

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

Dated: 21.05.2022

**MINUTES OF THE 06th MEETING OF THE EXPERT APPRAISAL
COMMITTEE**

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 19th May, 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 05th Meeting of the EAC (Industry-2) held during 10th May, 2022 conducted through Video Conferencing (VC), confirmed the same. While confirming the last minutes of meeting, the Committee noted the following correction in the minutes :

5.1 Expansion of Molasses based Distillery (120 to 370 KLPD) using C / B Heavy Molasses / Cane Syrup for Ethanol Production with 3 MW Captive Power Generation, Enhancement in Cane crushing (7,500 to 9,500 TCD) by M/s. Daund Sugar Private Limited, (DSPL) located at Gat No. 99 Alegaon, Tal. Daund, Dist. Pune - Consideration of Environment Clearance

[IA/MH/IND2/259197/2022, IA-J-11011/467/2017-IA-II(I)]

Agenda No. 5.1, Page No. 4, Para no. 9

Point in MoM	As per MoM	To be read as	Justification/ Reasons

Agenda No. 5.1 Pg. No. 4 Para No. 9	<u>ESP followed by 100 m stack height will be provided with the 30 TPH (spent wash/coal/bagasse) fired boiler.</u>	<u>ESP followed by 85 m stack height will be provided with the 30 TPH (spent wash/coal/bagasse) fired boiler.</u>	typographical error
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(iii) After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

(iv) 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: -

19th May, 2022 (Thursday)

Agenda No. 6.1

Proposed 100 KLPD Grain based Distillery by M/s. Happy Niwas Private Limited located at Khatian No. 4845, 6131, Mouza Goligram, J.L.No. 54, P.S. Galsi, Block Galsi –I, Dist. Purba Bardhaman, West Bengal - Consideration of Environment Clearance

[IA/WB/IND2/270819/2022, IA-J-11011/155/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. MITCON Consultancy and Engineering Services Ltd. made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for proposed grain based distillery 100 KLPD and 3.5 MW co-generation power plant (biomass/coal fired) at Khatian No. 4845, 6131, Mouza Goligram, J.L.No. 54, P.S. Galsi, Block Galsi –I, Dist. Purba Bardhaman, West Bengal by M/s. Happy Niwas Private Limited.

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

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

The details of products and capacity as under:

S. No.	Name of unit	Name of the product	Production capacity
1	Distillery plant	Ethanol	100 KLPD
2	Co-generation power plant	Power	3.5 MW

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

Total land area required is 8.19 Hectares. Greenbelt will be developed in total area of 2.70 Hectares i.e. 33.0% of total project area. The estimated project cost is Rs. 110.2 Crores. Capital cost of EMP would be Rs. 10.65 Crores and recurring cost for EMP would be Rs. 69.5 Lakhs per annum. Industry proposes to allocate Rs. 1.64 Crores towards Corporate Environment Responsibility. Total Employment will be 420 persons as direct & indirect.

PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Canal is flowing at a distance of 1.14 km in the SW direction of the proposed project.

AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.089 µg/m³, 11.7 µg/m³ and 2.94 µg/m³ with respect to PM, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 406 m³/day (400 m³/day for industrial use and 6 m³/day for domestic purposes) which will be met from ground water. Effluent (Condensate, spent lees and blow down) of 939 m³/day

quantity will be treated through Condensate Polishing Unit (1000 m³/day). Raw stillage from distillation plant will be 958 CMD. Raw stillage will be sent to decanter followed by MEE followed by dryer to produce DDGS. The plant will be based on Zero Liquid discharge system.

Power requirement will be 2.7 MW and will be met from 3.5 MW co-generation power plant. 26 TPH Biomass/coal fired boiler will be installed. ESP with a stack of height of 43 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for the proposed boiler. 1000 KVA DG set will be used as standby during power failure and stack height (>11 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 43 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

Details of solid waste/Hazardous waste generation and its management

- DDGS (Distilled Dried Grains Stillage) (75 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (coal ash -21.6 TPD and biomass ash – 43.2 TPD) will be utilized for brick manufacturing inside plant premises.
- Used oil (0.06 KLA) will be sold to authorized recyclers.
- CPU Sludge (1.7 TPD) will be reused 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.

PP has reported that land has already been taken on lease (Lease agreement submitted) and land use conversion has been applied. EAC found the information satisfactory.

