

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

Dated: 04.03.2022

**MINUTES OF THE 51st MEETING OF THE EXPERT APPRAISAL
COMMITTEE**

**(INDUSTRY-2 SECTOR PROJECTS)
HELD ON 23rd - 25th February, 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 50th Meeting of the EAC (Industry-2) held during 10th-11th February, 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.

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: -

23rd February, 2022 (Wednesday)

Agenda No. 51.A

Establishment of 200 KLPD Grain based distillery along with along with 5 MW Co-generation Plant M/s. by Greenergy Bio Refineries Private Limited (GBRPL) located at Survey Nos. 36/1A/2, 37/7, 38/1, 37/5, 36/3, 36/4, 37/8 & 37/10, Hanumanahalli, Tal. Rannebennur, Dist. Haveri, Karnataka - Consideration of Environment Clearance.

[IA/KA/IND2/256502/2022, J-11011/59/2022-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.

During deliberations, while presenting the layout, EAC observed that a pathway of a road is passing through the plant premises. In this regard, EAC enquired whether the road is national high way or any other local road. PP has informed that the road is local kachha (road).

EAC informed that proposed site should be an entire single continuous piece of land without any intersection of any roads as it would create trouble for both public and the working staff.

Meanwhile, PP intervened and informed that the displayed pathway is not of any road but of canal that is passing within proposed site. In this regard, EAC apprehended Consultant for misleading the facts and asked for explanation. However, no response has been received. EAC opined that Consultant didn't even seem to have visited the proposed location and there is clear contradiction of facts regarding the pathway shown whether it's a road/canal. Therefore, EAC noted that Consultant is misleading the committee & Ministry; punitive action should be taken against the Consultancy. Further, EAC suggested that Ministry should write to QCI for necessary action against the Accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd for misleading the facts and decided to return the proposal in present form.

Accordingly, proposal was **returned** in present form.

Agenda No. 51.B

Proposed 350 KLPD Grain based Ethanol Plant along with 15 MW Cogeneration Power Plant by M/s. Inland Green Energy (A Unit of Inland Power Limited) located at Village Tonagatu & Biyang, Tehsil Gola & Dulmi, District Ramgarh, Jharkhand - Consideration of Environment Clearance.

[IA/JH/IND2/257228/2022, J-11011/63/2022-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 350 KLPD Grain based Ethanol Plant along with 15 MW Cogeneration Power Plant by M/s. Inland Green Energy (A Unit of Inland Power Limited) located at Village Tonagatu & Biyang, Tehsil Gola & Dulmi, District Ramgarh, Jharkhand.

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.

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

The details of products and capacity are as under:

Unit	Capacity	Product
Grain Based Ethanol Plant	350 KLPD	Ethanol (Biofuel)
Co-generation Power Plant	15.0 MW	Power

Total project area is 16.78 ha and the same is already under the possession of the company and converted to industrial use. Industry will develop greenbelt in an area of 40% i.e., 6.71 ha out of total area of the project. The estimated project cost is Rs. 380 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 26.65 Crores and the Recurring cost (operation and maintenance) will be about Rs. 3.33 Crores / annum. No. of working days will be 350 days/annum. Total Employment will be 300 persons during operation phase. Industry proposes to allocate Rs. 4.0 Crores towards Corporate Environmental Responsibility.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km radius. Numerous unnamed Protected Forests (PF) are present within 10 km radius. Bhera Nadi (~2.5 km in North), Subarnarekha River (~3.5 km in SSE), Dora Nadi (~4.0 km in South), Khatgara Nala (~5.5 km in ENE), Kadamgara Nala (~6.5 km in ESE), Kochi Nala (~7.0 km in North) are the water bodies which lies within 10 km radius.

Total fresh water requirement will be 1853 KLPD (1813 Process & 40 KLPD Domestic) which will be sourced from Surface water from Damodar Valley Corporation (DVC). Total input for first run for Ethanol Plant will be 5990 KLPD. 4177 KLPD will be recycled and net fresh water requirement will be 1813 KLPD for proposed Ethanol Plant and 40 KLPD Domestic use. Effluent of 1731 KLPD will be treated through state of art CPU/Effluent Treatment Plant of 2000 KLPD capacity. The plant will be based on Zero Liquid Discharge system.

Power requirement for proposed Ethanol plant will be 8.0 MW, which will be sourced from the proposed 15.0 MW Co-generation Power Plant. Unit will be having two D.G. Sets of 1010 KVA each which will be used as standby during power failure. Adequate Stack height (6.5 m) will be provided as per CPCB norms. Boiler of 100 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 73 m for controlling the particulate emissions within the statutory limit of 30 mg/Nm³.

Details of process emissions generation and its management:

CO₂ (265 TPD) generated during the fermentation process will be collected and sold to authorized vendors.

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

- Solid waste from the Grain based operations generally comprises of fibres and proteins in the form of DDGS (163 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash (90 TPD) generated from the boiler will be used for brick manufacturing. Inland Power has already set-up a brick plant capacity of 3,50,000 brick/day adjacent to proposed premises. Ash from the boiler will be sent to the brick plant of Inland Power Ltd. MoU has already been obtained for the same.
- Used oil (0.75 KL/annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

As per the 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 350 KLPD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- Ash generated in the proposed Ethanol plant shall be supplied through pneumatic conveyors to nearby brick manufacturing unit of company's own (power) plant named M/s Inland Power Limited.
- Industry shall allocate Rs. 5.0 Crores towards CER which shall be spent for up-gradation of 5 public 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. All the proposed activities under CER Plan shall be implemented in consultation with District Collector and shall be completed before the commissioning of project.

PP has submitted the desired information as sought above.

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 350 KLPD shall be 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 1853 KLPD and will be met from Surface water from Damodar Valley Corporation (DVC). Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. 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. Ash generated in the proposed Ethanol plant shall be supplied through pneumatic conveyors to existing brick manufacturing unit of company's own (power) plant named M/s Inland Power Limited. PP shall use biomass like rice husk and coal as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% (800 KV) of the total power requirement from solar power.
- (vii). CO₂ bottling plant shall be installed within plant premises.
- (viii). PP shall allocate at least Rs. 60 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, 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.
- (xiv). PP proposed to allocate Rs. 5.0 Crores towards CER which shall be spent for up-gradation of 5 public 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. All the proposed activities under CER Plan shall be implemented in consultation with District Collector and shall be completed before the commissioning of project.
- (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.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.C

Proposed 100 KLPD Grain Based distillery along with 7.5 MW cogeneration Thermal Power Plant at Village: Kandarka, Tehsil: Berla, Bemetara, Chhattisgarh by M/s VARDA ENERGY & ENGINEERING PVT LTD- Consideration of Environment Clearance

[IA/CG/IND2/229774/2021, J-11011/388/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. AmpliEnviron 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 proposed 100 KLPD Grain Based distillery along with 7.5 MW cogeneration Thermal Power Plant at Village: Kandarka, Tehsil: Berla, Bemetara, Chhattisgarh by M/s Varda Energy & Engineering Pvt Ltd.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16th June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR & Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

Unit	Capacity	Product
Grain Based Ethanol Plant	100 KLPD	Product – Fuel Ethanol By Product – DDGS- 75 TPD CO ₂ – 55 TPD
CO- Generation Plant	7.5 MW	Power

Total project area is 5.72 ha for proposed project. Industry will develop greenbelt in an area of 33.2% i.e. 1.9 ha out of total area of the project.

The estimated project cost is Rs. 95.0 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 6.00 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.0 Crores / annum. No. of working days will be 330 days/annum. Total Employment will be 130 persons (Permanent 70 & temporary 60) during operation phase. Industry proposes to allocate INR 2.5 Crores of total project cost towards Corporate Environment Responsibility (CER).

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius.

Kharun River – 1.8 km E, Reservoir near Hardi – 4.5 km, NNW are the water bodies found within 10 km radius.

One Time Total water requirement for the project will be 3264 KLD which will be further reduced through recycling & reuse to 2526 KLD. 738 KLD will be fresh water. Fresh water demand for distillery process will be less than 4KL/KL of Ethanol. Water will be sourced from surface water. The applications for permission of withdrawal of water has been submitted to Water Resource Department Chhattisgarh. Effluent will be treated through state of art Effluent Treatment Plant. The plant will be based on Zero Liquid discharge system.

Power requirement for Ethanol plant will be 7.5 MW, which will be sourced from the 7.5 MW Co-generation Power Plant. Unit will be having D.G. Sets of 1 x 1000 KVA which will be used as standby during power failure. Stack height (30 m) will be provided as per CPCB norms. Proposed Boiler of 36 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 60 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm³

Details of process emissions generation and its management:

CO₂ (58 TPD) generated during the fermentation process will be collected and sold to authorized vendors.

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

- Solid waste from the Grain based operations generally comprises of fibers and proteins in the form of DDGS (75 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash (70 TPD) generated from boiler will be supplied to brick manufacturers.
- Used oil & grease (0.5 KL/Annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 100 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations, EAC sought the following information/commitments from PP:

- Industry shall install solar power of at least 10% of its total power requirement within the plant/nearby villages as a part of EMP.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Fresh water requirement shall not exceed 3.3 kL fresh water consumed/kL production of Ethanol.

- Industry shall construct a storage pond of 75 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP shall allocate at least Rs. 50 Lakhs per annum for Occupational Health Safety.
- The proposed budget towards CER be increased to Rs. 3.0 Crores which shall be spent on construction of a Modern Health Centre in any nearby village. Further, operational expenditure after construction shall be met by Industry. All the proposed activities under CER shall be completed before commencement of operations of the plant.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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 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 OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project
- (iii). 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. Industry shall install solar power of at least 10% of its total power requirement within the plant/nearby villages as a part of EMP.
- (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). Total fresh water requirement shall not exceed 3.3 kL fresh water consumed/kL production of Ethanol which will be sourced from surface water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage facility of 75 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. Brick manufacturing plant shall be installed for utilization of fly ash.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP proposed to allocate 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 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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.
- (xiv). PP proposed to allocate Rs. 3.0 Crores towards CER which shall be spent on construction of a Modern Health Centre in any nearby village. Further, operational expenditure after construction shall be met by Industry. All the proposed activities under CER shall be completed before commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.D

Greenfield project of 170 KL/Day Grain Based Ethanol Plant along with 4.0 MW Co-generation Power Plant located at Village-Fuljhar, Tehsil & DistrictRajnandgaon, Chhattisgarh by M/s New Look Bio Fuels Pvt. Ltd - Consideration of Environment Clearance

[IA/CG/IND2/255423/2022, J-11011/43/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Grass Roots Research & Creation India (P) Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed Greenfield project of 170 KL/Day Grain Based Ethanol Plant along with 4.0 MW Co-generation Power Plant located at Village-Fuljhar, Tehsil & DistrictRajnandgaon, Chhattisgarh by M/s New Look Bio Fuels Pvt. Ltd.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16th June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR & Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

SL.No	Units	Proposed Capacity
1	Installed Capacity	Grain Base Distillery of 170 KLD
2	Major Raw Material	Grain (primarily broken rice)
3	Final Product & By-Product	Ethanol (170 KLD) DDGS- 76 TPD CO ₂ - 65 TPD
2	Co-Generation Power Plant (1 x 38 TPH-AFBC)	4.0 MW

Total land required for the project is 5.07 Ha. Industry will develop greenbelt in an area of 33.13% of total project area i.e. 1.68 Ha out of total area of the project.

The estimated project cost is Rs 180.40 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 572 lakh and the Recurring cost (operation and maintenance) will be about Rs 113 lakh per annum. Total Employment will be 104 persons as direct & indirect due to the project. Industry proposes to allocate 1% of total project cost towards Corporate Environment Responsibility.

Following protected areas and river/water bodies are present within 10 km distance from the project site:

Location	Direction	Distance km
Agar River	W	0.8
Lalpur PF	W	6.9
Maniyari River	NNE	9
Achanakmar Tiger reserve	NE	13.75

One Time Total water requirement for the project will be 2327 KLD which will be further reduced through recycling & reuse of 1743 KLD. Total fresh water demand for distillery operation is 584 KLD @3.4 KL of water/KL of Ethanol. Net fresh water requirement including power plant of 4.0 MW is 824 KLD @4.8 KL/KL of ethanol production, which will be sourced from CSIDCL augmented with rain water. We have obtained permission of water from Chhattisgarh State Industrial Development Corporation Limited (CSIDCL) vide letter No. CSIDCL/2021/4817 dated 14.09.2021. Effluent of 697 KLD quantity will be treated through 850 KLD ETP/CPU. The plant will be based on Zero Liquid discharge system.

During operation phase power requirement will be 3.8 MW /Day and will be fulfilled by 4.0 MW Co-generation power plant within the project site. Surplus power will be connected to State Grid. For emergency, 1 DG set of 500 KVA will be installed within the plant area. Project will have 38 TPH AFBC boiler will be installed. ESP and bag filter with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers. Regular monitoring will be done to ensure that ambient air quality standards to meet all the time. All the internal roads will be asphalted.

Details of process emissions generation and its management:

CO₂ generated during fermentation process will be collected, purified, liquefied and sold to vendors.

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

Type of Waste	Quantity	Storage	Utilization/ Disposal
DDGS – (by product) (Dried distillers’ grains with soluble)	25,080 TPA	Covered shed	Sold as Cattle Feed, Poultry & Fisheriesr
Ash from boiler	12,540 TPA	Silo	Sold to Bricks manufactures in nearby area
Waste papers/Boxes	3.0 TPA	Covered shed	Sold to recyclers
Used Oil	1.5 KL	HDPE drums	Used for oiling the machine in house and balance will be given to authorized re- cyclers
Spent Resin from DM Plant	1.0 KL	HDPE drums	Given to authorized re- cyclers
ETP Sludge	104.36 Kg/Day	Stored in the dedicated Place	Given to authorized re- cyclers

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 170 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations PP has informed that Achanakmar Tiger Reserve is located at a distance of 13.75 NE from project site. As per, Ministry’s S.O 3654(E) dated 10th October, 2019 ESZ of of Achanakmar Tiger Reserve has been demarcated to an extent of zero kilometer to 8.49 kilometers around the boundary. In this regard EAC noted that the proposed project site falls outside the ESZ of Achanakmar Tiger Reserve and NBWL clearance is not applicable. Further, EAC sought the following information/commitments from PP:

- Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- Industry shall install STP to treat domestic water. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos.
- Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- The proposed budget towards CER shall be increased to Rs. 2.0 Crores and it shall be spent on upgrading infrastructure of public schools and installation of solar power in nearby villages. Further, operational expenditure after completion of up gradation of schools and installation of solar power shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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 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 OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 170 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project
- (iii). 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. Industry shall install solar power of at least 10% of its total power requirement within the plant/nearby villages as a part of EMP.
- (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). Total fresh water requirement shall not exceed 824 KLPD which will be sourced from CSIDCL. Industry shall install STP to treat domestic water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage facility 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. Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos. Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). 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 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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.
- (xiv). PP proposed to allocate Rs. 2.00 Crores towards CER and it shall be spent on upgrading infrastructure of public schools and installation of solar power in nearby villages. Further, operational expenditure after completion of up gradation of schools and installation of solar power shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.E

Greenfield Project of 60 KLD Grain Based Ethanol Plant along with 1.4 MW Co-generation Power Plant located at Khasra No. 161, 164 & 165 Mauza Parbatta, Thana-Ismailpur, District Bhagalpur, Bihar by M/s Sahu Agro Business Private Limited - Consideration of Environment Clearance.

