurajada Village, Pamidimukkala Mandal, Krishna District, Andhra Pradesh by M/s. Nukala Biofuels Private Limited - Consideration of Environmental Clearance

[IA/AP/IND2/ 400959/2022, IA-J-11011/487/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited (NABET / EIA/ 1922 / SA 0148 valid upto 16-12-2022) , 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 Fuel Ethanol plant, of production capacity of 1 x 300 KLPD under EBP programme under B2 category of grain-based Fuel Ethanol and 1 x 9 MW of captive power plant, to be installed at Survey No: 206/1B2, 206/1B3, 206/1C, 206/1D, 206/1E, 207/1, 207/2, 208/1A, 208/1C, 208/4A, 208/4B, 208/5, 208/6, 210/4, 210/5, 210/6, 210/6B, 210/7B, 210/8, 210/9, 210/10B, 210/11, 210/12B, 210/12C, 211/1A, 211/1B, 211/1C, 211/1D, 211/2, 211/3, 211/4A, 211/4B, 211/4C, 211/4D, 211/5, 212/3A, 212/4A1, 212/4A2, 212/4A3, 212/5, 212/6, 212/7A, 212/7B, 230/3B, 231/1, 231/2, 231/3, 231/4 & 231/6, Gurajada Village, Pamidimukkala Mandal, Krishna District, Andhra Pradesh by M/s. Nukala Biofuels 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	PRODUCTION CAPACITY
1	Distillery plant	Ethanol	300 KLPD
2	Power plant	Electricity	9 MW
BY-PRODUCTS			
1	Distillery plant	DDGS	240 TPD
2	Distillery plant	CO ₂ recovery	228 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 for the proposed project is 26.19 acres. Greenbelt will be developed in total area of 8.90 acres i.e 33% of total project area. The estimated project cost is Rs. 404.9 crores. Capital cost of EMP would be Rs. 41.4 crores and recurring cost of EMP would be Rs. 4.22 Crores per annum. Industry proposes to allocate Rs. 4.04 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment will be 200 persons.

There are no National parks / Wild life sanctuaries, Biosphere Reserves, Tiger / Elephant reserves, Wildlife corridors etc. within 10 Km distance. Water bodies: Pulleru canal – 51 meters, Gudivada Canal – 1.9 Kms, Machilipatnam canal – 5.22 kms, Krishna River – 9.3 kms & Krishna East Canal – 8 kms are present within 10 Kms radius. NOC letter no EE/KE/VIA/DB/ATO/NOC/1274 dtd. 2.11.2022 issued by Executive Engineer, water resources Department, Government of Andhra Pradesh has been submitted mentioning that the site location is at a distance of 50 m from left bank of upper canal. There will not be any HFL for the canal.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.11 µg/m³, 0.11 µg/m³, 3.4 µg/m³, and 0.58 µg/m³ with respect to PM₁₀, PM_{2.5}, SO₂ and NOx.

The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1200 m³/day which will be met from Ground water / Surface water. NOC has been obtained from Ground Water and Water Audit Department, Govt. of Andhra Pradesh vide no. AP05620022022-23 dated 27-09-2022 and valid upto 26-09-2025. Application has been submitted to Irrigation Department, Govt. of Andhra Pradesh for drawing surface water vide dated 09-09-2022. Effluent (Condensate/spent lees/blow down etc.) of 1755 m³/day quantity will be treated through Condensate Polishing Unit of capacity 1800 KLPD. Raw stillage (1800 KLPD quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. Non-Process effluent (Backwash from DM plant & Boiler blowdown) of 100 KLD will be neutralized in a neutralization tank and will be utilized for greenbelt development, dust suppression and ash conditioning after ensuring compliance with treated effluent quality as per MoEF / SPCB Standards. STP of capacity 15 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 9 MW and will be met from the proposed 1 x 9 MW captive power plant. 1 x 90 TPH Biomass / Coal fired boiler will be installed. APCE Electro Static Precipitator with a stack height of 66 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm³ for the proposed boiler. 3 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 with a stack height of 66 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 (228 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors

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

- DDGS (Distilled Dried Grains Stillage) (240 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (165.6 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 (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.8 TPD) and STP Sludge (1.2 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 1 x 300 KLPD will be used for manufacturing fuel ethanol only.

Total land of 26.19 acres is taken on lease for 20 years and Land use conversion has been completed vide letters no.s 135/2009, 136/2009 & 137/2009 dated 20-02-2009, 614/2022, 615/2022, 617/2022, 618/2022, 619/2022, 620/2022, 621/2022, 622/2022, 623/2022 & 625/2022 dated 28-10-2022. EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- At least 8900 plants shall be developed in 8.9 acres of the project area. PP shall develop indigenous plants in consultation with local DFO.
- Revised fresh water consumption balance @ 4 KL/KL of ethanol production shall be submitted. Accordingly, water balance to be modified.
- ESP (5 field) with 99.9% efficiency with a stack height of 66 meters will be installed to 90 TPH boiler for controlling the particulate emissions less than 30mg/Nm³. PP agreed to it. PP informed that an interlocking system will be provided to the boiler in such a way that whenever ESP fails the fuel feed to the boiler will stop.
- PP informed that lime dosing will be provided to bring down the SO_x emissions to less than 100 mg/m³.
- Brick manufacturing shall be constructed inside plant premises for utilisation of fly ash.
- 10% of the total power requirement shall be met from solar energy.

- PP has committed that at least Rs. 2.00 crores shall be earmarked for OHS.

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 300 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 Central Ground Water Authority (CGWA) for ground water / Concerned Local authority for surface water 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.
- (v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production which will be met from Ground water/ 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 shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.
- (vii). Electrostatic precipitator (5 field & 99.9% efficiency) with a stack height of 66 meters will be installed with 90 TPH Biomass / Coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm³. SO₂ and NO_x emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
- (viii). Boiler ash (165.6 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.
- (ix). CO₂ generated (228 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.
- (x). PP shall allocate at least Rs. 2.00 Crores per 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 in nearly 8.9 acres i.e., 33 % of the 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. Greenbelt development shall be completed before commissioning of the plant.
- (xvi). PP proposed to allocate Rs. 4.04 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.

