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

Dated: 06.09.2022

Meeting ID: IA/IND2/13327/01/09/2022

MINUTES OF MEETING OF THE EXPERT APPRAISAL COMMITTEE

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 01st- 02nd September, 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/IND2/13313/23/08/2022) held during 23rd - 24th August, 2022, 2022conducted 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: -

01st September, 2022 (Thursday)

Agenda No. 1

Proposed 500 KLPD grain based distillery at Plot No. 825/2 of GIDC, Jhagadia & Survey No 181,182 & 183 of Village Dadheda, Tal. Jhagadia & Dist. Bharuch, Gujarat by M/s. UPL Limited – Re-consideration of Environmental Clearance

[IA/GJ/IND2/ 279271/2022, IA-J- 11011/215/2 022-IA-II(I)]

The proposal was considered by the EAC in its meeting (Meeting ID: IA/IND2/13295/27/07/2022) held during 27th -28th July, 2022 and the Committee recommended the proposal for grant of Environmental Clearance. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.5002 µg/m3, 47.5 µg/m3, and 6.62 µg/m3 with respect to PM, SO2 and NOX respectively.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.5002 µg/m^3, 47.5 µg/m^3, and 6.62 µg/m^3 with respect to PM, SO_2 and NO_X respectively. GLC for SO_2 has been estimated to be 47.5 µg/m^3, which seems to be very high. As per information submitted vide letter dated 27.07.2022, boiler will be based on agro waste fuel and in adverse case only low sulphur fuel will be used. However, revised GLC has been re-calculated based on agro waste fuel only. Therefore, PP was requested to kindly submit the following information on priority to take further action in this regard: (i) Maximum incremental GLCs to recalculate for use of coal and biomass as fuel in boiler separately. (ii) Pollution control measures to be taken to reduce the incremental GLC w.r.t SO_2 pollutant.

Accordingly, PP vide letter dated 23.08.2022 has submitted additional information.

Matter was again placed before the EAC for their comments on the above issues. PP presented the following information :

S.N.	ADS Raised	Clarification
1	As per MoM of EAC (ind,-2 sector), AAQ modelling study	i. Revised incremental GLC analysis study details

	for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.5002 µg/m^3, 47.5 µg/m^3, and 6.62 µg/m^3 with respect to PM, SO_2 and NO_X respectively. GLC for SO_2 has been estimated to be 47.5 µg/m^3, which seems to be very high. As per information submitted vide letter dated 27.07.2022, boiler will be based on agro waste fuel and in adverse case only low sulphur fuel will be used. However, revised GLC has been re-calculated based on agro waste fuel only. Kindly submit the following information on: • Maximum incremental GLCs to recalculate for use of coal and biomass as fuel in boiler separately. • Pollution control measures to be taken to reduce the incremental GLC w.r.t SO_2 pollutant.	considering low Sulphur Coal (0.28% Sulphur) and Agro Waste**.** ii. For SO_2 emissions following pollution control measures will be implemented: • Use of Coal with maximum 0.28% sulphur content. • Adequate stack height of 60m • Flue gases will be treated through flue gas desulfurization (FGD) lime dosing with dry desulfurization processes • With the FGD $S0_2$ removal efficiencies will be 80-85 % • Incremental Ground Level Concentration (GLC) for SO_2 with FGD process will reduce to 4.68 µg/m^3**.** Details of Air modelling study for GLC with and without FGD were explained

After detailed deliberations, the committee suggested that fly ash shall be stored in the silo and transferred to the brick manufacturers /road construction in a covered truck and coal storage should not be more than ten days. The Committee was satisfied with the response given by PP.

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 500 KLPD shall only be used

for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat sewage generated from factory premises.

(iv). EC granted for the project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

(v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production and will be met by supply from GIDC, Gujarat. Prior permission shall be obtained for ground water withdrawal before start of construction activities. 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). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. ESP/bag house shall be installed with the 11 TPH boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for coal as fuel. Emissions of SO_2 and NOx shall be below 100mg/Nm3.Boiler ash supplied to brick manufacturers/ road construction/given to farmers as manure. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with

maximum sulphur content of 0.28% shall only be used. Flue gases will be treated through flue gas desulfurization (FGD) using dry lime dosing for control of SO2 emissions. PP shall explore possibility of using natural gas as fuel. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(vii). CO_2 generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(viii). PP shall allocate at least Rs. 70 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(x). The unit shall make 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.

(xi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its co-incineration. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

(xiii). The green belt of at least 5-10 m width shall be developed in 6.68 Ha i.e. nearly 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 shall be developed before commissioning of the plant.

(xiv). PP proposed to allocate Rs. 7.2 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 etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc. Village road shall be maintained and proper safety shall be ensured by installation of proper road safety measures.

(xvi). Fly ash shall be stored in the silo and transferred to the brick manufacturers /road construction in a covered truck and coal storage should not be more than ten days. 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.

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

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

(xix). 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

Proposed establishment of Grain-based distillery unit of 300 KLPD capacity to produce Ethanol and installation of captive power plant of capacity 15 MW in Sugar and Cogen complex located at Village Desanur, Tehsil Siruguppa, District Bellary, State Karnataka by M/s. NSL Sugars Tungabhadra Unit – Consideration of Environmental Clearance

[IA/KA/IND2/284912/2022; IA-J-11011/263/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Samrakshan (NABET certificate no. NABET/EIA/1992/SA 0138 (Rev. 01) and validity 20th October 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 300 KLPD grain based ethanol Plant & 15 MW co-generation power plant (biomass based) located in the existing sugar plant of 3500 TCD and 28 MW co-generation complex, Village Desanur, Tehsil Siruguppa, District Bellary, State Karnataka by M/s. NSL Sugars Tungabhadra Unit.

The Committee noted that the proposed site is located at a distance of 541.6m from River Tungbadra. However, the river is flowing just adjacent to existing sugar complex. NOC has been obtained from State Irrigation Department vide letter no. AA : Tuyovru:K.N.N.N.Tasha-1:2022-23/1239 dated 06.08.2022 stating that the proposed construction factory site is

541.6m from Tungabhadra River Bank. But it was noted that there is no mention of HFL and altitude of the project site from MSL which are essential for ascertaining the flood plain of the location. In this regard, EAC suggested PP to bring the details of HFL from State Irrigation Department in writing & altitude of the proposed site from the land and revenue Department to re-consider the proposal. EAC also desired that PP should submit copy of existing EC and CTO as well as latest CCR.

Accordingly, the proposal was returned in present form.

Agenda No. 3

Greenfield Project of 120 KLPD Grain Based Ethanol Plant along with 3 MW Co-generation Power Plant located at Village- Kathiya, Tehsil- Berla, District- Bemetara, Chhattisgarh by M/s Varsha Biofuels Private Limited – Consideration of Environmental Clearance.

[IA/CG/IND2/287161/2022, IA-J11011/312/2 022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. GRC India Pvt Ltd (NABET certificate no. NABET/EIA/2124/RA0213 and validity 15th February, 2024) 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 along with 3 MW co-generation power plant (coal/biomass) located at Village Kathiya, Tehsil Berla, District Bemetara, State Chhattisgarh by M/s. Varsha Biofuels Private Limited.

During deliberations, EAC noted that land documents were not complete and ownership of land is not with the PP as reported. The committee noted that land lease document is not registered with revenue department. **EAC also advised the consultant that the same should not be repeated in future as such activities are treated as concealment of facts.** EAC suggested to submit the valid land ownership/registered lease deed documents for further consideration.

Accordingly, proposal was returned in present form

Agenda 4

Proposed Establishment of 75 KLPD Grain Based Ethanol Plant with Captive power Plant 2.5 MW located at survey No. 253 Village Ismailpur, Tehsil MajgawanAonla, District Bareilly, State Uttar Pradesh by M/s. SNJ Bio Products Pvt. Ltd – Consideration of Environmental Clearance

[IA/UP/IND2/281103/2022, IA-J-11011/242/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Samrakshan (NABET certificate no. NABET/EIA/1922/SA 0138 (Rev.01) and validity 20th October, 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 75 KLPD grain based ethanol plant & 2.5 MW co-generation power plant (biomass/coal) located at survey No. 253, Village Ismailpur, Tehsil MajgawanAonla, District Bareilly, State Uttar Pradesh by M/s. SNJ Bio Products Pvt. Ltd.

As per the MoEFCC 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 with 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:

Sl. No.	Name of Unit	Name of the Product /by-product	Production capacity
1	Distillery (grain)	Ethanol	75 KLPD
2	Co-generation power plant	Power	2.5 MW
3	DWGS dryer	DDGS	44 TPD
4	Fermentation unit	Carbon di-oxide	58 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 no litigation is pending against the proposal.

Total land area required is 4.0 hectares. Greenbelt will be developed in total area of 1.36 hectares i.e. 34 % of total project area. The estimated project cost is Rs. 93.38 Crores. Capital cost of EMP would be Rs. 14.64 Crores and recurring cost for EMP would be Rs. 2.13 Crores per annum. Industry proposes to allocate Rs. 1.0 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 119 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Water bodies: River Ramganga is at a distance of 9 Km in North East direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.06 $\mu g/m^3$, 0.32 $\mu g/m^3$ and 0.467 $\mu g/m^3$ with respect to PM, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 450 CMD which will be met from ground water. Application has been submitted to Ground Water Department (NamamiGange& Rural Water Supply Department) Ministry of Jal Shakti Government of Uttar Pradesh dated 20.06.2022. Effluent (MEE Condensate/Cooling tower bleed/ boiler blowdown/ DM plant rejects/ lab washings etc.) of 598 CMD quantity will be treated through Condensate Polishing Unit of capacity 600 CMD. Raw stillage (456 CMD) will be sent to decanter followed by dryer to produce DDGS. A modular 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 1830 KW /day and will be met from proposed 2.5 MW cogeneration power plant. 22 TPH biomass/coal fired boiler will be installed. Electrostatic precipitator with a stack height of 50 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler. 2 x 250 kVA DG sets will be used as

standby during power failure and stack height (3 m ARL) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- Electrostatic precipitator with a stack height of 50 meters will be installed with 22 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (58 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and proposed bottling plant.

Details of solid waste/Hazardous waste generation and its management

- DDGS (Distilled Dried Grains Stillage) (44 TPD) will be sold as cattle feed.
- Boiler ash (7 TPD) will be supplied to brick manufacturers.
- Used oil (100 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (2 TPD) and STP sludge (0.5 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 75 KLPD will be used for manufacturing fuel ethanol only.

Total land of 4 Hectares is under possession of the company and land use conversion has been completed vide letter no. T202212130203698 dated 02.06.2022 and T202212130203642 dated 02.06.2022.

During deliberations, EAC discussed following issues:

(i) 20 m wide greenbelt will be developed towards the direction of Ismailpur village located 500 m away from the proposed plant and New Khusro Degree College and New Khusro Pharmacy.

(ii) Approach road connecting Highway should be maintained by the company.

(iii) MoU with brick manufacturing unit or inhouse brick making plant for utilisation of flyash generated from the proposed unit

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 75 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. 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 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 of 99.99 % efficiency/bag filter with a stack height of 50 meters will be installed with 22 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/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 shall be supplied to brick manufacturers in covered trucks. PP shall use biomass like rice husk/bagasse/coal as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 generated will be bottled and supplied to manufacturers of beverages /collected in proposed bottling plant.

(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. 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 1.36 Ha i.e. 34% 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. 20 m thick greenbelt will be developed within the plant done towards the downwind direction of Ismailpur as village is located and New Khusro Degree College and New Khusro Pharmacy.

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

(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 12thAugust, 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 5

Proposed Grain Based Fuel Ethanol Distillery Plant (100 KLPD) along with Power Generation of 3.0 MW at, Village Dhing, Teshil Nagaon, Dist., Nagaon , Assam by M/s North Eastern Energy Resources Ltd. Unit-2– Consideration of Environmental Clearance

[IA/AS/IND2/283592/2022, IA-J-11011/259/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Mantras Green Resources Ltd. (NABET certificate no. NABET/EIA/1922/RA0201 (Rev.01) and validity 08th 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 for Grain Based Fuel Ethanol Distillery Plant (100 KLPD) along with Power Generation of 3.0 MW at, Village Dhing, Teshil Nagaon, Dist., Nagaon , Assam by M/s North Eastern Energy Resources Ltd. Unit-2.

The Committee noted that the proposed site is located nearby flood plain of River Brahmputra. But it was noted that the PP has not mentioned HFL and altitude of the project site from MSL, which are essential for ascertaining the flood plain of the location. In this regard, EAC suggested PP to bring the details of HFL from State Irrigation Department in writing & altitude of the proposed site from the land and revenue Department to re-consider the proposal. PP should also submit copy of existing EC and CTO as well as latest CCR. Further it was also noted that EMP does not mention environmental settings of proposed project. It was also suggested to submit the same.

Accordingly, the proposal was returned in present form.

Agenda 6

Proposed Fuel Ethanol plant, of production capacity of 1 x 100 KLPD under EBP programme under B2 category of grain-based Fuel Ethanol and 2.5 MW of captive power plant, to be installed at Plot No. 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, 71, 72, 73, 74, 101, 103, 112, 161, 167, 168, 169, 170 Mouza -Laharapara, Block-Suti-1, District -Murshidabad, West Bengal by M/s. O2 Chemicals Private Limited- Re-consideration of Environment Clearance

The proposal was considered by the EAC in its meeting (Meeting ID: IA/IND2/13295/27/07/2022) held during 27th -28th July, 2022 and the Committee recommended the proposal for grant of Environmental Clearance subject to the following condition :

(i) Industry shall obtain NOC from Irrigation Department that the project site is not falling in Pagla river flood plain before start of construction activities.

PP has submitted letter issued by Irrigation & Waterways Directorate, Office of Executive Engineer dated 26-07-2022 (enclosed) stating that HFL of Pagla river based on 25 years of flood as recorded in river guage station of Pagla river is 22.734 m. PP has also submitted letter issued by Block Land & Land Reforms Officer (B.L. & L.R.O.) dated 24-08-2022 (enclosed) stating that the elevation of the project site as 23.10 m. In this regard PP has informed that project site elevation (23.10 m) is higher than the HFL of Pagla river (22.734 m) based on 25 years flood data. Matter was again placed before the EAC for their comments on the above issues.