[IA/BR/IND2/255068/2022, J-11011/44/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Grass Roots Research & Creation India (P) Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed Greenfield Project of 60 KLD Grain Based Ethanol Plant along with 1.4 MW Co-generation Power Plant located at Khasra No. 161, 164 & 165 Mauza Parbatta, Thana-Ismailpur, District Bhagalpur, Bihar by M/s Sahu Agro Business Private Limited.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16th June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR & Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

S. No.	Units	Proposed Capacity
1	Installed Capacity	Grain Base Distillery of 60 KLD
2	Major Raw Material	Mostly Starch Based Grains Like Maize/Corn, Sorghum grain, Broken Rice
3	Final Product & By-Product	Ethanol (60 KLD) DDGS- 42 TPD CO ₂ - 48 TPD
4	Co-Generation Power Plant (1 x 14 TPH-AFBC)	1.4 MW

Total land required for the project is 2.844 Ha. Industry will develop greenbelt in an area of 33% of total project area i.e. 0.938 Ha. out of total area of the project.

The estimated project cost is Rs.94.59 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 306 lakh and the Recurring cost (operation and maintenance) will be about Rs.66.5 lakh per annum. Total Employment will be 103 persons as direct & indirect due to the project. Industry proposes to allocate 1% of total project cost towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, forests, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site.

One Time Total water requirement for the project will be 818 KLD which will be further reduced through recycling & reuse of 601 KLD. Total fresh water demand for distillery operation is 217 KLD @3.6 KL of water/KL of Ethanol. Net fresh water requirement including power plant of 1.4MW is 308 KLD @5.1KL/KL of ethanol production, which will be Surface water sourced from Mahanadi River. Effluent of 231 KLD quantity will be treated through 280KLD ETP/CPU. The plant will be based on Zero Liquid discharge system.

During operation phase power requirement will be 1.4 MW /Day and will be fulfilled by 1.4MW Co-generation power plant within the project site. Surplus power will be connected to State Grid. For emergency, 1 DG set of 500 KVA will be installed within the plant area. Project will have 14 TPH AFBC boiler will be installed. ESP and bag filter with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers. Regular monitoring will be done to ensure that ambient air quality standards to met all the time. All the internal roads will be asphalted.

Details of process emissions generation and its management:

CO₂ generated during fermentation process will be collected, purified, liquefied and sold to vendors.

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

Type of Waste	Quantity	Storage	Utilization/ Disposal
DDGS – (by product) (Dried distillers’ grains with soluble)	13860 TPA	Covered shed	Sold as Cattle Feed, Poultry & Fisheries
Ash from boiler	12,420 TPA	Silo	Sold to Bricks manufactures in nearby area
Waste papers/Boxes	3.0 TPA	Covered shed	Sold to recyclers

Used Oil	1.2 KL	HDPE drums in covered shed	Used for oiling the machine in house and balance will be given to authorized re-cycler
Spent Resin from DM Plant	1.2 KL	HDPE drums in covered shed	Given to authorized re-cycler
ETP Sludge	36.58 Kg/Day	Stored in the dedicated Place	Sent to TSDF site

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 60 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations EAC remarked that proposed capital fund of Rs 306 lakh earmarked towards EMP and the recurring cost of Rs.66.5 lakh per annum are significantly less and are nowhere near to market estimates. In this regard EAC directed PP to submit revised estimates for EMP and its recurring cost. Further, EAC sought the following information/commitments from PP:

- Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- Industry shall install STP to treat domestic water. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos.
- Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- PP shall allocate at least Rs. 40 Lakhs per annum for Occupational Health Safety
- The proposed budget towards CER shall be increased to Rs. 1.00 Crore and it shall be spent on upgrading infrastructure of public schools, Primary Health Centre (PHC) and installation of solar power in nearby villages. Further, operational expenditure after completion of up gradation of schools/PHC and installation of solar power shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has submitted the desired commitments/information sought above in the form of undertaking. Further, PP has submitted revised budget of EMP and its recurrence cost as Rs 695 Lakhs, Rs. 162 Lakhs respectively.

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 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 OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 60 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project
- (iii). 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. Industry shall install solar power of at least 10% of its total power requirement within the plant/nearby villages as a part of EMP.

- (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). Total fresh water requirement shall not exceed 308 KLPD which will be sourced from Mahanadi River. Industry shall install STP to treat domestic water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage facility 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. Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos. Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP proposed to allocate Rs. 40 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 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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.
- (xiv). PP proposed to allocate Rs. 1.00 Crore towards CER and it shall be spent on upgrading infrastructure of public schools, Primary Health Centre (PHC) and installation of solar power in nearby villages. Further, operational expenditure after completion of up gradation of schools/PHC and installation of solar power shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.F

Expansion from 60 KLPD to 75 KLPD of Distillery unit, Grain based to dual feed (Molasses/Grain) based distillery plant by M/s. NV Distilleries Pvt. Ltd. located at Village Badhauri, Tehsil Naraingarh Distillery Ambala Haryana - Amendment of Environment Clearance.

[IA/HR/IND2/255045/2022, J-11011/646/2007 – IA-II (I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter F. No. J-11011/646/2007-IA-II(I) dated 17th September, 2007 & amended on 23rd December, 2008 for the project Expansion from 60 KLPD to 75 KLPD of Distillery unit, Grain based to dual feed (Molasses/Grain) based distillery plant at Village Badhuali, Tehsil Naraingarh Distillery Ambala Haryana by M/s. NV Distilleries Limited.

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

Para of EC issued by MoEF&CC	Details as per the EC	To be revised/read as	Justification/ reasons
Condition no. vi of A. Specific Conditions (EC letter no. J-11011/646/2007 – IA - II (I) dated 17 th September, 2007)	The operation of distillery shall be restricted to 300 days and that it will not operate during rainy season and/or whatever the ETP is not able to treat the effluent as per standards.	The operation of distillery shall be restricted to 350 days/annum for Grain based operation. The plant is completely based on Zero Liquid Discharge.	The company is presently operating only Grain based Distillery. No molasses is being used for the project and the company will continue to operate on Grain based mode only. Hence, the company wants to increase the number of working days from 300 days/annum to 350 days/annum.

During deliberations PP informed that Environmental Clearance obtained for dual mode (Molasses/Grain) based distillery plant and the Industry is operating only Grain based Distillery. No molasses is being/will be used in the plant and only Grain based distillery operations will be done. In view of continued Grain based distillery operations, the company is proposing amendment in Environment Clearance to increase the number of working days from 300 days/annum to 350 days/annum.

Further, PP has informed that company has submitted existing EC transfer proposal (from M/s. NV Distilleries Limited to M/s. NV Distilleries Pvt. Ltd.) which is under consideration in Ministry. Further, PP has also stated that Board of Directors is same for both the company and no ownership is changed. In this regard, EAC decided that the

amendment sought is recommended and it will be applicable only after obtaining transfer of EC.

During deliberations EAC sought the following information/commitments from PP:

- Existing production of 75 KLPD Grain based distillery shall remain the same after amendment. Only working days shall be increased from 300 to 350 days/annum. After amendment, there shall be no change in water requirement per day, power requirement per day, effluent generation per day for the existing distillery.
- Industry shall submit an affidavit stating that the existing EC has been granted in the name of M/s. NV Distilleries Limited. Now the company has changed from Public limited to Private limited (M/s. NV Distilleries Limited to M/s. NV Distilleries Private Limited). Ownership of the company is not changed.
- Proposed budget for social developmental activities shall be Rs. 50 lakhs which shall be spent on overall up gradation of infrastructure of 2 public schools which includes activities like distribution of laptops to the students and provision of Solar power support for uninterrupted power supply etc. which shall be implemented in consultation with District Magistrate.
- PP shall provide approx. 250 KW solar power in form of solar lights/solar panels/solar gadgets etc. within plant and to the nearby areas.
- PP shall allocate at least Rs. 30 Lakhs for Occupational Health Safety.

PP has submitted the desired information sought above.

After details deliberations, EAC found the justifications satisfactory and **recommended** the amendments in EC, as proposed by the project proponent, with all other terms and conditions remain unchanged. Following additional specific conditions are as follows:

- (i). Environmental Clearance granted by the Ministry vide letter F. No. J-11011/646/2007-IA-II(I) dated 17th September, 2007 & amended on 23rd December, 2008 in the name of M/s. NV Distilleries Limited. As the company name has been changed from Public limited to Private limited (M/s. NV Distilleries Limited to M/s. NV Distilleries Private Limited). Directorship of the company is unchanged; amendment in EC will be applicable only after obtaining transfer of EC.
- (ii). Existing production of 75 KLPD Grain based distillery shall remain the same after amendment. Only working days shall be increased from 300 to 350 days/annum. After amendment, there shall be no change in water requirement per day, power requirement per day, effluent generation per day for the existing distillery.
- (iii). Proposed budget for social developmental activities shall be Rs. 50 lakhs which shall be spent in overall up gradation of infrastructure

- on 2 public schools which includes activities like distribution of laptops to the students and provision of Solar power support for uninterrupted power supply etc. which shall be implemented in consultation with District Magistrate.
- (iv). PP shall provide approx. 250 KW solar power in form of solar lights/solar panels/solar gadgets etc. within plant and to the nearby areas.
- (v). PP shall allocate at least Rs. 30 Lakhs for Occupational Health Safety.

24th February, 2022 (Thursday)

Agenda No. 51.1

Proposed 250 KLPD Grain based Ethanol Plant along with 7.0 MW Cogeneration Power Plant at Village Sadatpura, Tehsil Detroj Rampura, District Ahmedabad, Gujarat by M/s Plimsoll Express Private Limited- Consideration of Environment Clearance

[IA/GJ/IND2/254496/2022, J-11011/38/2022-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 proposed 250 KLPD Grain based Ethanol Plant along with 7.0 MW Cogeneration Power Plant at Village Sadatpura, Tehsil Detroj Rampura, District Ahmedabad, Gujarat by M/s Plimsoll Express Private Limited.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16th June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR & Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

Unit	Capacity	Product
Grain Based Ethanol Plant	250 KLPD	Ethanol (Biofuel)

Co-generation Power Plant	7.0 MW	Power
---------------------------	--------	-------

Total project area is 9.72 ha (97200 m²) and the same is already under the possession of the company and converted to industrial use. Industry will develop greenbelt in an area of 33% i.e., 3.21 ha (32100 m²) out of total area of the project.

The estimated project cost is Rs.170 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 30 Crores and the Recurring cost (operation and maintenance) will be about Rs. 2.0 Crores / annum. No. of working days will be 350 days/annum. Total Employment will be 170 persons (Permanent 140 & Temporary 30) during operation phase. Industry proposes to allocate Rs. 1.7 Crores (1% of total project cost) towards Corporate Environment Responsibility.

There are no national parks, Reserved Forests (RF)/ Protected Forests (PF), Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km radius. Odhav Solgam Drain (~6.5 km in West) and many village ponds are the water bodies which lies within 10 km radius.

Total fresh water requirement will be 1256 KLPD (1236 Process & 20 KLPD Domestic) which will be sourced from Groundwater. Total input for first run for Ethanol Plant will be 4179 KLPD. 2943 KLPD will be recycled and net fresh water requirement will be 1236 KLPD for proposed Ethanol Plant and 20 KLPD Domestic use. Effluent of 1173 KLPD will be treated through state of art CPU/Effluent Treatment Plant of 1500 KLPD capacity. The plant will be based on Zero Liquid Discharge system.

Power requirement for proposed Ethanol plant will be 6.0 MW, which will be sourced from the proposed 7.0 MW Co-generation Power Plant. Unit will be having two D.G. Sets of 1000 KVA each which will be used as standby during power failure. Adequate Stack height (7 m) will be provided as per CPCB norms. Boiler of 55 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 57 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm³

Details of process emissions generation and its management: CO₂ (189 TPD) generated during the fermentation process will be collected and sold to authorized vendors.

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

- Solid waste from the Grain based operations generally comprises of fibres and proteins in the form of DDGS (116 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.

- Ash (47 TPD) generated from the boiler will be used for brick manufacturing.
- Used oil (0.5 KL/annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 250 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations PP has informed that based on the previous annual rainfall in the proposed region, Industry is proposing rainwater storage limited to 35 days which was agreed by EAC. Further, EAC sought the following information/commitments from PP:

- Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos.
- As proposed, Industry shall construct a rainwater storage facility of 35 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Biomass shall be used in the boiler. Coal of Sulphur content less than 0.5 % may be used during non-availability of biomass.
- The proposed budget towards CER shall be increased to Rs. 2.00 Crores and it shall be spent on upgrading infrastructure of 3 public schools in nearby villages. Further, operational expenditure after completion of up gradation shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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 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 OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project
- (iii). 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. Industry shall install solar power of at least 10% of its total power requirement within the plant/nearby villages as a part of EMP.
- (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). Total fresh water requirement shall not exceed 1256 KLPD which will be sourced from Groundwater. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within

the premises. Industry shall construct a rainwater storage facility of 35 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. Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos.
- (vii). Industry shall install CO₂ plant for efficient collection of CO₂ generated during fermentation.
- (viii). PP proposed to allocate 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 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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.
- (xiv). PP proposed to allocate Rs. 2.00 Crores towards CER which shall be spent on upgrading infrastructure of 3 public schools in nearby villages. Further, operational expenditure after completion of up

gradation shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.2

Expansion of Carbon Black Manufacturing from 1.38 LTPA TO 2.04 LTPA with CPP 40 MW to 55 MW by M/s Balkrishna Industries located at Village-Paddhar, Taluka-Bhuj, District-Kutch, Gujarat Limited, Gujarat- Consideration of Environment Clearance

[IA/GJ/IND2/244957/2021, J-11011/162/2017-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Perfect Envirosolutions 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 of Carbon Black Manufacturing from 1.38 LTPA TO 2.04 LTPA with CPP 40 MW to 55 MW by M/s Balkrishna Industries Limited located at Village-Paddhar, Taluka-Bhuj, District-Kutch, Gujarat Limited, Gujarat.

The project/activities are covered under Petrochemical based processing (processes other than cracking & reformation and not covered under the complexes) and thermal power plants are listed at S.No 5(e) and 1(d) respectively of Environment Impact Assessment (EIA) Notification 2006. As the proposed project is located outside the notified industrial area/estate the project is under category 'A' and to be appraised at Central Level by Expert Appraisal Committee (EAC).

Standard ToR and Public Hearing are not applicable as the proposed expansion is submitted under para 7(ii) of EIA Notification, 2006 and its subsequent amendments.

The Ministry had issued Environmental Clearance earlier for addition of Carbon Black manufacturing facility vide letter no. F.No. J-11011/162/2017-IA II (I) dated 08.01.2018 that was taken and amended on 20.05.2019 in respect of survey Nos., greenbelt area and raw material storage. To utilise the residual Off Gas generating during the Carbon Black manufacturing process, for conversion into additional energy, a revision in combined Environmental Clearance vide letter No J-11011/162/2017-IAII(I) dated 15.10.2020 was taken to increase Power generation from 20 MW to 40 MW along with increase in Tyre production (Non EC Product) from 1.2 LTPA to 1.8 LTPA and carbon black production remain unchanged.

Certified compliance report was issued by Integrated Regional office, MoEF&CC, Bhopal vide letter no 18-A-126/2012(SEAC)/891 dated 11-02-2021 wherein no non compliances were observed.