During deliberations, EAC discussed the following issues:

- Project site is adjacent to Delhi Kolkata National Highway (NH-19). So, adequate distance between plant and the road shall be maintained and permission as required from State/National highway authority shall be obtained.
- Fresh water requirement was recalculated and reduced from 557 m³/day to 406 m³/day considering @ 4KL/KL of alcohol production.
- Revised greenbelt development @ 2500 trees per hectares. List of indigenous tree species.
- Financial provision for EMP at Rs. 3.88 crores seems to be on lower side. Hence, PP has revised the EMP capital cost to Rs. 10.65 crores.

Committee suggested to frame condition for Ground water permission to be obtained before start of the construction activities; installation of Online monitoring system; Brick manufacturing unit to be installed

The committee was satisfied with the response provided by PP on above information. The Committee also deliberated on the following issues:

- Recalculation of stack height as incremental increase in SO₂ concentration is high.
- The basis/emission norms for PM, SO₂&NO_x considered for calculating the incremental increase.

Accordingly, PP has revised the stack height from 43 m to 48 m. The Committee suggested PP that the Environment Cell Head should report to Director or Board and not to plant head. Hence, condition may be stipulated accordingly. 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 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). Project site is adjacent to Delhi Kolkata National Highway (NH-19). PP shall obtain permission from NHAI before commencement of construction activities.

- (iv). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (v). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. CLU certificate shall be obtained before start of construction activities.
- (vi). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production and will be met from ground water. Prior permission shall be obtained for ground water withdrawal before start of construction activities. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vii). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. ESP shall be installed with the boiler. Boiler ash will be utilized for making bricks in the proposed brick making unit. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used only in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power.
- (viii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (ix). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (x). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xi). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms. PESO certificate shall be obtained.

- (xii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area @ 2500 trees per hectare, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Greenbelt shall be developed before commissioning of the plant.
- (xv). PP proposed to allocate Rs. 1.64 Crores towards CER which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xvi). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (xvii). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. Internal roads shall be made pucca.
- (xviii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

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

Agenda No. 6.2

Proposal for setting up of proposed distillery having installed capacity of 150 KLD grain based fuel ethanol plant with zero effluent discharge and captive power generation plant for 3.3 MW by M/s Alphalogic Techsys Limited located at Industrial Growth Centre (MIDC) Chandrapur, Maharashtra - Consideration of Environment Clearance

[IA/MH/IND2/270448/2022, IA-J-11011/152/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Ecomen Laboratories Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for proposed grain based distillery 150 KLPD and 3.3 MW co-generation power plant (biomass/coal fired) at Plot/Survey/Khasra No: D-7, MIDC Tadali, Chandrapur, Tehsil: Chandrapur, District: Chandrapur, State: Maharashtra by M/s. Alphalogic Techsys Limited.

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

The details of products and capacity as under:

S. No.	Name of unit	Name of the product	Production capacity
1	Distillery plant	Ethanol	150 KLPD

2	Co-generation power plant	Power	3.3 MW
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Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that no litigation is pending against the project.

Total land area required is 6.94 Hectares. Greenbelt will be developed in total area of 2.29 Hectares i.e. 33.02% of total project area. The estimated project cost is Rs. 105.0 Crores. Capital cost of EMP would be Rs. 22 Crores and recurring cost for EMP would be Rs. 50 Lakhs per annum. Industry proposes to allocate Rs. 1.05 Crores towards Corporate Environment Responsibility. Total Employment will be 105 persons as direct & indirect.

PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Morwa R.F. is at a distance of 0.7 km (SE) and Bhandak R.F. is at a distance of 8.0 km (NE).

Ambient air quality monitoring was carried out at 3 locations during March 2022 and the baseline data indicates the ranges of concentrations as: PM10 (60.30- 74.50 µg/m³), PM2.5 (23.0 - 30.60µg/m³), SO₂ (13.0 - 14.67 µg/m³) and NO₂ (18.04 - 19.20 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 5.03 µg/m³, 0.29 µg/m³, 1.82 µg/m³, 13.42 µg/m³ with respect to PM₁₀, PM_{2.5}, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 900 m³/day which will be met from ground water (MIDC Chandrapur Tadali). Effluent (809 m³/day) (including Condensate, spent lees and blow down) will be treated through Condensate Polishing Unit. Raw stillage will be sent to decanter followed by MEE followed by dryer to produce DDGS. The plant will be based on Zero Liquid discharge system.