Agenda No. 7

Greenfield Project of 150 KLD Grain Based Ethanol Plant along with 4.0 MW Co-generation Power Plant located at Khasra No. 1135/934, 1139/1136, 1143/1140, 1145/1144,6,8 in Village-Peeplada Hadon Ka, Tehsil-Talera, District-Bundi, Rajasthan by M/s. Ethan Bio-Fuel Pvt. Ltd. - Consideration of Environmental Clearance

[IA/RJ/IND2/ 403525/2022, IA-J-11011/473/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. GRC India Pvt. Ltd. (NABET certificate no. NABET/EIA/2124/RA0213 and valid till 15.02.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project 150 KLD Grain Based Ethanol Plant along with 4.0 MW Co-generation Power Plant located at Village- Peeplada Hadon Ka, Tehsil - Talera, District - Bundi, Rajasthan by M/s. Ethan Bio-Fuel 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	Ethanol	150 KLPD
2	Co-generation power plant	Power	4.0 MW
3	DWGS dryer	DDGS	67 TPD
4	Fermentation unit	Carbon di-oxide	112 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 7.45 hectares. Greenbelt will be developed in total area of 2.45 hectares i.e., 33% of total project area. The estimated project cost is INR 202.63 Crores. Capital cost of EMP would be INR 30.40 Crores and recurring cost for EMP would be INR 5.40 Crores per annum. Industry proposes to allocate Rs. 2.02 Crores towards Extended CER (Corporate Environment Responsibility). Total Employment will be 123 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 5.90 km towards West direction is present within 10 km area of the project site. Ghora Pachhar Nadi is at 0.87 km in South direction for which NOC has been obtained from the Office of the Executive Engineer, Water Resources Project, Division Bundi, vide letter no. EE/WRP/2022/2732 dated 17.11.2022. Executive Engineer informed that there is no history of flood in the region for more than 30 years. NOC vide letter no 1948 dated 4.11.2022 has been obtained from Executive Engineer, LMC Dn CAD Bundi regarding existing canal.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.03 $\mu\text{g}/\text{m}^3$, 0.02 $\mu\text{g}/\text{m}^3$, 0.78 $\mu\text{g}/\text{m}^3$, 0.48 $\mu\text{g}/\text{m}^3$ and 2.16 $\mu\text{g}/\text{m}^3$ with respect to PM₁₀, PM_{2.5}, NO₂, SO₂, and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement including CPP will be 750 m³/day which will be met from groundwater. The application for permission of withdrawal of groundwater has been submitted Vide application No 21-4/17701/RJ/IND/2022 dated 13.10.2022. Effluent (Condensate/spent lees/blowdown etc.) of 738 m³/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 900 KLD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 15 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 4.0 MW and will be met from proposed 4.0 MW co-generation power plant. 40 TPH Coal & Rice Husk fired boiler will be installed. ESP with 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 will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with 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 (112 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors.

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

- DDGS (Distilled Dried Grains Stillage) .i.e., 67 TPD will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (57.63 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises of capacity approx. 2.85 Cr. bricks per annum.
- Used oil (2 Kilolitres per annum) will be sold to authorized recyclers.
- CPU/ETP sludge (100.74 kg/day) and STP Sludge (1.37 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 150 KLPD will be used for manufacturing fuel ethanol only.

Total plant area i.e. 7.45 Ha is under possession of the company and land-

use conversion application has been submitted to Revenue Department, Rajasthan vide application ID. LC/2022-23/145076, dated 08.10.2022. EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- It was noted that an irrigation canal is passing nearby the project sited. Accordingly, PP has submitted NOC from the irrigation department for the same.
- ESP (5 field) with 99.9% efficiency with a stack height of 60 meters will be installed for controlling the particulate emissions.
- 15% of the total power requirement shall be met from solar energy.
- PP shall construct Garland drain all along the project boundary.
- PP has agreed to restrict the fresh water requirement upto 4 KL/KL of ethanol production.

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 150 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 Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
- (v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production i.e 600 m³/day which will be met from Ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.
- (vii). Electrostatic precipitator (5 field & 99.9% efficiency) with a stack height of 60 meters will be installed with 40 TPH Coal & Rice Husk fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm³. SO₂ and NO_x emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
- (viii). Boiler ash (57.63 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use biomass like 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

15% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

- (ix). CO₂ (112 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors.
- (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 in nearly 2.45 hectares i.e., 33 % of the 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. Greenbelt development shall be completed before commissioning of the plant.

- (xvi). PP proposed to allocate Rs. 2.02 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.

Agenda No. 8

Proposed 100 KLD Grain Based Ethanol plant along with 3.0 MW Cogeneration Power Plant located at Survey No. 38/1, & 38/2 Village Jaisingpura, District-Neemuch, Madhya Pradesh by M/s. Mangal Synthesis Private Limited - Consideration of Environmental Clearance

[IA/MP/IND2/401609/2022, IA-J-11011/433/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Envisolve LLP (NABET certificate no. NABET/EIA/2124/IA0088 and validity 19/08/2024) 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 & 3 MW Co-generation power plant (Rice Husk) located at Survey No. 38/1, & 38/2, Village Jaisingpura, Tehsil-Neemuch, District Neemuch, State Madhya Pradesh by M/s. Mangal Synthesis 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 (Raw material-Grains such as rice and maize)	Ethanol	100 KLPD
2.	Co-generation powerplant	Power	3 MW
3.	DWGS dryer	DDGS	50 TPD
4..	Fermentation unit	Carbon Di-Oxide	55 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 3.02 hectares. Greenbelt will be developed in total area of 1.006 hectares i.e., 33.3% of total project area. The estimated project cost is Rs. 110 Crores. Capital cost of EMP would be Rs. 14.85 Crores and recurring cost for EMP would be Rs. 1.78 Crores per annum. Industry proposes to allocate Rs. 1.65 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will 150 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 forests/protected forests, No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. from project site. No Eco sensitive around the boundary. Water bodies: River Retum is at a distance of 0.67 Km in North West direction and Jaju Sagar Dam is at distance of 9.29 Km in South East direction. River Retum is at a distance of 0.67 Km for which, we have received NOC from MPWRD Vide letter No. 2473/work/industrialarea/2022 dated 20.09.2022.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 79.62 $\mu\text{g}/\text{m}^3$, 17.13 $\mu\text{g}/\text{m}^3$ and 12.02 $\mu\text{g}/\text{m}^3$ 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 1077 m^3/day which will be met from River Return. Application has been submitted to WRD dated 12.09.2022. Effluent (Condensate/spent lees/blowdown etc.) of 602 m^3/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 700 KLPD. Raw stillage (626 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 2.6 MW and will be met from proposed 3 MW cogeneration power plant. 25 TPH Rice husk fired boiler will be installed. Bag filter with a stack height of 45 m will be installed for controlling the particulate emissions Within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 2 DG sets of 500 kVA each 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 Bag filter with a stack height of 45 m 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 (55 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) (50 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (40 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 (0.5 Kiloliters per annum) will be sold to authorized recyclers.
- CPU sludge (0.23 TPD) and STP Sludge (0.0002 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 100 KLPD will be used for manufacturing fuel ethanol only.

Total land of 3.02 Hectares is under possession of the company and land use conversion has been completed vide letter no. Patwarihalka No. 05 Zila Neemuch dated 17.10.2022.

During deliberations, EAC opined that total land area for the proposed project is 3.02 hectares, which very small for 100 KLPD Distillery. EAC suggested that PP should come out with adequate plot size for setting up of the proposed distillery project.

Accordingly, the proposal was returned in present form.

Agenda No. 9

Establishment of 300 KLPD Molasses / Sugarcane juice based Distillery, 5,000 TCD Sugar Factory & 20 MW Co-generation Plant located At/post: Ghatsawali, Tal & Dist. Beed, Maharashtra State by M/s. SP Sugar & Agro Pvt. Ltd. (SPSAPL) –Consideration of Environmental Clearance

[IA/MH/IND2/404438/2022, IA-J-11011/199/2022-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 Establishment of 300 KLPD Molasses / Sugarcane juice based Distillery, 5,000 TCD Sugar Factory & 20 MW Co-generation Plant located At/post: Ghatsawali, Tal & Dist. Beed, Maharashtra State by M/s. SP Sugar & Agro Pvt. Ltd. (SPSAPL).