The Consultant briefed the Committee about the proposed site vis-a-vis Pagla river location. It was also informed that there is road between proposed site and Pagla river. Pagla river is located 0.35 km away from the project site. Further, PP informed that even though the project site elevation is higher than the HFL based on 25 years flood data, the following additional precautionary measures will be implemented:

(i) Industry shall construct a garland drain within the plant premises towards the Pagla river side.
(ii) The project buildings will be at least 0.3 m above the Project site elevation of 23.10 m.

After detailed deliberations, it was suggested a retaining RCC wall should also be provided as a precautionary measure at project site towards river side. PP shall ensure that effluent /treated effluent shall not be discharged into the water bodies. The Committee was satisfied with the response of PP.

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 proposed distillery plant shall be at least 0.3 m above the Project site elevation of 23.10 m. A retaining RCC wall shall also be provided as a precautionary measure at project site towards river side. Industry shall construct a garland drain within the plant premises towards the Pagla river side. PP shall ensure that effluent /treated effluent shall not be discharged into the water bodies.

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

(iii). The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, as per the Ministry's OM dated 8th August, 2019. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken. PP shall also strictly follow the conditions mentioned in existing NBWL clearance.

(iv). The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.

(v). 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.

(vi). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises. STP shall be installed to treat sewage generated from factory premises.

(vii). 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.

(viii). Total Fresh water requirement shall not exceed 4.0 KL/KL of ethanol produced which will be met from ground water and Surface water (Bhagirathi river). Prior permission shall be obtained for ground/surface water withdrawal before start of construction activities. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(ix). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. ESP/bag house along with stack of 45 m height shall be installed with the 25 TPH boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for biomass as fuel and 30 mg/Nm3 for coal as fuel and SO2 and NOX emissions shall be of less than 100mg/ Nm3. Boiler ash will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use biomass like rice husk/bagasse/coal as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used only in case of biomass unavailability. 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. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(x). CO_2 generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(xi). 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.

(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. Firefighting 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 in place of sludge drying

(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 1.95 Ha i.e. nearly 35.71% 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 shall be developed before commissioning of the plant.

(xvii). PP proposed to allocate Rs. 1.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities

like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(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. Village road shall be maintained and proper safety shall be ensured by installation of proper road safety measures. PP shall strengthen and maintain the village road connecting NH114.

(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 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 to Managing 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 7

Expansion of existing distillery from 100 KLPD to 150 KLPD (molasses based distillery) along with 5 MW co-generation power located at Village: Safiyabad (Seohara), Tehsil: Dhampur, District: Bijnor, State: Uttar Pradesh by M/s. Avadh Sugar & Energy Limited, Unit – Seohara (distillery division)- Consideration of Environmental Clearance.

[IA/UP/IND2/231910/2021, J-11011/397/2005-IA II (I)]

The proposal was earlier considered by EAC (Ind-2) in its 43rd meeting held on 08-09th November, 2021 (Agenda No. 43.15) wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by EAC and responses submitted by the project proponent along with remarks of EAC as discussed in meeting are as follows:

S. No.	ADS by MoEFCC	Reply of PP
1	PP shall provide justification for the non/partial compliances observed and do the necessary action required for the rectification of the same.	Industry has submitted the action taken against the partial compliance found in CCR dated 16/08/2021 to Regional Office of MoEF&CC in Lucknow and requested to verify the same. Further, MoEF&CC, regional office has issued Certified compliance report dated 22/08/2022.
2	PP shall submit an affidavit that 3000 plants shall be planted before the completion of the expansion of the project.	Affidavit regarding the plantation of 3000 Sapling is submitted with ADS reply.
3	Managing director of the	As per the suggestion of

	company should be present and shall explain the steps that need to be taken by the Industry to improve the house keeping.	Managing direction, SOP and log book for Housekeeping within industry has been formulated and implemented. Copy of SoP and Log books is submitted with ADS reply.

The project proponent and the accredited Consultant M/s Environmental and Technical Research Centre (NABET certificate no. NABET/EIA/1922/IA0050 and validity 1st 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 for proposed expansion of existing molasses based distillery from 100 KLPD to 150 KLD along with 5 MW co-generation power plant at village Safiyabad, Tehsil Dhampur, District Bijnor, State Uttar Pradesh by M/s Avadh Sugar and Energy Limited, Unit: Seohara, Distillery Division.

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

The details of products and capacity as under:

S. No	Name of the unit	Product/by-product	Existing production capacity	Additional production capacity	Total production capacity
1	Molasses based distillery	Ethanol	100 KLPD	50 KLPD	150 KLPD
2	Co-generation power plant	Power	5.0 MW	-	5.0 MW

Ministry has issued Environmental Clearance to the existing Industry for a capacity expansion from 55 KLPD to 100 KLPD vide File No. J – 11011/397/2006 IA II(I); dated 03rd April 2006. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, vide File no. IV/ENV/UP/IND-76/193/2006/213 dated 28th July, 2021. Action Taken Report was submitted to IRO, MOEFCC. Certified Compliance has been obtained dated 2.08.2022.

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 no litigation is pending against the proposal.

Existing land area is 13.8 Ha, no additional land will be required for proposed expansion. Industry has already developed greenbelt in an area of 33 % i.e., 4.55Ha out of total area of the project. The estimated project cost is Rs.13.47 Crores. Capital cost of EMP would be Rs. 8.0 Crores and recurring cost for EMP would be Rs. 4.50 Crores per annum. Industry proposes to allocate Rs. 0.5 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 160 persons as direct & indirect.

There is no national park, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance from the project site. Water bodies: Ramganga River is at a distance of 7.18 km in East direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.73 µg/m^3 , 0.44 µg/m^3 , 1.021 µg/m^3 and 0.85 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 1000 CMD, which will be met from Ground Water. Permission for 1000 CMD has been obtained from Ground Water Department of Uttar Pradesh. Total Effluent (Condensate/spent lees/blowdown etc.) generation after expansion will be 1426 CMD quantity will be treated through Condensate Polishing Unit /Effluent Treatment Plant of capacity 1620 CMD. Total Spent wash after expansion (1200 CMD) is being / will be concentrated through Multi effect evaporators and concentrated spent wash is being / will be used as fuel in incineration boiler. Domestic waste water is being/will be treated in STP. The

plant is being/will be based on Zero Liquid discharge system and treated effluent/water is being/will not be discharged outside the factory premises.

Power requirement after expansion will be 3.575 MW and will be met from existing co-generation power plant of 5.0 MW capacity & State power distribution corporation Limited. Industry already has 45 TPH slop/biomass fired boiler. ESP (Electrostatic Precipitator) with a stack of height of 74 m has been installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the existing boiler. No additional boiler is required for the expansion.

Details of process emissions generation and its management

- Electrostatic Precipitator with a stack height of 74 meters has been installed with existing 45 TPH slop/biomass fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3.
- Online Continuous Emission Monitoring System has been installed with the stack and same data has been transmitted to CPCB/SPCB servers.
- CO_2 (111 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors.

Details of solid waste/Hazardous waste generation and its management

- Ash (72.48 TPD) is being/will be converted to granule and utilized as manure.
- Sludge (14 TPD) is being/will be used as manure.
- Used oil (1100 litres/annum) is being/will be sold to authorized vendors.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the proposed expansion capacity of 50 KLPD will be used for manufacturing fuel ethanol only.

During deliberations, EAC discussed following issues:

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.

During deliberations, EAC discussed following issues:

- Water requirement shall be reduced to 4 KL per KL of alcohol produced.
- Considering the high levels of PM10 and PM2.5 in the ambient air the Existing ESP should be upgraded or Bag house installed should be converted to 99.99% efficiency for achieving particulate emission of 50 mg/m3.
- Existing treatment of spent wash through bio-composting shall be phased out within 2 years.
- 15% truck parking area shall be earmarked.
- PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

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 expansion capacity of 50 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). 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.

(iv). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production 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.

(v). Spent wash shall be concentrated in MEE and concentrated spent wash shall be incinerated in boiler. 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 sewage generated from factory premises.

(vi). Electrostatic Precipitator of 99.99 % efficiency/bag house with a stack height of 74 meters has been installed with existing 45 TPH slop/biomass fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(vii). Boiler ash is being/will be converted to granule and utilized as manure. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Coal shall not be used as fuel. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

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

Solids shall be monitored and report submitted to the Ministry's Regional Office.

(ix). CO_2 generated will be bottled and supplied to manufacturers of beverages /secondary uses/collected in bottling plant.

(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 4.55 Ha. 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 plant. Thick green belt shall be developed along the parking area. Green belt in the entire 33% of the plant area shall be developed in 01 year.

(xvi). PP proposed to allocate Rs. 0.5 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, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(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 8

Expansion of Molasses based Distillery from 90 to 400 KLPD by using Molasses / Cane Syrup / Grains along with Electricity generation of 8 MW & enhancement of Sugarcane Crushing from 12,000 TCD to 16,000 TCD for cane syrup to Distillery located at: Vishnuannanagar, A/P.: Navalihal, Tal.: Athani, Dist.: Belgaum, Karnataka State by Athani Sugars Limited (ASL)– Consideration of Environmental Clearance
[IA/KA/IND2/288591/2022, J-11011/373/2013-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. (NABET Certificate no. : NABET/EIA/1821/RA 0135 and validity 04.10.2022) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for Expansion of Molasses based Distillery from 90 to 400 KLPD by using Molasses / Cane Syrup / Grains along with co-generation power plant of 8 MW & enhancement of sugarcane crushing from 12,000 TCD to 16,000 TCD for cane syrup to Distillery located at Village Vishnuannanagar, A/P.: Navalihal, TehsilAthani, District Belgaum, State Karnataka by M/s. Athani Sugars Limited (ASL).

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

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

The details of products and capacity as under:

No.	Name of unit	Name of the product/by-product	Existing Production capacity	Additional production capacity	Total production capacity
1	Distillery	Ethanol	90 KLPD C-Molasses based	310 KLPD C/B-Heavy Molasses / Sugar Syrup/ Grains	400 KLPD C/B-Heavy Molasses / Sugar Syrup/ Grains
		RS/ENA	90 KLPD C-Molasses based	-	90 KLPD C-Molasses based
2	Co-generation power plant for Distillery	Power	--	8 MW	8 MW
3	Co-generation power plant for sugar mill	Power	54 MW	-	54MW
4	Sugar mill	Sugarcane juice / syrup	12000 TCD	4000 TCD	16000 TCD
5	Fermentation unit	Carbon dioxide	75 TPD	255 TPD	330 TPD

Ministry has issued Environmental Clearance to the existing Industry for Expansion of sugar factory from (4500 to 12000 TCD), Distillery Plat (60 to 90 KLPD), Power Plant (24 to 54 MW) vide File No. J-11011/373/2013-IA-II(I) dated 03.04.2017. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Bangalore vide File No-EP-12.1/2017-18/29/KAR/1345 dated 01.02.2022.

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 no litigation is pending against the proposal.

Total plant area after expansion will be 48.78 Ha which is under possession of the company and converted to industrial use. Out of the total plant area, 19.42 Ha. i.e. 39.82% of total plant area is to be under green belt. 11.96 Ha. i.e. 24.5% of the total plant area has already been developed as green belt and 7.46 Ha. i.e. 15% of total plant area will be developed under greenbelt & plantation in and around plant premises. The estimated project cost is Rs 375 Crores. Capital cost of EMP would be Rs. 63 Crores and recurring cost for EMP would be Rs. 5 Crores per annum. Industry proposes to allocate Rs. 2.91 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 810 persons as direct & indirect.

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

Maharashtra – Karnataka interstate boundary is at 0.3 Km from project site. Water bodies: Agrani river is at a distance of 8 Km in North direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.553 µg/M^3, 0.138 µg/M^3, 3.47 µg/ M^3 and 2.08 µg/M^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 1294 CMD (sugar mill 40 CMD and distillery 1254 CMD) which will be met from Krishna River. NOC has been obtained from Irrigation Dept.; Karnataka vide letter no. WRD21HAY2017 dated 16.11.2017.

Existing effluent generation is 729 CMD from sugar mill which is treated in full-fledged ETP and 763 CMD from distillery which is treated in existing ETP under Sugar Factory. Proposed total effluent generation from sugar factory after expansion will be 1011 CMD which will be treated in existing ETP of capacity 1550 CMD and that from the distillery will be 3637 CMD which will

be treated through proposed Condensate Polishing Unit of capacity 5000 CMD. In molasses based /sugarcane syrup operation, spent wash generated from the analyser column during distillation will be bio-methanated& concentrated in Multi Effect Evaporator and concentrated spent wash will be dried in ATFD to form powder. Domestic waste water will be treated in STP of capacity 50 CMD. In grain based operations raw stillage (1820 TPD : quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. The plant is being/will be based on Zero Liquid discharge system and treated effluent/water is being/will be not discharged outside the factory premises.

Total power requirement of distillery & sugar mill after expansion will be 26.92 MW which will be sourced from 54 MW co-generation power plant & 8 MW proposed co-generation power plant in distillery. Existing distillery has 18 TPH coal & biogas fired boiler. Under proposed expansion, 60 TPH bagasse fired boiler will be installed in distillery. Existing sugar mill has 130 TPH & 145 TPH bagasse fired boiler.

ESP with a stack of height of 52 m is installed for existing 18 TPH coal/biogas fired boiler in distillery. For proposed bagasse boiler (60 TPH), ESP with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. In sugar mill, for existing 130 TPH & 145 TPH bagasse boiler, 2 separate ESPs with a stack of height of 72 m& 80 m respectively is installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. Industry has existing 1250, 500 & 320 KVA DG sets which will be used as standby during power failure and stack height (30 m, 7 m,6 m) are provided as per CPCB norms to the DG sets.

Details of Process emissions generation and its management

- 3 separate ESPs with stack of height 80 m, 72 m and 52 m are installed for the existing 145 TPH, 130 TPH and 18 TPH boilers respectively for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. ESP with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler of 60 TPH.
- Online Continuous Emission Monitoring System is being/will be installed with the stack and data transmitted to CPCB/SPCB servers.

- CO_2 (330 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and sold to authorized vendors/collected in proposed bottling plant.