Power requirement will be 3.3 MW and will be met from 3.3 MW co-generation power plant. 32 TPH Biomass/coal fired boiler will be installed. Multi cyclone separator/ bag filter with a stack of height of 61 m will be installed for controlling the particulate emissions within the statutory limit of

50 mg/Nm³ for the proposed boiler. 1x1010 KVA, 1x315 KVA DG set will be used as standby during power failure and stack height (30 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- Multi cyclone separator/ bag filter with a stack height of 61 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

Details of solid waste/Hazardous waste generation and its management

- DDGS (Distilled Dried Grains Stillage) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash will be utilized in brick manufacturing plant within premises.
- Used oil will be sold to authorized recyclers.
- CPU Sludge will be reused as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 150 KLPD will be used for manufacturing fuel ethanol only.

PP has reported that land is allotted in Chandrapur Growth Centre, Maharashtra Industrial Development Corporation (MIDC). EAC found the information satisfactory.

During deliberations, EAC discussed following issues:

- It was noted that generation of wastewater is 1500 m³/day but treatment is provided for effluent quantity of 700 m³/day. Further, PP clarified that waste water generation is 809 m³/day, which will be treated in Condensate polishing unit and treated water will be recycled as make up water.
- Recalculate GLC as per 2018 Notification for pollutants and take into account industries in study area. Also include wind rose diagram and dominant wind direction. The basis/emission norms for PM, SO₂&NO_x considered for calculating the incremental increase. In response, PP

informed that they will correct the GLC prediction. Accordingly, they have submitted the information.

- It was also suggested that as predominant wind direction is towards south, hence, 20 m thick greenbelt shall be developed towards Morwa Reserved Forest in SE direction.
- Ash management plan.
- Revised cost earmarked for Corporate Environment Responsibility.
- Recurring cost for implementation of EMP is low and need to be revised. Accordingly, they have submitted revised recurring cost.

Committee was satisfied with the response of project proponent. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments satisfactory.

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

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 150 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iv). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project.
- (v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production and will be met from ground water (MIDC Chandrapur Tadali). Prior permission shall be obtained for ground water withdrawal before start of construction activities. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Multi cyclone separator/ bag filter shall be installed with the boiler. Boiler ash will be utilized for making bricks in the proposed

brick making unit. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used only in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power.

- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (x). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms. PESO certificate shall be obtained.
- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area @ 2500 trees per hectres, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Greenbelt shall be developed before commissioning of the plant. Avenue plantation in approach road to plant shall be done. 20 m thick greenbelt shall be developed towards Morwa Reserved Forest in SE direction

- (xiv). PP proposed to allocate Rs. 1.05 Crores towards CER which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (xx). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. Internal roads shall be made pucca.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Agenda No. 6.3

Establishment of 105 KLPD Grain distillery with Electricity Generation of 3 MW by M/s Kailasbapu Agro Industries Producer Company Ltd. located at Gat No. 94/2, Mandurne, Taluka Chalisgaon, District Jalgaon, Maharashtra - Consideration of Environment Clearance

[IA/MH/IND2/271141/2022, IA-J-11011/28/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for proposed grain based distillery 105 KLPD and 3.0 MW co-generation power plant (biomass/coal fired) at Gat No. 94/2, Mandurne, Tal.: Chalisgaon, Dist.: Jalgaon, Maharashtra State by M/s Kailasbapu Agro Industries Producer Company Ltd.

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

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity
1	Distillery plant	Ethanol	105 KLPD
2	Co-generation power plant	Power	3.0 MW
3	DDGS dryer	DDGS	90 TPD
4	Fermentation	Carbon di-oxide	46 TPD

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

Total land area required is 6.3 Hectares. Greenbelt will be developed in total area of 2.08 Hectares i.e. 33.0% of total project area. The estimated project cost is Rs. 110.68 Crores. Capital cost of EMP would be Rs. 15.80 Crores and recurring cost for EMP would be Rs. 2.0 Crores per annum. Industry proposes to allocate Rs. 1.80 Crores towards Corporate Environment Responsibility. Total Employment will be 110 persons as direct & indirect. No. of working days will be 330 days.

PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Girna River is flowing at a distance 1.2 Km towards South & Manyad River at 1.7 Km towards South East.

AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.11 $\mu\text{g}/\text{m}^3$, 0.028 $\mu\text{g}/\text{m}^3$, 0.697 $\mu\text{g}/\text{m}^3$, 0.42 $\mu\text{g}/\text{m}^3$ with respect to PM_{10} , $\text{PM}_{2.5}$, SO_2 and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 346 m^3/day which will be met from Girna Dam. Effluent (Condensate, spent lees and blow down) of quantity 637 m^3/day will be treated through Condensate Polishing Unit. Raw stillage will be sent to decanter followed by MEE followed by dryer to produce DDGS. The plant will be based on Zero Liquid discharge system. Domestic effluent of quantity 6 m^3/day shall be treated in proposed STP of 10 CMD capacity.

Power requirement will be 2.5 MW and will be met from 3.0 MW co-generation power plant. 30 TPH biomass/coal fired boiler will be installed. ESP with a stack of height of 55 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1x500 KVA DG set will be used as standby during power failure and stack height (5m ARL) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- ESP with a stack height of 55 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (46 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and sold to authorized vendors.

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 (23 TPD) will be utilized in own brick manufacturing unit.

- Used oil (0.8 MT/yr) will be sold to authorized recyclers.
- Contaminated Cotton waste (0.3 MT/yr) will be forwarded to authorized re-processor.
- Empty containers (30 Nos. /yr) will be forwarded to authorized re-seller.
- CPU Sludge (0.6 TPD) will be reused 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 105 KLPD will be used for manufacturing fuel ethanol only.

PP has reported that land is under possession of the company and land use conversion has been completed and submitted letter vide dated 09.09.2019 issued by Office of Collector, Jalgaon. EAC found the information satisfactory.

During deliberation, the Committee noted that a layout map indicating a road passing through the plot area is shown in the documents uploaded and also provided the same document to the Expert members of the Committee. But during presentation, in the plant area layout presented by the Consultant the road was shown located outside the plot area and the shape of the plot also varies. The Committee members has taken it very seriously as consultant has given wrong/misleading information to the Committee. Further, the Committee recommended that the project proponent should submit layout map of plot indicating the actual site status including the road position authenticated by the concerned authority.

Further, EAC also discussed following issues:

- Recalculate GLC for all the pollutants considering air pollution control equipment of PM, Sulphur dioxide and Nitrogen dioxide as incremental values are low as compared to fuel used. Details of the air quality modelling to be provided.
- Action plan for greenbelt development @ 2500 trees per hectares.

The Committee deferred the project proposal for want of additional information.

Further, EAC also recommended that the Ministry should issue show cause notice against the Accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. for submission of misleading facts about actual project site.

Agenda No. 6.4

Proposed 150 KLPD Grain based Ethanol Plant & 4.5 MW Co-generation Power Plant by M/s. Sterling Distillers LLP located at Village Belari, Tehsil Ausgram – I, District Purba Bardhaman, West Bengal - Consideration of Environment Clearance

[IA/WB/IND2/270384/2022, IA-J-11011/151/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. J.M. EnviroNet Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for proposed grain based distillery 150 KLPD and 4.5 MW co-generation power plant (biomass/coal fired) at Village Belari, Tehsil Ausgram – I, District Purba Bardhaman, West Bengal by M/s. Sterling Distillers LLP.

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

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity
1	Distillery plant	Ethanol	150 KLPD
2	Co-generation power plant	Power	3.5 MW
3	DDGS dryer	DDGS	70.75 TPD
4	Fermentation	Carbon di-oxide	124.6 TPD

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

Total land area required is 7.64 Hectares. Greenbelt will be developed in total area of 2.52 Hectares i.e. 33.0% of total project area. The estimated project cost is Rs. 196.88 Crores. Capital cost of EMP would be Rs. 15.2 Crores and recurring cost for EMP would be Rs. 2.0 Crores per annum. Industry proposes to allocate Rs. 2.0 Crores towards Corporate Environment Responsibility. Total Employment will be 112 persons as direct & indirect. No. of working days will be 350 days/annum.

PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserved Forests (RF)/ Protected Forests (PF) which lies within 10 km radius are- Orgram RF (~4.0 km in NNE direction), Nurpur PF (~6.5 km in NE direction) and Dariapur PF (~9.0 km in NW direction). Water Bodies which lies within 10 km radius namely Damodar Branch Canal (~650 m in North direction), Pangarh Branch Canal (~800 m in North direction) and Khari Nadi (~4.5 km in South direction).

AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.225 $\mu\text{g}/\text{m}^3$, 0.562 $\mu\text{g}/\text{m}^3$, 0.769 $\mu\text{g}/\text{m}^3$, 0.917 $\mu\text{g}/\text{m}^3$ with respect to PM_{10} , $\text{PM}_{2.5}$, SO_2 and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 926 m^3/day which will be met from ground water. Effluent (Condensate, spent lees and blow down) of quantity 974.81 m^3/day will be treated through Condensate Polishing Unit. Raw stillage will be sent to decanter followed by MEE followed by dryer to produce DDGS. The plant will be based on Zero Liquid discharge system.

Power requirement will be 3.75 MW and will be met from 4.5 MW co-generation power plant. 35 TPH biomass/coal fired boiler will be installed. ESP with a stack of height of 55 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1x500 KVA DG set will be used as standby during power failure and stack height (5m ARL) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- ESP with a stack height of 55 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 (124.6 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

Details of solid waste/Hazardous waste generation and its management

- DDGS (Distilled Dried Grains Stillage) (70.75 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler Ash (36 TPD) generated from the boiler will be used for brick manufacturing. The company will be exploring opportunities for installation of in-house briquetting unit inside plant premises.
- Used oil (0.5 KL/annum) will be sold to authorized recyclers.
- CPU Sludge will be reused as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 150 KLPD will be used for manufacturing fuel ethanol only.

PP has reported that land is under possession of the company and land use conversion has been obtained from Office of the District Land & Land Reforms Officer, Purba Bardhaman, Govt. of West Bengal dated 19.04.2022. EAC found the information satisfactory.

During deliberations EAC discussed following issues:

- Commitment that ground water permission shall be obtained before commissioning of construction.
- Revised water balance by reducing fresh water requirement to 926 m³/day and water requirement break up.
- Action plan for greenbelt development @ 2500 trees per hectares.
- Tree plantation along the approach road to project site.
- List of villages where Corporate Environment Responsibility will be taken up.

Committee was satisfied with the response of project proponent. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments satisfactory.

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 150 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the

requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.

- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iv). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project.
- (v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production and will be met from ground water. Prior permission shall be obtained for ground water withdrawal before start of construction activities. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. ESP shall be installed with the boiler. Boiler ash will be utilized for brick manufacturing. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used only in case of biomass unavailability. PP shall meet 10% of the total power requirement from solar power.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

- (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (x). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms. PESO certificate shall be obtained.
- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area @ 2500 trees per hectare, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Greenbelt shall be developed before commissioning of the plant. Avenue plantation in approach road to plant shall be done.
- (xiv). PP proposed to allocate Rs. 2.0 Crores towards CER which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.

- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. Internal roads shall be made pucca.
- (xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xviii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Agenda No. 6.5

Proposed Greenfield Grain based Distillery Unit of Capacity 400 KLD under Ethanol Blended Petrol (EBP) Programme of GoI by M/s. Jubilant Agro Sciences Limited located at Plot no. A4/2, UPSIDC Industrial Area, Village- Bhartiagram, Tehsil Gajraula, District Amroha, Uttar Pradesh - Consideration of Environment Clearance

[IA/UP/IND2/271805/2022, IA-J-11011/162/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Perfect Enviro Solutions Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for proposed grain based distillery 400 KLPD at Plot no. A4/2, UPSIDC Industrial Area, Village- Bhartiagram, Tehsil Gajraula, District Amroha, Uttar Pradesh by M/s. Jubilant Agro Sciences Limited.

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

notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by-product	Production capacity
1	Distillery plant	Ethanol	400 KLPD
2	Co-generation power plant	Power	6.5 MW + 90 TPH Steam (for during disruption/stoppage of power/Steam supply from M/s Jubilant Ingrevia Limited)
3	DDGS dryer	DDGS	200 TPD
4	Fermentation	Carbon di-oxide	Upto 200

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

PP reported that project site is in critically polluted area i.e. UPSIDC Industrial Area, Gajraula. Total land area required is 6.6076 Hectares. Greenbelt will be developed in total area of 2.18 Hectares i.e. 32.99% of total project area. The estimated project cost is Rs. 300 Crores. Capital cost of EMP would be Rs. 17.37 Crores and recurring cost for EMP would be Rs. 17.31 Crores per annum. Industry proposes to allocate Rs. 0.75 Crores towards Corporate Environment Responsibility. Total Employment will be 80 persons as direct & indirect.

