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

Dated: 14.10.2022

Meeting ID: IA/IND2/13352/13/10/2022

MINUTES OF MEETING OF THE EXPERT APPRAISAL COMMITTEE

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 13th October, 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/IND2/13350/12/10/2022) held on 12th October, 2022 conducted through Video Conferencing (VC), confirmed the same. After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

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

13th October, 2022 (Thursday)

Agenda No. 01

Proposed establishment of Grain Based Ethanol Distillery capacity 200 KLPD with 4.0 MW co-generation power plant at Village –

Silora, Tehsil – Sausar, District - Chhindwara, Madhya Pradesh by M/s Lohiya Green Energy Private Limited - Consideration of Environmental Clearance

[IA/MP/IND2/291443/2022, IA-J-11011/361/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Paramarsh Servicing Environment and Development NABET accreditation no. NABET/EIA/2124/RA0224 valid till 01st May, 2024 made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for proposed establishment of grain based ethanol distillery capacity 200 KLPD with 4.0 MW co-generation power plant at Silora village, Sausar tehsil, Chhindwara district, Madhya Pradesh by M/s Lohiya Green Energy 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	200 KLPD
2.	Co-generation power plant	Power	4.0 MW
3.	DWGS dryer	DDGS	102 TPD
4.	Fermentation unit	Carbon di-oxide	155 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 8.9030 hectares. Total land of 8.9030 Hectares is under possession of the company and land use conversion has been completed vide letter dated 29.08.2022. Greenbelt will be developed in

total area of 2.98 hectares i.e., 33.51 % of total project area. The estimated project cost is Rs. 235.30 Crores. Capital cost of EMP would be Rs. 35.53 Crores and recurring cost for EMP would be Rs. 3.50 Crores per annum. Industry proposes to allocate Rs. 3.53 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 177 persons.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance. Water bodies: Kanhan River is at a distance of 0.60 Km in East direction, Waghyanala Dam Reservoir at distance of 4.06 km in South west direction. As per the certificate issued by the Office of the Executive Engineer, Water Resource Division, Chhindwara, Madhya Pradesh, vide letter number 3126/Karya/2022 dated 20.09.2022, the project site is above the HFL of Kanhan River and is more than 100 m away. There was no flood in this area in the last 25 years.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.93 $\mu g/m^3$, 0.733 $\mu g/m^3$, 7.02 $\mu g/m^3$ and 12.77 $\mu g/m^3$ with respect to PM_{10}, SO_2 and NO_X and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 800.0 m^3 /day, which will be met from Surface water of Kanhan River. Industrial Water permission application has been submitted through the Form – 199 to Officer on Special Duty, Control Board for Major Project, Water Resources Bhawan, Tulsi Nagar, Bhopal, Madhya Pradesh on dated 13.09.2022 for the permission of water withdrawal from Kanhan River. Effluent (Condensate/spent lees/blow down etc.) of 934m^3 /day quantity will be treated through Condensate Polishing Unit /Effluent Treatment Plant of capacity 1000 KLPD. Raw stillage 658 KLPD quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 20 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3.625 MW and will be met from proposed 4.0 MW cogeneration power plant. 40 TPH Coal/rice husk fired boiler will be installed. Coal shall be used in emergency case only. Electrostatic

Precipitator with a stack height of 35m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. 500 kVA × 2Nos and 1000 × 1Nos DG set will be used as standby during power failure and stack height (20 m) 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 35 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (155 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (102 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (6.33 TPD) will be used for brick manufacturing in own brick manufacturing unit.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (1.0 TPD) and STP Sludge (0.03 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.

During deliberations EAC discussed following issues:

- PP shall not start construction of the project without obtaining CLU from Town and Country Planning department.
- PP Committed that Industry shall install brick manufacturing plant for biomass ash disposal.
- PP committed that all the proposed activities under CER shall be completed before the commissioning of the plant in consultation

with District Administration.

- PP informed that CO_2 recovery plant shall be installed.
- PP shall submit details on risk assessment and damage control during different phases of the project along with safeguard measures to mitigate them. Accordingly, PP has submitted document on risk assessment and mitigation measures to be taken during ethanol plant operation.
- Total Fresh water requirement including all process & non-process application shall not exceed 4 KL/KL of ethanol production.

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

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

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

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

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

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

(i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 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 for the proposed project shall not exceed 4 KL/KL of ethanol production i.e. 800 m^3/day which will be met from Kanhan 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 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). Electrostatic precipitator (5 field ESP & 99.9% efficiency) with a stack height of 35 meters will be installed with 40 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. NOx and SO2 emissions shall be below 100 mg/Nm^3.At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (6.33 TPD) will be used for proposed brick manufacturing plant in premises/adjacent areas. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (155 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

(x). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the

duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

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

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

(xiii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. 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 2.98 hectares i.e., 33.51 %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. As committed, Greenbelt development shall be completed by December, 2023.

(xvi). PP proposed to allocate Rs. 3.5 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management

etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

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

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

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

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

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with

photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 02

Proposed 100 KLPD Grain Based Distillery Plant (Ethanol) along with 3 MW Cogeneration Power Plant at Gat No 134, Village: Vayal, Tal: Jalgaon (Jamod), Dist: Buldhana, Maharashtra by M/s Umashri Biofuels Private Limited ("UBPL") - Consideration of Environmental Clearance.

[IA/MH/IND2/400309/2022, IA-J11011/369/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Techno Green Environmental Solutions, NABET accreditation no. NABET/EIA/2124/IA0081 and valid till 05.07.2024 made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project proposed 100 KLPD Grain Based Distillery Plant (Ethanol) along with 3 MW Cogeneration Power Plant located at Gat No 134, Vayal village, Jalgaon (Jamod) taluk, Buldhana district, Maharashtra by M/s Umashri Biofuels Private Limited ("UBPL").