As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amended vide Notification No S.O. 3067 (E); dated 13.06.2019, the proposed project is listed as activity 5(g)(i)(ii)-Distillery at Centre Level & 5 (j)& 1(d) – Sugar Factory & Co-generation Plant respectively; Category 'B' at State Level. As the Sugar Factory, Co-generation Plant & Distillery projects are located in same premises as an integrated project complex, the entire proposal of establishment of Sugar Factory, Co-generation Plant & Distillery is being submitted at 'Ministry of Environment, Forests and Climate Change (MoEFCC); New Delhi' for grant of EC.

The details of products and capacity as under:

Industrial Unit	Product & By-product	Quantity (MT/ M)
Sugar Factory (5000 TCD)	Sugar (12%)*	18,000
	By-product	
	Molasses (4%)*	6,000
	Bagasse (30%)*	45,000
	Press Mud (4%)*	6,000
Co-Gen (20 MW)	Electricity (MW)	20
Distillery (300 KLPD)	Ethanol /RS/ ENA (KLPM)	9,000
	By-product	
	CO ₂ Gas (MT/M)	6,750
	Fusel Oil	18

Standard Terms of Reference have been obtained vide F. No. IA-J-11011/199/2022-IA-II(I) dated 15.06.2022. It was informed that no litigation is pending against the proposal.

Public Hearing for the proposed project had been conducted by Maharashtra Pollution Control Board on 29.08.2022 at project site and chaired by Additional District Magistrate, Beed. The main issues raised during the public hearing and their action plan:

No.	Issue in brief	Action plan in brief	Budget
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			allocated and timeline
1	<p>Congratulating the PP & supporting the project it was asked that while surveying said project, Ambesawali village which is 700 M from project site was not considered. Forest Department land is not mentioned in the said survey. Information about air pollution is given but information about SO₂ and NO_x is not mentioned. Information about ETP & STP and disposal of treated effluent should be given. No information has been given about local nala flowing nearby village ultimately meeting to Mankarnika River. Soil testing in Ambesawali village was not carried out during the survey.</p> <p>1.</p>	<p>Response: Project Consultant replied that during survey of said area, the villages have been selected for study according to the wind directions, impact possibilities, monitoring season & primary data has been prepared. Subsequently, after project commissioning, it is required to conduct routine monitoring w.r.t. various environmental parameters and it is necessary to prepare a report in this regards every 6 months. At that time the said village will be included in the monitoring.</p> <p>The consultant replied that it cannot be said that there is no forest in said area. But reserved forest area, protected forest area and social forestry are types of forest and there is no forest area notified (as WLS etc.) by the Govt. in this area. In fact, there is a reserved forest at a distance of 3.75 Km mentioned in EIA. Ht. of chimney is 72 M and APC comprises of ESP. Due to this there will be no problem of air pollution in the area. Concentrations of SO₂ & NO_x in ambient air is mentioned in presentation & EIA Report along with those in stack emissions and GLC modelling presented for same. In drainage pattern map of the area, the local nalla is shown. It was dry during monitoring hence sampling was not done there. Latest STP will be provided for treatment of sewage, latest ETP will be set up for industrial effluent which will be used for GB & irrigation within premises of</p>	<p>Budget: STP, ETP, 2 CPUs, Biom. Plant, 5 Days Spentwash Storage Tank - Rs. 53 Cr.</p> <p>Timeline: After grant of EC and before CTO award.</p>

		<p>industry. Distillery will be ZLD. Consultant explained all tech. aspects in detail to public.</p> <p>Action Plan: Sp.wash of 2400 CMD will be bio-methanated, concentrated in MEE @ 480 M³/D and dried for powder. Spent lees (412 CMD), condensate (2112 CMD) & blow downs (188 CMD) will be treated in CPU. Treated effluent (2543 CMD) will be reused in process for achieving ZLD. Sugar Factory & Co-gen Plant effluent (335 CMD) shall be treated in ETP and reused for GB in own factory premises; achieving ZLD. Domestic effluent 15 CMD to be treated in STP; reused for GB. 140 TPH bagasse boiler will be with ESP & 72 M stack. Impact studied tho' Air Dispersion Modeling & same is presented in Chapter 4, Point No. 4.3.1, Page No. 135-147.</p>	
2	<p>Supported above project, raised points - (1) Care should be taken that water in the area will not be polluted due to industrial effluent (2) Care should be taken that industry does not affect health of the citizens in area, (3) By using CSR funds, dense forest shall be develop on govt. land in the area. Play ground & other such activities shall be carried out by using CSR (4) local road passing tho' project area shall be</p>	<p>Response: Project consultant replied that STP will be provided for sewage and ETP for industrial effluent. Treated effluent will be used GB within industry. Also industry project will be ZLD. It was assured that health of villagers around project will not have any negative impact.</p> <p>Chairman of the Industry Shri Suresh Patil said that CSR Fund will be utilized with guidance of District Collector; Beed. He also assured that various social projects in the area will be developed. Also the chairman of the committee (ADC) informed that separate presentation shall be submitted to the collector office Beed regarding the local road.</p>	

	cleared for villagers.		
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Total land area required is 17.56 hectares. Greenbelt will be developed in total area of 5.79 hectares i.e., 33% of total project area. The estimated project cost is Rs. 210 Crores. Capital cost of EMP would be Rs. 64.20 Crores and recurring cost for EMP would be Rs. 3.0 Crores per annum. Industry proposes to allocate Rs. 5.30 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 322 persons as direct & indirect.

There is no presence of national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors. Reserve forests is at a distance of 3.75 Km from project site. Water bodies: Kundaka River is at a distance of 6 Km in West to East direction.

Ambient air quality monitoring was carried out at 8 locations during October – December 2020 and the baseline data indicates the ranges of concentrations as: PM₁₀ (48.7–61 µg/m³), PM_{2.5} (11.8-24.3 µg/m³), SO₂ (12-20.8 µg/m³) and NO_x (14.9-27.8 µg/m³) and CO (0.10-0.90 mg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.615 µg/m³, 0.154 µg/m³, 3.85 µg/m³ and 0.162 µg/m³ with respect to PM₁₀, PM_{2.5}, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 670 M³/day which will be met from Upper Kundalika Medium irrigation Project (Sonna Kota dam. Application has been submitted to Irrigation Department, Beed, Maharashtra dated 10.06.2022. Effluent generated from Sugar & Co-gen unit will be 335 M³/day quantity will be treated through Proposed Effluent Treatment Plant of capacity 500 KLPD. Raw spentwash generated after establishment of distillery will be @ 2400 CMD will be concentrated in MEE. Concentrated spentwash @480 CMD will be Dried for powder formation. Other effluent generated after distillery establishment will be @ 2712 CMD in the form of lees, MEE condensate, cooling & boiler blowdown, lab & wash effluent. Same will be treated in CPU. Treated effluent will be fully recycled in process; ZLD will be achieved. STP of capacity 15 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 8.5 MW and will be met from proposed 20 MW cogeneration power plant. 140 TPH Bagasse fired boiler will be installed. APCE as ESP with a stack of height of 72 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 (16 M) will be provided as per CPCB norms to the proposed DG set.