PP reported that there are no Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. The project is at a distance of 5.61 km from Hastinapur Wildlife Habitat Boundary as per the Delimitation HWLS Boundary approved by the National Board for Wild Life ("NBWL") vide its MoM F.No. 6-50/2020 WL dated 23.10.2020. Thereafter, the UP State Government has vide its order No. 1275/81-4-2020-852/97 Dt. 17.11.2020 has ordered for commencing the activities for demarcating the land as per the Denotified Wildlife Sanctuary boundary (The de-notification gazette of the Hastinapur Wildlife Sanctuary is awaited

from GoUP). (However, the project falls within the boundary of Hastinapur Wildlife Sanctuary & its ESZ as notified by MoEFCC vide its S.O. 4890(E) dated 19 September 2018). In compliance with the Wildlife (Protection) Act, 1972, an application has been submitted to the National Board of Wildlife, for grant of wildlife clearance to the project. A seasonal stream, River Bagad, is flowing at a distance of 1.01 km in WSW direction, Drain near Bhanpur is at 3.56 km NE, Matwali Nadi is flowing at 5.63 km SW, Pond near Kankather is at 5.68 km SW, Chhoiya Nala is at 6.07 km NNW, Ganga river is at 6.95 km W, Pond near Keserwa is at 7.63 km NW, Naia Nadi is flowing at 12.07 km NW from the project site.

Ambient air quality monitoring was carried out at 3 locations during 07.03.2022 to 12.03.2022 and the baseline data indicates the ranges of concentrations as: PM10 (250.6 µg/m³ - 114.8 µg/m³), PM2.5 (132.3 µg/m³- 54.7 µg/m³), SO₂ (12.3 µg/m³ -8.4 µg/m³) and NO₂ (46.0 µg/m³- 28.3 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.60 µg/m³, 1.28 µg/m³, 12.1 µg/m³ and 4.96 µg/m³ with respect to PM10, PM2.5, SO₂ and NO₂. The resultant concentrations are above the National Ambient Air Quality Standards (NAAQS) for PM2.5 & PM10 while they are within the National Ambient Air Quality Standards (NAAQS) for SO₂ and NO₂.

Total fresh water requirement will be 2350 m³/day (1057 Process & 20 KLPD Domestic) which will be met from Jubilant Ingrevia Limited for which agreement has been made between Jubilant Ingrevia Limited & Jubilant Agro Science Limited, along with other common utility and services. The Jubilant Ingrevia Limited has obtained the NoC from UPGWD and the total quantity of ground water extraction will remain within the approvals granted even after catering to the requirement of the proposed project. Effluent (Condensate, spent lees and blow down) of quantity 2756 m³/day will be treated through Condensate Polishing Unit. Raw stillage will be sent to decanter followed by MEE followed by dryer to produce DDGS. The plant will be based on Zero Liquid discharge system.

Power requirement will be 6600 KW and will be sourced from M/s Jubilant Ingrevia limited as per the utility supply and service agreement between Jubilant Ingrevia Limited & Jubilant Agro Science Limited, from within their current consented capacity. However, a 6.5 MW capacity coal based co-

generation power plant with 90 TPH steam generation capacity would be installed and would be operated whenever the supply from Jubilant Ingrevia Limited would be disrupted/stopped for any reasons. There is a steam requirement of 1600 TPD which will be sourced from M/s Jubilant Ingrevia Ltd. from within their current approved capacity as per the Utility supply and service agreement made between Jubilant Ingrevia Limited & Jubilant Agro Science Limited. Steam shall be transported through above Ground pipeline. Clean condensate will be returned back to the boiler for steam generation, thus enhancing heat recovery. However, 6.5 MW co-generation power plant Coal fired of 90 TPH capacity would be installed for sourcing steam during disruption/stoppage of steam supply from M/s Jubilant Ingrevia Limited. ESP with lime dosing and stack height of 65 m shall be provided for emission control from 90 TPH boiler. 2x3500 KVA DG set will be used as standby during power failure and stack height (30 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- ESP with a stack height of 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 (Upto 200) generated during the fermentation process will be collected by utilizing CO2 scrubbers and sold to authorized vendors.