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	3.0 MW
3	DWGS dryer	DDGS	50 TPD

4	Fermentation unit	Carbon di-oxide	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 land area 8.96 ha which is in possession of UBPL. Total 8.96 ha land is in possession of M/s Umashri Biofuels Private Limited ("UBPL") & land use conversion has been completed vide letter no R.C.N. NP-34/ Wayal, Tal. Jalgaon O/03/2021-22 dated 29/08/2022. Greenbelt will be developed in total area of 2.98 hectares i.e., 33.29% of total project area. The estimated project cost is Rs. 145.00 Crores. Capital cost of EMP would be Rs. 15.95 Crores and recurring cost for EMP would be 0.69 Crores per annum. Industry proposes to allocate Rs. 2.18 Crores towards Extended CER (Corporate Environment Responsibility). Total Employment will be 90 persons as direct & 100 Persons 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 1.5 km from Raipur Reserve Forest. Water bodies: Rajur tank is at a distance of 0.80 Km in west direction from project site.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.35 µg/m3, 0.12 µg/m3, 0.16 µg/m3 and 0.23µg/m3 with respect to PM10, PM2.5, SO_2 & Nox. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 1727 m3/day of which fresh water requirement of 453 m^3/day will be met from Rajur Minor irrigation Tank/ Godada M.I tank/ Dharona M.I Tank. Application submitted to Executive Engineer, Buldhana Irrigation Division, Buldhana dated 29th August 2022. Effluent (Condensate/ Spent lees /blowdown) of 545 m^3/day quantity will be treated through Condensate polishing unit of capacity 600 M3/day. Raw Stillage (669 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises. STP will be installed to treat sewage generated.

Power requirement will be 2.8 MW and will be met rom proposed 3.0 MW cogeneration power plant. 32 TPH Coal or Bagasse fired boiler will be installed. APCE ESP with a stack height of 60_m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1000 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:

- ESP with a stack height of 60 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (80 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage). i.e 50 TPD will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (Coal Ash 23.4 TPD or Rice Husk Ash:39.3 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 will be sold to authorized recyclers.
- CPU & 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.

During deliberations EAC discussed following issues:

- Total Fresh water requirement including all process & non-process application shall not exceed 4 KL/KL of ethanol production.
- Approach road to the Industry shall be constructed and maintained by the Industry.
- 20% biomass pellets shall be used as fuel.

- It was observed that non-native species and ornamental plants were included for development of green belt. It was suggested to revised list containing only native species for development of greenbelt. Accordingly, PP informed that around 7460 nos. of trees will be planted over an area of 2.98 ha at the rate of 2500 trees per Ha. And revised list of proposed trees species as suggested by domain expert has been submitted.

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

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

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

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

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

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

(i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 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 including all process & non-process application shall not exceed 4 KL/KL of ethanol production i.e 400

m^3/day which will be met from Rajur Minor irrigation Tank/ Godada M.I tank/ Dharona M.I Tank. 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 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. NOx and SO2 emissions shall be below 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (Coal Ash 23.4 TPD or Rice Husk Ash:39.3 TPD) will be used for brick manufacturing and supplied to nearby brick manufacturers in covered vehicles only/ utilize in brick manufacturing in proposed brick manufacturing plant in premises/adjacent areas. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. 20% biomass pellets shall be used as fuel. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (80 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

(x). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the

duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

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

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

(xiii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. 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 2.98 hectares i.e., 33.29% of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. As committed, Greenbelt development shall be completed by December, 2023.

(xvi). PP proposed to allocate Rs. 2.18 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management

etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

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

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

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

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

(xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with

photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 03

Greenfield Project of 200 KLD Grain Based Ethanol Plant along with 5.0 MW Co-Generation Power Plant located at Village-Biramchandrapur, Tehsil- Harbhanga, District- Boudh, Odisha by M/s MGM Biofuels Pvt. Ltd - Consideration of Environmental Clearance

[IA/OR/IND2/401914/2022, IA-J-11011/406/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. GRC India Pvt Ltd NABET accreditation No. NABET/EIA/2124/RA0213 valid till 15.02.2024 made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for proposed project 200 KLD Grain Based Ethanol Plant along with 5 MW Co-generation Power Plant located at Biramchandrapur Village, Harbhanga tehsil, Boudh district, Odisha by M/s MGM Biofuels 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 Unit	Name of the product /by-product	Production capacity
1	Distillery	Ethanol	200 KLPD
2	Co-generation power plant	Power	5.0 MW
3	DWGS dryer	DDGS	90TPD
4	Fermentation unit	Carbon di-oxide	158 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 19 hectares. Total land of 19 Hectares which is under the possession by company and CLU application has been submitted to Tahasildar, Harbhanga, Boudh District for change in land use on 08.08.2022. Greenbelt will be developed in total area of 6.27 hectares i.e. 33% of total project area. The estimated project cost is Rs. 225.24 Crores. Capital cost of EMP would be Rs. 34.0 Crores and recurring cost for EMP would be Rs. 7.25 Crores per annum. Industry proposes to allocate Rs. 2.25 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment will be 115 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Bankamundi RF is at a distance of 5.0 km in SW direction. Jajpur RF is at a distance of 9.5 km in South direction. Nuagan RF is at a distance of 10.0 km in NNE direction. A water body (Nala) is adjacent to the project site in NNE direction. Mahanadi River 0.3 km in NNE Direction, Bauda Main Canal is 3.35 km in SSW, Nuapada Dam Boudh is 5.0 km in SSW direction, Manjore River is 5.7 km in North direction from the project site. NOC for water Body (Nala) and Mahanadi has been obtained from Executive Engineer, Boudh Irrigation Division vide letter No. 2295 dated 30.09.2022.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.4 $\mu g/m^3$, 0.16 $\mu g/m^3$, 1.64 $\mu g/m^3$, 1.07 $\mu g/m^3$ and 1.09 $\mu g/m^3$ with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1120 m^3/day which will be met from Surface water through Mahanadi River. NoC has been obtained vide letter No. GM/SLNA/MBFL/334/21/2840 dated 06.11.2021. Effluent (Condensate/spent lees/blowdown etc.) of 818 m^3/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 1000 KLPD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 5 KLD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 5.0 MW and will be met from proposed 5.0 MW co- generation power plant. 1x60 TPH Coal fired boiler will be installed. ESP a stack height of 65m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 2x500 kVA DG sets will be used as standby during power failure and stack height will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 65 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (158 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (90 TPD) will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (147 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises of capacity approx. 7.27 Cr. bricks per annum.
- Used oil (2.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (111.65 kg/day) and STP Sludge (0.55 kg/day) will be used as manure.