Details of Process emissions generation and its management:

- Process emissions in the form of CO₂ shall be generated.
- After establishment of distillery, CO₂ @ 225 MT/D will be bottled and supplied to manufacturers of beverages /secondary uses.

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

a. Solid Waste:

- Sugar & Co-gen- Solid waste generated in the form of ETP sludge 10MT/M; used as manure. Boiler ash 1260 MT/M; Used as manure / Sold to Brick manufactures.
- Distillery- Yeast sludge 1920 MT/M & CPU sludge 81 MT/M; used as manure.

b. Hazardous Waste:

- Spent Oil 0.5 MT/Yr,; to Forwarded to authorized re-processor.

Total land of 17.56 Hectares is under possession of the company and Out of this land 13.85 Ha land conversion has been completed vide letter no. 5188 dated 15.09.2022. Remaining land (3.86 Ha) land conversion application has been submitted to Revenue Department dated 07.10.2022.

During deliberations, EAC discussed following issues:

- It was noted that natural nala is bisecting the proposed project site. Therefore, EAC suggested to furnish NOC from the irrigation department for the same. EAC also suggested to furnish additional measures to protect the nella.
- PP shall submit detailed time bound action plan along with budgetary allocation for addressing all the issues raised in Public Hearing.
- Discrepancies were observed in the baseline ambient air quality data submitted by PP. PP shall conduct 15 days baseline study again.
- PP shall also provide justifications for high background levels of AAQM.
- Impact of vehicles to be considered in the study. Traffic management

plan to be provided.

- PP shall submit action plan to control odour nuisance.
- PP shall explore the possibility to install air cooled condenser.
- 20% biomass pellets shall be used as fuel.
- PP shall allocate at least Rs. 1.00 crore for OHS.

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.

29th November, 2022 (Tuesday)

Agenda No. 1

Proposed Expansion sugarcane crushing from 10,000 TCD to 15,000 TCD to augment the requirement of sugarcane syrup/juice as raw material during sugarcane crushing season for distillery for production of ethanol by expansion for distillery from 300 KLPD to 600 KLPD under EBP programme. Located at Survey Nos. 238 & 239 of Hipparagi Village, Jamakhandi Taluk, Bagalkot District, Karnataka by M/s Shri Sai Priya Sugars Ltd – Consideration of amendment of Environmental Clearance

[IA/KA/IND2/293084/2022, IA-J-11011/277/2010-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. J-11011/277/2010-IA II(I) dated :23/11/2021 for the project expansion sugarcane crushing from 10,000 TCD to 15,000 TCD to augment the requirement of sugarcane syrup/juice as raw material during sugarcane crushing season for distillery for production of ethanol by expansion for distillery from 300 KLPD to 600 KLPD under EBP programme. Located at Survey Nos. 238 & 239 of Hipparagi Village, Jamakhandi Taluk, Bagalkot District, Karnataka by M/s. Shri Sai Priya Sugars Ltd.

PP informed that MoEF&CC vide letter no J-11011/277/2010-IA II (I) dated 14.02.2015 issued EC for establishment of 5000 TCD sugar plant, 120 KPPD Distillery and 30 MW Co-gen Power Plant. SEIAA vide letter no SEIAA6 IND 2015 dated 19.10.2015 issued EC for expansion of sugar from 5000 TCD to 10000 TCD, Cogeneration Power Plant from 30 MW to 65 MW and Captive Power Plant 5 MW. MoEF&CC vide letter no J-11011/277/2010-IA II (I)

dated 04.02.2021 issued EC for expansion of Distillery from 120 KLPD to 300 KLPD and captive power plant from 5 MW to 8 MW. MoEF&CC vide letter no J-11011/277/2010-IA II (I) dated 23.11.2021 issued EC for expansion of Sugar plant from 10000 TCD to 15000 TCD and Distillery from 300 KLPD to 600 KLPD.

PP has requested for transfer of distillery unit from M/s. Shri Sai Priya Sugars Limited to M/s.TruAlt Bioenergy Limited (Unit-2) Hipparagi- Maigur Village, Jamakhandi Tq Bagalkot District. Since earlier EC was issued for integrated project, PP has applied the project proposal for amendment to EC by splitting all conditions stipulated in the Environmental Clearances issued to the industry.

During deliberations, EAC discussed following issues:

- PP shall submit Board resolution from both the Companies.
- PP shall submit engineering drawing layout of the project.
- PP shall provide details of greenbelt in both the units after split of EC including clearly delineation of greenbelt in the layout map.
- Details of utilities after the Split.
- Compliance of undertaking provided while obtaining ECs under Ethanol blended with Petrol (EBP) program.
- Bifurcation of all the conditions stipulated in all EC granted to the industry.

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. 2

Proposed Integrated expansion of sugar plant from 5,000 TCD to 10,000 TCD, Distillery unit from 65 KLPD to 400 KLPD using C- heavy molasses / B- heavy molasses / sugar syrup / grains as feedstock and a new Captive power plant capacity of 8 MW under Ethanol blended with Petrol (EBP) program located at Bagalkot, Karnataka by M/s. MRN Cane Power (India) Limited – Consideration of amendment of Environmental Clearance

[IA/KA/IND2/293084/2022, IA-J-11011/312/2021-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. J-11011/312/2021- IA II(I) dated :21/09/2021 for the project Integrated expansion of sugar plant from 5,000 TCD to 10,000 TCD, Distillery unit from 65 KLPD to 400 KLPD using C- heavy molasses / B- heavy molasses / sugar syrup / grains as feedstock and a new Captive power plant capacity of 8 MW under Ethanol blended with Petrol (EBP) program located at Bagalkot, Karnataka by M/s. MRN Cane Power (India) Limited.

PP informed that MoEF&CC vide letter no J-11011/411/2014-IA II (I) dated 29.08.2016 has issued EC for establishment of 5000 TCD sugar plant, 65 KPPD Distillery and 35 MW Co-gen Power Plant. MoEF&CC vide letter no J-11011/411/2014-IA II (I) dated 21.10.2021 has issued EC for expansion of Distillery from 65 KLPD to 400 KLPD, Sugar plant from 5000 TCD to 10000 TCD and 8 MW captive power plant.

Since earlier EC was issued for integrated project, PP has applied the project proposal for amendment to EC by splitting all conditions stipulated in the Environmental Clearances issued to the industry.

PP has requested for transfer of distillery unit from **M/s. MRN Cane Power (India) Limited** to M/s. TruAlt Bioenergy Limited (Unit -3) located at Khallapur Village, Kulegeri, Hobali, Badami Tq.Bagalkot Dist. Sugar plant and co-generation will continued to be with M/s. MRN Cane power (India) Limited

During deliberations, EAC discussed following issues:

- PP shall submit Board resolution from both the Companies.
- PP shall submit engineering drawing layout of the project.
- PP shall provide details of greenbelt in both the units after split of EC including clearly delineation of greenbelt in the layout map.
- Details of utilities after the Split.
- Compliance of undertaking provided while obtaining ECs under Ethanol blended with Petrol (EBP) program.
- Bifurcation of all the conditions stipulated in all EC granted to the industry.