FUGITIVE EMISSIONS	
Source	Control measures
Equipment Leaks	Installation of leakage detection and alarm system for critical equipment. Periodic preventive maintenance of valves, pipes and equipment to prevent leakages.
Grain Storage area	Grain will be stored in Silos and provided with a vent dust extraction system.

Ethanol Storage Area	Vent storage condensers for Ethanol storage tanks. Nitrogen blanketing system where appropriate. All transfer through closed pipes/conveying systems. Installation of appropriate leakage detection and alarm system. .
Haul road	All internal roads in the premise will be paved / tarred. Water sprinkling will be done.

Details of solid waste/Hazardous waste generation and its management

- Biodegradable Organic Waste (5 kg/day) Shall be composted as manure and used in green belt development
- Non-Biodegradable Recyclable Waste (Plastic, paper, wood, glass, etc.) (10 kg/day) shall be disposed as per Solid Waste management Rules.
- STP sludge (12 TPA) shall be used as manure.
- ETP sludge (10000 TPA) shall be used as manure.
- Discarded Bags/ containers/metals/ packaging material (2000 TPA) shall be sold to recyclers.
- Fly Ash (from Boiler) (300 TPD) sold to brick manufacturers/ cement plants.
- Oily cotton & cloth (50 kg/month) will be disposed off through TSDF.
- Contaminated containers/bags etc.(100 kg/month) will be disposed off through TSDF.
- Spent catalyst (1000 kg/month) will be disposed off through TSDF/landfill.
- Used oil (300 litres/month) will be sold to authorized recyclers.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 400 KLPD will be used for manufacturing fuel ethanol only.

PP has reported the land is already industrial land allotted by UPSIDC to Jubilant Ingrevia Limited, which is being sub-leased by Jubilant Ingrevia Limited to Jubilant Agro Sciences Limited. Hence, no new land use will be created. EAC found the information satisfactory.

EAC discussed following issues and desired the following additional information:

- The Committee noted that the project proposal is located within

Hastinapur Eco Sensitive Zone and also falls under critically polluted area.

- Details of pollutants responsible for categorising this industrial area as a CPA and Status of present pollution levels in the said critically polluted area.
- Details of Action plan for abating pollution in the said critically polluted area. Details of action plan to be implemented by the surrounding industries in consultation with SPCB for abating pollution level in critically polluted area.
- The incremental increase of PM, SO₂& NO_x in ambient air quality shall be recalculated with PM emission levels of 30 mg/Nm³& norms for SO₂ & NO_x. The basis/emission norms for PM, SO₂ & NO_x considered for calculating the incremental increase.
- All the pollution control measures to be taken by the proposed industry in order to avoid increase in the pollution level of the area. Pollution control measures to be provided to achieve the particulate emission level less than 30 mg/Nm³and norms for SO₂& NO_x.
- Revise fresh water consumption.
- Commitment that no litigation/court case is pending against parent company (Jubilant Ingrevia Limited).
- Revised cost break up i.e. Rs. 2.5 Crores earmarked for Corporate Environment Responsibility.
- Distance of project site from Delhi-NCR shall be confirmed.
- Details of use of ETP sludge to be modified.
- Status of approval of Wild Life Conservation plan from DFO.
- Action plan for greenbelt development in an area of 40% @2500 trees per hectares. Commitment to not cut trees in existing plant.
- The financial provision for EMP is very low and needs revision to meet the stringent emission norms.
- Measures to be taken to control air pollution from Rice husk and coal storage.
- MoU with cement/brick manufacturers for fly ash utilization, commitment that ash shall be utilized in brick manufacturing unit within the premises.

The Committee deferred the project proposal for want of above mentioned additional information.

Agenda No. 6.6

Expansion of Distillery from 100 KLPD to 300 KLPD by M/s Hermes Distillery Pvt Ltd at Gat No. 9615A, 96/5B, 96/5C, 96/3A/2,

98/1B/3, 98/1B14, 98/1B/5, Village Yadrav, Taluka Raibag, District Belagavi (Karnataka)- Reconsideration - Amendment in Environment Clearance

[IA/KA/IND2/256555/2022, J-11011/143/2014-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its 02nd meeting held during 29th to 30th March, 2022. During the deliberations, EAC found the PPs justification to amend feed stock of 100 KLPD capacity molasses based to 100 KLPD capacity molasses based/grain based distillery valid. However, EAC opined that PP shall submit an addendum to EIA/EMP incorporating all necessary changes that will result due to change in feed stock when distillery is operated in 100 KLPD grain based mode. PP submitted the required addendum EIA/EMP as stated above and proposal has been placed again in 6th EAC meeting.