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

During deliberations EAC discussed following issues:

- RCC retaining wall shall be constructed towards river side. Buffer area to be created and 50 m thick green belt to be provided in the buffer area towards river side. Accordingly revised layout has been submitted. Garland drain to be constructed outside the boundary for

proper channelization of water during rainy season.

- PP has informed that following criteria has been taken into consideration for selection the of the proposed site:-
  (i). No national park/ wildlife sanctuary/ biosphere reserve/tiger reserve/ elephant reserve or other ecologically and/or sensitive areas are present in the 10 km study area of project site.
  (ii). NOC has been obtained from Office of the Executive Engineer, Irrigation Division, Boudh for Mahanadi River and Nalla.
  (iii). Road and rail connectivity is better.
  (iv). No major habitat is present within 500 mtr radius of project site. 5. Availability of Raw material i.e. rice is in abundance for ethanol plant.
  (v). No major industry is present in vicinity of project area. Hence by putting ethanol plant we will be able to provide employment to nearby people.
  (vi). Surface water is easily available from Mahanadi River for our project. Assurance letter is obtained. Copy is enclosed as Annexure-VIII.
  (vii). The project site & in 10 km there are no critically polluted area as per Critically Polluted Industrial Areas and Clusters / Potential Impact Zone.
- PP has agreed to increase CER amount to Rs. 3.00 crores and submitted the details of activities proposed under CER.
- PP shall submit revised GLC considering the stack height for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3 for the proposed boiler. PP has submitted revised incremental GLC, which is within the prescribed limits.
- PP shall submit risk assessment and mitigation measures for the operations of the plant. Accordingly, PP has submitted the risk assessment along with the mitigation measures for the operations of the plant.
- PP committed that Electrostatic precipitator (5 field & 99.9% efficiency) shall be installed for the proposed 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 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 i.e. 800 m^3/day which will be met from Mahanadi 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 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). Electrostatic precipitator (5 field ESP & 99.9% efficiency) with a stack height of 65 meters will be installed with 60 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. NOx and SO2 emissions shall be below 100 mg/Nm^3.At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (147 TPD) will be used for brick manufacturing and supplied to nearby brick manufacturers in covered vehicles only/ utilize in brick manufacturing in proposed brick manufacturing plant in premises/adjacent areas. 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 (158 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

(x). PP shall ensure that RCC retaining wall shall be constructed towards river side. Buffer area to be created and 50 m thick green belt to be provided in the buffer area towards river side. PP shall ensure that no effluent/treated water from the proposed project/distillery plant shall be discharged into river. Garland drain to be constructed outside the boundary for proper channelization of water during rainy season.

(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. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.

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

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

(xvi). The green belt of at least 5-10 m width shall be developed in nearly 6.27 hectares i.e. 33% of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. As committed, Greenbelt development shall be completed by December, 2023.

(xvii). PP proposed to allocate Rs. 3.00 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, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

(xviii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total

project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

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

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

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

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

Agenda No. 04

Proposed 250 KLPD grain-based Fuel Ethanol Plant and 8 MW Power Cogeneration Plant of M/s. Greenways Bioenergy Pvt Ltd to

be located at village Guggilla, Bejjanki Mandal, District Siddipet, Telangana - Consideration of Environmental Clearance.

[IA/TG/IND2/401436/2022, IA-J-11011/391/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Enviro Infra Solutions Pvt. Ltd NABET accreditation no NABET/EIA/1922/RA0157 valid till 13th November, 2022 made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project proposed 250 KLPD Grain based Ethanol Plant & 8 MW Co-generation power plant (biomass based) located at Guggilla village, Bejjanki Mandal, Siddipet District, Telangana by M/s Greenways Bioenergy 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 Product/By-product	Production Capacity
1.	Distillery (Grain based)	Fuel Ethanol	250 KLPD
2.	Cogeneration of Power	Power	8 MW
3.	Fermentation Unit	CO_2	191 TPD
4.	DWGS Dryer	DDGS	134 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 7.02 hectares. Total land of 7.02 Hectares is under possession of the company and the land use conversion has been completed vide proceedings no.2200909174 dated 27.09.2022. Greenbelt will be developed in total area of 2.30 hectares i.e., 33 % of total project

area. The estimated project cost is Rs. 200 Crores. Capital cost of EMP would be Rs. 19.00 Crores and recurring cost for EMP would be Rs. 3.3 Crores per annum. Industry proposes to allocate Rs. 1.50 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 400 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. River Mohidummeda flows at a distance of 3.8 kms. from site. The MSL of the river nearest to site is 312 m whereas the MSL of site is 324 m. The MSL of the river and site clearly indicates that the site is not in flood prone area.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.32 $\mu g/m^3$ for particulate matter and 4.46 $\mu g/m^3$ for SO_2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1117 m^3/day which will be met from canal water supply. NOC for canal water supply @ 2000 m^3/day has been received from Executive Engineer, Irrigation Division no. 2, IC-1, LMD Colony, Karimnagar vide letter no. EE/Irr.Div.2/IC1/TS/T2/01/S dated 04/04/2022. Spent wash @ 1312 MT/day would be generated during the proposed production of Ethanol @ 250 KL/day. The spent wash would be sent to the decanter where wet cake @ 248 MT/day would be separated and thin slops @ 1064 MT/day would be generated. The thin slops @ 1064 MT/day will be treated in multi-effect evaporation system. The industry will generate 1428 m^3/day of condensates from MEE, spent lees and dryer condensates. Out of the total condensate generation, 815 MT/day of condensates would be directly reused in the liquification process. The remaining 613 MT/day would be sent to CPU for treatment, which after treatment would be reused in the cooling tower makeup water. Besides this, the industry will generate misc. stream effluent such as – floor/fermenter washing effluent @ 20 MT/day, cooling towers blow down @ 50 MT/day, domestic effluent @ 18 MT/day, D.M. plant reject @ 30 MT/day and boiler blowdown @ 20 MT/day, from the proposed plant. This effluent after treatment would be used on land for irrigation purposes. The DWGS generated from the decanter and thick slops generated from the MEE will be treated in the dryer to produce DDGS. The plant will be based on Zero Liquid discharge system and no

effluent/treated water will be discharged outside factory premises.