The details of products and capacity are as under:

S. No	Product	Existing	Proposed Expansion under para 7(ii)	Total after expansion
1	Carbon Black (CB)	1.38 LTPA	0.66 LTPA	2.04 LTPA
2	Captive Power Plant (CPP)	40 MW	15 MW	55 MW

Existing land area is 12,12,560 m² and proposed expansion will be done on the same land area only. Industry has already developed greenbelt in an area of 34.03 % i.e. 4,12,637 m² out of the total plot area of the project.

The total estimated project cost is Rs 4588 including existing investment of Rs 4188 crores and proposed- Rs 400 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 113 Cr and the Recurring cost (operation and maintenance) will be about Rs 194 Lakhs per annum. Total Employment will be 5350 persons as direct & 350 persons indirect after expansion. Industry proposes to allocate Rs 10 Cr towards Corporate Environment Responsibility (CER) to be earmarked towards upgradation of Primary Health Centres (PHCs) equipment & infrastructure which will be spent before commissioning of the new plant.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Sang Nadi is the nearest waterbody flowing at a distance of 2.88 km in E direction.

Ambient air quality monitoring was not carried out as the proposed expansion is submitted under para 7(ii) of EIA Notification, 2006 and its subsequent amendments.

Total water requirement after expansion is 8230 m³/day, out of which fresh water requirement is 5215 m³/day (increasing by 1065 m³/day from existing 4050 m³/day) being met from Gujarat Water Infrastructure Limited (GWIL) and CGWB approved borewell. After expansion, industrial Effluent (2382 KLD) quantity will be treated through ETPs of combined capacity 2562 KLD followed by RO and MEE. The treated industrial effluent will be recycled for industrial purposes. The plant will be based on the Zero Liquid discharge system. Domestic Sewage (590 KLD quantity will be treated through STPs of combined capacity 600 KLD and treated sewage will be utilised for domestic, flushing, plantation and greenbelt purposes.

Power requirement after expansion will be 43 MW including existing 33.5 MW, proposed to be supplied by PGVCL (Sanctioned load- 9.5 MW) and CPP (55 MW - Existing 40 MW + Proposed 15 MW). There will be no change in the DG set capacity in the proposed expansion, existing DG sets will remain on standby. Stack (height 11 m for all DG sets) will be provided as per CPCB norms. Existing unit has 1 MW Solar Photovoltaic (PV) plant which will be expanded up to 6 MW plant which will meet 15% of the expansion load.

Existing unit has approval for Boilers of capacity 2 x 66 TPH (Coal), 1 x 95 TPH (Off Gas), 1 x 45 TPH (Off Gas), 2 x 20 TPH (Coal based process boilers for tyre plant). After proposed expansion, 110 TPH based on Offgas shall be installed and the existing 45 TPH off gas boiler shall be upgraded to 66 TPH. Electrostatic Precipitators (ESP) with lime dosing are already installed with coal based 2 x 66 TPH boilers while ESP is installed on 2 x 20 TPH coal based process boilers. After proposed expansion, requisite engineering control systems such as Flue Gas Desulphurisation unit (FGD) shall be installed for off gas based boilers to reduce the net SO₂ emission load by 10 %.

Details of process emissions generation and its management:

Technical Specifications of the Stack						Details of Air Pollution Control System (APCS)		Stack design	
S no	Machinery	Steam Capacity	Unit	Fuel	Status (Existing/proposed)	Existing	Proposed	Dia (m)	Height (m)
1	Boiler 1	66	TPH	Coal	Existing	ESP with Lime	No Change	3.5	84
2	Boiler 2	66	TPH	Coal	Existing	ESP with Lime	No Change	3.5	84

3	Boiler 3	95	TPH	Off Gas	Existing	-	FGD	6.3	105
4	Boiler 4	20	TPH	Coal	Existing	ESP	No Change	1.2	40
5	Boiler 5	20	TPH	Coal	Existing	ESP	No Change	1.2	40
6	Coal Crusher	80	TPH	Coal	Existing	Bag Filter	No Change	1.2	30
7	Dryer System Line 1 & 2	15	TPH	Off Gas	Existing	-	-	1.7	50
8	Dryer System Line 3	10	TPH	Off Gas	Existing	-	-	1.5	50
9	Boiler 6	45	TPH	Off Gas	Existing - To be Upgraded to 66 TPH	-	FGD	6.8	120
10	Boiler 7	110	TPH	Off Gas	Proposed	-	FGD		
11	Dryer System Line 4 & 5	6.1	TPH	Off Gas	Proposed	-	-	1.2	50

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

Solid Waste Management:

Category	Type of Waste	Treatment method	Total after expansion
Biodegradable	Organic Waste	Disposed for treatment in Organic Waste Converter to get converted to manure and the same will be followed after expansion	2154 kg/day (786.7 TPA)
Non-Biodegradable	Recyclable Waste	Sent to authorised recyclers	1456 kg/day(531.8 TPA)
Total			3610 kg/day (1319 TPA)

Hazardous Waste Management:

Name	HWM Rules 2016, Category	Quantity (TPA)			Source	Method of Collection and Disposal
		Existing	Proposed	After expansion		
Residues from Treatment of Effluent	35.3	610	300	910	ETP	TSDF
MEE Residue	35.3	900	60	960	MEE	TSDF
Oily Cotton Waste	33.2	7	1	8	All plant	TSDF
Spend / Used Oil	5.1	421	29	450	All plant	Sent to registered recycler
Discarded Container, Barrel & Drum	33.1	425	35	460	All plant	Sent to registered recycler
Total	-	2363	425	2788		

During deliberations PP made a brief presentation on CCR and EAC found the compliance status satisfactory. Further, it was informed to the

PP/consultant that para 7(ii) of EIA notification doesn't exempt EIA and Public Hearing, it prescribes that the EAC on the due diligence after assessing additional increase in pollution load will decide, preparation/exemption of EIA and Public Hearing.

PP has informed that the proposal has been submitted under para 7(ii) as proposed Flue Gas Desulfurization (FGD) unit installation in the existing and proposed gas based fired boilers results in 10% reduction in SO₂ emissions than earlier approved limit. (Earlier Approved without FGD: 292 kg/day, after Expansion with FGD: 277 kg/ day).

EAC opined that PP should not have submitted the proposal under para 7(ii) and should have gone through normal process of obtaining ToR, preparation of EIA/EMP report and Public Hearing as the proposal relates to Petrochemical based processing which includes other process emissions apart from SO_x.

In this regard, PP elaborated that TOR was obtained from MoEF&CC vide TOR letter no. J-11011/162/2017-IA II (I) dated 27th November 2020 for proposed expansion in carbon black manufacturing facilities (11,500 TPM to 33,300 TPM i.e 1.38 LTPA to 4 LTPA) and enhancement of CPP (40 MW to 90 MW). The EIA Report was submitted to GPCB in the third week of January 2021 for conducting Public Hearing. GPCB scheduled Public Hearing three times on dates 20.04.2021, 26.07.2021 and 27.10.2021, but could not be conducted by Local authorities due to COVID protocols and associated reasons.

Further, PP stated that due to non-feasibility of conducting Public Hearing, PP has revised the project in environment friendly manners and also reduced proposed enhanced capacity from the TOR. In this regard, it has been informed to PP that as there is no increase in pollution load and the resultant increase in production is not more than 50 percent of the production capacity permitted in the earlier environmental clearance; the project proponent should have obtained 'No Increase in Pollution Load'. However enough justification about reduction in pollution load was presented and is acceptable for consideration under clause 7(ii) c.

Further, PP has informed that an appeal was filed in February 2018 praying for quash of EC issued by MoEF&CC dated 08th Jan 2018 on the grounds that the public hearing dated 26.09.2017 was not conducted as per the requisite procedure and the procedures for issuing EC was not properly followed. The details of the case are as follows:

Proceeding Details and Summary of NGT Orders

Hearing Date	Order of Tribunal (Principal Bench)	Remarks
08-03-2018	<p>Heard M.A No 275 of 2018.</p> <p>Considering the circumstances explained and the fact that the Western Zone Bench is presently not functional, the request for transfer of Appeal No 29 of 2018 from the file of the Western Zonal Bench of Pune to Principal Bench is granted. Learned counsel for the applicant submitted no date has been given by Western Zonal Bench in the said case hence let it be listed on 9th April 2018 and Applicant is directed to intimate the next date of hearing to the Respondents. Registry is directed to secure the file and intimate the next date of hearing to Western Zonal Bench.</p> <p>M.A.No 275 of 2018 is disposed of with no order as to costs.</p>	<p>Applicant requested for transfer of Appeal from NGT Pune Bench to Principal Bench New Delhi.</p> <p>This request was accepted by the NGT Principal Bench.</p>
14-03-2018	<p>None appeared.</p> <p>The matter is adjourned to 12th April 2018</p>	Nil
09-04-2018	<p>Await records. Registry is directed to secure by the next date.</p> <p>List it on 09th May ,2018.</p>	Nil
12-04-2018	<p>The Learned counsel appearing for the applicant at whose instant case is transferred from Western Bench, Pune to Principal Bench, New Delhi is absent.</p> <p>The applicant is directed to produce two more sets of copies of the case papers sufficient to the member of the Bench within two weeks from now.</p> <p>List it on 14th May, 2018.</p>	Nil

09-05-2018	<p>Ms. Sadiya Rohma Khan appears for the Appellant and submits there is urgency in the matter needing grant of interim order. However ,we notice from the record this case was transferred from Western Zonal Bench on the request made by the appellant expressing urgency but our order directing furnishing two more sets of case papers due to composition of larger number of Hon'ble Members of the Bench has not complied with.</p> <p>There is no interlocutory application seeking interim relief. Be that as it may, we permit the Appellant to take required steps if the Appellant so desires. List this matter on 14th may,2018 the date which is granted .if the steps are not taken as mentioned afore-said the case shall stand transferred back to the jurisdictional Western zonal Bench where the Appeal originally filed.</p> <p>Appellant is directed to furnish copies of the Appeal memo to the Respondents.</p>	Nil
14-05-2018	<p>On behalf of Respondent No.2 time is sought for filing reply. The Learned counsel on behalf of the Ministry of Environment, Forest and Climate Change takes Notice and seeks time for filing reply. Respondent No.3 and 4 are not represented. The applicant counsel submits that they have duly served with the Notice. Post it for the appearance of Respondent No.3 and 4 and for reply of Respondent No.1 and 2 on 31st May, 2018.</p> <p>Later on the Learned Counsel Mr.Dhruv Pal appears for State of Gujarat and State Pollution Control Board submits that he will duly inform the learned counsel on record representing the State of Gujarat.</p> <p>The request on behalf of appellant to permit them for filing of application</p>	Respondent No 2 i.e M/sBalkrishna Industries Ltd seeks time for filing reply.

	for grant of interim relief is granted. List this case on 31st May, 2018.	
31-05-2018	The applicant's counsel is present. On behalf of Respondent No.2 time is sought for filing the reply. So also requested by Respondent No.1,3 and 4. All are granted two weeks time to file their replies, failing which they will be liable to pay cost. Request on behalf of the learned Counsel appearing for the applicant the case may be transferred back to Western Zonal Bench at Pune which is not opposed by the respondents. List it for further proceedings on 24th July, 2018 at Pune.	All Respondents sought time for filing a reply. All are granted two week time to file their replies. Applicant requested for transfer of case to Western Zonal Bench Pune, which is permitted by Principal Bench.

Since 31st May 2018, the matter has not been heard by NGT Western Bench Pune and it is getting adjourned from time to time. As per the latest causes list, the next date given is 12th April, 2022 by the NGT, Western Bench, Pune.

After detailed deliberation EAC sought following commitments/information from PP:

- Industry shall use Carbon Black Feed Stock having a maximum Sulphur content of 2.5 % for production of Carbon Black. Industry shall use Carbon Black Feed Stock with specifications of guidelines/directions issued by SPCB/CPCB for such usage from time to time.
- Industry shall install solar power of at least 6.00 MW within plant/nearby villages as a part of EMP.
- PP shall allocate at least Rs. 1.00 Crore per annum for Occupational Health Safety.
- The proposed budget of Rs. 10 Crs towards CER which shall be spent on up gradation infrastructure of Primary Health Centers in nearby villages in consultation with District Magistrate. Further, the operational expenditure on completion of up gradation shall be met by the Industry. All the proposed activities under CER shall be completed before commencement of operations of the plant.
- Anticipated increase in pollution load after assessment keeping account of all the parameters related to land, air and water such as

emissions generated, effluent discharged etc. for submitting under para -7(ii).

PP has submitted the desired commitments/information sought above and following remarks were made by Committee:

- As per the supplementary information submitted, Industry is installing one new boiler of 110 TPH(boiler no. 7) & also increasing capacity of boiler no 6 from 45 TPH to 66TPH. Hence, there would be substantial increase in air pollution emission load especially in terms of sulphur dioxide, nitrogen oxides & particulate matter etc.
- FGD unit has been proposed only for 3 boilers against total 7 boilers which would reduce 50 percent sulphur dioxide against the required efficiency of more than 90 percent.
- Further, there will be increased in effluent generation from 1317 KLD to 2382 KLD and also increase in Hazardous waste generation from 2363 TPA to 2788TPA due to proposed expansion. In this regard, PP in the presentation has clearly brought out reduction in the emissions.

No response has been received by the PP/consultant for the remarks raised above.

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 EIA/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 EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

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

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

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

- (i). The project proponent shall abide by all the orders and judicial pronouncements, made from time to time w.r.t the case pending at NGT, Western Bench, Pune.
- (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. Industry shall install solar power of at least 6.00 MW within plant/nearby villages as a part of EMP.
- (iii). Industry shall use Carbon Black Feed Stock having a maximum Sulphur content of 2.5 % for production of Carbon Black. Industry shall use Carbon Black Feed Stock with specifications of guidelines/directions issued by SPCB/CPCB for such usage from time to time.
- (iv). Net fresh water requirement shall not exceed 5215 m³/day which will be met from Gujarat Water Infrastructure Limited (GWIL) and CGWB approved borewell. Necessary permission in this regard shall be obtained from the concerned regulatory authority. 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). For use of furnace oil as fuel for Hot oil heater, CPCB guideline shall be followed coupled with adequate measures such as installation of Cyclone Dust Separator and alkali Scrubber with adequate stack height shall be taken to mitigate emissions.
- (vi). Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.
- (vii). Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.

- (viii). Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.
- (ix). Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.
- (x). Regular VOC monitoring shall be done at vulnerable points.
- (xi). The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.
- (xii). Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.
- (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 cleaning etc. to reduce wastewater generation.
- (xiv). The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xv). PP proposed to allocate Rs. 10 Crs towards CER which shall be spent on up gradation infrastructure of Primary Health Centers in nearby villages in consultation with District Magistrate. Further, the operational expenditure on completion of up gradation shall be met by the Industry. All the proposed activities under CER shall be completed before commencement of operations of the plant.
- (xvi). The project proponent shall set up a skill development centre/provide skill development training to village people.
- (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.

- (xviii). 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.
- (xix). 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. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.
- (xx). PP shall allocate at least Rs. 1.00 Crore per annum for Occupational Health Safety. PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. 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.
- (xxi). The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012 as amended time to time shall be followed.
- (xxii). Recommendations of mitigation measures from possible accident shall be implemented based on advanced risk Assessment studies conducted for worst case scenarios using latest techniques.