Details of solid waste/Hazardous waste generation and its management

- In molasses/cane juice operations, concentrated spent wash (640 CMD) will be converted to powder by ATFD.
- In grain based operations, DDGS (Distilled Dried Grains Stillage) (319 TPD) will be sold as cattle feed .
- Boiler ash from proposed 60 TPH bagasse fired boiler (870 TPM) and existing 130 & 145 TPH boilers(2475 TPM) will be used as manure /supplied to brick manufacturers.
- Used oil (0.53 MT/M) will be sold to authorized recycler.
- CPU sludge (96 MT/M) and STP Sludge (0.5 MT/M) will be used as manure
- Press mud (19,200 MT/M) will be used as manure in sugar mill.
- Bagasse (1,44,000 MT/M) will be used as fuel in sugar mill.
- Molasses (14400 MT/M) will be used as raw material in distillery.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed expansion capacity of 310 KLPD & 4000 TCD will be used for manufacturing fuel ethanol only.

During deliberations, EAC discussed the following issues:

- PP shall provide details of trees existing in the proposed site. Commitment stating that the existing trees shall not be removed and properly relocated within the project site.
- Proper traffic study shall be carried out and management plan for the same shall be submitted along with the impact on ambient air quality.
- Commitment for installation of air cooled condenser system in order to reduce water requirement within 2 years.
- Existing sugar unit to be converted for ZLD.
- Ground water quality of the plant premises showing BOD which indicates that there may be contamination from the spent wash lagoon or from the bio-composting. PP shall carry out leakage check from the structure and measures to be taken.

- PP shall provide details of ethanol produced using molasses/cane syrup/ grain as feed stock.
- PP shall provide clarification for high SO2 and NOx concentration in the ambient air.
- PP shall submit proposal for achieving emission norms of 30mg/Nm3 for Particulate matter and 100 mg/Nm3 for SO2 and NOx from 18 TPH coal/bagasse fired boiler .
- PP shall submit proposal to reduce impact of accidents/ fires in the threat Zone within and outside the plant

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. 9

Establishment of 200 KLPD Grain based Distillery for Ethanol Production with 4.5 MW Captive Power Generation Located at Plot No. B-21 Halkarni MIDC, Tal: Chandgad, Dist: Kolhapur, Maharashtra Stateby M/s. Alchemy Biofuels India Private Ltd. (ABIPL) – Consideration of Environmental Clearance

[IA/MH/IND2/284263/2022,IA-J-11011/281/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. (NABET certificate no. NABET/EIA/1821/RA 0135 and validity 04th October, 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 200 KLPD grain based ethanol plant and co-generation power plant of 4.5 MW located at Halkarni MIDC, Tehsil Chandgad, District Kolhapur, State Maharashtra by M/s. Alchemy Biofuels India Private Ltd.(ABIPL).

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 (Rice & Maize)	Ethanol	200 KLPD
2	Captive Power Plant	Power	4.5 MW
3	DWGS Dryer	DDGS	160 TPD
4	Fermentation unit	Carbon Di-oxide	90 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 nolitigation is pending against the proposal.

Total land area required is 9.97 Ha. Greenbelt will be developed in total area of 3.33 Ha. i.e. 33% of total project area. The estimated project cost is Rs. 170 Crores. Capital cost of EMP would be Rs. 16.15 Crores and recurring cost for EMP would be Rs.1.90 Crores per annum. Industry proposes to allocate Rs. 3.15 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 130 persons as direct & indirect.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Unnamed Reserved forests is at a distance of 2.6 Km in South-West direction. PP informed that project site is located at 3.35 km from ESA Village Kitvade, at 5.42 km from ESA Village Hajagoli, at 6.34 km from ESA Village Jelugade and at 8.25 km from ESA Village Kalasgade which are listed in WGESA Draft Notification No. S.O. 3072 (E) dated 06thJuly 2022. The same has been submitted as undertaking. Water bodies: River Tamiraparani is at a distance of 3 Km in West direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.713 µg/m^3, 0.240 µg/m^3, 6.92 µg/m^3 and 1.16 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 782 CMD which will be met from Maharashtra Industrial Development Corporation (MIDC) Halkarni. NOChas been obtained from MIDC Sub Division,Gadhinglaj vide letter No. DE/GAD/HAL/C-63948/ of 2022 dated 04.08.2022. Effluent (Condensate/spent lees/blow down etc.) of 1192 CMD quantity will be treated through Condensate Polishing Unit of capacity 1300 CMD. Raw stillage (933 TPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 7 CMD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 4.5 MW and will be met from proposed 4.5 MW co-generation power plant. 45 TPH coal/biomass fired boiler will be installed. ESP with a stack height of 65 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler. 1000 KVA DG set will be used as standby during power failure and stack height (6.5 m) will be provided as per CPCB norms to the proposed DG set.

Details of Process emissions generation and its management

- ESP with a stack height of 65 meters will be installed with 45 TPH coal/biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (90 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and in proposed bottling plant.

Details of solid waste/Hazardous waste generation and its management

- DDGS (Distilled Dried Grains Stillage) (160 TPD) will be sold as cattle feed.
- Boiler ash (27 TPD) will be used for brick manufacturing in proposed brick manufacturing unit inside plant premises.
- CPU sludge (1.4 TPD) and STP Sludge (0.005 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self - certification in the form of notarized affidavit declaring that the proposed capacity of 200 KLPD will be used for manufacturing fuel ethanol only.

Total land of 9.97 Hectares is under possession of the company and allotted by Halkarni MIDC by Regional Office, Kolhapur.; Government of Maharashtra vide letter no. MIDC/RO(KOLHAPUR)/Halkarni/LMS-333/202206002145 dated 22.06.2022 & MIDC/RO(KOLHAPUR)/Halkarni/LMS-333/202206002669 dated 03.08.2022.

During deliberations, EAC discussed following issues:

(i) Maximum GLC of SO_2 levels was estimated to be 6.92 µg/m3 as incremental value. The Committee suggested to check the values and reduce the value by taking control measures.

(ii) ESP of 99.99 % efficiency/bag house should be installed to achieve particulate emissions within the statutory limit of 30 mg/Nm3.

(iii) PP informed that 45 trees to be removed. It was suggested to revise the layout plan to reduce cutting of trees and provide details of existing trees and trees to be relocated instead of cutting with prior permission from the DFO.

(iv) The CO2 capture rate is low and the collection efficiency need to be improved.

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his

knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

(i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 200 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. 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 which will be met from Maharashtra Industrial Development Corporation (MIDC) supply. 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). ESP of 99.99 % efficiency/bag house with a stack height of 65 meters will be installed with 45 TPH coal/biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/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 shall 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 only in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 generated will be bottled and supplied to manufacturers of beverages /collected in proposed bottling plant.

(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. 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 3.33 Ha i.e. 33.01% 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. Existing 45 trees to be relocated within the project site with prior permission from the DFO.

(xvi). PP proposed to allocate Rs. 3.15 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 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. 10

Grain Based Distillery Plant (Fuel Ethanol 100 KLPD) along with Power Generation of 3.0 MW located at Khasra no. 238/55 & 239/55, Village: Rayanwali, Tehsil: Suratgarh, District: Ganganagar, State: Rajasthanby M/s. Progressive Bioenergy Private Limited – Consideration of Environmental Clearance
[IA/RJ/IND2/279353/2022, IA - J-11011/212/2022-IA-II(I)]

The proposal was earlier considered by EAC (Ind-2) in its meeting (Meeting id: IA/IND2/13302/11/08/2022) held on 11th -12thAugust, 2022 wherein EAC deferred the proposal and desired certain requisite information/inputs. After submission of ADS reply by Project Proponent, proposal was again considered in EAC meeting (Meeting ID: IA/IND2/13327/01/09/2022) held on 01st -02nd September, 2022. Information desired by EAC and responses

submitted by the project proponent along with remarks of EAC as discussed in meeting are as follows:

S. No.	ADS by MoEFCC	Reply of PP
1.	The Committee noted that the EMP report of the said project has been prepared by accredited Consultant M/s. AmplEnviron Pvt. Ltd. (NABET Certificate No. NABET/EIA/2023/IA0061 and validity 22nd October, 2023). However, as per information received by QCI-NABET, "the approval of Sh. Vipin Kumar as FAE/EC, shall be suspended for a period of 6 months from the date of NABET communication". EAC observed that Mr. Vipin Kumar joined the meeting for presenting the proposal as EIA co-ordinator which is not in line with the recent direction of the QCI-NABET. Thereafter, EAC suggested that the accredited environmental organization (ACO) shall authorize an accredited person for 5(ga) category or PP shall authorize another accredited consultant for presenting the proposal before EAC for further consideration.	Environmental consultant/PP has informed that on behalf of M/s AmplEnviron Private Limited Ms. Runa Sanjay Patil, a QCI – NABET approved EIA Coordinator accredited for distilleries sector 5(g) will present the proposal. Also, details of QCI -NABET MoM of M/s AmplEnvironPvt. Ltd. has been submitted.

The Project Proponent and the accredited Consultant M/s. AmplEnvironPvt. Ltd. (NABET Certificate No. NABET/EIA/2023/IA0061 and validity 22nd October, 2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 100 KLPD grain based ethanol Plant & 3.0 MW co-generation power plant (biomass/coal) located at Village Rayanwali, Tehsil Suratgarh,

District Ganganagar, State Rajasthan by M/s. Progressive Bioenergy Private Limited.

As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provision in the EIA Notification, 2006-(Schedule 5 (ga), Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

S.No.	Name of the Unit	Name of the Product/by Product	Production Capacity
1	Distillery	Ethanol	100 KLPD
2	Co-gen Power Plant	Power	3.0 MW
3	DWGS dryer	DDGS	46 TPD
4	Fermentation unit	Carbon –di-Oxide	78 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 no litigation is pending against the proposal.

Total land area required is 10.35 hectares. Greenbelt will be developed in total area of 3.44 hectares i.e.33.01% of total project area. The estimated project cost is Rs. 138.15 Crores. Capital cost of EMP would be Rs. 13.95 Crores and recurring cost for EMP would be Rs. 0.90 Crores per annum. Industry proposes to allocate Rs. 2.5 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 130 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Water bodies: Indira Gandhi Canal is at a distance of 1.35 Km in North direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.8 µg/m^3, 0.52 µg/m^3 and 2.3 µg/m^3 with respect to PM_{10}, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 433 CMD which will be met from Surface/Ground water. Application has been submitted for ground water vide Application No: 21-4/17176/RJ/IND/2022 and application for surface water vide letter no. WRD/PBPL/007 dated 12.05.2022. Effluent (Condensate/spent lees/blowdown etc.) of 431 CMD quantity will be treated through Condensate Polishing Unit /Effluent Treatment Plant of capacity 500 CMD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 12 CMD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3.0 MW and will be met from proposed 3.0 MW cogeneration power plant. 32 TPH biomass/coal 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 30 mg/Nm^3 for the proposed boiler. 1200 kVA DG set will be used as standby during power failure and stack height (30 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- ESP with a stack height of 60 meters will be installed with 32 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (78 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

Details of solid waste/Hazardous waste generation and its management

- DDGS (Distilled Dried Grains Stillage) (46 TPD) will be sold as cattle feed / fish feed / prawn feed.

- Boiler ash (30 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (2.0 Kilolitres /annum) will be sold to authorized recyclers.
- CPU sludge and STP Sludge 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 area is 10.35 Hectares is under possession of the company. Land use conversion application has been submitted vide application ID LC/2022-23/129661 dated 21st July, 2022 to Revenue Department, Govt. of Rajasthan.

During deliberations, EAC discussed following issues:

(i) PP committed that cost of EMP will be revised by incorporating the cost of ETP and ESP. Further PP has submitted revised EMP capital cost of Rs. 14.2 Crore and recurring cost of 1 Crore per annum.

(ii) PP committed to install air cooled condenser to reduce fresh water demand.

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

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

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. 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 which will be met from surface/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 makeup 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). ESP of 99.99 % efficiency/bag house with a stack height of 60 meters will be installed with 32 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/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. Air cooled condenser shall be installed to conserve water.

(viii). Boiler ash shall 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 only in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 generated will be bottled and supplied to manufacturers of beverages /collected in proposed bottling plant.

(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. 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 3.44 Ha i.e. 33.01% 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.

(xvi). 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, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(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. 11

Proposed 2 KLPD Malt Spirit Plant, 2 KLPD Cane juice based Rum Plant & 2 KLPD Craft Gin plant along with Pilot Plant for fermentation & Bottling Plant located at Plot No. 2A, Sector 4, IIE – Escort Farm, Kashipur, District Udham Singh Nagar, Uttarakhand by M/s Himalaya Wine Company Private Limited – Consideration of Environment Clearance

[IA/UK/IND2/252837/2022, IA-J-11011/19/2022-IA II(I)]

The Project Proponent and the accredited Consultant M/s. J.M. EnviroNet Private Limited (NABET certificate no. NABET/EIA/2023/RA0186 and validity 7thFebruary, 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 2 KLPD malt spirit plant, 2 KLPD cane juice based rum plant & 2 KLPD craft gin plant along with pilot plant for fermentation &bottling plant at Plot No. 2A, Sector 4, IIE – Escort Farm, Kashipur, District Udham Singh Nagar, State Uttarakhand by M/s. Himalaya Wine Company Private Limited.

As per EIA Notification dated 14thSeptember, 2006 and as amended on 13th June, 2019, the project falls under Category "B", Project or Activity '5(g)' Distilleries [Non-Molasses based distilleries ≤ 200 KLD]. As per EIA

Notification, 2006; as amended from time to time, "In absence of a duly constituted SEIAA or SEAC, a Category "B" project shall be treated as Category "A" project"; and due to absence of SEIAA or SEAC at Uttarakhand, this project will be considered as Category "A" and will be appraised at Central level in MoEFCC, New Delhi.

The details of products and capacity as under:

S. No.	Units	Product & Byproduct	Proposed Capacity
1	Malt Spirit Plant	Malt Spirits	2 KLPD
2	Cane juice based Rum Plant	Rum	2 KLPD
3.	Craft Gin plant along with Pilot Plant for fermentation & Bottling Plant	Gin & Fruit based distilled products	2 KLPD

Standard ToR has been issued by Ministry vide letter No. IA-J-11011/19/2022-IA II(I) dated 1stFebruary, 2022. It was informed that no litigation pending against the proposal.