Power requirement will be 7 MW and will be met from proposed 8 MW cogeneration power plant. 60 TPH biomass fired boiler will be installed. ESP will be installed with the boiler furnace for the control of air emissions with a stack height of 50 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1 x 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 sets.

Details of Process emissions generation and its management:

- Electrostatic Precipitator with a stack height of 50 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (191 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) (134 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (60 TPD) will be used for brick manufacturing in own brick manufacturing unit.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.2 TPD) 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 250 KLPD will be used for manufacturing fuel ethanol only.

During deliberations consultant took too much time for essential documents sought. In this regard Committee warned the consultant that they should come prepared for the meeting ready with the essential documents instead wasting time. The Committee was also of the view that

the Consultant performance is very poor. Further, EAC discussed following issues:

- Approach road for the project site shall be constructed and maintained by the PP.
- PP has submitted revised CER budget of Rs. 2 Crore alongwith break up.
- Essential details of green belt development such as list of species, area reserved for each tree have not been submitted in EMP. PP submitted that they will plant local varieties of trees in the green area (2.3 hectares) to be developed within the proposed project. 10 m thick green belt all along the boundary will be developed. The trees will include - Tamarind, Take, Kanuga, Neem, Subabul etc. Overall, 1 tree in 3 sq. meter area will be planted and hence around 7800 trees will be planted within the premises. Further, the Committee suggested that they should develop the greenbelt in consultation with local DFO.
- Total Fresh water requirement including all process and non-process applications shall not exceed 4 KL/KL of ethanol production i.e. 1000 m^3/day.
- In spite of suggestions by the Committee, the Consultant did not submit proper risk assessment and risk mitigation plan. The Committee suggested them to carry out detailed risk assessment of the project and submit to PESO and Regional Office of MoEF&CC for records.

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

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

Clearance given, if any, will be revoked at the risk and cost of the project proponent.

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

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

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

(i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in

respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

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

(iv). NOC from the Central Ground Water Authority (CGWA)/ Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production i.e. 1000 m^3/day which will be met from canal 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). Electrostatic precipitator (5 field ESP & 99.9% efficiency) with a stack height of 50 meters will be installed with 60 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. NOx and SO2 emissions shall be below 100 mg/Nm^3.At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.

Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (60 TPD) will be used for brick manufacturing and supplied to nearby brick manufacturers in covered vehicles only/ utilize in brick manufacturing in proposed brick manufacturing plant in premises/adjacent areas. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (191 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

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

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

(xii). PP shall carry out detailed risk assessment of the project and submit to PESO and Regional Office of MoEF&CC for records before start of construction.

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

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

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

(xvi). The green belt of at least 5-10 m width shall be developed in nearly 2.30 hectares i.e., 33 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. As committed, Greenbelt development shall be completed by December, 2023.

(xvii). 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, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

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

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

vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

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

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

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

Agenda No. 05

Greenfield Project of 120 KLD Grain Based Ethanol Plant along with 3 MW Co-Generation Power Plant located at Village- Mahewa, Tehsil- Teonthar, District- Rewa, Madhya Pradesh by M/s Crescendo Industries Pvt. Ltd - Consideration of Environmental Clearance

[IA/MP/IND2/400893/2022, IA-J-11011/394/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. GRC India Pvt Ltd NABET accreditation no. NABET/EIA/2124/RA0213 and valid till 15.02.2024 made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to

the project proposed 120 KLD Grain Based Ethanol Plant along with 3.0 MW Co-generation Power Plant located at Mahewa Village, Teonthar tehsil, Rewa District, Madhya Pradesh by M/s Crescendo Industries 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	120 KLPD
2	Co-generation power plant	Power	3.0 MW
3	DWGS dryer	DDGS	55 TPD
4	Fermentation unit	Carbon di-oxide	89 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 7.621 hectares. Total plant area i.e. 7.621 Ha is under possession of the company and land use conversion certificate has been obtained from 'The Madhya Pradesh Bhu-Rajsva Sanhita and current land use is industrial. Greenbelt will be developed in total area of 2.515 hectares i.e., 33% of total project area. The estimated project cost is INR Rs. 130.7 Crores. Capital cost of EMP would be INR 22.5 Crores and recurring cost for EMP would be INR 5 Crores per annum. Industry proposes to allocate Rs. 1.31 Crores towards Extended CER (Corporate Environment Responsibility). Total Employment will be 200 persons as direct & indirect.

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

Reserve forest namely Dhakra Bari RF is at 0.92 km towards NE is present within 10 km area of the project site. Bhar Nala is at 2.8 km in South direction. Belan River is at a distance of 9 Km in SW direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.041 $\mu g/m^3$, 0.016 $\mu g/m^3$, 0.382 $\mu g/m^3$, 0.763 $\mu g/m^3$ and 0.8 $\mu g/m^3$ with respect to PM_{10}, $PM_{2.5}$, NO_2, SO_2, and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement including CPP will be 689 m^3/day which will be met from groundwater. The application for permission of withdrawal of groundwater has been submitted Vide application No 21-4/1511/MP/IND/2022, dated 15-09-2022. Effluent (Condensate/spent lees/blowdown etc.) of 518 m^3/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 650 KLD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 20 KLD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3.0 MW and will be met from proposed 3.0 MW co- generation power plant. 32 TPH Coal & Rice Husk fired boiler will be installed. ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 500 kVA DG set will be used as standby during power failure and stack height will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 60 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (89 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

Details of solid waste/Hazardous waste generation and its

management:

- DDGS (Distilled Dried Grains Stillage). i.e 55 TPD will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (52.48 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises of capacity approx. 2.6 Cr. bricks per annum.
- Used oil (2 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (71 kg/day) and STP Sludge (2.73 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 120 KLPD will be used for manufacturing fuel ethanol only.