Agenda No. 51.3

Proposal for obtaining Environment Clearance for proposed distillery having installed capacity of 100 KLD Grain Based Fuel Ethanol Plant with Zero Effluent Discharge and captive power generation plant for 3.5 MW at Industrial Growth Centre Balipara, Sonitpur, Assam by M/s Kaziranga Biofuels Pvt Ltd - Consideration of Environment Clearance

[IA/AS/IND2/252151/2022, J-11011/21/2022-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 proposed distillery having installed capacity of 100 KLD Grain Based Fuel Ethanol Plant with Zero Effluent Discharge and captive power generation plant for 3.5 MW at Industrial Growth Centre Balipara, Sonitpur, Assam by M/s Kaziranga Biofuels Pvt Ltd.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16th June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR & Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

Sl.No.	Product details	Existing quantity	Proposed quantity	Total quantity
1	Absolute Alcohol(Ethanol)	---	100 KLD	100 KLD
Total		-----	100KLD	100KLD

Existing land area is 61114 m². It is a green field project. Industry will develop greenbelt in an area of 33.38 % i.e., 20400 m² out of total area of the project.

The estimated project cost is Rs 149.21 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 26.15 crores and the Recurring cost (operation and maintenance) will be about Rs 0.483 crores per annum. Total Employment will be 209 persons. 136 persons as Permanent Employment & 73 persons as Contractual Employment. Industry proposes to allocate 1% of total project cost towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Garumari Reserve forest lies within 10 km radius (6.9km SE). Mansari River is flowing at a distance of 2.7 km in East direction. Other prominent rivers in the nearby area are Dipota River 3.8 km in West direction, Mara Bhareli River 4.0 km in SE direction, Bor Juli River 4.3 km in SW direction, Bhareli River 9.0 km in East direction.

Total water requirement is 1493 m³/day of which fresh water requirement of 650 m³/day will be met from Ground water. The plant will be based on Zero Liquid discharge system.

Power requirement will be 3.5 MW and will be met from 3.5 MW Co-Generation Power Plant. 2 DG sets of 500 KVA each will be used as standby during power failure. Stack height 14m will be provided as per

CPCB norms to the proposed DG sets. 35 TPH one fired boiler will be installed. Multi cyclone separator/ bag filter will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boilers.

Details of process emissions generation and its management:

Stack emissions:

Stack monitoring shall be done in a regular basis, Regular cleaning, inspection and maintenance of air pollution control equipment, Workers will be trained regarding emergency actions to be taken during equipment failure, The whole distillery unit will be provided with facility of inter locking so that any failure of equipment or APCE will result in instant shut down of the complete process.

Fugitive Emissions:

The fugitive dust (PM) emissions occur from road, raw material unloading and loading, vehicle movement leading to suspension of settled dust, etc. Mitigation measures will be Water application to suppress dust generation, Stabilized concreted earthworks with stone, soil, geotextiles, vegetation, compacting, Use enclosures – covering for stockpiles – tarpaulin, plastic, fences, screens, Keep proper shape of stockpiles (avoid steep slopes and faces), Remove muck from truck tyres prior to leaving the plant premises, Minimize the drop height of raw materials, All road surfaces for permanent movement of trucks shall be paved (Concreted), Apply water spray in conjunction with cutting, grinding, drilling, Provide enclosure around mixing process, Use mechanical road sweeping machine for regular cleaning of roads, Use industrial vacuum cleaner for cleaning all shop floors and roofs.

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

Solid wastes generated will be wet cake, yeast sludge and ash from the boiler. Solid waste from the grain based operations generally comprises of fibres and proteins in the form of DDGS, which will be ideally used as Cattle Feed. Yeast sludge will be sent to the sludge drying beds or may be added to the wet cake. ETP sludge will be dewatered using filter press and will be used as manure. Ash (approx. 15000 tonnes/annum) from the boiler will be used for brick manufacturing. Used oil & grease generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized vendors.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 100 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations, EAC sought the following information/commitments from PP:

- Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos.
- Biomass shall be used in the boiler. Coal of Sulphur content less than 0.5 % may be used during non-availability of biomass.
- PP shall allocate at least Rs. 96 Lakhs per annum for Occupational Health Safety.
- The proposed budget of Rs. 1.50 Crores towards CER shall be spent on upgrading infrastructure of public schools and installation of solar power of in nearby villages. Further, operational expenditure after completion of up gradation of schools and installation of solar power shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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 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 OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project
- (iii). 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. Industry shall install solar power of at least 10% of its total power requirement within the plant/nearby villages as a part of EMP.
- (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). Total fresh water requirement shall not exceed 650 KLPD which will be sourced from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage facility 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. Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos.

Biomass shall be used in the boiler. Coal of Sulphur content less than 0.5 % may be used during non-availability of biomass.

- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP proposed to allocate Rs. 96 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 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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.
- (xiv). PP proposed to allocate Rs. 1.50 Crores towards CER which shall be spent on upgrading infrastructure of public schools and installation of solar power of in nearby villages. Further, operational expenditure after completion of up gradation of schools and installation of solar power shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.4

Proposed 100 KLD Grain Based Ethanol plant along with 2.7 MW Cogeneration Power Plant at Kh. No 98, Village-Patashi, Tehsil-Sohagpur, Dist.- Shahdol, M.P. by M/s SMPRIMAL Process Private Limited - Consideration of Environment Clearance

[IA/MP/IND2/255591/2022, J-11011/471/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Ascenso Enviro 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 proposed 100 KLD Grain Based Ethanol plant along with 2.7 MW Cogeneration Power Plant at Kh. No 98, Village-Patashi, Tehsil- Sohagpur, Dist.- Shahdol, M.P. by M/s SMPRIMAL Process Private Limited.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16th June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR & Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

S. No	Units	Proposed Capacity
1	Installed Capacity	Grain Base Distillery of 100 KLPD
2	Major Raw Material	Grain (Mostly Maize, Wheat and Rice)
3	Final Product & By-Product	Ethanol (100 KLPD) DDGS- 45 TPD CO2- 55TPD
2	Co-Generation Power Plant (1 x 25 TPH-AFBC)	2.7 MW

Total land required for the project is 4.002 Ha. Industry will develop greenbelt in an area of 33% of total project area i.e. 1.35 Ha. out of total area of the project.

The estimated project cost is Rs. 95.28 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 325 lakh and the Recurring cost (operation and maintenance) will be about Rs.48 lakh per annum. Total Employment will be 150 persons as direct & indirect due to the project. Industry proposes to allocate 1% of total project cost towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Sone River is at approx. 0.74 km towards NE.

One Time Total water requirement for the project will be 1628 KLD. Total fresh water demand for distillery operation is 402 KLD@4.0 KL of water/KL of Ethanol. Net fresh water requirement including domestic use is 427 KLD, which will be sourced from Jal Sansadhan Department. Permission for Water Withdrawal from Sone river has been obtained from Madhya Pradesh Water Resource Department vide letter no. Kr.Vri. Pa.Ni.Ma/31/tak/Ra.Sta.-1000/2021/41 dated 31/01/2022. Effluent of will be treated through ETP/CPU. The plant will be based on Zero Liquid discharge system.

During operation phase power requirement will be 2.6 MW /Day and will be fulfilled by 2.7 MW Co-generation power plant within the project site. Surplus power will be connected to State Grid. For emergency, 1 DG set of 1010 KVA will be installed within the plant area. Project will have 25 TPH AFBC boiler will be installed. ESP and bag filter with a stack of height

of 60 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers. Regular monitoring will be done to ensure that ambient air quality standards to met all the time. All the internal roads will be asphalted.

Details of process emissions generation and its management: CO₂ generated during fermentation process will be collected, purified, liquefied and sold to vendors.

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

S. No.	Solid waste/hazardous waste	Quantity, /day	Method of collection	Mode of disposal
1.	Boiler fly Ash	40 TPD	Mechanical conveyor into common silo for further disposal.	sold to bricks manufacturers
2.	DDGS	45 TPD	Mechanical Conveyor	Sold as Cattle Feed, Poultry & Fisheries
3.	Domestic solid waste	67.5 kg/day	Labour force. Domestic organic solid waste will be composted, while the inorganic solid waste will be handed over to municipality.	Segregated in separate colored bins at designated places. Disposed to authorized vendors.
4.	Used oil from DG set.	0.5 KL/A	Stored in leak proof sealed barrels	Disposed to SPCB authorized recyclers.
5.	Steam turbine oil waste	1.0 KL/A		

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 100 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations, EAC sought the following information/commitments from PP:

- Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- Fresh water requirement shall not exceed 3.5 kL fresh water consumed/kL production of Ethanol. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

- Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos. Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- Industry shall install CO₂ plant for efficient collection of CO₂.
- PP shall allocate at least Rs. 40 Lakhs per annum for Occupational Health Safety.
- The proposed budget of Rs. 1.50 Crores towards CER shall be spent on upgrading infrastructure of 3 public schools in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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 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 OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project
- (iii). 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. Industry shall install solar power of at least 10% of its total power requirement within the plant/nearby villages as a part of EMP.
- (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). Total fresh water requirement shall not exceed 3.5 kL fresh water consumed/kL production of Ethanol which will be sourced from Sone River. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage facility 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. Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos. Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- (vii). Industry shall install CO₂ plant for efficient collection of CO₂ generated during fermentation.

- (viii). PP proposed to allocate Rs. 40 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 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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.
- (xiv). PP proposed to allocate Rs. 1.50 Crores towards CER which shall be spent on upgrading infrastructure of 3 public schools in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

- (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. 51.5

Grain Base 75 KLD Distillery along with cogeneration power plant of 1.8 MW by M/s. Majetsic Basmati Rice Private Limited located at Plot No. 14, 14B, 15, 16, New Industrial Area, Phase-II, Mandideep Dist. Raisen, Madhya Pradesh - Consideration of Environment Clearance.

[IA/MP/IND2/254965/2022, J-11011/36/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Creative Enviro Services, Bhopal (MP), made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Grain Base 75 KLD Distillery along with cogeneration power plant of 1.8 MW by M/s. Majetsic Basmati Rice Private Limited located at Plot No. 14, 14B, 15, 16, New Industrial Area, Phase-II, Mandideep Dist. Raisen, Madhya Pradesh.

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

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

The details of products and capacity are as under:

Sr No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1.	Fuel Ethanol	Nil	75 KLD of fuel ethanol	75 KLD of fuel Ethanol
2	Co generation of power	Nil	1.8 MW	1.8 MW
3	DDGS	Nil	34 TPD	34 TPD

The acquired land area is 4.8 ha with proposed built-up area of 16500 sq mtrs. Green belt will be developed in area of 33 % i.e. 1.65 ha of area with 3300 number of trees within 02 years of time. The estimated project cost is Rs. 84.33 Cores. Total capital cost for environmental measures is proposed as Rs. 1260 Lacs. The recurring cost (operation and maintenance) will be about Rs. 99 Lacs per annum. Total Employment will be 50 persons as direct & 90 persons as indirect after the commissioning of project. Industry proposes to allocate Rs. 160 Lacs (2% of project cost) towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. No Major River is in vicinity, Seasonal river Betwa is flowing 1.25 km away from the site.

Total water requirement is estimated to be 1213 KLD and after recycling & reuse of 909 KLD of water, net fresh water requirement is estimated to be 304 KLD (4.0 KI per KI) which will be supplied by MPIDC, Manideep Dist Raise (MP). Spent wash of 443 KLD will be treated through Multi Effect Evaporator with thermal recompression for thin slops evaporation and followed by CPU. The plant will be based on Zero Liquid Discharge concept.

Power requirement for the project will 1700 KWH and will be met from Co-generation unit of 1.8 MW and MPSEB. Unit will have 01 boilers of 18 TPH, which will be husk fired. ESP with a stack having height of 42 mt will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm₃) for proposed boiler.

Details of process emissions generation and its management:

PM, SO₂, NO_x will be generated from the fuel combustion. Following measures are proposed for implementation:

- Provision of ESP at stack of boiler to control the emission below 50 mg per cubic meter for proposed fuel ethanol plant.
- Though rick husk is proposed as fuel, however if coal will be used, Provision of Good quality of coal for boiler having sulphur less than 0.5% shall be ensured.

- Provision of Adequate stack height of 42 mt for boiler and 30 mt for the DG set.
- Provision of Dust collectors system at various material transfer points.
- Provision of Online continuous monitoring system for stack of boiler.
- Provision of regular monitoring of ambient air quality.
- Development of green belt in time bound manner in consultation with forest department.
- Provision of Dense phase conveying system for ash handling to prevent the fugitive emission.
- Provision of enclosure for all the loading & unloading operations, where ever required.
- Provision of cover over coal conveyors belt along with dust suppression system.
- Provision of dust mask for workers and instruction of compulsory use.
- Regular maintenance, green belt along the road and water spraying arrangement over approach road of the unit meeting to NH-12
- CO₂ generated during the fermentation process will be collected by utilizing CO₂ scrubbers.

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

Detail Of By Products / Solid/Hazardous Waste And Management			
Type Of Waste	Quantity	Storage	Utilization/ Disposal
DDGS - (by product)	33-35 TPD	Covered shed	Sold as Cattle Feed, Poultry & Fisheries
Boiler ash	20 TPD	Silo	Own Brick Manufacturing Unit
Waste papers/Boxes	0.1 TPD	Covered shed	to recyclers
Used Oil	<200Lt/Yr	HDPE drums in covered shed	Given to re-cycler authorized by MPPCB/MoEF
Spent Resin from DM Plant	<50Kg/Yr	HDPE drums in covered shed	Given to re-cycler authorized by MPPCB/MoEF
ETP Sludge	1.5-2 TPD	HDPE Bags	Will be used as Manure

As per the Notification S.O. 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 75 KLD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- Entire project shall be ZLD and no single drop of water shall be discharged outside of plant premises.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP shall utilize fresh water 3.0 KL/KL ethanol.
- Brick manufacturing unit shall be installed within the plant premises for utilization of fly ash.
- PP shall use agro fuel for the proposed boiler.
- ESP shall be installed with the boiler.
- PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety.
- PP shall meet 10% (200 KWH) of the total power requirement from solar power.
- 15% of the total plant area will be reserved for parking.
- PP shall install CO₂ bottling plant within premises.
- The proposed budget allocation of Rs. 2.0 Crores towards CER shall be used for construction/up-gradation for adopting two public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

PP has submitted the desired information as sought above.

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

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 75 KLD shall be 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 225 KLD (3.0 KI per KI) and will be met from supplied water by MPIDC Manideep District Raise. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. 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. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. ESP shall be installed with the boiler. PP shall use agro fuel for the proposed boiler. PP shall meet 10% (200 KWH) of the total power requirement from solar power.
- (vii). CO₂ bottling plant shall be installed within plant premises.
- (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, 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.
- (xiv). The proposed budget allocation Rs. 2.0 Crores towards CER shall be used for construction/up-gradation for adopting two public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be

implemented in consultation with District Collector before the commissioning of project.

- (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.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.6

Grain Based 100 KLD Distillery along with 2.8 MW Co-generation Power Plant by M/s. Beyond Trust Industries Pvt. Ltd. located at Khasara no 367, 368, 369, 381, 382 Village - Kalyanpur, Tehsil Huzur, Dist. Bhopal, Madhya Pradesh - Consideration of Environment Clearance.

[IA/MP/IND2/256113/2022, J-11011/55/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Creative Enviro Services, Bhopal (MP), made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Grain Based 100 KLD Distillery along with 2.8 MW Co-generation Power Plant by M/s. Beyond Trust Industries Pvt. Ltd. located at Khasara no 367, 368, 369, 381, 382 Village - Kalyanpur, Tehsil Huzur, Dist. Bhopal, Madhya Pradesh.