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. 3

Setting up of 125 KLPD Grain Based Distillery, 25 KLPD Malt Spirit Plant and 4.5 MW Co-Generation Power Plant at Village Chiraura, Tehsil Akbarpur, District Kanpur Dehat, Uttar Pradesh by M/s. Aarti Distilleries Private Limited – Consideration of amendment of Environmental Clearance

[IA/UP/IND2/293912/2022, IA- J-11011/58/2018-IA-II(I)]

The proposal is for amendment in the Environment Clearance granted by the Ministry vide letter no. J-11011/58/2018-IA-II(I) dated 18th September, 2022 in favour of M/s. Rajasthan Liquors Limited transferred on 14th September, 2020 to M/s. Aarti Distilleries Private Limited for Setting up of 125 KLPD Grain Based Distillery, 25 KLPD Malt Spirit Plant and 4.5 MW Co-Generation Power Plant located at Village Chiraura, Tehsil Akbarpur, District Kanpur Dehat, Uttar Pradesh.

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

S. No.	Particulars of EC issued by MoEF&CC	Details as per the EC	To be revised/read as	Justification/ reasons
1.	9(e) - Page 2 of 6	Coal shall not be used as fuel in boiler	15% Coal shall be used as auxiliary fuel along with biomass/rice husk as fuel in boiler	During plant operations it has been observed and anticipated that usage of only rice husk/biomass as fuel in the boiler is not sufficient especially during monsoon seasons due to high moisture content, thus the company wants to mix 15% coal as auxiliary fuel in the boiler along with

				rice husk/biomass.
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During deliberations, EAC discussed following issues:

- EAC suggested that while using the coal as fuel for boiler, PP has to comply with the emission standards for particulate emission i.e. 30 mg/m³. However, the PP informed that they cannot comply with the emission standards of 30 mg/m³ as the Unit has already installed the pollution control device.

Since PP has shown inability to comply with the emissions standard, the proposal for amendment was not considered at this stage.

Accordingly, proposal was returned in present form.

Agenda No. 4

Expansion in the production capacity from 52.5 KLPD (Molasses based RS/ENA/Ethanol) to 202.5 KLPD (Establishment of 150 KLPD Grain Based Distillery to produce Ethanol for blending under EBP Programme) with existing cogeneration power plant for existing & proposed distillery is 15 MW located at Village Chelluru, Tehsil Rayavaram, District Dr. B.R. Ambedkar Konaseema (Formerly East Godavari) District, State Andhra Pradesh by M/s. Sri Sarvaraya Sugars Limited - Consideration of Environmental Clearance

[IA/AP/IND2/404506/2022, IA- J-11011/128/2003-IA II (I)]

The Project Proponent and the accredited Consultant SV Enviro Labs & Consultants (NABET certificate no. NABET/EIA/2124/RA 0240 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 expansion in the production capacity from 52.5 KLPD (Molasses based RS/ENA/Ethanol) to 202.5 KLPD (Establishment of 150 KLPD Grain Based Distillery to produce Ethanol for blending under EBP Programme) with existing cogeneration power plant for existing & proposed distillery is 15 MW located at Village Chelluru, Tehsil Rayavaram, District Dr. B.R. Ambedkar Konaseema (Formerly East Godavari) District, State Andhra Pradesh by M/s. Sri Sarvaraya Sugars Limited.

The company is proposing to set up a 150 KLPD Grain based Distillery to produce Ethanol for blending under EBP programme by demolishing the existing sugar plant and by retaining the power unit, 70 TPH boiler, ESP, turbines, softener plant etc.

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:

S. No.	Name of the unit	Name of the product/ by-product	Existing Production Capacity	Additional Production Capacity	Total Production Capacity
1.	Distillery	Existing Product - RS/ENA/Ethanol Proposed Product - Ethanol	52.5 KLPD (Molasses as Raw material)	150 KLPD (Grain as Raw material)	202.5
2.	Co-generation power plant	Power	15.0 MW	--	15.0 MW
3.	DWGS Drier	DDGS	73.0 TPD	--	73.0 TPD
4.	Fermentation Unit	Carbon di-oxide	12.0 TPD	60.0 TPD	72.0 TPD
5.	Bio composting Unit	Digester Sludge & Fermentor Sludge	1.0 TPD	--	TPD

Ministry has issued Environmental Clearance to the existing Industry for a capacity of 52.5 KLPD vide file No. J-11011/128/2003-IA II (I) dated

22.03.2004. Certified Compliance report of existing EC has been obtained from Andhra Pradesh Pollution Control Board vide letter No. APPCB/UH:IV/CFO/MoEF & CC/Comp Rpt/2022 dated 30.09.2022. The Committee noted that the proposal was considered in the EAC meeting held on 23-24 August, 2022 and the proposal was returned back with the comments "As per the latest OM, PP has to submit certified compliance report from IRO/SPCB for the existing distillery unit as proposed project is interlinked with the integrated project of sugar and distillery in which proposed project will be established after demolition of sugar unit. Therefore, the committee desired to submit certified compliance report from IRO/SPCB for the existing distillery unit. Accordingly, PP mentioned that certified compliance report of sugar and distillery has been obtained from APPCB.

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 25.50 Hectares (existing plant area 17.40 Hectares and additional land required 8.10 Hectares for proposed capacity) which is under possession of the company and is under Industrial use. Out of the total plant area 9.71 Hectares (Existing – 7.04 & Proposed – 2.67) i.e. 38% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained/ will be developed under greenbelt & plantation in and around plant premises. The estimated project cost for the proposed project is Rs. 175.0 Crores and the existing was Rs. 39.98 Crores. Capital cost for proposed EMP would be Rs. 15.88 Crores and recurring cost for EMP would be Rs. 2.0 Crores per annum in addition to existing Capital Cost for EMP is Rs. 8.47 Crores & Recurring Cost for EMP is Rs. 1.29 Crores per Annum. Industry proposes to allocate Rs. 2.86 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 230 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. within 10 km radius from project site. There are no Reserve forests/protected forests within 10 km radius from project site. Water bodies: Mandapeta Canal is at a distance of 1.10 Km in NE direction. NO Rivers is at a distance of 10 km from the project Site.

An existing 70 TPH Boiler provided with Electrostatic precipitator and 9.0 TPH Boiler provided with Multi-cyclone separator were in site for which Environmental Clearance and consent orders were obtained. These boilers will be used for the steam and power generation No additional Boiler was proposed so AAQ modelling was not carried out.