During deliberations EAC discussed following issues:

- Total Fresh water requirement including all process and non-process applications shall not exceed 4 kL/kL of ethanol production i.e. 480 m^3/day.
- PP shall not start construction of the project without obtaining CLU from Town and Country Planning department.
- PP has submitted revised EMP with a Capital cost. Rs. 22.54 Crore has and recurring cost of Rs. 5.00 Crore/annum. PP has earmarked CER budget of Rs. 2 Crore.
- As suggested by the Committee, PP has submitted revised air quality modelling details, which is within the standards.
- PP committed that detailed emergency preparedness plan along with on-site and off-site disaster management plan shall be prepared and submitted to PESO and Regional Office, MoEF&CC.

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 120 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery

is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

(ii). 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 i.e. 480 m^3/day which will be met from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent wash shall be dried to form DDGS to be used as cattle feed. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment (Condensate Polishing Unit). Treated effluent will be recycled/reused for 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 5 fields 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. NOx and SO2

emissions shall be below 100 mg/Nm^3.At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (52.48 TPD) will be used for brick manufacturing and supplied to nearby brick manufacturers in covered vehicles only/ utilize in brick manufacturing in proposed brick manufacturing plant in premises/adjacent areas. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (89 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

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

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

(xii). PP shall ensure that detailed emergency preparedness plan along with on-site and off-site disaster management plan shall be prepared and submitted to PESO and Regional Office, MoEF&CC.

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

(xiv). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge,

process inorganic & evaporation salt shall be disposed of to the TSDF. Filter press shall be installed for drying of sludge.

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

(xvi). The green belt of at least 5-10 m width shall be developed in nearly 2.515 hectares i.e., 33% of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. As committed, Greenbelt development shall be completed by December, 2023.

(xvii). 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, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

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

(xix). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be

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

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

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

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

Agenda No. 06

Proposed expansion of Distillery capacity from 300 KLPD to 600 KLPD for production of Ethanol at Shetphalgade, Tehsil- Indapur, District Pune, Maharashtra by by M/s. Baramati Agro Limited (Unit-1)- Consideration of Environmental Clearance reg

[IA/MH/IND2/291324/2020, IA- J-11011/106/2016-IA II(I)]

The Project Proponent and the accredited Consultant M/s. Sustainera Solutions Private Limited NABET accreditation no. NABET/EIA/2225/IA 0095 valid till 20.02.2025 made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for expansion of existing distillery unit from 300 KLPD to 600 KLPD, co-generation power plant for distillery from 3 MW to 8 MW located at Shetphalgade village, Indapur tehsil, Pune district, Maharashtra by M/s. Baramati Agro Limited (Unit-1).

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

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity		
			Existing	Proposed	Total
1	Distillery (**Molasses as** Raw material)	Rectified Spirit or Extra Neutral Alcohol or	60 KLPD	0	60 KLPD
		Ethanol	240KLPD	300KLPD	540 KLPD
2	Co-generation power plant for sugar mill	Power	70 MW	0	70 MW
	Co-generation power plant for distillery	Power	3.00MW	5.00MW	8.00MW
3	Sugar mill	Sugar	18000 TCD	0	18000 TCD
5	Fermentation unit	Carbon Dioxide (CO2)	230 TPD	230TPD	460TPD

6	Incineration Ash	Ash	69 TPD	122TPD	191TPD

Ministry has issued Environmental Clearance to the existing Industry for a sugarcane crushing capacity from 12000 TCD to 18000 TCD and molasses-based distillery from 160 KLPD to Multi-feed (B Heavy, Cane Juice, grains) based 300 KLPD distillery unit vide File No. IA-J-11011/106/2016-IA-II (I) dated 26th August, 2021. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Nagpur vide File no- EC-1525/RON/2022-NGP/9841 dated 14.06.2022. Action Taken Report has been submitted to IRO, MOEFCC, Nagpur dated 22.07.2022 for one partial compliance and one noncompliance condition. Committee was satisfied with the response of PP.

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 47.76 Ha (existing plant area 47.76 Hectares and No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 17.0 Hectares i.e., 35.98 % of the total plant area has already been developed as greenbelt & plantation and the same will maintained. The estimated project cost is Rs. 200 Crores. Capital cost of EMP would be Rs. 68.13 Crores and recurring cost for EMP would be Rs. 2.49 Crores per annum. Industry proposes to allocate Rs. 1.5 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 100 persons as direct & indirect.

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

AAQ modelling study for point sources emissions indicates that the maximum incremental GLCs after the proposed project would be 2.11 µg/m^3, 1.39 µg/m^3 and 1.64 µg/m^3 with respect to PM_{10}, SO_2 and NO_X respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 2093 m^3/day, which will be met from Khadakwasala and Ujani Dam for which withdrawal permission has been obtained from NOC has been obtained by Branch Officer Bhima Lift Irrigation, Palasdev vide letter no. 595 dated 22.10.2016 and validity 31.05.2023 for Ujani water permission and NOC has been obtained by Executive Engineer, Khadakwasala Irrigation Division, Pune vide letter no. KHAPAVI/BINSI/2235 dated 07.04.2021 and validity 01.03.2027 for Khadakwasala water permission. Existing effluent generation is 1861 CMD from distillery which is treated through Condensate Polishing Unit (capacity 2000 in CMD). Proposed effluent generation will be 2459 CMD from distillery which will be treated through proposed Condensate Polishing Unit (capacity 2500 in CMD). In molasses-based operation, spent wash generated from the analyzer column during distillation will be concentrated in Multi Effect Evaporator and concentrated spent wash will be burnt in incineration boiler. Domestic wastewater will be treated in STP of capacity 60 KLPD. The plant is being based on Zero Liquid discharge system and treated effluent will not be discharged outside the factory premises.