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

Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

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

The details of products and capacity are as under:

Sr No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1.	Fuel Ethanol	Nil	100 KLD of fuel ethanol	100 KLD of fuel Ethanol
2	Co generation of power	Nil	2.8 MW	2.8 MW
3	DDGS	Nil	46 TPD	46 TPD

The acquired land area is 7 ha with proposed built-up area of 21000 sq mtrs. Green belt will be developed in area of 33 % i.e. 2.5 ha of area with 5000 number of trees within 02 years of time. The estimated project cost is Rs. 116.19 Cores. Total capital cost for environmental measures is proposed as Rs. 2864.75 Lacs. The recurring cost (operation and maintenance) will be about Rs. 84.25 Lacs per annum. Total Employment will be 90 persons as direct & 105 persons as indirect after the commissioning of project. Industry proposes to allocate Rs. 175 Lacs (1.5 % of project cost) towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. No Major River is in vicinity, Seasonal river Ghodapachad is flowing 6.5 km away from the site.

Total water requirement is estimated to be 1472 KLD and after recycling & reuse of 1078 KLD of water, net fresh water requirement is estimated to be 394 KLD (3.9 KI per KI) which will be supplied by MPIDC, Bhopal (MP). Spent wash of 603 KLD will be treated through Multi Effect Evaporator with thermal recompression for thin slops evaporation and followed by CPU. The plant will be based on Zero Liquid Discharge concept.

Power requirement for the project will 2500 KWH and will be met from Co-generation unit of 2.8 MW and MPSEB. Unit will have 01 boilers of 30 TPH, which will be husk fired. ESP with a stack having height of 42 mt will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm₃) for proposed boiler.

Details of process emissions generation and its management:

PM, SO₂, NO_x will be generated from the fuel combustion. Following measures are proposed for implementation:

- Provision of ESP at stack of boiler to control the emission below 50 mg per cubic meter for proposed fuel ethanol plant.
- Though rick husk is proposed as fuel.
- Provision of Adequate stack height of 42mt for boiler and 30 mt for the DG set.
- Provision of Dust collectors system at various material transfer points.
- Provision of Online continuous monitoring system for stack of boiler
- Provision of regular monitoring of ambient air quality.
- Development of green belt in time bound manner in consultation with forest department.
- Provision of Dense phase conveying system for ash handling to prevent the fugitive emission.
- Provision of enclosure for all the loading & unloading operations, where ever required.
- Provision of cover over coal conveyors belt along with dust suppression system.
- Provision of dust mask for workers and instruction of compulsory use.
- Regular maintenance, green belt along the road and water spraying arrangement over approach road of the unit meeting to NH-46.
- CO₂ generated during the fermentation process will be collected by utilizing CO₂ scrubbers.

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

Detail Of By Products / Solid/Hazardous Waste And Management			
Type Of Waste	Quantity	Storage	Utilization/ Disposal
DDGS – (by product)	46 TPD	Covered shed	Sold as Cattle Feed, Poultry & Fisheries
Boiler ash	28 TPD	Silo	Brick making or land filling
ETP sludge	0.1MT/Day	Drying Beds	Will be used as Manure
Used Oil	< 100 lit per year	HDPE drums in covered shed	Given to re-cycler authorized by MPPCB/MoEF
Spent Resin from DM Plant	<20Kg/Yr	HDPE drums in covered shed	Given to re-cycler authorized by MPPCB/MoEF

As per the 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 KLD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- Entire project shall be ZLD and no single drop of water shall be discharged outside of plant premises.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP shall utilize fresh water 3.0 KL/KL ethanol.
- Brick manufacturing unit shall be installed within the plant premises for utilization of fly ash.
- PP shall use agro fuel for the proposed boiler.
- ESP shall be installed with the boiler.
- PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety.
- PP shall meet 10% (250 KWH) of the total power requirement from solar power.
- 15% of the total plant area will be reserved for parking.
- PP shall install CO₂ bottling plant within premises.
- The proposed budget allocation of Rs. 2.0 Crores towards CER and shall be used for construction/up-gradation for adopting two public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

PP has submitted the desired information as sought above.

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 KLD shall be 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 300 KLD (3.0 Kl per Kl) and will be met from supplied water by MPIDC, Bhopal. Prior permission shall be obtained from the concerned regulatory

authority/CGWA in this regard, and renewed from time to time. 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. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. ESP shall be installed with the boiler. PP shall use agro fuel for the proposed boiler. PP shall meet 10% (250 KWH) of the total power requirement from solar power.
- (vii). CO₂ bottling plant shall be installed within plant premises.
- (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, 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.
- (xiv). The proposed budget allocation of Rs. 2.0 Crores towards CER shall be used for construction/up-gradation for adopting two public schools

building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

- (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.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.7

Expansion of Distillery Project from 150 KLPD to 500 KLPD (Ethanol) based on Syrup/ B heavy Molasses and Grain by M/s. NSL sugars Ltd, Unit III, Jay Mahesh located at Pawarwadi Tal, Majalgaon Dist Beed, Maharashtra - Consideration of Environment Clearance.

[IA/MH/IND2/255527/2022, J-11011/26/2015-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Techno Green Environmental Solutions, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion of Distillery Project from 150 KLPD to 500 KLPD (Ethanol) based on Syrup/ B heavy Molasses and Grain by M/s. NSL sugars Ltd, Unit III, Jay Mahesh located at Pawarwadi Tal, Majalgaon Dist Beed, Maharashtra.

All Sugar and Distillery projects are listed at S. No. 5(j) & 5(g)/ 5(ga) of Schedule of Environment Impact Assessment (EIA) and as per the EIA

Notification 2006 and amendment vide Notification S.O 2339(E) dated 16.06.2021 the proposal is to be appraised as B2 category.

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

Ministry had issued EC for sugar plant (7000 TCD to 12000 TCD) & Molasses based distillery (100 KLPD) along with 3 MW cogeneration power (in addition to the existing 30 MW cogeneration Plant) at Pawarwadi. Tal- Malegaon, District: Beed, Maharashtra by M/s. NSL Sugars Limited, Unit III dated 7th June 2017.

Certified Compliance Report (CCR) was submitted by IRO, MoEFCC, Nagpur vide letter no. EC-443/RON/2017-NGP/8873 dated 17th November 2021. Action Taken Report (ATR) was submitted by IRO, MoEFCC Nagpur vide letter no. EC-443/RON/2017-NGP/9059 dated 21st December, 2021. Action Taken Report is found satisfactory by the EAC and recommended the proposal.

The details of products and capacity are as under:

Sl. No.	Unit	Existing	Expansion	Total
1	Distillery (Molasses/ B-Heavy / Syrup) For 200 days in season	150 KLPD	350 KLPD	500 KLPD
	Grain for 130 days in offseason	-	500KLPD	500KLPD
2	Cogeneration	33 MW	16 MW	49 MW

Existing land area is 690000 m². No additional and will be used for proposed expansion. Industry has already developed greenbelt in an area of 33 % i.e., 227000 m² out of total area of the project. The estimated project cost is Rs. 467.54 Cr including existing investment of Rs. 72.54 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 54.30 Cr and the Recurring cost (operation and maintenance) will be about Rs. 0.69 Cr per annum. Total Employment will be 310 persons as direct & 1500-2000 persons indirect after expansion. Industry proposes to allocate Rs. 2.96 Cr @ of 0.75 % towards Corporate Environment Responsibility.

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

from the project site. Krishan River is flowing at a distance of 1.5 Km in south direction.

Total water requirement is 3097 m³/day of which fresh water requirement of 1164 m³/day will be met from Ground water. Effluent of quantity 1385 m³/day spent wash will be treated by Evaporation in MEE and CSW sent to Spray Dryer. Condensate from MEE and other effluent will be treated in CPU. The plant will be based on Zero Liquid Discharge system.

Power requirement after expansion will be 17.5 MW including existing 3.0 MW and will be met from existing 3 MW Co-generation unit and proposed 16 MW cogeneration. Existing unit has 135 TPH Boiler & 20x2 TPH Boilers. Proposed 110 TPH Boiler will be installed for distillery. Electrostatic precipitator (ESP) with a stack of height of 65 m is provided to 135 TPH Boiler for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boilers and for proposed 110 TPJH Boiler 80 m stack and ESP will be provided.

Details of process emissions generation and its management:

Gaseous emissions from process are mainly PM₁₀, PM_{2.5}, Sox, NOx, from Boiler & DG set & CO₂ from fermentation process.

Air pollution control measures:

Sl. No.	Source of air pollution	Fuel	Emissions	Chimney height (M)	APC equipment provided
1	Existing 135 TPH Cogeneration boiler	Bagasse + Biogas	PM, So ₂ & Nox	65 m	ESP
2	Existing 20 x 2 TPH Boiler	Bagasse	PM, So ₂ & Nox	65 m	ESP
3	Proposed 110 TPH Boiler	Bagasse + Biogas	PM, So ₂ & Nox	80m	ESP
2	Fermentation process	-	CO ₂		304 TPD Co ₂ Bottling plant

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

SI. No.	Details of the solid waste	Existing Quantity in TPD	Expansion Quantity in TPD	Total Quantity in TPD	Treatment	Mode of Disposal
1	CPU sludge	2.0	3.0	5.0	Mixed in bio composting	Used as manure
2	Yeast Sludge	2	3	5	Mixed in bio composting	Used as manure
3	Boiler ash	7.68	20.16	27.84	Mixed in bio composting	Sold to brick Manufacturer and Mixed in bio composting

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 350 KLPD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- Entire sugar and distillery project shall be ZLD and no single drop of water shall be discharged outside of plant premises. Total ZLD shall be achieved for integrated facility.
- Bio-composting shall not be allowed.
- PP shall utilize fresh water 3.0 KL/KL ethanol.
- Company to construct a storage pond of 90 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- 15% of the total plant area will be reserved for parking.
- PP shall meet 10% (500 KW) of the total power requirement from solar power.
- PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety.
- PP shall install CO₂ bottling plant within premises.
- The proposed budget allocation of Rs. 4.0 Crores towards CER and shall be used for construction/up-gradation for adopting four public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan

shall be implemented in consultation with District Collector before the commissioning of project.

PP has submitted the desired information as sought above.

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 Notification S.O 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 350 KLPD shall be 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. Entire sugar and distillery project shall be ZLD and no single drop of water shall be discharged outside of plant premises. Total ZLD shall be achieved for integrated facility.
- (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 @3.0 KL/KL and will be met from Ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Company to construct a storage pond of 90 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 in grain based mode and in molasses based mode, spent wash shall be dried and incinerated. Bio-composting shall not be allowed. PP shall meet 10% (500 KW) of the total power requirement from solar power.
- (vii). CO₂ bottling plant shall be installed within plant premises.
- (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, 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.
- (xiv). The proposed budget allocation of Rs. 4.0 Crores towards CER and shall be used for construction/up-gradation for adopting four public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.
- (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.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.8

Expansion of distillery unit from 75 to 150 KLPD by M/s. Rajarambapu Patil Sahakari Sakhar Karkhana Ltd. located at Rajaramnagar, Post Sakharale, Taluka Walva, Dist. Sangli, Maharashtra - Consideration of Environment Clearance.

[IA/MH/IND2/252285/1996, J-11011/50/96 - IA II (I)]

The Project Proponent and the accredited Consultant M/s. Vasantdada Sugar Institute, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion of distillery unit from 75 to 150 KLPD by M/s. Rajarambapu Patil Sahakari Sakhar Karkhana Ltd. located at Rajaramnagar, Post Sakharale, Taluka Walva, Dist. Sangli, Maharashtra.

All distillery projects are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC), whereas sugar industry is placed at 5(j).

The ToR has been issued by Ministry vide letter No. IA- J-11011/50/96-IA II(I), dated 26th March 2021. Public Hearing for the proposed project has been conducted by MPCB, Dist. Sangli vide dated 8th July 2021 at project site M/s. Rajarambapu Patil Sahakari Sakhar Karkhana Limited and chaired by District Collector, Sangli. The main issues raised during the public hearing are related to concerns with particulate air pollution. It was informed that no litigation is pending against the project.

Ministry had issued letter vide F. No. J-11011/ 50/ 96 -IA II; dated 21st October 1997 and stated that the environmental clearance from the modernization of existing 75 KLPD distillery unit is not required under the provision of EIA notification dated 27th January, 1997 in favor of M/s. Rajarambapu Patil Sahakari Sakhar Karkhana Ltd. Hence the factory has obtained consent to operate from MPCB for 75 KLPD distillery unit. Current consent to operate is valid up to 31st August 2023.

Details of CTO Certified Compliance Report submitted by MPCB vide Letter No. MPCB/SROS/TB/534/21 dated 11/11/2021. CTO Certified Compliance Report is found satisfactory by the EAC and recommended the proposal.

The details of products and capacity are as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1	Rectified spirit & impure spirit	75 KLPD	75 KLPD	150

	(5%) or ENA& impure spirit (6%) or Fuel alcohol & impure spirit (5%)			KLPD
2	Fusel oil (by-product)	360	360	720 LPD

Existing Total plot area of the unit is 75.69 Ha out of which built up area of existing sugar; cogeneration and distillery unit is 6.31 Ha built up area required for proposed expansion is approximately 1.29 Ha it will be made available from existing available land. Total greenbelt area requirement of i.e. 33 % on total plot area is 24.98 Ha, out of which and unit has already developed approximately 16.79 Ha of area and remaining 8.89 Ha is proposed for greenbelt development during expansion. The estimated project cost is Rs. 10,424.09 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 4905 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 1365.25 lakhs per annum. The project will generate additional employment for 50 persons of which 35 will be skilled and remaining semiskilled. Current workers at distillery are 73. Industry proposes to allocate Rs. 78 lakhs (0.75% of capital cost for brownfield project) towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Krishna is approx. 3.65 away from proposed site towards northeast.

Ambient air quality monitoring was carried out at 8 locations during December 2020 to Feb 2021 (winter season) and the baseline data indicates the ranges of concentrations as: PM10 (56.89 to 79.76 $\mu\text{g}/\text{m}^3$), PM2.5 (20.56 to 35.39 $\mu\text{g}/\text{m}^3$), SO₂ (15.63 to 25.52 $\mu\text{g}/\text{m}^3$) and NO₂ (21.49 to 37.69 $\mu\text{g}/\text{m}^3$). AAQ modeling study for point source emissions indicates that the maximum rise in GLCs after the proposed project would be 2.62 $\mu\text{g}/\text{m}^3$, 1.007 $\mu\text{g}/\text{m}^3$, 6.72 $\mu\text{g}/\text{m}^3$ and 3.60 $\mu\text{g}/\text{m}^3$ with respect to PM10, PM 2.5, SO₂ and NO₂. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 456 m³/day distillery will be met from Krishna River through canal with permission from irrigation department. Raw spent wash will be concentrated in standalone Multi effect evaporation; Conc. spent wash of >55-60% solids will be burnt in new incineration boiler with coal or bagasse (During off-season of sugar mill). For spent lees, condensate and other effluent: Two stage biological treatment followed by tertiary treatment domestic wastewater (sewage) will be treated in STP.

Power requirement after expansion will be 2.8 MW during season it will be met from in house STG of 3.0 MW capacity. The distillery will require maximum 32 TPH steam, which will be fulfilled from new 32 TPH

incineration boiler after augmenting its capacity appropriately. In case of use of juice or syrup as a feed, steam will be procured from sugar mill boiler of 140 TPH capacity.