Public Hearing for the proposed project had been conducted by Uttarakhand Environment Protection and Pollution Control Board (UEPPCB) on 31stMay, 2022 at 11.00 am at proposed project site chaired by Additional District Magistrate, Sugarcane Development and Sugar Industry, Uttarakhand. The main issues raised during public hearing and their action plan:

Regarding Employment opportunities, PP informed that total manpower required for operation of the plant is around 70 employees (20 temporary & 50 permanent) and 50 persons during construction phase which will be provided to the local people and will be employed as per their skills and abilities. In addition to providing employment, the company will be establishing Skill Development centre for Youth & organising Training programmes for youth/residents for which a budget of Rs. 10 lakhs has been allocated for two years.

Regarding purchase of raw material from the local people, PP informed that for the proposed project, barley (4 TPD) & sugarcane (30 TPD) will be required as raw materials from farmers for alcohol production. The company will purchase the raw materials from local farmers. Therefore local farmers will get income from the proposed project.

Regarding Environmental Pollution from the proposed project & mitigation measures, PP informed that proper EMP Budget has been allocated out of which Capital cost is Rs. 4.0 crores & Recurring cost is Rs. 0.65 crores/annum. Air Pollution: Bag Filter with stack of adequate height (30 m) will be installed with the proposed boiler. Water Pollution: Plant will be completely based on "Zero Effluent Discharge" technology. CPU/ETP of capacity 150 KLPD will be installed and the treated water will be recycled back to process plant. Fly ash (4 TPD) generated from the proposed boiler will be supplied to brick manufacturers in covered vehicles only.

Total land area required is 0.8533 Hectares. Greenbelt will be developed in total area of 0.282 Hectares, i.e., 33% of total project area. The estimated total cost for the project is Rs 30.0 Crores. Capital cost of EMP would be Rs. 3.3 Crores and recurring cost for EMP would be Rs. 0.5 Crores per annum. Industry proposes to allocate additional Rs. 0.3 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 70 persons (Permanent 50 & Temporary 20) as direct.

There is no National Park, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km radius. Reserved forests/ Protected forests: Jurka RF is at a distance of 3.5 km in ENE direction, Manrur Firozpur (Haldua) RF is at a distance of 5.0 km in WNW direction, Ampokhra RF is at a distance of 6.0 km in North direction, Jogipura RF is at a distance of 5.0 km in East direction, Gulzarpur RF is at a distance of 5.5 km in ENE direction, Ampani RF is at a distance of 8.5 km in NE direction &Sehonathpur South RF is at a distance of 10.0 km in NNW direction. Water bodies: BahallaNadiis at a distance of 2.0 km in WNWdirection, Mahadev Canal is at a distance of 3.0 km in WSWdirection, Drona Sagar Canal is at a distance of 4.5 km in WNWdirection, DebkaNadiis at a distance of 5.0 km in ESEdirection, BurhiKosiNadiis at a distance of 5.0 km in NEdirection, Kosi River is at a distance of 5.5 km in SEdirection, TumariyaBahalla Canal is at a distance of 6.5 km in Northdirection, DhelaNadiis at a distance of 7.5 km in NWdirection, Durgapur Distributary is at a distance of 8.0 km in Westdirection, Karanpur Distributary is at a distance of 7.5 km in WNW direction&Narayanpur Distributary is at a distance of 9.5 km in ESEdirection.

Ambient air quality monitoring was carried out at 8 locations during Winter Season i.e. December 2021 to February, 2022 and the baseline data

indicates the ranges of concentrations as: PM10 (46.3 to 87.4 μg/m3), PM2.5 (25.5 to 52.1 μg/m3), SO2 (5.62 to 18.2 μg/m3) and NO2 (10.68 to 32.6 μg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.341 $\mu g/m^3$, 0.137 $\mu g/m^3$, 0.569 $\mu g/m^3$ and 0.683 $\mu g/m^3$ with respect to PM10, PM2.5, SO_2 and NO_2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The fresh water requirement for the proposed project will be 64 CMD which will be sourced from the Groundwater. NOC has been obtained for ground water abstraction of 64 CMD from CGWA vide NOC no. CGWA/NOC/IND/ORIG/2022/14749 valid from 02.03.2022 to 01.03.2025. Effluent generated from the process will be 118 CMD and will be treated through state of art CPU/ETP of Capacity 150 CMD. STP of capacity 5 CMD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid Discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 0.75 MW which will be sourced from Uttarakhand Power Corporation Ltd (UPCL). For the same, the company has already applied for power connection in Single Window Clearance of Government of Uttarakhand and the same has been recommended by UPCL. 2 x 2 TPH biomass (Bagasse/cane trash/wood chips/Agro waste) fired boiler will be installed. Bag Filter with stack height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. One 750 KVA DG Set will be used as standby during power failure and stack height (6 m) will be provided as per CPCB norms to the proposed DG Sets.

Details of Process emissions generation and its management

- Bag filter with a stack height of 30 meters will be installed with 2x2 TPH biomass (Bagasse/cane trash/wood chips/Agro waste) fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (2 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers.

Details of Solid waste/ Hazardous waste generation and its management

- DWGS (4 TPD) will be used as cattle feed.
- ETP sludge will be dewatered in sludge drying beds and will be used as manure.
- Bagasse (11 TPD) generated from cane crushing processor in Craft Rum plant will be reused as fuel in proposed boilers.
- Fly ash (4 TPD) generated from the proposed boiler will be supplied to nearby brick manufacturers in closed vehicles only.
- Used oil & grease (0.2 KL/annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

Total land of 0.8533 Hectares is under possession of the company and land use conversion is not applicable as the project site lies in IIE (Integrated Industrial Estate) Escort Farm, Kashipur and is already industrial.

During deliberations, EAC discussed following issues:

(i) Plant will be operated for 350 days per annum.
(ii) Bag house with 30m stack will be installed with 2x2 TPH boilers to control particulate emission within 50 mg /m^3.
(iii) PP committed that filter press will be provided instead of sludge drying bed.

The committee was satisfied with the response provided by PP on above information.

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 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 EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, 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 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.

(iv). Total Fresh water requirement shall not exceed 64 m^3/day which will be met from ground water. Prior permission shall be obtained for fresh water withdrawal before start of construction activities. 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. 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 shall be discharged outside the premises. STP shall be installed to treat sewage generated from factory premises.

(vi). Bag house with a stack height of 30 meters shall be installed with 2x2 TPH biomass (Bagasse/cane trash/wood chips/Agro waste) fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. Coal shall not be used as fuel. 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). Ash generated from the proposed 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). CO_2 generated shall be collected by utilizing CO2 scrubbers.

(ix). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(x). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

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

(xii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. Filter press shall be installed for drying of sludge.

(xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

(xiv). The green belt of at least 5-10 m width shall be developed in nearly 0.282 Ha i.e. 33.24% 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 plant.

(xv). PP proposed to allocate Rs. 0.3 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.

(xvi). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

(xvii). Storage of raw materials shall be either 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.

(xviii). 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.

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

(xx). 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. 12

Proposed expansion of Petrochemical manufacturing facility located at Plot No.: T-2, V-45, V-11 to V-14, T-2/1, T-1, MIDC Taloja, Tehsil: Panvel, Dist.: Raigad, Maharashtra by M/s. IG Petrochemicals Limited – Consideration of amendment in Environmental Clearance

[IA/MH/IND2/284398/2022, J-11011/73/20 16-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide EC Identification No. EC22A020MH142817 (File No. J-11011/73/2016-IA-II(I)) dated 14th March, 2022 for Proposed expansion of Petrochemical manufacturing facility located at plot No.: T-2, V-45, V-11 to V-14, T-2/1, T-1, MIDC Taloja, Tehsil Panvel, District Raigad, State Maharashtra by M/s. IG Petrochemicals Limited

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

Sr. no.	Para of EC	Details as per EC	To be revised	Justification/ Reasons
1	Para- 17 and Specific condition i	Industry shall install solar power of at least 10% of its total power requirement within plant/ nearby villages as a part of EMP.	Industry shall install solar power of at least 16% of the power requirement of proposed expansion project within plant.	Power requirement for proposed expansion project is 2750 KW. Proposal for installing solar power unit on warehouse roof (4288 m^2 area) which will generate approx. 400 KW. (16% of proposed expansion power requirement). Industry generates power from waste steam

Sr. no.	Para of EC	Details as per EC	To be revised	Justification/ Reasons
				generated from exothermic heat of reaction (green power) and is self-sufficient in power requirement. The same will be applicable for expansion. No grid power required during normal plant operations.
2.	Specific Condition ii	The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.	Industry shall restrict CETP discharge to existing 220 CMD and no additional effluent discharges from proposed expansion project.	The received EC is for proposed expansion (phase V) project. The 68 CMD effluent proposed to be generated in phase V expansion will be treated and recycled totally.
3.	Specific Condition vii	Process organic residue and spent carbon, if any, shall be sent to cement industries.	Process organic residue (distillation residues from Phthalic Anhydride and Maleic Anhydride process) shall be used as fuel in Thermic Fluid Heaters. Spent carbon and process organic residue from tank cleaning, if	**Residue from Distillation:** Existing (5467.8 MT/A) and Proposed (1316 MT/A) residue will be generated in Phthalic Anhydride and Maleic Anhydride distillation is utilized as fuel in thermic fluid heaters. The total saving of LSHS/ FO will be 3028 MT/year. Rule 9 (of Hazardous and Other Wastes (M and TM) Rules, 2016) exemption permission obtained from MOEFCC for use of

Sr. no.	Para of EC	Details as per EC	To be revised	Justification/ Reasons
			any, shall be sent to CHWTSDF.	distillation residue vide letter no. 23/47/2017-HSM dt. 19th September 2017.Residue use in thermic fluid heaters is approved by MPCB in the Consent to Operate granted to the unit for the last more than 30 years. Residue is handled (stored and consumed) under totally close system and has to be handled in hot condition (temperature- 150-170 deg C). Considering this, transportation of residue poses a major challenge. The nearest cement plant from the site is 600 km away. Hence, Residue from Distillation are proposed to be utilized as fuel in thermic fluid heaters. Details of residue generation and disposal submitted in EIA report and affidavit letter Ref. no. IGPL/JKS/2022/PA-V dated 11.02.2022. **Solids from Residue, Wash Water Tank Cleaning and Spent Carbon** Solids Generated from residue and wash water tanks cleaning. Estimated

Sr. no.	Para of EC	Details as per EC	To be revised	Justification/ Reasons
				quantity post expansion is 190 MT/A. The generation is infrequent. Spent carbon generation is 93.7 MT/A which is very low. In existing facility, sent to CHWTSDF (Mumbai Waste Management ltd.) which is located 4 km away. Disposal to CHWTSDF be allowed as per existing Consent to Operate granted by MPCB. Nearest cement plant is located 600 km away and it is not viable. Details of residue generation and disposal submitted in EIA report and affidavit letter Ref. no. IGPL/JKS/2022/PA-V dated 11.02.2022.
4.	Specific Condition xii	The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc.	Industry will develop 26% (29064.63 m^2) of the total plot area as greenbelt within the plant premises and 10% additional green belt shall be developed outside plant premises adjacent to the	The plant has been in existence since 1990-91.Existing green belt area within plot is 12% (13313.45 m^2).6 m wide road around the plant is mandatory for safety purposes as per MIDC Development Control Rules and DISH requirements under Factories Act, 1941.With optimization within plot, PP proposes to increase green belt area within plot upto 26% (29064.63

Sr. no.	Para of EC	Details as per EC	To be revised	Justification/ Reasons
			plant within MIDC Industrial area.	m^2). Further optimization within plot is very difficult. Further, PP informed that to develop additional green belt area 10% (10218 m^2) adjacent to the plant within the MIDC Industrial Area. Agreement has been signed with MIDC for tree plantation. This will cover the plant with dense green belt on three sides. Total green belt area within and outside the plant (39282.63 m2) i.e. 36% of total plot area will be developed.

During deliberations, EAC discussed the above issues and was satisfied with the response provided by PP on above information.

After deliberations, EAC **recommended** for amendment in EC as proposed by the project proponent subject to the following additional condition:

(i) Industry shall obtain prior approval from SPCB for discharge of effluent to CETP. Industry shall discharge 220 KLPD of treated effluent to CETP after achieving the discharge norms specified by the SPCB. Online monitoring system shall be installed and connected to the CPCB and SPCB server.

(ii) Air emissions from Thermic Fluid Heaters shall be monitored and emission levels shall not exceed the prescribed limit.

(iii) For outside greenbelt development, PP shall take land for long term lease of 25 years and greenbelt shall be maintained properly.

(iv) 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 12thAugust,

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

However, all other terms and conditions mentioned in EC vide EC Identification No. EC22A020MH142817 (File No. J-11011/73/2016-IA-II(I)) dated 14th March, 2022 shall remain unchanged.

Agenda No. 13

Greenfield project for installation of production facilities for 60 KLD Bio-Ethanol Plant along with 2 MW Co-gen plant under Ethanol blended petrol program launched by GOI at Village Paraswar Khurd, Tehsil Rajpur, District Balrampur Ramanujganj, State Chhattisgarh by M/s. Indramani Industries Private Limited – Consideration of Environmental Clearance
[IA/CG/IND2/224370/2021, IA-J-11011/318/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Anacon Laboratories Private Limited (NABET certificate no. NABET/EIA/2023/SA 0160 and validity 29th march, 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 60 KLPD grain based ethanol plant & 2 MW co-generation power plant (coal/biomass) located at Village Paraswar Khurd, Tehsil Rajpur, District Balrampur Ramanujganj, State Chhattisgarh by M/s. Indramani Industries Private Limited.

As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provision in the EIA Notification, 2006 – [Schedule 5g (a), Category B2] is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

S.	Name of unit	Name of the	Production

No.		product/by-product	capacity
1	Distillery	Ethanol	60 KLPD
2	Co-generation power plant	Power	2 MW
3	DWGS dryer	DDGS	9380 MT / annum
4	Fermentation unit	Carbon di-oxide	9520 MT / annum

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 no litigation is pending against the proposal.