Total power requirement of distillery after expansion will be 5.25 MW which will be sourced from existing 3.0 MW TG set connected to 32 TPH incineration boiler and proposed 5.0 MW TG set connected to 45 TPH incineration boiler. APCE ESP with a stack of height of 70 m is installed with the existing 32 TPH incineration boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. APCE ESP with a stack height of 81 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed 45 TPH incineration boiler. Industry has 2*500 KVA DG set which will be used as standby during power failure and stack height (6 m above roof level) 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 70 m is installed with the existing 32 TPH incineration boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm3. APCE ESP with a stack of height of 81 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed 45 TPH incineration boiler.
- Online Continuous Emission Monitoring System is installed for existing stack and will be installed to the proposed stack and data will be transmitted to CPCB/SPCB servers.

- CO2 (460 TPD) generated during the fermentation process will be collected and utilizing in proposed bottling Plant.

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

- Concentrated spent wash (270 MT/day) is burnt in existing 32 TPH incineration boiler, concentrated spent wash (120 MT/day) is converted to bio-compost to be used as manure and Concentrated spent wash (575 MT/day) will be in proposed 45 TPH incineration boiler.
- Incineration Boiler ash (existing as well as proposed - 191 TPD) will be used as potash rich manure to farmers.

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 300 KLPD will be used for manufacturing fuel ethanol only.

During deliberations, EAC discussed following issues:

- PP informed that 15 % of the total power requirement i.e 0.8 MW shall be met from solar power.
- EAC suggested that Bio composting followed in the existing Industry shall be discarded within 2 years from the date of issue of EC. PP informed that they will discard existing bio composting and they will treat spent wash by concentration in MEE followed by incineration in 45 TPH boiler.
- PP informed that Wet scrubber shall be replaced by bagfilter in the existing 10 TPH boiler.
- PP has submitted revised air quality modelling data considering incineration boiler of Distillery division and boilers (50 TPH and 110 TPH) of sugar unit. Maximum incremental concentration was found to be 6.82 $\mu g/m^3$, 4.55 $\mu g/m^3$, 0.05 $\mu g/m^3$ and 6.18 $\mu g/m^3$ for PM_{10}, $PM_{2.5}$, SO_2 and NO_x respectively.
- PP has submitted revised CER budget increased to Rs. 2.00 Crores along with breakup. As remarks made in CCR, PP shall also spend unutilised funds of Rs. 0.95 Crores as committed in addition to the funds earmarked to CER for the proposed expansion.

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 expansion of 300 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

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

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

(iv). Total Fresh water requirement shall not exceed 2093 CMD of ethanol production which will be met from Khadakwasala and Ujani Dam. 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). Bio composting followed in the existing Industry shall be discarded within 2 years from the date of issue of EC. Industry shall discard existing bio composting and they will treat spent wash by concentration in MEE followed by incineration in 45 TPH boiler. Wet scrubber shall be replaced by bagfilter in the existing 10 TPH boiler.

(vi). Spent wash was shall be treated in MEE followed by incineration 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 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). APCE ESP with a stack height of 70 m is installed with the existing 32 TPH incineration boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. APCE ESP with a stack of height of 81 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed 45 TPH incineration boiler. 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). Incineration Boiler ash (191 TPD) will be used as potash rich manure to farmers**.** PP shall meet 10% of the total power requirement i.e 0.8 MW from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (460 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be collected in bottling plant.

(x). 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.

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

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

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

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

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

(xvi). The green belt of at least 5-10 m width which has been developed shall be maintained in nearly 17.0 Hectares i.e., 35.98 % of the total plant 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.

(xvii). 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, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration. As remarks made in CCR, PP shall also spend unutilised funds of Rs. 0.95 Crores as committed in addition to the funds earmarked to CER for the proposed expansion

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

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

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

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

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

Agenda No. 07

Greenfield Project of 100 KLPD Grain Based Ethanol Plant along with 3.5 MW Co-generation Power Plant located at Village & Mandal- Narkatpally, District- Nalgonda, State- Telangana by M/s SRISRS Spirits Private Limited - Consideration of Environmental Clearance

[IA/TG/IND2/401864/2022, IA-J11011/404/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. GRC India Pvt Ltd NABET accreditation no. NABET/EIA/2124/RA0213 and valid till 15.02.2024 made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project 100 KLPD Grain Based Ethanol Plant along with 3.5 MW Co-generation Power Plant located at Narkatpally Village, Narkatpally Mandal, Nalgonda district, Telangana by M/s SRISRS Spirits 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	3.5 MW
3	DWGS dryer	DDGS	44 TPD
4	Fermentation unit	Carbon di-oxide	65 TPD