Existing water requirement is 1174 KLD (Fresh Water – 326 KLD & Recycled Water – 848 KLD) & proposed water requirement (Fresh Water – 576 KLD & Recycled Water – 1876 KLD) for 150 KLPD distillery. So total fresh water requirement after expansion will be 902 KLD, which will be met from Ground Water through Bore Wells. NOC has been obtained to M/s. Sri Sarvaraya Sugars Limited from APWALTA, Tadepalli Guntur District Andhra Pradesh vide letter no. PRR05-11028/22/2018-SLNA-GIS-CORD dated 20.11.2020.

The Distillery effluent (Spent Wash) @ 863 KLD is sent to the decanter where the wet grain is separated. Further a part of the Thin Slop i.e. 174 KLD will be reused in the process and the remaining i.e. 587 KLD will go the Multiple Effect Evaporator (Capacity - 800 KLD). In the MEE it is further concentrated and these Solids i.e. 88.0 KLD are separated. The wet grain from the Decanter and MEE is 218 TPD will be sent to dryer to form DDGS. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is 1114 KLD will be sent to the 'Condensate Polishing Unit' of 1200 KLD Capacity. followed by dryer to produce DDGS. STP of 20 KLD capacity will be installed to treat domestic waste waters. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

The Committee noted that the existing distillery is operating bio-digester, RO system along with MEE followed by Bio-composting to meet ZLD. The Committee suggested to abandon bio-composting process within 3 years and adopt powder formation technology.

Total power requirement of distillery after expansion will be 6.0 MW, which will be sourced from existing 15.0 MW co-generation power plant in the existing sugar mill/distillery. NOC for power requirement from State Grid has been obtained vide letter no. NA dated NA. The industry will be using the existing 70

TPH Boiler provided with Electro Static Precipitator with stack height of 60.0 meters and 9.0 TPH Boiler provided with Multi Cyclone separators with a stack height of 40.0 meters were installed for controlling the particulate emissions. Accordingly, Committee suggested that ESP/bagfilter should be provided in place of multicyclone to achieve emission standards of 30 mg/Nm³. Industry has an existing 1 x 500 KVA DG set which will be used as standby during power failure and stack height (7.0 m) has been provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- For 70.0 TPH Boiler APCE is Electro Static Precipitator with a stack height of 60 meters. At present the APCE is designed to meet < 115 mg/Nm³ of PM and PP proposed to upgrade the existing ESP to meet < 30 mg/Nm³ by installing additional fields. For 9.0 TPH Boiler APCE is Multi-Cyclone Separator with a stack height of 40.0 meters was installed for controlling the particulate emissions. As suggested by the Committee, multicyclone separator should be replaced by ESP/bagfilter.
- Online Continuous Emission Monitoring System be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ of 72.0 TPD (Existing - 12.0 TPD & Proposed – 60.0 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. The CO₂ collection is low and PP was asked to submit proposal for enhancing CO₂ recovery.

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

- Proposed DDGS (Distilled Dried Grains Stillage) (73.0 TPD) will be sold as cattle feed / fish feed /Prawn feed.
- Boiler ash of 38.0 TPD (Existing – 7.0 TPD & Proposed – 31.0 TPD) shall be given to nearby brick manufacturing units.
- Used oil (100 LPA) and used is being sold to authorized recyclers and used lead acid batteries (4 no.'s/year) shall be return to the dealer/manufacturer on buy back system.

- The CPU & STP sludge or rejects will be used for Ash Quenching or returned back to MEE for further treatment.
- The existing sludge generation (Digester Sludge & Fermentor Sludge) is 1.0 TPD is being used in the bio composting process and the final product is being sold 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 150 KLPD will be used for manufacturing fuel ethanol only.

Total land of 25.50 Hectares (Existing – 17.40 Hectares & Proposed – 8.10 Hectares) is under possession of the company since 1958 and was certified Panchyati Secretary Chelluru Rayavaram Mandal vide letter no. 2250 dated 26.06.2021 stating the survey numbers in which Sri Sarvaraya Sugars Limited establishments situated are being used for Non-Agriculture purpose only. EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- It was noted that the proposed fresh water requirement is on the higher side. EAC suggested to revise water balance so that net fresh water requirement does not exceed 4 KL/KL of ethanol production. PP has submitted the details restricting net fresh water requirement to 576 KLPD for the proposed expansion.
- PP shall submit ZLD plan for existing waste water generation. Accordingly, PP submitted the plan for ZLD.
- PP shall not produce DWGS as end product, DWGS should be converted to DDGS. PP submitted in writing to comply with same.
- PP shall submit details of the proposed measures for controlling SO₂ emissions when coal is used as fuel in the boiler. PP informed that they will go for rice husk and imported coal (Indonesian) with low sulphur content.
- PP shall submit the proposed safety measures for storing caustic soda onsite.
- CO₂ bottling plant shall be installed in the Industry.
- Details of rain water harvesting including size of pond/tank. PP provided the pond capacity of 150 m³.

- Details of activities proposed in CER along with breakup of budgetary allocation. PP has provided the break up of CER.
- Confirmation regarding compliance to C & D waste management Rules while demolishing the existing sugar unit.
- 15% of total power requirement shall be met by solar power.
- Bio composting in the existing plant shall be phased out completely within 3 years from the date of issuance of EC.

Further, the Committee noted that the following:

- (i) As per details submitted in EMP report, it was mentioned in the section air pollution modelling at page 27 that *"In order to predict the Ground Level Concentrations (GLCs) at various distances from the source of the above mentioned pollutants, an air modelling exercise has been undertaken and is discussed in the impact prediction section below"*. However, it was noticed that there was no such information is available in the EMP Document. Accordingly, PP should provide ambient air quality baseline data from the secondary source to understand the background situation of the project site. Also PP shall provide details of AAQ modelling carried out for the existing boilers.
- (ii) It was noted that as per guidelines mentioned in OM dated 08.06.2022 that the project proponent shall approach concerned Regional Offices of Central Pollution Control Board (CPCB) or MS of respective State Pollution Control Boards (SPCB) in case IRO of Ministry has not furnished CCR within three months of application. PP shall provide clarification for adherence to guidelines prescribed in OM dated 08.06.2022.

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. 5

Proposed 330 KLPD Grain based Ethanol Plant along with 7.0 MW Cogeneration Power Plant at Village Hindupur, Tehsil Krishna, District Narayanpet, Telangana by M/s. Devsristi Bio Fuels Private Limited - Consideration of Environmental Clearance

[IA/TG/IND2/400620/2022, IA-J-11011/450/2021-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 07th 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 330 KLPD Grain based Ethanol Plant along with 7.0 MW Co-generation power plant located at Village Hindupur, Tehsil Krishna, District Narayanpet, Telangana by M/s. Devsristi Bio 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	Ethanol	330 KLPD
2.	Co-generation power plant	Power	7.0 MW
3.	DWGS dryer	DDGS	149 TPD
4.	Fermentation unit	Carbon di-oxide	263 TPD

The company had obtained EC from MoEFCC vide EC Identification no. EC21A060TG110207 dated 31.12.2021 for proposed 250 KLPD Grain based Ethanol plant along with 6.0 MW Cogeneration Power Plant at Village Hindupur, Tehsil Krishna, District Narayanpet, Telangana. Subsequently the company has also obtained CTE from Telangana State Pollution Control Board vide Consent Order No. 01/TSPCB/CFE/NPT/RO-HYD/HO/2022 dated 27.01.2022 and started civil construction activities. Certified Compliance

report for the existing EC has been obtained from IRO, MOEFCC, Hyderabad vide File No. 1-6/2022/IRO-HYD/ dated 10.11.2022 for which the site visit has been done on 04.11.2022 and the project was found to be in construction phase. Subsequently the management has planned increase the capacity of Ethanol plant from 250 KLPD to 330 KLPD and Cogeneration Power Plant from 6.0 MW to 7.0 MW in the same location with a vision to participate in EBP Programme and surrender the earlier EC granted for 250 KLPD Grain based Ethanol plant along with 6.0 MW Cogeneration Power Plant. The increase in capacity (250 KLPD to 330 KLPD) is due to inclusion of grains as raw material like broken rice, sorghum, maize, etc instead of only maize which was proposed earlier for achieving maximum contribution towards EBP Programme by the company.