Total land required for the project is 6.094 Ha. Greenbelt will be developed in total area of 2.05 Ha. i.e., 33.66 % of total project area. The estimated project cost is Rs. 89.50Crores. Capital cost of EMP would be Rs. 4.50 Crores and recurring cost for EMP would be Rs. 0.77 Crores per annum. Industry proposes to allocate Rs. 0.50 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 90 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance. Reserve Forests/Protected Forests: Paraswad Reserve Forest is at a distance of 0.22 km in South direction. Water bodies: BankiNadi is at a distance of 0.40 Km in North direction, Baghre Nala River is at a distance of 0.14 Km in East direction, Patrengi Nala is at a distance of 3.14 Km in South direction, Parchhahiyan Nala is at a distance of 4.09 Km in South East direction, Padri Nala is at a distance of 3.25 Km in South west direction, Samtai Nala is at a distance of 2.38 Km in WNW direction. For BankiRiver application has been submitted to Water Resources Department vide application no. WA00212 dated 09-08-2021.

Total fresh water requirement will be 300 CMD which will be met from Banki river. Application has been submitted to Water Resources Department vide letter no. WA00212 Dated 09-08-2021. Effluent (Condensate/spent lees/blowdown etc.) of 100 CMD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 1000 CMD. Raw stillage (398 CMD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS.STP of capacity 10 CMD will be installed to treat sewage generated from factory premises. The

plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 1.8 MW and will be met from proposed 2 MW co-generation power plant. 20 TPH coal/biomass fired boiler will be installed. ESP with a stack height of 43 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. 2 Nos. of 750 kVA DG set will be used as standby during power failure and stack height (15 m)will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- 3 field Electrostatic Precipitator with a stack height of 43 m meters will be installed with 20 TPH coal/biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2(9520 MT/annum) 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) (9380 MT/annum) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (34 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (2 KL/year) will be sold to authorized recyclers.
- CPU sludge (250 TPA) & STP Sludge (5 TPA) will be reused as manure.

As per Notification S.O 2339(E), dated 16thJune, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 60 KLPD will be used for manufacturing fuel ethanol only.

Total land of 6.094 Hectares is under possession of the company and land use conversion has been completed vide order no. Revenue Case No - 202201210100026/A-2/2021-22 Dated 01/08/2022order issued by SDM (Revenue) Rajpur Dist. Balrampur - Ramanuj Ganj (CG).

During deliberations, EAC discussed following issues:

(i) The Committee noted that PP has not carried out air quality modelling for incremental GLC for the proposed boiler. No information has been provided in the Parivesh portal.

(ii) No details have been provided for environmental settings in the EMP report. Committee suggested the Consultant to follow by the documentation requirement as per EIA Notification 2006 as amended from time to time.

(iii) Banki Nadi is flowing at a distance of 0.40 Km in North direction, Baghre Nala River is flowing at a distance of 0.14 Km in East direction. As per Ministry's OM No. 22-39/20200IA III dated 14.02.22 regarding guidelines for siting industries which are in close proximity with river. Industry shall not be located within the river flood plain corresponding to one in 25 years flood as certified by concerned District Magistral/ Executive Engineer from State water resource Depp. or any other Officer authorized by State Govt. for this purpose. It was noted that PP has not submitted NOC from Irrigation Department indicating HFL of river and altitude of the project site.

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.

2nd September (Friday)

Agenda No. 1

Proposed 200 KLPD Grain Based Distillery along with 4.8 MW Power generation under Ethanol Blending Program located at Khasrano: 1840/954,1842/955,1844/956,1845/957, Village- Nagdala, Chanduji Ka Gada, Tehsil Ganoda, Sub Div. Ghatol, District Banswara, Rajasthan by M/s. Atthah Petrochem Pvt. Ltd. - Consideration of Environmental Clearance
[IA/RJ/IND2/286619/2022, IA-J-11011/290/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Technogreen Environmental Solutions (NABET certificate no. NABET/EIA/2124/IA0081 and validity 05thJuly 2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 200 KLPD grain based ethanol plant & 4.8 MW co-generation power plant located at Kh.no:1840/954,1842/955,1844/956,1845/957, VillageNagdala, Chanduji Ka Gada, Tehsil Ganoda, Sub Div. Ghatol, District Banswara, State Rajasthanby M/s. Atthah Petrochem Pvt. Ltd.

As per the MoEF&CC Notification S.O.2339(E), dated 16thJune,2021, a special provision in the EIA Notification, 2006-(Schedule5(ga),CategoryB2) 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 detailsof products andcapacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity
1	Distillery	Ethanol	200 KLPD
2	Co-generation power plant	Power	4.8 MW
3	DWGS dryer	DDGS	108 TPD
4	Fermentation unit	Carbon di-oxide	152 TPD

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

Total land area required is 7.3652 Ha. Greenbelt will be developed in total area of 2.5778 Ha i.e., 35% of total project area. The estimated project cost is Rs.250.95 Crores. Capital cost of EMP would be Rs.24.1466 Crores and recurring cost for EMP would be Rs.3.0542 Crores per annum. Industry

proposes to allocate Rs.3.76 Crores towards Extended EMP (Corporate Environment Responsibility).Total Employment will be 150 persons as direct &indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves,Tiger/Elephant Reserves, Wildlife Corridors, protected forest etc. within 10 km distance. Reserve forest/Protected Forest: Unnamed Reserve forest patch is at a distance of 1.94 km in East direction and unnamed reserve forest is at a distance of 3.76km in NW direction. Water bodies: Kalol river is at a distance of 0.97 km in NW direction, Kagdi River is at a distance of 4.50 km in SW direction, Chap river is at a distance of6.17 km in NWW direction and Checkdam at Jaitur is at a distance of 2.51 km in E direction from project site.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.48µg/m^3, 0.22µg/m^3, 1.83µg/m^3 and 3.59 µg/$m^3$with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1091.3 CMD which will be met from ground water. Application has been submitted to CGWA Vide application number: 21-4/17434/RJ/IND/2022 dated 21.07.2022. Effluent (Condensate /spentlees/dryer process condensate etc.) of 1259 CMD quantity will be treated through Condensate Polishing Unit of capacity 1600 CMD. Raw stillage (1665CMD) will be sent to decanter followed by MEE and dryer to produce DDGS. STP 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 4.25MW and will be met from proposed 4.8MW co-generation power plant. 45 TPH biomass/coal fired boiler will be installed. ESP/Bagfilter with a stack height of 60m will be installed for controlling the particulate emissions within the statutory limit of 30mg/Nm^3 for the proposed boiler.750 kVA DG set will be used as standby during power failure and stack height(6.0m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- ESP/Bag filter with a stack height of 60m will be installed with 45 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (152 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) (108TPD) will be sold as cattle feed/fish feed/prawn feed.
- Boiler ash(14.1TPD coal ash and 37.41 TPD biomass ash) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (0.4 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (1.35 TPD) will be used as manure.

As per Notification S.O2339(E), dated16th June,2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 200 KLPD will be used for manufacturing fuel ethanol only.

Total land of 7.3652 Hectares is under possession of company and land use conversion application has been submitted to Revenue Department, Govt. of Rajasthan vide application no: LC/2022-23/127976 dated 04.07.2022

During deliberations, EAC discussed following issues:

(i) Water requirement should be maintained 3.01 Kl/kl of alcohol produced.
(ii) Air cooled condenser will be installed to reduce the fresh water requirement.
(iii) Dry flue gas desulphurisation unit to be provided for the boiler to control SO_2 emissions.
(iv) ESP of 5 fields/bag house to be provided with boiler to achieve particulate matter below 30 mg/Nm^3.
(v) 15% parking area to be provided.

(vi) Approach road should be pucca and to be maintained by PP.

(vii) Name of villages to be provided after consultation of DM for utilisation of extended EMP

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

(i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 200 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. 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 3.01 KL/KL of ethanol production 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). ESP of 5 fields/bag house with a stack height of 60 m will be installed with 45TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm3. Dry flue gas desulphurisation unit to be provided for the boiler to control SO_2 emissions. Air cooled condenser to be provided. 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 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 in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 generated will be bottled and supplied to manufacturers of beverages /collected in proposed bottling plant.

(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. 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 2.5778 Hai.e.35%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. Green belt shall be developed between the parking area and plant boundary.

(xvi). PP proposed to allocate Rs. 3.76 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 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 12thAugust, 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

Proposed 100 KLPD Grain Based Distillery Plant (Ethanol) along with 3 MW Power Generation at Survey No. 420/1A/2A/3/6, Mantur Road, Mudhol, Dist: Bagalkot, Karnataka by M/s. Shrisuryavanshi Nutraceutical Private Limited (SSNPL) –Consideration of Environmental Clearance

[IA/KA/IND2/287202/2022, IA-J- 11011/297/2 022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Techno Green Solution (NABET certificate No. NABET/EIA/2124/IA0081 (Rev.01) and validity 05th July 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 along with 3 MW co-generation power plant located at survey. no. 420/1A/2A/3/6,Village Mantur Road, Tehsil Mudhol, District Bagalkot, State Karnataka by M/s Shrisuryavanshi Nutraceutical Private Limited (SSNPL).

As per the MoEF&CC Notification S.O. 2339(E), dated 16thJune, 2021, a special provision in the EIA Notification, 2006-(Schedule 5 (ga), Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

Sr No	Name of Unit	Name of the products /by products	Production capacity
1	Distillery	Ethanol	100 KLPD
2	Power Plant	Power	3 MW
3	DWGS Dryer	DDGS	50 TPD
4	Fermentation	Carbon Dioxide	80 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 no litigation is pending against the proposal.

Total land area required is 5.12 Ha. Greenbelt will be developed in total area of 1.70 hectares i.e., 33.20 % of total project area. The estimated project cost is Rs. 140.27 Crores. Capital cost of EMP would be Rs. 15.45 Crores and recurring cost for EMP would be Rs. 0.615 Crores per annum. Industry proposes to allocate Rs. 2.10 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 190 persons as direct & indirect.

There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Project site is located at 8.58 km from Yadahalli Chinkara Wildlife Sanctuary, Karnataka and 7.71 km from Eco-sensitive Zone Boundary (ESZ) as per the MoEF&CC Final Notification Vide No. SO 787 (E) dated 19th February 2021. The Eco-Sensitive Zone is spread over an area of 70.72 square kilometres with an extent of 100 m to one kilometre from the boundary of Yadahalli Chinkara Wildlife Sanctuary, Karnataka and the boundary description of the said Zone. The project does not fall under wild sanctuary or within ESZ boundary. Water bodies: Ghatprabha River is at a distance of 5.0 Km in South direction and Roti nala is at a distance of 1.6 Km in South West direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.54 µg/m3, 3.45 µg/m3, 0.16 µg/m3 and 0.18 µg/m3 with respect to PM10, PM2.5 ,SO2 &NOx.The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement is 460 CMDwhich will be met from Ghatprabha River. Application has been submitted to Executive Engineer, Minor Irrigation & under water development department division - Vijayapura dated 12/07/2022 (No. MIS.No/SD/Mudhol/ water permission letter/2022-23/697 dated 12/07/2022.). Effluent (Condensate/ Spent lees /blowdown) of 545 CMD quantity will be treated through Condensate polishing unit of capacity 600 CMD. Raw Stillage (669 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP will be installed to treat domestic 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 2.8 MW and will be met rom proposed 3.0 MW cogeneration power plant. 32 TPH coal/biomassfired 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 30 mg/Nm3 for the proposed boiler. 1000 kVA DG set will be used as standby during power failure and stack height (6 m ARL) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- ESP with a stack height of 60 meters will be installed with 32 TPH coal/biomass fired boilerfor controlling the particulate emissionswithin the statutory limit of 30 mg/Nm3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (80 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and 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 (Coal ash 23.4 TPD&biomassash39.30 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil will be sold to authorized recyclers
- CPU & STP sludge will be used as manure.

As per Notification S.O 2339(E), dated 16thJune,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 5.12 Hectares is under possession of M/s Shrisuryavanshi Nutraceutical Private Limited ("SSNPL") and Land use conversion application has been submitted to Revenue Department, Government Karnataka dated 07/07/2022

During deliberations, EAC discussed following issues:

(i) Different data has been mentioned in the different documents regarding boiler capacity. PP clarified that they will use 32 TPH boiler instead of 45 TPH boiler.

(ii) The Committee has taken it very serious that the Consultant mentioned wet scrubber, ESP and bagfilter altogether as a pollution control device for boiler. It was clarified by the Consultant that they will install ESP of 5 fields to achieve standards for particulate emission within 30 mg/m^3. Thereafter, the Committee warned the Consultant that such error shall not be repeated in future.

(iii) Water consumption to be restricted within 4 KL per KL of alcohol produced.

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

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

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. CLU certificate shall be obtained before start of construction activities.

(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 Ghatprabha 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). ESP of 5 fields/bag house with a stack height of 60 meters will be installed with 32 TPH coal/biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/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 shall 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 in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 generated will be bottled and supplied to manufacturers of beverages /collected in proposed bottling plant.

(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. 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 1.70 hectares i.e., 33.20 %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. 2.10 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 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. The village road connecting plant with Highway shall be strengthened and maintained by the industry.

(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 12thAugust, 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

Proposed 150 KLPD Molasses/Cane Juice/Grain based Distillery along with 3 MW Co-generation Power Plant, Expansion of Sugar Mill (3500 TCD to 6000 TCD) & Co-Generation Power Plant (4.5 MW to 7.5 MW) within the Existing Plant Premises at Village Arala-Karanguli, Tehsil Shirala, District Sangli, Maharashtra by M/s Dalmia Bharat Sugar and Industries Limited – Unit Ninaidevi, Kokrud– Consideration of Environment Clearance

[IA/MH/IND2/284723/2021 , IA-J-11011/121/2021-IA-II (I)]

The Project Proponent and the accredited Consultant M/s. J.M. EnviroNet Private Limited (NABET certificate no. NABET/EIA/2023/RA0186 and validity 7th February, 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 150 KLPD Molasses/Cane Juice/Grain based Distillery along with 3 MW Co-generation Power Plant, Expansion of Sugar Mill (3500 TCD to 6000 TCD) & Co-Generation Power Plant (4.5 MW to 7.5 MW) within the Existing Plant Premises at Village Arala- Karanguli, Tehsil Shirala, District Sangli, State Maharashtra by M/s Dalmia Bharat Sugar and Industries Limited – Unit Ninaidevi, Kokrud.