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

Total land area required is 8.15 hectares. Total land of 8.15 Hectares and has been taken on lease basis for 25 Years and land use conversion application has been obtained from Revenue divisional Officer, Nalgonda vide letter no. E/5351/2019 dated 13.11.2019. Greenbelt will be developed in total area of 2.69 hectares i.e., 33% of total project area. The estimated project cost is INR Rs. 130.68 Crores. Capital cost of EMP would be INR Rs. 26.3 Crores and recurring cost for EMP would be INR Rs. 6.15 Crores per annum. Industry proposes to allocate Rs. 1.31 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 120 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserve Forest/protected forest: Goplaswami Gutta RF at a distance of 1.2 km in South direction, Chityal RF at a distance of 6 km in West direction and Shivanenigudem RF at a distance of 7.8 km in NW direction. No river is located within 10km distance.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.19 $\mu g/m^3$, 0.13 $\mu g/m^3$, 2.13 $\mu g/m^3$, 1.07 $\mu g/m^3$ and 0.5 $\mu g/m^3$ with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement including CPP will be 590 m^3/day which will be met from surface water. The application for surface water has been submitted to Rural Water Supply & Sanitation Department, Hyderabad having application no. 202209220001 on dated 22nd Sep 2022. Effluent (Condensate/spent lees/blowdown etc.) of 398 m^3/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 500 KLPD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 20 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3.4 MW and will be met from proposed 3.5 MW co- generation power plant. 35 TPH Coal/Rice Husk fired boiler will be installed. ESP with a stack height of 50 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1000 kVA DG set will be used as standby during power

failure and stack height will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 50 m will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (65 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) .i.e 44 TPD will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (150 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises of capacity approx. 0.89 Cr. bricks per annum.
- Used oil (1.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (54.33 kg/day) and STP Sludge (2.2 kg/day) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 100 KLPD will be used for manufacturing fuel ethanol only.

During deliberations EAC discussed following issues:

- Committee noted that a pond is located nearby the project site. PP informed that it is a deposition of rain water which formed as a lagoon. The committee suggested that PP shall spend some amount of CER to restore the water quality of the pond. It was also suggested to get NOC from the gram panchayat.
- Total Fresh water requirement including all process and non-process applications shall not exceed 4 kL/kL of ethanol production i.e. 400 m^3/day.
- PP shall not start construction of the project without obtaining CLU

from Town and Country Planning department.

- PP has agreed to increase CER amount to Rs. 2.00 crores and submitted the details of activities proposed under CER.
- PP shall submit risk assessment and mitigation measures for the operations of the plant. Accordingly, PP has submitted the risk assessment along with the mitigation measures for the operations of the plant.
- PP committed that Electrostatic precipitator (5 field & 99.9% efficiency) shall be installed for the proposed boiler.
- PP has submitted revised EMP with a Capital cost. Rs. 26.3 Crore has and recurring cost of Rs. 6.15 Crore/annum

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 i.e. 400 m^3/day which will be met from surface water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vi). Spent wash 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). Electrostatic precipitator (5 field ESP & 99.9% efficiency) with a stack height of 50 meters will be installed with 35 TPH biomass/coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. NOx and SO2 emissions shall be below 100 mg/Nm^3.At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (150 TPD) 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. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (65 TPD) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

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

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

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

(xiii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. 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 2.69 hectares i.e., 33% of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. As committed, Greenbelt development shall be completed by December, 2023.

(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, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. PP shall spend some amount of CER to restore the water quality of the pond which is located nearby the project site. PP shall also obtain NOC from the gram panchayat. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

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

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

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

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

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

Agenda No. 08

500 KLPD Grain Based Ethanol Plant in existing Molasses based Industrial Alcohol (90 KLD, Fusel Oil/Fusel alcohols (0.9 KLD) and Biofertilizer (1500 TPM) at Asnad, Olpad (Surat) by Luna Chemical Industries Pvt. Ltd - Consideration of Environmental Clearance

[IA/GJ/IND2/279322/2022, IA-J-11011/415/2018-IA-II(I)]

The committee noted that the proposal uploaded on the parivesh portal mentioning details of accredited consultant namely M/s. Paramarsh Servicing Environment and Development NABET accreditation no. NABET/EIA/2124/RA 0224 valid till 01st May, 2024. The committee observed during the presentation that some other consultant was presenting the proposal. During enquiry, the consultant informed that he is an authorized consultant from M/s Chandigarh Pollution Testing laboratory -EIA Division Accreditation Number NABET/EIA/1922/RA0146 Valid till October 18, 2022). However, as per practice new consultant should submit an undertaking that they have to verify the existing documents and own the responsibility of the data submitted and ensure that the complete document is uploaded on the parivesh portal. It was noted that the same process was not followed by the PP and consultant. Even neither PP nor consultant has informed MoEF&CC and committee about the change of the environmental consultant. Further, a complaint has been received alleging unauthorized usage of M/s. Paramarsh Servicing Environment and Development mentioning that they were not at all related to the instant proposal. However, PP and consultant failed to explain any justification on the alleged complaint.

In view of the above, the committee decided to return the proposal in original form and asked PP to submit proposal afresh with updated information of environmental consultant. Further, committee desired the

matter may be referred to NABET/QCI for necessary action against the consultant.

Agenda No. 09

Establishment of 250 KLPD grain-based distillery to manufacture 125 KLPD Ethanol and 125 KLPD Extra Neutral Alcohol (ENA) at Usroli Village, Taluka Khalapur, District Raigad, Maharashtra state by M/s. Rocking Bombay Beverages Private Limited (RBBPL) – Consideration of Environmental Clearance

[IA/MH/IND2/260593/2021, IA-J-11011/90/2022-1A-II(I)]

The consultant M/s. Dr. Subbarao's Environment Center has informed through email that NABET accreditation validity of the organisation has been expired and informed that they will not be able to present the proposal. Therefore, EAC has decided to defer the proposal.

Accordingly, proposal was deferred due to above reasons.