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 11.98 hectares. Greenbelt will be developed in total area of 4.0 hectares i.e., 33 % of total project area. The estimated project cost is Rs. 262 Crores. Capital cost of EMP would be Rs. 24.6 Crores and recurring cost for EMP would be Rs. 3.0 Crores per annum. Industry proposes to allocate Rs. 2.6 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: Krishna River is at a distance of 1.2 km in WSW direction, Hindupur Vagu is at a distance of 1.2 km in West direction, Dodda Halla is at a distance of 5.0 km in SE direction, Bhima River is at a distance of 7.5 km in WNW direction, Konda Halla is at a distance of 8.0 km in South direction & Pedda Vagu is at a distance of 9.5 km in NE direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.348 µg/m³, 0.731 µg/m³ and 0.801 µg/m³ with respect to PM, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1425 m³/day which will be met from Surface water (Krishna River). NOC has been obtained from Chief Engineer, Irrigation, Mahabubnagar vide Proc. No. CE(I)MBNR/DCE/OT-3/TS.2/WA/Devsristi/01 dated 31.01.2022. Effluent (Condensate/spent lees/blowdown etc.) of 1692 m³/day will be treated through Condensate Polishing Unit /Effluent Treatment Plant of capacity 2000 KLPD. Raw stillage (2222 KLPD) 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 6.5 MW and will be met from proposed 7.0 MW Co-generation power plant. 60 TPH Biomass like Rice 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 2 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 set.

Details of Process emissions generation and its management:

- APCE ESP with a stack height of 65 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 (263TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors.

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

- DDGS (Distilled Dried Grains Stillage) (149 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (100 TPD) will be used for brick manufacturing and supplied to nearby brick manufacturers in covered vehicles only.
- Used oil (0.75 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (2 TPD) and STP Sludge (0.01 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 330 KLPD will be used for manufacturing fuel ethanol only.

Total land of 11.98 Hectares is under possession of the company and is converted to industrial use as per conversion orders from Tahsildar & Jt. Sub Registrar Office, Krishna, Government of Telangana vide letter no. 2101046489 dated 16.11.2021, letter no. 2200781994 dated 08.08.2022 & letter no. 2200597620 dated 15.06.2022 for establishment of industry. EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- PP shall surrender existing EC Identification no. EC21A060TG110207 dated 31.12.2021 obtained for proposed 250 KLPD Grain based Ethanol plant along with 6.0 MW Cogeneration Power Plant.
- Boiler ash generated while using coal as fuel shall be given to cement manufacturers and when biomass is used as fuel boiler ash generated shall be transported to brick manufacturers in covered trucks.
- PP shall install in-house brick manufacturing plant for utilization of fly ash.
- PP shall revise fresh water requirement restricting to 4 KL/KL of ethanol production i.e 1320 KLPD inclusive of process and non process applications. However, PP has submitted the undertaking that fresh water requirement will not exceed 1425 KLPD. Therefore, the Committee asked the PP to comply with water requirement @ 4 KL/KL i.e. 1320 KLPD.
- 10 % of total power requirement shall be met by solar power. PP has given commitment for the same.
- PP should take the responsibility of maintain the road connectivity to plant from the NH-167 and NH-150 the nearest highway. PP has submitted the same in writing.

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 330 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 Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
- (v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production i.e. 1320 KLD, which will be met from Surface water (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 shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP

comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for make up water of cooling towers/process etc. and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat the sewage generated from factory premises.

- (vii). Electrostatic precipitator (5 field & 99.9% efficiency) with a stack height of 65 meters will be installed with 60 TPH Biomass like Rice Husk/Coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm³. SO₂ and NO_x emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
- (viii). Boiler ash (100 TPD) will be used for brick manufacturing. PP shall install in-house brick manufacturing plant for utilization of fly ash. 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.
- (ix). CO₂ (263 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors.
- (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 in 4.0 hectares i.e., 33 % of the 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. Greenbelt development shall be completed before commissioning of the plant.
- (xvi). PP proposed to allocate Rs. 2.6 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). 1.8 Ha (15%) of the plant area shall be earmarked for parking of vehicles for raw materials and finished products with facilities like rest rooms etc and no parking to be allowed outside on public places.

- (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. 6

Expansion of the sugar from 3500 TCD To 10000 TCD, Co-generation 27.5 MW to 34.5 MW, establishment of distillery 300 KLPD and captive power plant of 4 MW located at Nad KD Village, Indi Taluk,

Vijayapura District, Karnataka State by M/s. Jamkhandi Sugars Limited Unit – II - Consideration of Environmental Clearance

[IA/KA/IND2/402350/2022, IA-J-11011/72/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Samrakshan (NABET certificate no. NABET/EIA/1922/SA 0138 (Rev.01), QCI/NABET/EIA/ACO/22/2560 and validity extended up to 17.01.2023) 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 the sugar from 3500 TCD To 10000 TCD, Co-generation 27.5 MW to 34.5 MW, establishment of distillery 300 KLPD and captive power plant of 4 MW located at Nad KD Village, Indi Taluk, Vijayapura District, Karnataka State by M/s. Jamkhandi Sugars Limited Unit – II.

Integrated Sugar Industry, co-generation power plants and Distilleries are listed at S.N. 5(j), 1(d) and 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity as under:

S. No.	Unit	Product /By-product	Existing quantity	Proposed quantity	Total quantity
1	Sugar plant	Sugar	3500 TCD	6500 TCD	10000 TCD
2	Co-generation power plant	Electric Power	27 MW	7.5 MW	34.5 MW
3	Distillery plant	RS/ENA/Ethanol using C-Heavy or B-Heavy molasses	-	300 KLPD	300 KLPD
		RS/ENA/Ethanol using sugarcane syrup	-	450 KLPD	450 KLPD
4	Distillery Captive power plant	Electric Power	-	4 MW	4 MW
5	Fermentation section	CO ₂	-	342 TPD	342 TPD

Note: Total capacity shall not exceed 300 KLPD at any time

Ministry has issued Environmental Clearance to the existing capacity 3500 TCD and 27 MW Co-generation vide File No. F. No. J-13012/38/2012-IA.II (T) dated 19.02.2014. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEF CC, Bangalore vide File No. EP/12.1/2013-14/09/KAR /33 dated 31.01.2022. Action Taken Report has been submitted by the PP to IRO, MOEFCC, Bangalore dated 14.11.2022 for Point No. 8 & 9 of CCR in which partial compliance is observed by IRO for which pp has explained action plan for the same.