Details of process emissions generation and its management:

The carbon dioxide emissions from fermentation process will be separated. CO₂ Recovery Plant takes CO₂ gas from the fermentation process passes through a series of purification processes namely - a stainless steel CO₂ foam trap to separate the gas, a deodorizer. The fully automatic systems carefully treat the CO₂ produced during fermentation.

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

SI No.	Waste	Quantity TPA	Disposal
1	Yeast sludge (dry)	25-30	Mixed into soil due to organic nature
2	Ash - total (considering coal and spent-wash)	22620	Sold to brick manufacturing units
3	Distillery CPU Sludge	150-170	Mixed into soil due to organic nature
4	Spent oil from DG	2-5 KL	Spent oil is burnt in boiler

During deliberations EAC sought the following information/commitments from PP:

- Entire sugar and distillery project shall be ZLD and no single drop of water shall be discharged outside of plant premises. The sugar and distillery unit shall be integrated.
- Biocomposting shall not be allowed.
- PP shall install CO₂ bottling plant within premises.
- PP shall use bagasse/agro-fuel as a primary fuel of boiler. Only in case of emergency or shortage of bagasse, PP shall use low sulphur coal with maximum sulphur content of 0.5%.
- PP shall meet 10% (500 KW) of the total power requirement from solar power.
- PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety.
- PP shall utilize fresh water 3.0 KL/KL ethanol.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall also make necessary provisions of ash silo for its safe storage before utilization.
- The proposed budget allocation of Rs. 1.5 Crores towards CER and shall be used for construction/up-gradation for adopting three public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan

shall be implemented in consultation with District Collector before the commissioning of project.

PP has submitted the desired information as sought above.

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 EIA/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 EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

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

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the

Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

- (ii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iii). Total Fresh water requirement shall not exceed @ 3.0 KL/KL and will be met from Krishna River. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (iv). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed in grain based mode and in molasses based mode, spent wash shall be dried and incinerated. Sugar factory and distillery unit shall be treated as an integrated complex and no form of composting shall be done. PP shall meet 10% (500 KW) of the total power requirement from solar power. PP shall use bagasse/agro-fuel as a primary fuel of boiler. Only in case of emergency or shortage of bagasse, PP shall use low sulphur coal with maximum sulphur content of 0.5%. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall also make necessary provisions of ash silo for its safe storage before utilization.
- (v). CO₂ bottling plant shall be installed within plant premises.
- (vi). 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.
- (vii). 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.
- (viii). 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.
- (ix). 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.

- (x). 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.
- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, 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.
- (xii). The proposed budget allocation of Rs. 1.5 Crores towards CER shall be used for construction/up-gradation for adopting three public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.
- (xiii). 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.
- (xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xv). 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.
- (xvi). 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. 51.9

Proposed 45 KLPD Grain Based Distillery by M/s. Siddharth Bio-Products Pvt. Ltd. located at Survey No. 123/1, Waghwade-Village, Taluka and District Belagavi, Karnataka - Consideration of Environment Clearance.

[IA/KA/IND2/250991/2022, J-11011/13/2022-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 45 KLPD Grain Based Distillery by M/s. Siddharth Bio-Products Pvt. Ltd. located at Survey No. 123/1, Waghwade- Village, Taluka and District Belagavi, Karnataka.

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.

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

The details of products and capacity are as under:

Sr. No.	Particulates	Capacity
1.	Ethanol	45 KLPD
2.	Captive power plant	1.2 MW

The land area available for the project is 24900 m². Industry will develop greenbelt in an area of 33 % i.e., 8200 m² out of total area of the project. The estimated project cost is Rs. 55.22 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 1.80 Cr. and the recurring cost (operation and maintenance) will be about Rs. 21.0 lakhs per annum. Total employment will be 117 persons as direct & indirect (Construction & Operation Phase). Industry proposes to allocate Rs. 1.10 Cr. @ 2.0% of Total Project Cost (Rs. 55.22 Cr.) towards Corporate Environment Responsibility.

There are No national parks, wildlife sanctuaries, biosphere reserves, Tiger / Elephant reserves, Wildlife Corridors etc., within 10 km distance from the project site. River/ water body Malaprabha is flowing at a distance of 7 km in SW direction.

Total water requirement is 396 m³/day of which fresh water requirement of 200 m³/day will be met from surface water (Santi Bastwad Barrage). Total effluent of quantity 196.7 CMD will be treated through CPU of capacity 250 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 1.17 MW and will be met from own captive power plant. Proposed unit will have 500 kVAx1. DG set will be used only as standby during power failures. Stack height >11 m will be provided as per CPCB norms to the proposed DG set. Proposed 15 TPH with 1.5 MW TG. Electrostatic precipitator with 40 m stack will be installed for proposed boiler.

Details of process emissions generation and its management:

Project Activity	Anticipated pollutant	Management
Process emissions	CO ₂ and Negligible VOCs	CO ₂ shall not be release in the air. Industry will provide CO ₂ scrubber to scrub CO ₂ and bottle it.
Stack, fugitive emissions, material handling.	PM ₁₀ , PM _{2.5} , NO _x and SO ₂ .	15 TPH with 40 m stack height, Electro Static Precipitator used as APC equipment.

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

Sr. No.	Type of waste	Quantity	Final Disposal
1.	Coal ash	12.8 TPD	Sold to brick manufacturers
2.	Rice husk ash	27 TPD	Ash will be used as manure
3.	CPU Sludge	0.45 TPD	Used as manure.
4.	Spent oil	0.375 KLA	Authorized recycler
5.	DDGS	30 TPD	Sold to cattle feed

As per the 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 45 KLPD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- 15% of the total plant area will be reserved for parking.
- PP shall allocate at least Rs. 30 Lakhs/annum for Occupational Health Safety.
- PP shall utilize fresh water 3.0 KL/KL ethanol.
- Entire project shall be ZLD and no single drop of water shall be discharged outside of plant 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.
- PP shall meet 10% of the total power requirement from solar power.
- PP shall use bagasse/rice husk as a fuel of boiler. Only in case of emergency or shortage of bagasse/rice husk, PP shall use low sulphur coal with maximum sulphur content of 0.5%.
- Incineration boiler ash shall be used for briquetting.
- PP shall install CO₂ bottling plant within premises.
- ESP shall be installed with the boiler.
- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- The proposed budget allocation of Rs. 1.10 Crores towards CER shall be used for construction/up-gradation for adopting two public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

PP has submitted the desired information as sought above.

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 45 KLPD shall be 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 @3.0 KL/KL and will be met from surface water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. 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. Incineration boiler ash shall be used for briquetting. ESP shall be installed with the boiler. PP shall use bagasse/rice husk as a fuel of boiler. Only in case of emergency or shortage of bagasse/rice husk, PP shall use low sulphur coal with

maximum sulphur content of 0.5%. PP shall meet 10% of the total power requirement from solar power.

- (vii). CO₂ bottling plant shall be installed within plant premises.
- (viii). PP shall allocate at least Rs. 30 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (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, 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.
- (xiv). The proposed budget allocation of Rs. 1.10 Crores towards CER shall be used for construction/up-gradation for adopting two public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.
- (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.

- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.10

Proposed establishment of grain based ethanol distillery of capacity 60 KLD along with co gen power plant – 2.0 MW at village- Jainpur Kadrabad, tehsil – Aonla, distt – Bareilly (U.P) by M/s Aonla Distilleries Private Limited. - consideration of environment clearance

[IA/UP/IND2/256562/2022, J-11011/58/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Environmental and Technical Research Centre., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed establishment of grain based ethanol distillery of capacity 60 KLD along with co gen power plant – 2.0 MW at village- Jainpur Kadrabad, tehsil – Aonla, distt – Bareilly (U.P) by M/s Aonla Distilleries Private Limited.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16th June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR & conducting Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

Sr.No.	Product Details	Quantity
1	Ethanol	60 KLD
2	Co-Gen Power	2 MW

Proposed land area is 5.006 hectares, which is already under the possession of M/s Aonla Distilleries Private Limited. Industry will develop greenbelt in an area of 33 % i.e., 1.66 hectares out of total area of the project.

The estimated project cost is Rs 7930 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 1468 Lakh and the Recurring cost (operation and maintenance) will be about Rs 200 Lakh per annum. Total Employment will be 125 persons as direct & indirect. Industry proposes to allocate Rs 160 lakhs towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body Ramganga flowing at a distance of 2.0 Km in the North direction.

Total water requirement for the Grain based Ethanol Plant will be 1017 KLPD out of which 671 KLPD will be recycled in plant operations. Hence, the fresh water requirement for the project will be 346 KLPD, which will be met from ground water. Spent Wash (Slops) generation from Distillation, will be sent through separation of suspended solids in Decanter Centrifuge, part Thin Slops are concentrated in multi-effect evaporators to form a Thick (Protein) Syrup, which is mixed with the Wet Cake DWG separated earlier from Decanters. This interim product called DWGS has 30-32% w/w Solids is subject to drying in a rotating steam tube bundle dryer to deliver a value-added by-product – DDGS – Distillers Dried Grains with soluble and which has min. 90% Solids and max 10% moisture. This DDGS sells as Cattle Feed / Poultry Feed / Fish Feed based on its Protein Content. Hence, entire spent wash is decanted, concentrated into syrup in a Multi-Effect Evaporation followed by Drying, in order to achieve Zero Effluent Discharge. Effluent of 355 KLPD quantity will be treated through state of art CPU/Effluent Treatment Plant of 600 KLPD capacity (Anaerobic, aerobic, Filters, & RO system). The plant will be based on Zero Liquid discharge system.

Power requirement for proposed project will be 1800 KWH (maximum) will be met from Co-generation power plant of 2 MW. Unit has proposed 1 no of boiler of capacity 20 TPH. Electro Static Precipitator (ESP) with a stack of height of 65 m will be installed for controlling the particulate

emissions within the statutory limit of 50 mg/Nm³ for the proposed boilers.

Details of process emissions generation and its management:

- ESP with a stack height of 65 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 generated (30 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

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

Waste	Quantity	Uses / Disposal
Total Ash	3.0 MT/Day	Fly Ash generated from the boiler will utilised in brick manufacturing unit.
Condensate polishing unit sludge	1.0 KLD	Used as manure.
Cattle Feed DDGS	32.0 MT/Day	Will be sold as cattle feed.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 60 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations, EAC sought the following information/commitments from PP:

- Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- Fresh water requirement shall not exceed 4 kL fresh water consumed/kL production of Ethanol. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos. Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- Industry shall install CO₂ plant for efficient collection of CO₂
- PP shall allocate at least Rs. 50 Lakhs per annum for Occupational Health Safety.
- The proposed budget of Rs. 1.60 Crores towards CER shall be spent on upgrading infrastructure of public schools in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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 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 OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 60 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project
- (iii). 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. Industry shall install solar power of at least 10% of its total power requirement within the plant/nearby villages as a part of EMP.
- (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). Total Fresh water requirement shall not exceed 4 kL fresh water consumed/kL production of Ethanol which will be sourced from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage facility 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. Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos. Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- (vii). Industry shall install CO₂ plant premises for efficient collection of CO₂ generated during fermentation.
- (viii). PP proposed to allocate 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 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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.
- (xiv). PP proposed to allocate Rs. 1.60 Crores towards CER which shall be spent on upgrading infrastructure of public schools in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.11

Establishment of 105 KLPD Molasses (B & C heavy) /Cane juice based Distillery unit with 2 MW CPP by M/S APRO Biofuels Pvt. Ltd. - Consideration of Environment Clearance

[IA/MH/IND2/211352/2021, J-11011/191/2021-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 proposed establishment of 105 KLPD Molasses (B & C heavy) /Cane juice based Distillery unit with 2 MW CPP by APRO Biofuels Pvt. Ltd.

All Molasses based distilleries having capacity more than 100 KLPD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC). It was informed that no litigation is pending against the proposal.

The Standard ToR has been issued by Ministry vide letter No. IA-J-11011/191/2021-IA-II(I) dated 13th May 2021. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 29.10.2021 presided by Additional District Magistrate, Satara at the project site. The main issues raised during the public hearing are related to Air & Water Pollution, Distance Criteria, etc.

The details of products and capacity are as under:

Industrial Unit	Description	Quantity
Distillery (Proposed 105 KLPD)	Product	
	Rectified Spirit/ Ethanol/ ENA	3,150 KL/M
	By-product	
	Carbon Di-oxide (CO ₂) Gas	2,610 MT/M
	Fusel Oil (0.2%)	6 KL/M
	Spentwash Dry Powder	1,950 MT/M

Total plot land area is 47,700 m². Proposed Distillery Built- up is 14,200 m². After establishment of distillery, Industry will develop the Green Belt area would be 15,800 m² which accounts for 33% of total plot area.

The estimated proposed project cost is Rs. 108 Crores. The distillery will be operated for 330 days. Total capital cost earmarked towards environmental pollution control measures under distillery is Rs. 17.87 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.54 Crores per annum. Total Employment under proposed project would be 90 persons as direct as well as indirect after establishment of projects. Industry proposes to allocate Rs. 1.7 Crores @ of 1.5% towards Corporate Environmental Responsibility.

There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 Km Study Area. River Krishna is flowing at a distance of 2.4 Km at West, River Koyna at 8.5 Km at South-West.

Ambient air quality monitoring was carried out at 8 locations during January – February- March 2021 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (52.30–69.20 µg/m³), PM_{2.5} (16.20 –29.10 µg/m³), SO₂ (10.70– 25.70 µg/m³) and NO_x (12.20 – 30.80 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the establishment project would be 1.59 µg/m³ PM₁₀ (towards North East side), 0.391 µg/m³ PM_{2.5} (towards North East side), 3.86 SO₂ µg/m³ (towards North East side) and 2.66 µg/m³ NO_x (towards North East side). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement for Distillery project will be 1,223 CMD. Out of which,136 CMD fresh water will be met from Tembu Jal Sinchna Yojna while 1008 CMD will be CPU treated effluent and 79 CMD will be harvested rainwater. The effluent generated from 105 KLPD molasses distillery would be in the form of raw spentwash to the tune of 840 M³/Day. Here, raw spentwash shall be concentration in Multiple (Five) Effect Evaporator (MEE). Concentrated spentwash to the tune of 183 M³/Day (1.7 KL/KL of alcohol against norm of 8 KL/KL of alcohol) shall be dried in ATFD to form powder. Other effluent generated from distillery in the form of boiler & cooling blowdown, condensate, lab-washing & DM backwash 1,029 M³/Day will be treated in Condensate Polishing Unit (CPU). Treated effluent will be fully recycled in process to achieve ZLD. Domestic effluent generated after establishment of distillery unit will be 4 CMD; shall be treated in proposed Sewage Treatment Plant of 5 CMD capacity.

Power requirement for proposed distillery will be 1.5 MW will be procured from boiler turbine. One DG set of 500 KVA capacity will be installed in proposed distillery as standby during power failure. Stack of height 7 M ARL is provided as per CPCB norms to the DG sets. New boiler will be installed under proposed distillery unit, since steam required will be taken from proposed 30 TPH boiler. ESP is provided with a stack of height of 60 M resp. for controlling the particulate emissions within the statutory limit of 115 mg/Nm³

Details of process emissions generation and its management: The CO₂ generation shall take place in fermenters of the distillery. CO₂ to the tune of 87 MT/Day shall be released from 105 KLPD distillery plant. CO₂ shall be bottled and supplied to manufacturers of beverages.