As per EIA Notification dated 14thSep, 2006 and as amended on 13thJune, 2019, the project falls under Category "A", Project or Activity '5(g)' Distilleries [Molasses based distilleries>100 KLPD & Non-Molasses based distilleries >200 KLD] and 5 (j) Sugar Industry (5000 TCD cane crushing capacity) falls in category B but it is an integrated project, hence will be appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity as under:

S. No.	Units	Product & By-product	Existing Production	Proposed Capacity	Total Production

			Capacity		Capacity
1	Molasses/Cane Juice/Grain based Distillery	Ethanol/RS/ Impure alcohol/ENA	-	150 KLPD	150 KLPD
2	Distillery Co-generation power plant	Power	-	3.0 MW	3.0 MW
3.	Sugar Mill	Sugar	3500 TCD	2500 TCD	6000 TCD
4.	Sugar Mill Co-generation power plant	Power	4.5 MW	3.0 MW	7.5 MW

As per EIA Notification dated 14thSeptember, 2006, Environment Clearance is not required for Sugar Mill of manufacturing capacity ≤5000 TCD. The existing Sugar Mill capacity is 3500 TCD, hence, no Environment Clearance is required. The existing plant is operational on the basis of Consent to Operate for Air & Water obtained from MPCB vide consent letter number FORMAT1.0/CAC/UAN No.MPCB-CONSENT-0000114945/CO/2205000241 dated 05.05.2022 and valid till 31.07.2023. Certified CTO compliance report for existing CTO has been obtained from MPCB, Sangli.

Standard ToR has been issued by Ministry vide letter No. J-11011/121/2021-IA II(I) dated 27th March, 2021. It was informed that neither any litigation is pending nor has any direction/order been passed by any Court of Law against the project.

Public Hearing for the proposed project has been conducted by Maharashtra Pollution Control Board on 30th June, 2022 at 11:00 am within the Existing Plant Premises at Village Arala-Karanguli, Tehsil Shirala, District Sangli, Maharashtra chaired by Additional District Magistrate, District Sangli. The main issues raised during public hearing and their action plan:

Regarding effect of air & river water pollution on flora fauna, Effluent from distillery & sugar factory will be treated in combined ETP of capacity 2800 KLPD and recycled / reused in process, greenbelt development and ferti-irrigation. Domestic waste water generated from the plant will be treated in STP (Capacity 20 KLDP) and utilized in greenbelt development. Capital cost is Rs. 42.0 Crores& Recurring cost/annum is Rs. 1.7 Crores. ESP/Bag filter and adequate stack height will be commissioned for the

project and 100% potash ash will be recovered from the burning of spent wash. DBSIL will invest in Air Pollution management for which Capital cost is Rs. 5.0 Crores& Recurring cost/annum is Rs. 0.2 Crores. Online monitoring of air and water will be done for which Capital cost will be Rs. 1.0 Crore and Recurring cost/annum will be 0.2 Crores.

Regarding employment, PP informed that total manpower after installation of Distillery and expansion of sugar mill will be 450 persons which include all categories of unskilled, semiskilled and skilled personnel and contract labour.

Regarding provision of health facilities for workers & villagers, DBSIL will implement Medical health checkup camps, Distribution of medical equipment, wheelchairs, oxygen cylinders in hospitals and health centre of nearby villages for which Rs. 20 lakhs has been allocated.

Regarding activities implemented under CSR, Socio economic developmental activities will be undertaken by the company which will include farmers & youth skill development programme, provision of safe drinking water, health facilities, school infrastructure up-gradation, other social development & solar lights/lanterns installations, etc. for which DBSIL will invest Rs 1.85 Crores to be spent within two years.

The existing plant area is 31.04 Hectares which is under possession of the company and already industrial in nature due to existing operational activities. No additional land is required for the proposed installation of distillery & expansion of sugar mill, as the same will be done within the existing plant premises. Out of the total plant area 10.25 Hectares i.e. 33% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained. The estimated total cost for the expansion project is Rs 185.0 Crores. Capital cost of EMP would be Rs. 50.0 Crores and recurring cost for EMP would be Rs. 2.50 Crores per annum. Industry proposes to allocate additional Rs. 1.85 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 450 persons as direct.

Chandoli National Park [Part of Sahyadri Tiger Reserve] is at a distance of 6 km in NW Direction (Outer boundaries), Pusarle RF is at a distance of 9.5 km in South direction and some unnamed Reserve Forest are also located within 10 km radius of plant site. ESZ is not notified till date. Chandoli National

Park covering area of 317.67 Sq. Km has been declared as National Park and notified by Maharashtra State Govt vide notification dated 15thJuly 2004. Application has been submitted for clearance under the Wildlife (Protection) Act, 1972, to Standing Committee of NBWL vide proposal no. FP/MH/IND/5880/2021 dated 30th April 2021. Additional Principal Chief Conservator of Forests (Wildlife) West, Mumbai has recommended project to Principal Chief Conservator of Forests, Nagpur vide letter no. 3/jamin/NBWL/ P.K.175/2701/2021-2022 dated 28.01.2022 and resubmitted on 27.04.2022. The project is recommended in above said letter with one of the condition as: *"2% amount of project cost will be made available to Wildlife Wing for protection & habitat development work."* The project is further recommended to state government by principal chief of forest wildlife vide letter no 23(2)/WL/Survey/P.K.173 (2021-22) dated- 04.05.2022. Waterbodies: Warana Left Bank Irrigation Canal is adjacent to the plant site in North direction, Warana River is at a distance of 1.0 Km in WSW direction, Chandoli Dam is at a distance of 8 km in NW direction.

Ambient air quality monitoring was carried out at 8 locations during Summer season (March, to May, 2021) and the baseline data indicates the ranges of concentrations as: PM10 (47.1 to 73.6 μg/m3), PM2.5 (22.0 to 45.5 μg/m3), SO2 (5.0 to 13.7 μg/m3) and NO2 (9.1 to 27.7μg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.695μg/m3, 0.278μg/m3, 1.39μg/m3 and 2.43μg/m3 with respect to PM10, PM2.5, SO2 and NO2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total freshwater requirement after expansion for Sugar mill will be 289 KLPD. Freshwater requirement for Distillery operation during molasses based operation will be 396 KLPD during season & 864 KLPD during off season and during grain based operation will be 561 KLPD. After expansion total fresh water requirement for the complex will be 658 KLPD during season & 894 KLPD during off season which will be sourced from Surface water (Warana River). Permission for withdrawal of 0.3423 Million cubic meter per year water from Warana River has been obtained from Kolhapur Irrigation Division vide letter No J.K. Copav(u)/Non irrigation/3376/year 2021 dated 18th June, 2021. In molasses based operation, concentrated spent wash (284 TPD) will be burnt in incineration boiler and in grain based operation, raw stillage (840 KLPD) will be concentrated in MEE followed by dryer to produce DDGS. Effluent generated from sugar mill after expansion is 1257

KLPD & proposed molasses based distillery is 1177 KLPD which will be treated through state of art CPU/ETP of capacity 2800 KLPD. Domestic waste water will be treated in STP of capacity 20 KLPD. The plant is being/will be based on Zero Liquid Discharge system and treated effluent/water is being/will not be discharged outside the factory premises.

The power requirement of distillery/sugar mill after expansion will be 10.5 MW which will be sourced from co-generation power plant of 7.5 MW & proposed 3.0 MW power plant. Wet Scrubber with stack of 57 m has been installed with the existing bagasse/coal fired sugar mill boilers (25+28 TPH) to control the particulate matter within the statutory limit of 30 mg/Nm3 for the proposed boiler. The company will upgrade the existing 25 TPH boiler to 40 TPH & existing 28 TPH to 55 TPH and APCE to ESP/Bag Filter. In the Distillery Plant, 30 TPH Concentrated spent wash/ Bagasse/coal fired boiler will be installed. ESP/Bag Filter with stack height of 68 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. Additional 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 Sets.

Details of Process emissions generation and its management-

- Wet scrubber as APCE in existing (25+ 28 TPH) boilers will be replaced by ESP/ Bag Filter with a stack of height of 57 m for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. ESP/Bag Filter with a stack of height of 68 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed 30 TPH boiler.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (126 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) (75 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Concentrated spent wash (284 TPD) will be burnt in incineration boiler.
- Bagasse (1800 TPD) generated is being/will be used as fuel for power generation in co-generationpower plant.

- Molasses (270 TPD) generated from Sugar industry will be used as raw material in distillery for Alcohol production.
- Bagasse ash (8 TPD) is rich in silica content, hence, can be used directly for brick manufacturing. Slop based boiler ash (35 TPD) is rich in potash (>14%) hence, Ministry of Fertilizer has declared it Potash derived from molasses (PDM) which will be used as manure.
- ETP Sludge generated after treating waste water generated in sugar unit is being/will be used as manure.
- Press Mud (210 TPD) generated is being/will be given to the farmers as manure.
- Used oil (1.5 KL/annum) generated from the plant machinery/ gear boxes as hazardous waste is being/will be sold out to the CPCB authorized recycler.

During deliberations, EAC discussed following issues:

(i) The Committee noted that issues related to pollution from boiler, effluent discharge and impact on tiger reserve were discussed during public hearing. Further PP informed that regarding control of air pollution, the company will install ESP with all boilers to control the particulate emission within the statutory limit. In Sugar mill, Bagasse fired boiler will be installed with ESP as APCE for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. In the proposed distillery, 30 TPH Concentrated spent wash/Bagasse/coal fired boiler will be installed with ESP as APCE for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. Ash collected from incineration Boiler shall be used as bio-manure. CO2 generated (126 TPD) during the fermentation process will be collected and sold to vendor. Regarding control of water pollution, pp informed that the entire plant will be based on "Zero Liquid Discharge concept" and no effluent/treated effluent will be discharged outside the premises. For socio economic development, they have earmarked Rs. 185 Lakh to address the public hearing issues. The committee noted that the proposed project will be set up in the existing plant. Since PP has proposed complete zero effluent discharge for existing as well as new proposed plant, it was envisaged that there will be no adverse impact on the water bodies.

(ii) Water balance to be revised considering 100% recycling of effluent from sugar unit.

(iii) Assessment of vehicular pollution and its impact shall be carried out and traffic management plan to be submitted.

(iv) Wet scrubber as APCE in existing (25+ 28 TPH) boilers will be replaced by ESP of 99.99% efficiency / Bag Filter.

(v) PP shall include nutrient management of soil as part of Extended EMP (CER) budget.

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 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 EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be

obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, 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). NOC from the Concerned Local authority for supply of river water 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.

(iii). Total Fresh water requirement shall not exceed 658 KLPD during season & 894 KLPD during off season which will be met from Surface water (Warana River). No ground water abstraction shall be permitted. 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.

(iv). Spent wash shall be concentrated in MEE and incinerated or spent wash shall be concentrated and dried to form DDGS in grain based distillery. 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. As proposed by PP, entire plant will be based on

"Zero Liquid Discharge concept" and no effluent/treated effluent will be discharged outside the plant premises. STP shall be installed to treat sewage generated from factory premises.

(v). The capacity of existing 25 TPH boiler shall be upgraded to 40 TPH steam generating capacity and 28 TPH to 55 TPH capacity. The Wet scrubber as APCD in existing (25+ 28 TPH) boilers will be replaced by ESP of 99.99% efficiency / Bag Filter while upgrading the boilers capacity with a stack of height of 57 m for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. ESP/Bag Filter with a stack of height of 68 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed 30 TPH boiler. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. 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.

(vi). Bagasse ash is rich in silica content, hence, can be used directly for brick manufacturing. Slop based boiler ash is rich in potash (>14%) hence, Ministry of Fertilizer has declared it Potash derived from molasses (PDM) which will be used as manure. 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 in case of biomass unavailability PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(vii). 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.

(viii). CO_2 generated will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

(ix). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(x). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

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

(xii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. Filter press shall be installed for drying of sludge.

(xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

(xiv). The green belt of at least 5-10 m width shall be developed in 10.25 Hectares i.e. nearly 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.

(xv). PP proposed to allocate Rs. 1.85 Crores to address the public hearing issues & 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.

(xvi). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 20% shall be allotted solely for parking purposes with facilities like rest rooms etc. Approach road from the industry to the State Highway shall be maintained and developed by PP.

(xvii). 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.

(xviii). 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.

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

(xx). 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 200 KLPD Grain Based Ethanol Plant along with 5.0 MW Co-generation Power Plant at Village Ganora, Tehsil Ganora, District Banswara (Rajasthan) by M/s. Express Digital Payment Services Private Limited–Consideration of Environmental Clearance

[IA/RJ/IND2/288720/2022, IA-J-11011/317/2022-IA-II(I)

The Project Proponent and the accredited Consultant J.M. EnviroNet Pvt Ltd. (NABET certificate no. NABET/EIA/2023/RA0186 and validity 7thFebruary, 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 200 KLPD grain based ethanol plant along with 5.0 MW co-generation power plant located at Village Ganora, Tehsil Ganora, District Banswara, State Rajasthan by M/s. Express Digital Payment Services Private Limited.

As per the MoEF&CC Notification S.O. 2339(E), dated 16thJune, 2021, a special provision in the EIA Notification, 2006-(Schedule 5 (g(a)), 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.	Grain Based Ethanol Plant	Ethanol	200 KLPD
2.	Co-generation power plant	Power	5.0 MW

3.	DWGS dryer	DDGS	98 TPD
4.	Fermentation unit	Carbon di-oxide	154 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 no litigation is pending against the project.