The proposal is for amendment in the Environmental Clearance granted by Ministry vide letter number J-11011/143/2014-IA-II(I) dated 26th February, 2019 for expansion of Distillery from 100 KLPD to 300 KLPD by M/s Hermes Distillery Pvt. Ltd. at Gat No. 9615A, 96/5B, 96/5C, 96/3A/2, 98/1B/3, 98/1B14, 98/1B/5, Village Yadrav, Taluka Raibag, District Belagavi (Karnataka).

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

S r. N o .	Para of EC issu ed by MoE F&C C	Details as per the EC	To be Revised / Read as
1	Subj ect	The proposal for environmental clearance to the project for expansion of the distillery from the present capacity of 100 KLPD (molasses based) to 300 KLPD (200 KLPD Molasses & 100 KLPD Grain based) by.....	The proposal for environmental clearance to the project for expansion of the distillery from the present capacity of 100 KLPD (molasses based) to 300 KLPD (100 KLPD Molasses, 100 KLPD Grain & 100 KLPD Molasses / Grain based) by.....

S r. N o .	Para of EC issued by MoE F&C C	Details as per the EC	To be Revised / Read as																																																		
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S r. N o .	Para of EC issu ed by MoE F&C C	Details as per the EC	To be Revised / Read as
	Point 6.0, Para 2	boiler.	evaporators (MEE) followed by incineration in boiler. Lees from grain distillery will be recycled in process. Thick Slop to be sent to Dryer for formation of DWGS & DDGS to be sold as Cattle Feed

The justification/reasons provided by the PP for the amendments sought is as follows: HDPL is a stand-alone distillery. Availability of Molasses has now become a big issue as most of the sugar factories have expanded their distilleries for captive ethanol production. Looking at the availability of grains in command area, Management decided to implement the remaining 100 KLPD plant capacity (as per EC dated 26.02.2019) for Grain based /Molasses based distillery. Therefore, Management decided to implement the remaining 100 KLPD plant capacity (as per EC dated 26.02.2019) for Molasses/ Grain based distillery.

During deliberations, EAC discussed the following issues:

- Prescribed norms for air pollution emission shall be 50 mg/Nm³.
- Details regarding existing greenbelt already developed/area covered, action plan for year-wise plantation of greenbelt. Commitment to develop greenbelt in upcoming monsoon (i.e. before 31.08.2022) @ 2500 trees per hectares.
- Commitment to achieve Zero Liquid Discharge for all distilleries.
- Commitment to provide CEMS for PM, SO₂, NO_x and meet new norms for all emissions and connect to CPCB/SPCB servers for continuous transmission.

Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments satisfactory.

After deliberations, EAC **recommended** for amendment in EC as proposed by the project proponent. However, all other terms and conditions mentioned in EC vide letter J-11011/143/2014-IA-II(I) dated 26th February, 2019 shall remain unchanged. Following additional specific conditions are as follows:

- i. Prescribed norms for air pollution emission shall be 50 mg/Nm³.
- ii. Greenbelt shall be developed in 33% area and it shall be completed in upcoming monsoon (i.e. before 31.08.2022) @ 2500 trees per hectares. Indigenous species shall be grown after consultation from State Forest Department and as per CPCB guidelines.
- iii. The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- iv. Continuous Emission Monitoring System for PM, SO₂, NO_x shall be installed to meet prescribed norms for all emissions and connect to CPCB/SPCB servers for continuous transmission.

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 Ramesh Rao Mungikar	Member
7.	Dr. Seshagiri Rao Ambati (IIFE)	Member
8.	Dr. Sanjay V. Patil (VSI)	Member
9.	Dr. Siddhartha Singh (IMD)	Member
10.	Shri A.N. Singh, Scientist 'E'	Member Secretary
MoEFCC		
11.	Dr. Mahendra Phulwaria	Scientist 'C'
12.	Ms. Meetika Gupta	Research Associate