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

Details of Solid waste generated & its management

No.	Unit	Waste Type	Quantity (MT/M)	Disposal
1.	Distillery	Yeast Sludge	720	Used as manure
		CPU Sludge	30	
		Boiler Ash	240	Brick/Cement Industry/Manure

Details of Hazardous waste generated & its management

No	Industrial Unit	Category	Quantity	Disposal
1	Distillery Unit	Cat.5.1 : Spent Oil	0.8 MT/Yr.	Forwarded to authorized re-processor
		Cat. 33.3 : Cotton Waste	0.3 MT/Yr.	
		Cat. 33.1 : Empty Containers	30 Nos. / Yr.	Forwarded to authorized re-seller

During the deliberations, EAC sought the following information/commitments from PP:

- Proposed stack height to the boiler shall be increased to 75 m.
- Ash generated after bagasse combustion will be stored in silos and shall be sold as manure. Spentwash powder generated after concentration shall be sold in palletized form.
- Industry shall install CO₂ plant for efficient collection of CO₂
- The proposed budget towards CER shall be increased to Rs. 2.00 Crores which shall be spent on installation of solar power and for providing drinking water facilities within nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iii). Total fresh water requirement shall not exceed 136 KLPD which will be met from Tembu Jal Sinchna Yojna. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises.
- (iv). Raw spentwash shall be concentration in MEE followed by drying in ATFD to form powder. Ash generated after bagasse combustion will be stored in silos and shall be sold as manure. Spentwash powder

generated after concentration shall be sold in palletized form. Proposed stack height to the boiler shall be increased to 75 m.

- (v). Industry shall install CO₂ plant premises for efficient collection of CO₂ generated during fermentation.
- (vi). 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.
- (vii). 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.
- (viii). 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.
- (ix). 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.
- (x). 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.
- (xi). The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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.
- (xii). PP proposed to allocate Rs. 2.00 Crores which shall be spent on installation of solar power and for providing drinking water facilities within nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xiii). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.

- (xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xv). 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.
- (xvi). 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. 51.12

Expansion of Grain / Molasses based Distillery from 65 to 180 KLPD & CPP from 1.4 to 5.4 MW by M/s. Karthik Agro Industries Pvt. Ltd., (KA IPL) located at SY No 92 Hoolageri Village, Tal. Badami, Dist. Bagalkote, Karnataka – Re-consideration of Environment Clearance.

[IA/KA/IND2/191585/2021, J-11011/224/2008-IA II (I)]

The proposal was earlier placed before the EAC (Ind-2) in its 47th meeting held on 23th December, 2021 wherein EAC deferred the proposal.

Information desired by the EAC and responses submitted by the project proponent is as under:

S. No	ADS	Reply of PP	Observation of EAC
1.	PP shall submit revised air quality emission data from certified/accredited laboratory.	PP has submitted revised AQ data from certified / accredited laboratory.	EAC deliberated the issue and found it satisfactory.
2.	PP shall submit instrument list used for pollutant measurement of air.	PP has submitted instrument list used for pollutant measurement of air.	
3.	Surface water permission submitted by PP is not clear, hence, PP shall clarify source of water throughout the year.	PP has clarified source of water throughout the year.	

4.	PP shall submit revised water balance reducing the fresh water requirement @ 4.0 KL/KL.	PP has submitted revised water balance reducing fresh water requirement.	
----	---	--	--

Again, the case has been placed in 51st EAC meeting held during 23rd - 25th February, 2022 for re-consideration.

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 Expansion of Grain / Molasses based Distillery from 65 to 180 KLPD & CPP from 1.4 to 5.4 MW by M/s. Karthik Agro Industries Pvt. Ltd., (KAIPL) located at SY No 92 Hoolageri Village, Tal.: Badami, Dist.: Bagalkote, Karnataka.

As per the provisions of "EIA Notification No. S.O. 1533 (E)" dated 14.09.2006; as amended vide Notification No. "S.O. 1960 (E)" dated 13.06.2019; the proposed Expansion of Grain / Molasses based Distillery from 65 to 180 KLPD activity at 5(g) under Category 'A' & is being appraised at Center Level by EAC of MoEFCC.

The Standard ToRs has been issued by Ministry vide letter No. J-11011/224/2008-IA II (I) dated 22nd January, 2021 for Expansion of Grain / Molasses based Distillery from 65 to 180 KLPD & CPP from 1.4 to 5.4 MW. Public Hearing for the proposed project has been conducted by the Karnataka State Pollution Control Board on 21.09.2021 at Project Site of Karthik Agro Industries Pvt. Ltd (KAIPL), Bagalkot and chaired by Additional Deputy Commissioner, Bagalkot. No any specific issues were raised during the Public Hearing. It was informed that no litigation is pending against the project.

Ministry has issued EC earlier vide letter No. J-11011/224/2008-IA II (I) dated 17th March, 2009 to the Establishment of 65 KLPD Grain/ Molasses based Distillery in favor of Karthik Agro Industries Pvt. Ltd. (KAIPL).

Details of Certified compliance report submitted by IRO, MoEF&CC. Visit of IRO, MoEFCC, Bangalore was conducted on 04.08.2021 and IRO report was received on 07.09.2021. The compliance to the various conditions of Environment Clearance is Satisfactory. Certified Compliance Report is found satisfactory by the EAC and recommended the proposal.

The details of products and capacity are as under:

Industrial Unit	Products & By-products	Units	Quantities		
			Existing	Proposed	Total

Distillery (65 to 180 KLPD)	Rectified Spirit/ ENA/ Ethanol/ Absolute Alcohol (AA)	KL/M	1,950	3,450	5,400
	By-product				
	DWGS	MT/M	6,540	11,460	18,000
	DDGS (10% Moisture)	MT/M	--	6,000	6,000
	Fusel Oil	MT/M	3.6	6.6	10.2
	CO2	MT/M	1,620	2,880	4,500
CPP (1.4 to 5.4 MW)	Electricity	MW	1.4	4.0	5.4

Existing land area is 1,61,874 M². No additional land area will be acquired for expansion project. Industry has already developed Green Belt in an area of 64,000 M² (40% of total plot area). The estimated project cost is Rs. 164.5 Crores including existing investment of Rs. 48 Crores. Total capital cost earmarked towards environmental pollution control measures under distillery is Rs. 79.05 Crores and the Recurring cost (operation and maintenance) will be about Rs. 8.20 Crores per annum. Total Employment is 197 persons as direct & indirect persons after expansion. Industry proposes to allocate Rs.1.5 Crores @ of 1.3% towards Corporate Environmental Responsibility.

There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 Km Study Area. Ghatprabha river is flowing at a distance of 8 Km from East to West direction.

Ambient air quality monitoring was carried out at 8 locations during October 2020 – November 2020 – December 2020 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (44.60 – 65.90 µg/M³), PM_{2.5} (13.20 – 22.60 µg/M³), SO₂ (11.70 – 26.20 µg/M³) and NO_x (18.80 – 30.90 µg/M³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs would be 0.338 µg/M³ for PM₁₀ (towards West side), 0.086 µg/m³ for PM_{2.5} (towards West side), 3.05 for SO₂ µg/m³ (towards West side) and 0.714 µg/m³ NO_x(towards West side). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement after expansion of Molasses based Distillery will be 2218 CMD. Out of which 687 CMD will be fresh water taken from Ghatprabha River. Total water requirement after expansion of Grain based Distillery will be 2104 CMD. Out of which 896 CMD will be fresh water taken from Ghatprabha River. After expansion of Grain based Distillery, process effluent generated in the form of FOC, PRC RC Lees – 590 M³/D, Condensate – 425 M³/D & Other effluent to the tune of 142 M³/D which will be treated in existing & proposed CPUs & recycled in process. After expansion of Molasses based Distillery, process effluent generated in the form of raw spent wash to the tune of 1,440 M³/D which

would be concentrated in Multiple Effect Evaporator (MEE) and the conc. Spent wash @ 288 MT/D (1.6 KL/KL of alcohol) would be blended with bagasse or coal and burnt in proposed 40 TPH incineration boiler. Other effluents viz. spent lees @ 285 M³/D, MEE condensate @ 1152 M³/D and other effluents @ 142 M³/D will be treated in existing & proposed CPUs. Treated effluent from CPU will be reused in process and boiler makeup, thereby achieving Zero Liquid Discharge (ZLD) for Distillery. Domestic effluent @ 8 M³/Day will be treated in proposed STP. The distillery will be operated for 330 days.

Power requirement for distillery after expansion will be 3.7 MW will be met from own Co-gen Plant. After Expansion no DG set will be installed. Existing unit has 500 KVA DG set with 2.1 M stack height. Existing Distillery has one 16 TPH Boiler which is already installed. M.D.C. (Mechanical Dust Collector) with a stack of height of 47 M is installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the boiler. After expansion, under Molasses based Distillery a new incineration boiler of 40 TPH capacity would be installed. Bagasse (400 MT/D) / Coal (166 MT/D) & Spent wash (388 MT/D) would be used as fuel. ESP with a stack of height of 100 M installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the boiler. Under Grain based Operations a 50 TPH Husk (225 MT/D) / Bagasse (500 MT/D) would be used as fuel. ESP with a stack of height of 61 M installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the boiler.

Details of process emissions generation and its management:

The CO₂ generation shall take place in fermenters of the distillery. CO₂ to the tune of 150 MT/Day shall be released from 180 KLPD distillery plant. CO₂ shall be compressed, bottled and supplied to manufacturers of beverages.

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

Details of Solid waste generated & its management

No.	Description	Quantity (MT/D)		Disposal Facility
		Existing	After Expansion	
1	Boiler Ash	29	81	To Bricks Making
2	Yeast Sludge	14	39	Burnt in Incineration Boiler
3	CPU Sludge	1	1	

Details of Hazardous waste generated & its management

No any hazardous waste will be generated from distillery unit.

During deliberations EAC sought the following information/commitments from PP:

- (i). Brick manufacturing unit will be installed within the plant premises for utilization of coal fly ash. Bagasse/rice husk ash shall be stored in dedicated silos before being supplied to farmers for use as manure.
- (ii). PP shall use bagasse/rice husk as a fuel of boiler. Only in case of emergency or shortage of bagasse/rice husk, PP shall use low sulphur coal with maximum sulphur content of 0.5%.
- (iii). PP shall install CO₂ bottling plant within premises.
- (iv). PP shall meet 10% (1 MW) of the total power requirement from solar power.
- (v). ESP shall be installed with the boiler.
- (vi). The proposed 40 TPH incineration boiler shall be provided with ESP & stack height shall be increased to 100 m.
- (vii). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety.
- (viii). The proposed budget allocation of Rs. 2.0 Crores towards CER. An amount of Rs. 1.0 Crore shall be used for construction/up-gradation for adopting two public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Remaining amount of Rs. 1.0 Crore shall be used for solar photovoltaic electricity generation systems for nearby villages. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

PP has submitted the desired commitments/information sought above in the form of undertaking except for point (vii) which is imposed as specific condition.

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 EIA/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 EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The

Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iii). Total fresh water requirement shall not exceed @ 3.5 Kl/Kl and will be met from Ghatprabha River. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. 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.
- (iv). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed in grain based mode and in molasses based mode, spent wash shall be dried and incinerated. ESP shall be installed with

the boiler. Brick manufacturing unit will be installed within the plant premises for utilization of coal fly ash. Bagasse/rice husk ash shall be stored in dedicated silos before being supplied to farmers for use as manure. PP shall use bagasse/rice husk as a fuel of boiler. Only in case of emergency or shortage of bagasse/rice husk, PP shall use low sulphur coal with maximum sulphur content of 0.5%. PP shall meet 10% (1 MW) of the total power requirement from solar power. The proposed 40 TPH incineration boiler shall be provided with ESP & stack height shall be increased to 100 m.

- (v). CO₂ bottling plant shall be installed within plant premises.
- (vi). 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.
- (vii). 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.
- (viii). 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.
- (ix). 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.
- (x). 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.
- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, 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.
- (xii). The proposed budget allocation of Rs. 2.0 Crores towards CER. An amount of Rs. 1.0 Crore shall be used for construction/up-gradation for adopting two public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc. Remaining amount of Rs.

1.0 Crore shall be used for solar photovoltaic electricity generation systems for nearby villages. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

- (xiii). 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.
- (xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xv). 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.
- (xvi). 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. 51.13

Expansion of Grain Based Distillery from 100KLD to 600 KLD & Cogeneration Power Plant of 40MW, Ferozpur, Punjab by M/s Malbros International Private Limited, - Amendment of Environment Clearance

[IA/PB/IND2/251904/2022, J-11011/228/2015-IA II (I)]

The proposal is for amendment in the Environmental Clearance granted by Ministry vide letter number- J-11011/228/2015-IA II (I) dated 15.01.2018 for Expansion of Grain Based Distillery from 100KLD to 600KLD & Installation of Co-generation Power Plant of 40MW located at Village- Mansoorwal, Tehsil- Zira, District- Ferozpur, Punjab in the favor of M/s Malbros International Private Limited.

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

S. No.	Particulars	Detail as per EC Granted	Proposal for Amendment in EC	Justification for amendment
1.	Grain Based Ethanol/ENA/RS/Industrial Alcohol plant	100 KLPD To 600 KLPD(Addition of 500 KLPD) (2X250 KLPD)	Addition of 11.63 acres of land area to increase in the plant area from 36.5 acres to 48.13 acres.	For using the same for storage of raw material and development of additional green belt
2.	Co-generation power plant	40 MW (2X20MW)		
3.	CO2 Plant	225 TPD (2X112.5 TPD)		
4.	DDGS/Cattle Feed/Poultry Feed	300 TPD (2X150 TPD)		

S. No.	Particulars	Detail as per EC Granted	Additional detail for Amendment in EC	Detail after amendment
GENERALS				
1.	Land Area in acre	36.5	11.63	48.13
2.	Cost of the project	Rs 583.0 Cr.	Rs 6.39 Cr.	Rs 589.39 Cr.
Grain Based Distillery				

3.	Grain Based Ethanol/ENA/RS/Industrial Alcohol plant	100 KLPD To 600 KLPD, Addition of 500 KLPD (2X250 KLPD)	No Change	500 KLPD (2X250 KLPD)
4.	Co-generation power plant	40 MW (2X20MW)	No Change	40 MW (2X20MW)
5.	CO2 Plant	225 TPD (2X112.5 TPD)	No Change	225 TPD (2X112.5 TPD)
6.	DDGS/Cattle Feed/Poultry Feed	300 TPD (2X150 TPD)	No Change	300 TPD (2X150 TPD)

During deliberations PP has informed that proposed land area to be added is located adjoining to the existing Industry. Further, EAC sought the following information/commitments from PP:

- Green belt shall be developed in 33% of the total land area of 48.13 acres.
- Raw material shall be stored in covered sheds.
- Rainwater harvesting shall be provided in additional land area proposed by constructing a pond for storage of rain water.

PP has submitted the desired commitments/information sought above in the form of undertaking.

After details deliberations, EAC found the justifications satisfactory and **recommended** the amendments in EC, as proposed by the project proponent, with all other terms and conditions remain unchanged.

25th February, 2022 (Friday)

Agenda No. 51.14

Onshore Oil and Gas Development drilling in contract area AA/ONDSF/UMATARA/2018 located in Assam Shelf for two block i.e. Umatara and South Rajgarh', of District- Dibrugah and

Charaideo, Assam by M/s. Indian Oil Corporation Limited - Consideration of Environment Clearance.