Total land area required is 8.18 ha. Greenbelt will be developed in total area of 2.7 ha i.e., 33 % of total project area. The estimated project cost is Rs. 240 Crores. Capital cost of EMP would be Rs. 26.0 Crores and recurring cost for EMP would be Rs. 2.5 Crores per annum. Industry proposes to allocate additional Rs. 2.0 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 200 persons as direct.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius. Reserved Forests (RF)/ Protected Forests (PF): KundliDudka Block PF is at a distance of 4.5 km in ENE direction, RF is at a distance of5.0 km in ESE direction, BhoyarBorda PF is at a distance of5.5 km in ESE direction, RF is at a distance of6.0 km in SSW direction, RF is at a distance of6.5 km in SSE direction, PF is at a distance of6.5 km in SW direction, Loharia Block A PF is at a distance of8.0 km in West direction, RF is at a distance of8.0 km in SSE direction, Gargiyamagra Block PF is at a distance of8.5 km in ENE direction, Loharia Block B PF is at a distance of9.0 km in West direction, SuliyaVenka Block PF is at a distance of9.5 km in North direction, RF is at a distance of9.5 km in NNE direction. Water bodies: Mahi River is at a distance of6.5 km in NW direction, Mahi Canal is at a distance of9.0 km in East direction, ShakliyaNadiis at a distance of9.5 km in ESE direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.603µg/m3, 0.241µg/m3, 0.704µg/m3 and 0.905µg/m3 with respect to PM10, PM2.5, SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1143 CMD which will be met from groundwater. The company has applied to CGWA for groundwater abstraction of 1143 KLPD vide Application code 79779 and is under process. Effluent (Process Condensate/ CT blow down/ DM plant reject & washing etc.) of 1085 CMD will be treated through Condensate Polishing Unit

/Effluent Treatment Plant of capacity 1400 CMD. Raw stillage (1296 CMD) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 25 CMD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 5.0 MW and will be met from proposed 5.0 MW co-generation power plant. 45 TPH biomass fired boiler will be installed. ESP with a stack height of 55 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. 2x500 KVA DG sets will be used as power backup during power failure and stack height (5 m) will be provided as per CPCB norms to the proposed DG set.

Details of Process emissions generation and its management

- ESP with a stack height of 55 meters will be installed with 45 TPH biomass fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (154 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) (98 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (47 TPD) will be used for brick manufacturing and supplied to nearby brick manufacturers in covered vehicles only.
- Used oil & grease (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (1.4 TPD) and STP Sludge (0.0125 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 200 KLPD will be used for manufacturing fuel ethanol only.

Total land area required for the proposed project is 8.18 ha (20.23 acres) which is already in possession of the company. Total land purchased by the company is 18.8 ha, but earmarked land for this Ethanol project is 8.18 ha. The land has been converted to industrial purpose as per the Conversion orders from The Office of Prescribed Authority Sub Division Officer, Ghatol, District Banswara (Rajasthan).

During deliberations, EAC discussed following issues:

(i) The plant location will be reoriented so that existing tree shall not be cut and relocated within the plant premises in consultation with DFO.
(ii) ESP of five fields to be installed.
(iii) Ash shall be collected in silo and transported through covered truck. Company will install fly ash brick manufacturing unit inside the plant.
(iv) Solar plant will be installed within the plant for 10% of the power consumed in the proposed project.

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the

recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

(i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 200 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. 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 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). ESP of five fields with a stack height of 55 meters will be installed with 45 TPH biomass fired boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. SO_2 and NOx emissions shall be less than 100 mg/Nm3. Coal shall not be permitted as fuel to be used. 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 will be used for brick manufacturing and supplied to brick manufacturers in covered trucks. 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.

(ix). CO_2 generated will be bottled and supplied 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. 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 2.7 ha i.e., nearly 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. 2.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities

like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(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. Approach road from the industry to the State Highway shall be maintained and developed by PP.

(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 12thAugust, 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

Grain based Ethanol [Biofuel] Plant [100 KLD] along with cogeneration power plant [4 MW] located at Village–Village–Baharawali, Chhata Shergarh Road, Tehsil - Chhata, Dist. -Mathura, UP by M/s Allianz Distillery Limited

[IA/UP/IND2/286236/2022, IA-J-11011/282/2022-IA-II(I)]

The Project Proponent and the accredited consultant Sd Engineering Services Pvt Ltd (NABET certificate no. NABET/EIA/2023/ SA 0166 valid up to 12th August 2023] has made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance for the project for 100 KLPD Grain based Ethanol Plant with 4MW Co-generation power plant [fuel - Biomass or coal in case of unavailability of biomass] located at Village–Baharawali, Chhata Shergarh Road, Tehsil - Chhata, Dist. -Mathura, UP - 281 401 by M/s Allianz Distillery Limited.

As per the MoEF&CC Notification S.O. 2339(E), dated 16thJune, 2021, a special provision in the EIA Notification, 2006-(Schedule 5 (g(a)), Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product /by-product	Production capacity
1	Distillery	Ethanol	100 KLPD

2	Co-generation power plant	Power	4 MW
3	DWGS dryer	DDGS	48 TPD
4	Fermentation unit	Carbon di-oxide	50 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 no litigation is pending against the project.

Total land area identified is 12.45 Acre (5.09 ha). Greenbelt will be developed in total area of 4.5 acre i.e., 36% of total project area. The estimated project cost is INR 128.9 Crores. Capital cost of EMP would be Rs. 7.26Crores and recurring cost for EMP would be Rs. 1.08Crores per annum. Industry proposes to allocate Rs. 1.3Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 166 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: Shernagar R.F at an aerial distance of 13.08 Km on North, Bathain R.F at an aerial distance of 14.6 Km on NW, Nandgaon R.F at an aerial distance of 14.8 Km on SW. The project site is located outside the TTZ. Water bodies: i)Shergarh Canal is at an aerial distance of 610 m on East, ii) Yamuna River is situated at an aerial distance of 13.26 km on NE, iii) Kosi drain is at an aerial distance of 2.6 Km on SW, iv) Agra canal is at an aerial distance of 8.7 Km on SW, iv) Tal Guhali is at an aerial distance of 8.5 Km on SW.

AAQ modelling study for point source emissions [Fuel rice husk] indicates that the maximum incremental GLCs after the proposed project would be 0.126µg/m3, 0.075µg/m3, 0.883 µg/m3and 1.90µg/m3 with respect to PM10, PM2.5, SO2 and NOX.The baseline concentration and resultant concentrations of PM 10 and PM 2.5 are slightly higher than the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 573 m3/day including domestic & green area usage [60 KLD] which will be met through onsite ground water abstraction. PP has applied vide application no. MTHR0722NIN0078 dated 22/07/2022 for obtaining ground water abstraction approval. Effluent (Condensate/spent lees/blowdown etc.) of 993m3/day quantity will be partly

recycled and partlytreated through Condensate Polishing Unitof capacity 1100 KLPD. Raw stillage 558 KLD [quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS.STP of capacity 20KLDwill be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3.15 MWand will be met from proposed 4.0MW cogeneration power plant. 30TPH boiler [fuel - biomass or coal in case of unavailability of biomass] will be installed. APCE [ESP] with a stack height of 55 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. 2 nos. @ 250 kVA each DG set will be used as standby during power failure and stack height (15m) 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 55 m will be installed for controlling the particulate emissions from boiler.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (50 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers, liquified and shall be sold to authorized vendors.

Details of solid waste/Hazardous waste generation and its management

- DDGS (Distilled Dried Grains Stillage) (48 TPD) will be sold as cattle feed / poultry feed.
- Fly ash from boiler (approx. 35-40 TPD from coal or 20-25 TPD from biomass] will be generated. The same will be used in infrastructure base fill material/brick manufacturing unit set up by the project proponent in collaboration with local brick manufacturing unit.
- Bottom ash [approx. 26 TPD from coal or 15 TPD from biomass] will be generated and disposed for landfilling/road making activities.
- Used oil (approx. 1Kl/annum) will be sold to authorized recyclers.
- ETP sludge (50 Kg/day) and STP Sludge (1.5 Kg/day) will be used as manure.

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

proposed capacity of 100 KLPD grain-based distillery will be used for manufacturing fuel ethanol only.

Total land of 12.45 Acre (5.09 ha) is under possession of the company and present landuse is "Abadi" (Converted from to Agriculture to Industrial Use).

During deliberations, EAC discussed following issues:

(i) No ground water shall be extracted without approval.

(ii) Regarding PM10 level of 160 micro gram/m^3 PP informed that ambient air quality monitoring was done during summer season in the month of May. Air borne /wind laden dust contains high concentration of particulate matter (PM10 and PM2.5). The wind direction was from west to east. Loose soil from non-irrigated agriculture land adds on to concentration of suspended particulate matter in air. PP informed that all the air pollution control measures shall be taken to achieve prescribed air emission prescribed by the CPCB and SPCB. ESP of five fields to be installed to achieve the particulate emission levels of 30 mg/m^3. Fugitive air emissions shall be controlled by adopting good house keeping and planting of additional trees within the plant and along the road.

(iii) Regarding revised GLC considering 0.5 % sulphur in fuel coal, the GLC calculation was done considering 0.58% sulphur in coal under worst case scenario. However, they have further conducted GLC calculation of 0.5 % sulphur.

(iv) Details of revised CER has been submitted.

(v) ESP of five fields to be installed.

(vi) Ash shall be collected in silo and transported through covered truck.

(vii) PP informed that the existing leather factory was operated 8 years ago in the same land. Some of the infrastructure will be used for the proposed project.

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

(i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that

subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. 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 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 1000m^3 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). ESP of 5 fields with a stack height of 55 meters will be installed with 30 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. SO_2 and NOx 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 will be used for brick manufacturing and supplied to brick manufacturers in covered trucks. PP shall use biomass 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.

(ix). CO_2 generated will be bottled and supplied 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. 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 2.04 Ha i.e., nearly 40% 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. 1.3 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 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. As proposed, 4.0 % area is earmarked for parking with facilities like rest rooms etc within the project site and dedicated additional 5 acres parking area will be provided separately outside the plant premises, which is located 1.5 KM away.

(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). The demolition waste shall be disposed in compliance with the provisions of C&D Waste Management Rules, 2016. Since, proposed site is located in the existing leather factory operational 8 years ago, TCLP test shall be conducted of soil in plant site.

(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 12thAugust, 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

Proposed 200 KLPD Grain Based Distillery Unit along with 5.3 MW Co-gen Power Plant and Zero Liquid Discharge located at SIPCOT Industrial Park, ThervoyKandigai village, Gummidipoondi Tehsil, Tiruvallur District, Tamil Nadu State by M/s. SLB Ethanol Private Limited - Consideration of EnvironmentalClearance

[IA/TN/IND2/288850/2022,IA-J11011/304/2022-IA-II (I)]

The Project Proponent and the accredited Consultant M/s. Enviro Care India Private Limited (NABET certificate no. NABET/EIA/1821/RA0137 and validity 6th September 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 200 KLPD Grain based Ethanol Plant & 5.3 MW co-generation power plant (Imported coal/biomass based) located at SIPCOT Industrial Park, ThervoyKandigai village, Gummidipoondi Tehsil, Tiruvallur District, Tamil Nadu State.

As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provision in the EIA Notification, 2006 (Schedule 5g(a), Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity
1	Distillery (grain)	Ethanol	200 KLPD
2	Co-generation power plant	Power	5.3 MW
3	DWGS dryer	DDGS	112 TPD
4	Fermentation unit	Carbon di-oxide	156 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 no litigation is pending against the proposal.

Total land area required is 8.07 Ha. Greenbelt will be developed in total area of 2.71 Ha i.e., 33.58 % of total project area. The estimated project cost is Rs. 270.2 Crores. Capital cost of EMP would be Rs. 8 Crores and recurring cost for EMP would be Rs. 0.78 Crores per annum. Industry proposes to allocate Rs. 6.6 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 150 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance. Reserve forests/protected forests: Thervoy Reserve Forest at a distance of 2.7 km in NE direction. Water bodies :River Arani is at a distance of 8.5 km.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.95 µg/m3, 4.86 µg/m3, 1.24 µg/m3 and 2.49µg/m3 with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1206 CMD which will be met from SIPCOT Water Supply. NOC has been obtained by Agreement vide letter no. CP257653 dated 27thJan 2022 and validity through the operating years. Effluent (Condensate / Spent lees / Blow down etc.) of 690 CMD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 750 CMD. Raw stillage (1467 TPD) 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 4.95 MW and will be met from proposed 5.3 MW co-generation power plant. 45 TPH imported coal/biomass fired boiler will be installed. Electrostatic Precipitator with a stack height of 50 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. 1500 KVA DG set will be used as standby during power failure and stack height (20m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- Electrostatic Precipitator with a stack height of 50 meters will be installed with 45 TPH imported coal/biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (156 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) (112 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (33 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (0.16 Kilo litres per annum) will be sold to authorized recyclers.
- CPU sludge (Nil) and STP Sludge (2.47 TPA) will be used as manure.

As per Notification S.O 2339(E), dated 16thJune, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the proposed capacity of 200 KLPD will be used for manufacturing fuel ethanol only.

Total land of 8.07 Hectares is under possession of the company and land use conversion has been completed vide letter no. P-II/SIP-TK/SLB ETHANOL/2021 dated 13.12.2021.

During deliberations, EAC discussed following issues:

(i) 20 m thick greenbelt shall be provided towards village side.
(ii) Environment Officer will report to Managing Director of the Company.
(iii) Filter press to be provided instead of sludge drying bed.
(iv) Flouride levels in Ground water are high. PP shall make provision for providing potable water to the nearby villagers/residents as part of Extended EMP budget.

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC

noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

(i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 200 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. CLU certificate shall be obtained before start of construction activities.

(iv). NOC from the Concerned Local authority shall be obtained for SIPCOT Water Supply 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 SIPCOT Water Supply. 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 with a stack height of 50 meters will be installed with 45 TPH imported coal/biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. SO_2 and NOx 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 shall 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. 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.

(ix). CO_2 generated will be bottled and supplied to authorized vendors/collected in proposed bottling plant.

(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. 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 2.71 Ha i.e., 33.58%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. 20 m thick greenbelt towards village side to be provided.

(xvi). PP proposed to allocate Rs. 6.6 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, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply, providing fluoride free potable water to the nearby villagers/residents 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 12thAugust, 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

100 KLPD Grain Based Ethanol Plant & 2.5 MW Captive/Cogeneration power plant located at Sy No. 201/6, 197/*, 201/2, 201/4, 196/2A, 196/2B, 196/2K, behind Dhaneshwari Weight Bridge, Mudhol-Lokapur Road, Village Hebbal, Tal. Mudhol, Dist. Bagalkot, Karnataka by M/s. Avantiniya Agrovet Private Limited – Consideration of Environmental Clearance

[IA/KA/IND2/284516/2022. IA-J-11011/271/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. MITCON Consultancy and Engineering Services Ltd. (NABET certificate no. NABET/EIA/2124/RA 0229_Rev 02 and validity 05th February, 2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 100 KLPD grain based ethanol plant & 2.5 MW co-generation power plant (biomass/coal) located at Sy No. 201/6, 197/*, 201/2, 201/4, 196/2A,

196/2B, 196/2K, Village Hebbal, TehsilMudhol, District Bagalkot, State Karnataka by M/s. Avantiniya Agrovet Private Limited.