Standard Terms of Reference have been obtained vide F. No. IA-J-11011/72/2021-IA-II(I) dated 05.03.2021. It was informed that No litigation is pending against the project.

Public Hearing for the proposed project had been conducted by the Karnataka State Pollution Control Board on 02.09.2022 at project site chaired by Additional Deputy Commissioner, Vijayapur.

The main issues raised during the public hearing and their action plan:

The public has expressed happiness about the expansion of the plant and they have opined that the operation of the existing sugar factory has benefitted them economically, also benefitted in terms of the infrastructure development of the region.

The Committee suggested PP to provide point wise time bound action plan along with budgetary allocation to address all the issues raised in Public Hearing.

Total plant area after expansion will be 37.23 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 37.23 Hectares i.e. 35.86% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained in and around plant premises. The estimated project cost is Rs. 584.06 Crores. Capital cost of EMP would be Rs. 46.45 Crores and recurring cost for EMP would be Rs. 1.77 Crores per annum. Industry proposes to allocate Rs. 2.0 Crores towards extended EMP

(Corporate Environment Responsibility). Total Employment after expansion will be 480 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 forests/protected forests within 10 km distance. No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km from project site. Water bodies: Lalasangi Lake at a distance of 4.8 Km in North West direction. River Bheema is at a distance of 9 km.

Ambient air quality monitoring was carried out at 9 locations during March to April 2021 and the baseline data indicates the ranges of concentrations as: PM₁₀ (20.1 - 39.6 µg/m³), PM_{2.5} (17.2 - 26.4 µg/m³), SO₂ (7.1 - 14.2 µg/m³) and NO₂ (9.2 - 17.8 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 47.2 µg/m³, 14.96 µg/m³ and 18.72 µg/m³ with respect to PM, SO₂ and NO₂. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 2791 CMD for both sugar and distillery unit which will be met from River Bheema. NOC has been obtained by Water Resource Development Organization; Government of Karnataka vide letter No. EE/KNNL/IPC/Dn.1/Jama Sugar/ PB-10/2022-22/86 dated 19.04.2022.

Sugar & Co-generation plant - Effluent management System

After expansion, the sugar plant effluent 953 KLD is mainly from the spray pond over flow, process condensate, co-generation plant cooling tower bleed and the boiler blow down. The existing treatment plant has a capacity to treat 350 KLD of effluent. ETP process comprises of primary and secondary treatment. A separate monthly wash water tank is provided to hold the plant cleaning effluent and taken for treatment.

It is proposed to upgrade the ETP by increasing the capacity to handle 1200 m³ per day of sugar plant effluent. For sugar plant condensate of 1514 KLD a condensate polishing unit of capacity 1500 KL is proposed. The treated condensate will be reused in the sugar plant & for cooling. Excess treated

effluent will be used for distillery. For storage of treated effluent, an RCC storage tank/polishing pond of capacity 15 days holding capacity is proposed. Excess treated effluent of 1108 KLD will be used for on land green belt and on R & D farm owned by the industry for irrigation in experimental farming. No effluent shall be discharged outside the factory owned land.

Distillery Plant - Effluent management System

The spent wash from the distillery will be collected in impervious collection tank of 5 days i.e, 12000 m³ capacity. The spent wash will be concentrated in MEE and concentrated spent wash will be used as fuel in incineration boiler.

Other lean effluents Spent lees, MEE Condensates and utility effluents treated in the condensate polishing unit (CPU) comprising of three stage RO. The treated permeate will be reused in cooling tower water makeup and for molasses dilution. The RO rejects will be taken back to MEE. The distillery plant will be operating on Zero Liquid Discharge (ZLD) principle.

Domestic Sewage: 20 KLD is treated in Sewage Treatment Plant.

Total power requirement of sugar mill, co-generation unit and distillery plant after expansion will be 30.4 MW which will be sourced from 34.5 MW co-generation power plant and for proposed distillery plant 4 MW captive power plant. Existing unit has a 90 TPH capacity bagasse fired boiler, the capacity of which will be enhanced to 120 TPH. 50 TPH co-generation bagasse fired boiler and 55 TPH Incineration boiler spent wash and coal fired boiler will be installed. APCE ESP followed by bag filter with a stack of height of 90 m is installed in the existing boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm³. APCE individual ESP with a common stack of height of 76 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for the proposed boilers. Industry has two 1010 KVA DG sets which will be used as standby during power failure and stack height (30 m) is provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Process emission: CO₂ generation from fermentation process is of 342

TPD, this will be scrubbed and bottled in CO₂ Bottling unit.

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

- Bagasse – 2700 TPD will be used as fuel in Boilers
- Press mud – 400 MTD will be mixed with yeast sludge and given farmers as manure
- Lime sludge – 2500 Kg/day will be used for filling low lying areas
- Boiler ash – 50 MTD will be given brick manufacturers
- Yeast sludge – 120 MTD will be mixed with press mud and given to farmers as manure.
- ETP sludge – 60 MTD will be given to famers as manure
- Used oil – 0.9 KLPA - Stored in secure manner and disposed to KSPCB authorized agencies
- Wastes residues containing oil - 0.873 MT/A- Stored in secure manner and disposed to KSPCB authorized agencies

During deliberations, EAC discussed following issues:

- PP shall submit point wise time bound action plan along with budgetary allocation to address all the issues raised in Public Hearing.
- Fresh water requirement shall be reduced by considering the utilisation of treated effluent from sugar plant. Accordingly, PP shall submit revised water balance.
- PP shall mention fresh water requirement for existing and proposed project (sugar, distillery & cogen power separately).
- PP shall submit detailed scheme for treatment of for existing and proposed project (sugar, distillery & cogen power). PP shall incorporate biological treatment in the aforementioned details.
- PP shall provide clarification for low concentration of both PM₁₀ and PM_{2.5} values and their nearly identical concentration.
- PP shall provide clarification For not adopting site selection criteria for monitoring of noise levels and collecting soil samples
- PP shall re-calculate incremental GLC for the proposed project by conducting AAQ modelling again.
- PP shall re-calculate the stack height of the combined boilers of 50 TPH & 55 TPH.
- PP shall replace sludge drying belt with filter press in the existing

- plant.
- PP shall submit revised CER table

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.

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.	Prof. Dilip Majumdar	Member
5.	Dr. Onkar Nath Tiwari	Member
6.	Shri. J.S. Kamyotra	Member
7.	Dr. Rahul Ramesh Rao Mungikar	Member
8.	Dr. Seshagiri Rao Ambati	Member
9.	Dr. Sanjay V. Patil (VSI)	Member
10.	Shri A. N. Singh, Scientist 'E'	Member Secretary
MoEFCC		
11.	Dr. Mahendra Phulwaria	Scientist 'C'
12.	Mr. Kanaka Teja	Research Assistant