Agenda No. 10

Proposed 160 KLPD Grain Based Distillery along with 4.6 MW Co-gen Power Plant and Zero Liquid Discharge Unit located at Mugasipudhur Village, Anthiyur Taluk, Erode District, Tamil Nadu by M/s. SPAC Starch Products (India) Private Limited - Consideration of Environmental Clearance

[IA/TN/IND2/401703/2022, IA-J-11011/314/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Enviro Care India Private Limited NABET accreditation no. NABET/EIA/2124/RA0249 valid till 14th December, 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 proposed 160 KLPD Grain Based Distillery along with 4.6 MW Co-gen Power Plant and Zero Liquid Discharge Unit located at Mugasipudhur Village, Anthiyur Taluk, Erode District, Tamil Nadu by M/s. SPAC Starch Products (India) 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:

<table>
<tr><th>S. No.</th><th colspan="2">Name of unit</th><th>Name of the product/ by-product</th><th colspan="2">Production capacity</th></tr>
<tr><td rowspan="4">1</td><td colspan="2">Distillery</td><td rowspan="4">Ethanol</td><td colspan="2" rowspan="4">160 KLPD</td></tr>
<tr><td colspan="2">Raw Materials - Grains (Broken & Full rice, Maize)</td></tr>
<tr><td>Starch 68% - 375 TPD</td><td>Starch 60% - 425 TPD</td></tr>
<tr><td></td></tr>
<tr><td>4</td><td colspan="2">Co-generation Power Plant</td><td>Power</td><td colspan="2">4.6 MW</td></tr>
<tr><td>5</td><td colspan="2">DWGS Dryer</td><td>DDGS</td><td>Broken Rice 10320 TPA</td><td>Maize 17844 TPA</td></tr>
<tr><td>6</td><td colspan="2">Fermentation Unit</td><td>Carbon di-oxide</td><td colspan="2">14549.54 TPA</td></tr>
<tr><td rowspan="2">7</td><td colspan="2" rowspan="2">By Products</td><td>Technical Alcohol</td><td colspan="2">5.24 KLPD</td></tr>
<tr><td>Fusel Oil</td><td colspan="2">0.16 KLPD</td></tr>
</table>

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 7.825 hectares. Total land of 7.825 Hectares is under the possession of the company. Land use conversion to set up Industry, NOC has been issued by Joint Director of Agriculture, Erode addressed to Assistant Director, District Town and Country Planning Office, Erode letter no.4044/2022 dated 21.09.2022. Greenbelt will be developed in total area of 2.58 hectares i.e., 33% of total project area.

The estimated project cost is Rs. 219.20 Crores. Capital cost of EMP would be Rs. 52.34 Crores and recurring cost for EMP would be Rs. 5.31 Crores per annum. Industry proposes to allocate Rs. 10.5 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 125 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. There is no Eco-sensitive Zone within 10 km distance from project area. NBWL application is not applicable for this proposed project. There is no Schedule I species present within 10 km distance from the project site. The river Kaveri is located 6.34 km from the project site.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.14 $\mu g/m^3$, 3.21 $\mu g/m^3$, 0.85 $\mu g/m^3$ and 1.02$\mu g/m^3$ 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 1036 m^3/day which will be met from Kaveri River. The permission from the Public Works Department has been obtained, Letter No. S7(1)/72908/U.S.P. V/1966, dt 25.10.2018. Effluent (Condensate/spent lees/blow down etc.) of 1543 m^3/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 1600 KLPD. Raw stillage (932 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 25 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3.55 MW for maize operation and 3.38 MW for broken rice operation which is met from proposed 4.6 MW Co-generation Power Plant. A 40 TPH boiler is installed. Electrostatic Precipitator with a stack height of 68 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler, 1000 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:

- APCE Electrostatic Precipitator with a stack height of 68 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.
- One separate CO2 recovery plant will be installed and CO2 (14549.54 TPA) 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 (10320 TPA for broken rice & 17844 TPA for maize) will be sold as cattle feed.
- Boiler ash for broken rice operation (2.98 TPD of Ash /43.2 TPD of Imported Coal & 22.80 TPD of Ash /127.2 TPD of Rice Husk) will be supplied to brick manufacturers.
- Boiler ash for maize operation (3.15 TPD of Ash /45.6 TPD of Imported Coal & 24.19 TPD of Ash /134.4 TPD of Rice Husk) will be supplied to brick manufacturers

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 160 KLPD will be used for manufacturing fuel ethanol only.

During deliberations EAC discussed following issues:

- The committee noted that natural drain is passing by the project site. The committee decided to recommend the proposal subject to submission of NOC from State Irrigation Dept regarding natural drain passing nearby the project site.
- PP assured that total Fresh water requirement for the proposed project shall not exceed 4 KL/KL of ethanol production i.e. 640 m^3/day.

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 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 160 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 for the proposed project shall not exceed 4 KL/KL of ethanol production i.e. 640 m^3/day which will be met from Kaveri 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 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). APCE Electrostatic Precipitator with a stack height of 68 meters will be installed with 40 TPH biomass/coal fired boiler for controlling the

particulate emissions within the statutory limit of 30 mg/Nm^3. NOx and SO2 emissions shall be below 100 mg/Nm^3.At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (2.98 TPD of Ash /43.2 TPD of Imported Coal & 22.80 TPD of Ash /127.2 TPD of Rice Husk) will be used for brick manufacturing and supplied to nearby brick manufacturers in covered vehicles only/ utilize in brick manufacturing in proposed brick manufacturing plant in premises/adjacent areas. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas.

(ix). CO_2 (14549.54 TPA) generated during the fermentation process will be collected by utilizing CO2 scrubbers and it shall be sold to authorized vendors.

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

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

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

(xiii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. 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 2.58 hectares i.e., 33 %of the total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. As committed, Greenbelt development shall be completed by December, 2023.

(xvi). PP proposed to allocate Rs. 10.5 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

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

(xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension

during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

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

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

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

*****

ANNEXURE

GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE

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

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

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

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

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

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

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

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

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

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

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

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

S. No.	Name and Address	Position
1.	Shri S. C. Mann	Chairman
2.	Dr. J.S. Sharma	Member
3.	Prof. Y. V. Rami Reddy	Member
4.	Dr. Onkar Nath Tiwari	Member
5.	Shri J. S. Kamyotra	Member
6.	Dr. Rahul Rameshrao Mungikar	Member
7.	Dr. Seshagiri Rao Ambati	Member
8.	Dr. Sanjay V Patil	Member
9.	Shri A.N. Singh, Scientist 'E'	Member Secretary
MoEFCC		
10.	Dr. Mahendra Phulwaria	Scientist 'C'
11.	Mr. Kanaka Teja	Research Assistant

***