As per the MoEF&CC Notification S.O.2339(E), dated 16thJune, 2021, a special provision in the EIA Notification, 2006-(Schedule 5 (ga), Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

S. No.	**Name of unit**	**Name of the product/ by-product**	**Production capacity**
1	Distillery	Ethanol	100 KLPD
2	Co-generation power plant	Power	2.5 MW
3	DWGS dryer	DDGS	67 TPD
4	Fermentation unit	Carbon di-oxide	60 TPD

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

Total land area required is 5.71 hectares. Greenbelt will be developed in total area of 1.9 hectares i.e., 33% of total project area. The estimated project cost is Rs. 138.36 Crores. Capital cost of EMP would be Rs. 10.53 Crores and recurring cost for EMP would be Rs. 1.15 Crores per annum. Industry proposes to allocate Rs. 2.08 Crores towards extended EMP (Corporate Environment Responsibility).Total Employment will be 65 persons as direct & indirect.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance. Reserve forests/protected forests patches around at a distance of 2.5 km in East direction. Water bodies: Ghatprabha River is at a distance of 2.53km in NE direction, Lokapur Halla is at a distance of 2.85km in East direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.29 µg/m3, 12.1

µg/m3, and 2.89 µg/m3 with respect to PM, SO2 and NOX respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 419.7 CMD which will be sourced from Ghataprabha River. Industry can apply for surface water withdrawal permission only after receiving State Level Single Window Clearance Committee (SLSWCC) from Karnataka Government. PP has applied to State Level Single Window Clearance Committee and after getting approval from SLSWCC only PP can apply for surface water withdrawal permission. Effluent (Total Condensate/spent lees/blowdowns/ Misc. etc.) of 589.4 CMD quantity will be treated through Condensate Polishing Unit of capacity 600 CMD. Raw stillage (722 CMD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 5 CMD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 2.2 MW and will be met from proposed 2.5 MW co-generation power plant. 24 TPH coal/biomass fired boiler will be installed. Electro Static Precipitator (ESP) with a stack height of 40 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler. 750 kVA DG set will be used as standby during power failure and stack height (12 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- Electro Static Precipitator (ESP) with a stack height of 40 m will be installed with 24 TPH coal/biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (60 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be collected in installed bottling plant.

Details of solid waste/hazardous waste generation and its management

- DDGS (Distilled Dried Grains Stillage) (67 TPD) will be sold as cattle feed / fish feed /prawn feed.
- Coal ash (11.1 TPD) will be sent to Brick Manufacturer and Biomass ash (21.5 TPD) will be used as Manure.
- Used oil (0.003 KLD) will be sold to authorized recyclers.

- CPU sludge (0.7 TPD) will be used as Manure and STP Sludge (0.4 TPD) will be used as manure.

As per Notification S.0 2339(E), dated 16thJune, 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 5.71 Hectares is under possession of the company and RTC via unique number I15F9E2BD843E161 dated 7.06.2020 and NA number: KAR/RB/LNA/CR-1012006-07 dated 05.06.2006.

During deliberations, EAC discussed following issues:

(i) EMP cost has been increased from 10.53 Crore To 14.47 Crore.

(ii) Recalculate the incremental value of GLC. PP informed that SO2 emission will be reduced from measures like use of low sulphur coal, adequate height of 40 m and lime dosing.

(iii) Village approach road to be maintained by PP.

(iv) MoU with the brick manufacturing unit to be submitted.

(v) PP informed that few structures of existing factory area which is coming in proposed distillery area will be demolished. The Committee suggested that C & D waste should be disposed of as per C&D Waste Management Rules, 2016.

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

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

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. CLU certificate shall be obtained before start of construction activities.

(iv). NOC from the Concerned Local authority shall be obtained for surface water supply 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 Ghataprabha 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). Electro Static Precipitator (ESP) with a stack height of 40 meters will be installed with 24 TPH coal/biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. SO_2 and NOx 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). Coal ash shall be supplied to brick manufacturers and biomass ash shall be used as manure. 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 in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 generated will be bottled and supplied to authorized vendors/collected in proposed bottling plant.

(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. 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 1.9 hectares i.e., nearly 33.27% 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. Existing trees shall be maximally relocated and in worst condition only tree cutting shall take place.

(xvi). PP proposed to allocate Rs. 2.08 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 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. The road connecting the plant to the Highway/village road shall be maintained by the industry.

(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). The demolition waste shall be disposed in compliance with the provisions of C&D Waste Management Rules, 2016.

(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 12thAugust, 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 KLPD Grain Based Distillery along with 3.0 MW Power Generation under Ethanol Blending Program at Plot-C, AIDC Industrial Growth Centre, Post Mornoi, Matia Tehsil, Dist. Goalpara, Assamby M/s. Shantanu Transnational Life Sciences Pvt. Ltd.– Consideration of Environmental Clearance

[IA/AS/IND2/285259/2022; IA-J-11011/88/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s.Technogreen Environmental Solutions (NABET certificate No. NABET/EIA/2124/IA0081 (Rev.01) andvalidity05th July 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 100KLPD grain based ethanol plant & 3.0 MW co-generation power plant located at Plot-C, AIDC Industrial Growth Centre, Post Mornoi, Tehsil Matia, DistrictGoalpara, State Assamby M/s. Shantanu Transnational Life Sciences Pvt. Ltd.

As per the MoEF&CC Notification S.O.2339(E),dated16thJune,2021,a special provision in the EIA Notification,2006-(Schedule5(ga),Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for Ethanol

Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity
1.	Distillery	Ethanol	100 KLPD
2.	Co-generation power plant	Power	3.0 MW
3.	DWGS dryer	DDGS	42 TPD
4.	Fermentation unit	Carbon di-oxide	78.9 TPD

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

Total land area required 8.09 Ha. Greenbelt will be developed in total area of 2.8315 Ha i.e.35% of total project area.The estimated project cost is Rs.125.39 Crores. Capital cost of EMP would be Rs. 17.9455 Crores and recurring cost for EMP would be 1.0512 Crores per annum. Industry proposes to allocate Rs.1.88 Crores towards Extended EMP (Corporate Environment Responsibility).Total Employment will be 85persons as direct &indirect.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors /Protected forest etc. within 10 km distance. Nearest Patch of reserve forest is located at distance of 8.01 km in SE direction from project site; however, project site is surrounded by dense jungle in South direction. Water bodies: Brahmaputra River is at distance of 1.6 km in NNE direction. River Brahmaputra is at a distance of 1.6 km for which NOC has been obtained from State Irrigation Department vide letter no. DGEDI/E-1/Pt-XVII/2021/932 dated 18.8.2022 stating that "we hereby confirm that the proposed project site of M/s Shantanu Transnational Life Sciences Pvt. Ltd. Plot-C, AIDC Industrial Growth Center, Mornoi Village, Matia Tehsil, District: Goalpara, Assam; Is approximately

1.60 km away from the Bank of Brahmaputra River and there is no flood history for the said project land in AIDC zone. Since the project site is located in AIDC, Assam State Government, we do not have any objection to establish industry at above specified location".

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be0.78µg/m^3,0.35µg/m^3,3.59 µg/$m^3$and 4.24 µg/$m^3$with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards(NAAQS).

Total fresh water requirement will be 700.78 CMD which will be met from ground water. Application has been submitted to CGWA vide no. 21-4/1555/AS/IND/2022 dated 10/03/2022. Effluent (Condensate/Spent Lees/blowdown etc.) of 800.12 CMD quantity will be treated through Condensate Polishing Unit of capacity 850 CMD. Raw Stillage (663 CMD: Quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. Domestic sewage will be treated in Secondary treatment facility of CPU. 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 2.8 MW and will be met from proposed 3.0 MW co-generation power plant. 30 TPH biomass/coal fired boiler will be installed. ESP/bag filter with stack of 45 m height will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. 900 kVA DG set will be used as standby during power failure and stack height (9.0 m ARL) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- ESP/bag filter with stack of 45 m height will be installed with 30 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2(78.9TPD)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)(42TPD)will be sold as cattle feed/fish feed/prawn feed.
- Boiler ash(10.6TPD during coal firing and 28.4 TPD during biomass)will be used for brick manufacturing.
- Used Oil (0.25 Kilolitres per annum) will be sold to authorized recyclers.
- CPU Sludge(0.68 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 8.09 Ha is allotted to company by AIDC Industrial Growth Centre.

During deliberations, EAC discussed following issues:

(i) PP informed that ash will used for brick manufacturing within the plant premises.

(ii) The Committee suggested that existing trees shall be retained/translocated within the plant premises.

(iii) One row greenbelt shall be provided in the Parking area.

(iv) ESP of 99.99% efficiency/bag house shall be provided with the boiler.

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and

information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

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

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project.

(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 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.

(vii). ESP/bag filter with stack of 45 m height will be installed with 30 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/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 shall be supplied to brick manufacturers in covered trucks. 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 in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 generated will be bottled and supplied to manufacturers of beverages /collected in proposed bottling plant.

(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. 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 2.8315 Ha i.e.35% 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. Thick green belt shall be developed within the plant adjacent to the parking area towards the road outside the plant.

(xvi). PP proposed to allocate Rs. 1.88 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 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 12thAugust, 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. 9

Grain Based Distillery Plant (Fuel Ethanol 200 KLPD) along with Power Generation of 6.0 MW at Sy. No. 283/1, 283/2, 284/1,284/2, 285/2A, 285/3A 285/3B1, and 285/2B1,Remalle Village, Bapulapadu Mandal, Krishna Dt. A.P, by M/s. Mohan Green Energies Pvt. Ltd– Consideration of Environmental Clearance

[IA/RJ/IND2/287655/2022, IA - J-11011/302/2 022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s.AmplEnviron Pvt. Ltd. (NABET Certificate No. NABET/EIA/2023/IA0061, Validity: 22-10-2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 200 KLPD Grain based Ethanol Plant &6.0 MW Co-generation power plant (Biomass/Coal) located at Remalle Village, Bapulapadu Mandal, Krishna Dt. A.P, by **M/s. Mohan Green Energies Pvt. Ltd**.

As per the MoEF&CC Notification S.O.2339(E), dated 16thJune, 2021, a special provision in the EIA Notification, 2006-(Schedule 5 (ga), Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for Ethanol

Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

S.No.	Name of the Unit	Name of the Product/by Product	Production Capacity
1	Distillery	Ethanol	200 KLPD
2	Co-gen Power Plant	Power	6.0 MW
3	DWGS dryer	DDGS	101.68 TPD
4	Fermentation unit	Carbon –di-Oxide	90.78TPD

Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16thJune, 2021. It was informed that nolitigation is pending against the proposal.

Total land area required is 6.98hectares. Greenbelt will be developed in total area of 2.33 hectares i.e., 33.4% of total project area. The estimated project cost is Rs. 221.20 Crores. Capital cost of EMP would be Rs. 16.0 Crores and recurring cost for EMP would be Rs. 0.90Crores per annum. Industry proposes to allocate Rs. 2.0 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 150.0 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. Water bodies: Canal is at a distance of1.7 Km in SEdirection.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.0µg/m^3, 1.13µg/m^3 and 2.3 µg/m^3 with respect to PM_{10}, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1048 m^3 /day which will be met from Surface water. Application has been submitted by M/s. Mohan Green Energies Pvt. Ltd. videApplication dated 11.07.2021to Government of

Andhra Pradesh, Water Resources (Reforms) Department. Effluent (Condensate/spent lees/blowdown etc.) of 930 m^3 /day quantity will be treated through Condensate Polishing Unit /Effluent Treatment Plant of capacity 1000KLPD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 12.0 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 6.0 MW and will be met from proposed 6.0 MW cogeneration power plant.45TPH Biomass/Coal fired boiler will be installed. APCE ESP with a stack height of 55 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler. 1500 kVA DG set will be used as standby during power failure and stack height (30 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- APCE ESP with a stack height of55 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 (90.78TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

Details of solid waste/hazardous waste generation and its management

- DDGS (Distilled Dried Grains Stillage) (101.68 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (67 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 (2.0 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge and STP Sludge will be used as manure.

As per Notification S.O 2339(E), dated 16thJune, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 200 KLPD will be used for manufacturing fuel ethanol only.

Total land area is6.98Hectares is under possession of the company. Project Site is private land.

During deliberations, EAC discussed following issues:

(i) Thick green belt shall be developed towards the village side.

(ii) Recurring cost of EMP was found to be lower side. In this regard EAC suggested PP to increase the recurring cost to 160 lakhs per annum.

(iii) As proposed water requirement shall not exceed 3.42 Kl/KL of alcohol produced

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

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The

project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

(i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 200 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. CLU certificate shall be obtained before start of construction activities.

(iv). NOC from the Concerned Local authority shall be obtained for surface water supply 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 3.5 KL/KL of ethanol production which will be met from surface water supply. 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). Electro Static Precipitator (ESP) with a stack height of 55 meters will be installed with 45 TPH coal/biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. SO_2 and NOx 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). Coal ash shall be supplied to brick manufacturers and biomass ashshall be used as manure.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 in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 generated will be bottled and supplied to authorized vendors/collected in proposed bottling plant.

(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. 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 2.33 hectares i.e., 33.09% 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. Thick green belt shall be developed towards the village side.

(xvi). PP proposed to allocate Rs. 2.00 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 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 12thAugust, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

ANNEXURE

GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE

(i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

(ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.

(iii) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

(iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

(v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

(vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

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

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

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

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

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

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

S. No.	Name and Address	Position
1.	Shri S. C. Mann	Chairman
2.	Prof. Y. V. Rami Reddy	Member
3.	Dr. Sanjeev Chaudhari (one day 01.09.2022)	Member
4.	Dr. Onkar Nath Tiwari	Member
5.	Shri J. S. Kamyotra	Member
6.	Dr. Rahul Rameshrao Mungikar (one day 01.09.2022)	Member
7.	Dr. Siddhartha Singh (IMD)	Member
8.	Dr. Seshagiri Rao Ambati	Member
9.	Shri A.N. Singh, Scientist 'E'	Member Secretary
MoEFCC		
10.	Mr. Kanaka Teja	Research Assistant

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