[IA/AS/IND2/252318/2020, J-11011/318/2020-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Mantec Consultants 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 Onshore Oil and Gas Development drilling in contract area AA/ONDSF/UMATARA/2018 located in Assam Shelf for two block i.e. Umatarara and South Rajgarh', of District- Dibrugah and Charaideo, Assam by M/s. Indian Oil Corporation Limited.

All Offshore and onshore oil and gas exploration, development & production proposals are listed at S.N. 1(b)of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

Standard ToR has been issued by Ministry vide letter No. IA-J 11011/318/2020-IA.II(I) dated 16.12.2020. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 7.10.2021 for district Sibsagar & 23.11.2021 for district Dibrugarh Chaired by Additional Deputy Commissioner Charaideo & Additional Deputy Commissioner Dibrugarh respectively. The main issues raised during the public hearing are related to 1. the abandoned drill sites which are left without protective measures pose threat to human life & animals 2. Mentioned about the incident of Baghjan blast & fire in May 2020 3. Regarding employment generation 4. Impact on environment due to drilling activities 5. Mentioned regarding CSR activities.

The details of products and capacity are as under:

Block	Estimated In place resource (MMbbl)-Base case	Estimated In place resource (MMbbl)-Upside	Estimated Total (Base case + Upside) resources (MMbbl)
Umatarara	7.84	7.26	15.10
South Rajgarh	5.46	1.28	6.74
Total	13.30	8.54	21.84

Proposed well co-ordinates to be drilled in block AA/ONDSF/UMATARA/2018:

Wells	Latitude	Longitude	Location	Production Capacity
UTR-IOCL-1	27° 13' 33.9736" N	95° 16' 2.4524" E	Chamaguri Village, Naharkatia	441 bbl/day
SRJ-IOCL-1	27° 07' 46.0000" N	95° 07' 48.0000" E	Rohonpothar, Sapekhati	538 bbl/day
UTR-IOCL-2(Tentative)	27° 13' 25.1708" N	95° 15' 22.1543" E	RajgarRangaliPather, Naharkatia	441 bbl/day
UTR-IOCL-4 (Tentative)	27° 14' 10.0784" N	95° 17' 13.6193" E	KawaimariGaon, Naharkatia	441 bbl/day
SRJ-IOCL-2 (tentative)	27° 08' 41.3322" N	95° 08' 29.4171" E	DhowaPather, Tingkhong	538 bbl/day

The Contract Area covers an area of 52.03 Sq. Km and comprises of two parts namely, South Rajgarh and Umatara. As per the MoEF&CC, 33% of the project area must be developed for greenbelt purpose. Most of the activities are sub surface in nature and will not have any impact on the surface surrounding area. However, adequate green belt will be developed nearby the proposed well sites and GWHI area.

The estimated project cost is Rs. 170.18 Cr. The monthly expenditure (operation and maintenance) for environmental pollution control measures will be about 40 lakhs per month. Total Employment will be 68 persons (20 during site preparation & 40 during drilling operations). IOCL proposes to allocate 2 % average net profit towards CSR earned during three immediately preceding financial years Corporate Social Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Disang River is flowing at a distance of 0.53 km in south direction.

Ambient air quality monitoring was carried out at 8 locations during Dec 2020 to Feb 2021 and the baseline data indicates the ranges of concentrations as: PM10 (72-42µg/m³), PM2.5 (43-24µg/m³), SO₂ (18-5 µg/m³) and NO₂ (28-14µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 66.100 µg/m³, 15.60 µg/m³ and 29 µg/m³ with respect to PM10, SO₂ and NO₂. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 25 m³/day of which fresh water requirement of 25 m³/day will be met from Tubewell from local contractor. Effluent of 4.5 KLD quantity will be treated through Effluent Treatment Plant. The plant will be based on Zero Liquid discharge system.

Diesel generators will be used to generate power to operate the drill rig and for the residential camp. It is estimated that five diesel-engine generators, four DG sets with a capacity of 1430 KVA and one DG set

with the capacity of 250 KVA,. Stack (height 16 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

Atmospheric Emissions: Routine emission to ambient air results from the operation of DG sets to be used for power generation. Generally the testing of the well also results in emission to atmosphere by the way of flaring of produced hydrocarbons. It is to be noted that the Ambient Air Quality Monitoring stations were located at areas where some amount of human and other activities were present. Compared to this, the well sites will be located far from the human settlements and activities, where the parameters are expected to have even lower values. Thus, the contribution of the drilling activities to the overall ambient air quality will be insignificant considering the actual background values.

Practical steps to limit atmospheric emissions are undertaken during all drilling operations and these will be adopted during the drilling program for the proposed exploration wells. These include:

- Advanced planning to ensure efficient operations;
- Well maintained and operated equipment and generators
- Regular monitoring of fuel consumption

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

Description	Sources	Quantity (capacity)
Bio-degradable Waste	- Food waste, - Municipal solid waste	50 kgs/day
Non-Hazardous Waste	Packaging Material – Plastics, Rubber Hoses, Tyres etc.	50 Kgs/day
Hazardous Waste	- Oil Soaked cotton waste - Oil soaked filters - Burnt oil - Effluents	Solid: 30 Kgs/Year Liquid: 100 lts/Year
Electrical & IT Waste	- Electrical Power equipment including transformers, capacitors etc., fused bulbs and tubes, computers	30 Kgs/Year
Battery Waste	Batteries operating on Site	4-5 Nos/Year

Proposed Mitigation:

- Ensure proper documentation and manifestation of all wastes generated.
- Litter and debris not to be discarded at site and to be segregated at a segregation pit on the well site
- No-toxic biodegradable waste to be buried during operations and decommissioning, ensuring that local water resources are not

contaminated in any way.

Action to be taken:

- Pre-operation inspections to ensure waste disposal facilities are in place.
- A segregation pit to have waste types segregated into separate drums at the well site.
- Block Operator to include in tender requirements wherever possible.

During deliberations EAC sought following commitment from PP in the form of undertaking:

- As Disang River is flowing near to the proposed site; at least 500 m distance shall be maintained from the river for the proposed development drilling.
- PP should adhere to guidelines issued by OISD & DGMS related to safety measures.
- PP shall allocate Rs. 1.00 Crores towards CER which shall be spent on upgrading infrastructure of public schools, and installation of solar power of in nearby villages. Further, operational expenditure after completion of up gradation of schools and installation of solar power shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP agreed to the commitment sought above. However no undertaking has been received from the PP. Therefore, the commitments sought are being imposed as specific conditions.

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 EIA/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 EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of Environmental Clearance.

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

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

- (i). As Disang River is flowing near to the proposed site; at least 500 m distance shall be maintained from the river for the proposed development drilling.
- (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). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (iv). The project proponent will treat and reuse the treated water within the drilling site location including at processing location and no waste or treated water shall be discharged outside the premises under any condition. Mobile ETP coupled with RO and mobile STP shall be installed to treat the waste water and sewage waste respectively.
- (v). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using appropriate technology.
- (vi). The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- (vii). Approach road shall be made pucca to minimize generation of suspended dust.

- (viii). The project proponent shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- (ix). The net water requirement shall not exceed 25 KLPD will be met from Tubewell from local contractor. Extraction of ground water shall not be done without obtaining prior permission of CGWA/concerned authority.
- (x). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.
- (xi). Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.
- (xii). Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xiii). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation. PP should adhere to guidelines issued by OISD & DGMS related to safety measures.
- (xiv). The project proponent shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xv). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xvi). On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In

case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations.

- (xvii). PP proposed to allocate Rs. 1.00 Crores towards CER which shall be spent on upgrading infrastructure of public schools, and installation of solar power of in nearby villages. Further, operational expenditure after completion of up gradation of schools and installation of solar power shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xviii). No lead acid batteries shall be utilized in the project/site.
- (xix). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xx). Oil content in the drill cuttings shall be monitored if oil-based mud is used and report shall be sent to the Ministry's Regional Office.
- (xxi). The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

Agenda No. 51.15

Proposed Production Operations in Galiyana #1 well in the Block CB-ONN-2010/11 in an area of 21.10 Sq. km by M/s. Gail (India) Limited located at Survey No. 213, 215 Galiyana Village, Tarapur Taluk, Anand District, Gujarat - Consideration of Environment Clearance.

[IA/GJ/IND2/221473/2019, J-11011/300/2019-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Hubert Enviro Care System (P) 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 Production Operations in Galiyana #1 well in the Block CB-ONN-2010/11 in an area of 21.10 Sq. km by M/s. Gail (India) Limited located at Survey No. 213, 215 Galiyana Village, Tarapur Taluk, Anand District, Gujarat.

All Crude oil projects are listed at S. No. 1(b) - Offshore and onshore oil and gas exploration, development & production of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A', and are appraised by Central Level by Expert Appraisal Committee (EAC).

The ToR has been issued by Ministry vide letter No. IA-J-11011/300/2019-IA II(I), dated 14.11.2019. Public Hearing for the proposed project has been conducted by Gujarat State Pollution Control Board, Dist. Anand vide dated 10.03.2021 at Open Plot Beside Hotel Momai, Vataman Tarapur Highway, Opp. Gujarat Gas Pump, Galiyana and chaired by Resident Additional Collector & Additional District Magistrate, Anand. The main issues raised during the public hearing are related to basic facilities for local public and CSR activities to be carried out in nearby villages. It was informed that no litigation is pending against the project.

Ministry had issued EC earlier vide letter no. J-11011/233/2013-IA II(I) dated 27.10.2015 to the existing project in favour of M/s. GAIL (India) Limited.

Details of Certified compliance report submitted by IRO, MoEF&CC, Gujarat vide letter No. J-11/26-2021-IROG NR dated 17.11.2021 and the compliance of EC recommendations was certified. Status of compliance is fully complied. Certified Compliance Report is found satisfactory by the EAC and recommended the proposal.

The details of products and capacity are as under:

Production Profile:

Year	Oil Rate BBI/Day	Cum Oil BBI	Gas Rate Scf/Day	Cum Gas Scf	Water Rate BBI/Day	Pressure Psi
1	25	9125	1725	629625	0	1791
2	25	18250	1725	1259250	0	1723
3	25	27400	1730	1890600	0	1655
4	21	35156	1466	2425781	2	1592
5	18	41749	1246	2880685	3	1536
6	15	47338	1056	3266294	3	1487
7	13	52101	900	3594960	3	1446
8	11	56150	765	3874326	4	1408
9	9	59591	651	4111878	5	1372
10	8	62524	555	4314182	6	1337

Equipment required for production facility

Sl No	Service	Equipment details	Operating Conditions	Design conditions
------------------	----------------	------------------------------	---------------------------------	------------------------------

1	Sucker Rod Pump (One)	Capacity: 50-75 BOPD	-	-
2	Finned Pipe Heat Exchanger (One)	Duty: 1.6 Kw MOC Pipe: CS; MOC Fin- Aluminum	Press: 1.05 barg Temp: 85 °C	Press: 3.5 barg Temp: 125 °C
3	Storage Tank (one)	Horizontal: 2.8 m x 8.3 m MOC: CS, internals: SS 316	Press: atm Temp: 85 °C	Press: FOW+1500 mm WC Temp: 125 °C
4	Crude Export Pump	Capacity: 250 m ³ /hr; Head: 40 mts MOC: CS	Press: atm Temp: 50 °C	-
5	Fire water tank	Capacity: 36m ³ (vertical) Size: 4.3 mts ID X 4.3 mts length MOC: CS	Press: atm Temp: ambient	Press: FOW+1500 mm WC Temp: 85 °C
6	Fire water pump	Diesel driven, horizontal Capacity: 72m ³ /hr. MOC: CS	Press: 10.5 barg Temp: ambient	-
7	PPD injection package	MOC: SS-304	-	-
8	Evaporation Pond	Existing concrete Raw water tank will be converted.	-	-

Existing land area is 18,243 m² (4.51 Acres). No additional land will be used for proposed expansion. Industry will develop greenbelt in an area of 3% i.e. 547.3 m² out of total area of the project. The estimated project cost is Rs. 5.3 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 132.8 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 4.95 lakhs per annum. Total Employment will be 10 persons as direct and 0 persons as indirect after expansion. Industry proposes to allocate Rs. 4 lakhs on Public Hearing Commitment towards Enterprise Social Commitment.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km radius from the project site. Water bodies: Canal ~0.01 km (S), Sabarmati R

~1.04 km (WNW), Limbasi Branch ~3.0 km (SE), Navido Nadi ~5.50 km (SE), Limbasi Distributary ~7.15 (N), Kenwal Talav ~7.20 km (ESE), Selva Nala ~8.34 km (WSW), Alang Canal ~ 8.6 km (ESE), Rohini Vishakha ~9.75 km (SSE), Chikhliya Vishakha ~9.92 km (ESE), Kenwal Pravishakha ~10.0 km (ESE).

Ambient air quality monitoring was carried out at 8 locations during December 2019 to February 2020 and average baseline data indicates the ranges of concentrations as: PM₁₀ (53.8 – 63.55 µg/m³), PM_{2.5} (31.85 – 38.17 µg/m³), SO₂ (8.72 – 12.14 µg/m³) and NO₂ (17.73 – 24.63 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.07µg/m³, 0.04µg/m³ and 0.38 µg/m³ with respect to PM, SO_x, and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 16 m³/day of which fresh water requirement of 16 m³/day will be met from Private Tankers.

During production operation water will be required only for domestic uses and periodic fire water make-up. Potable and non-potable water for domestic uses will be sourced from third party suppliers about 1 KLD (More than 99% of the Project Life).

During workover operations for well maintenance, water requirement will increase to about 15 KLD [15 KLD requirement is only for initial 7 days of workover operation to make the well production-ready. (Less than 1% of the project life)], which will be sourced from third party suppliers through tankers.

Effluent of 7.2 KLD quantities will be sent to Evaporation Pond and other sludge will be sent to TSDF.

Wastewater treatment and Disposal Management as follows:

Description	Proposed (KLPD)	Treatment
Domestic (During Production Operation)	0.9	Septic tanks and soak pits
Operational Work (Workover Operation that will be done only in the initial 7 days at the beginning of the project.)	7.2	Will be taken to evaporation pit for solar evaporation. Sludge will be sent to TSDF.

Power requirement after expansion will be 1000 kVA including existing 0 KVA and will be met from Grid power supply. Existing unit has 0 No of DG sets capacity is used as standby during power failure. Proposed unit has 2 No of DG sets capacity will be used as standby during power failure. Stacks (height 30 m ARL) will be provided as per CPCB norms.

Details of process emissions generation and its management:

There will be no process emission generation due to the proposed project.

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

Solid Waste (Operation Phase):

Municipal solid waste:

S.No	Waste type	Quantity (kg/day)	Disposal method
1	Organic	2.7	Will be collected and sent to local Municipal Bins
2	Inorganic	1.8	Will be collected and sent to GPCB authorized recyclers

Hazardous Waste Management:

S. No	Hazardous Waste type	Quantity	Method of Disposal
1	5.1 - Used /Spent Oil	2 KLPA	Collected in barrels and sent to GPCB authorized recyclers.
2	33.1-Empty barrels/containers/linerscontaminated with hazardous chemicals/wastes	150 nos./Annum	Sent to GPCB Authorized Recyclers.
3	2.2 – sludge containing oil	2 KLPA	Collected in barrels and sent to GPCB authorized recyclers

During deliberations EAC sought the following information/commitments from PP:

- As canal is passing at a distance of 0.01 km to the proposed site; at least 500 m distance shall be maintained from the river for proposed production operations. Further, no effluent shall be discharged into it.
- PP shall allocate Rs. 25 Lakhs towards CER which shall be spent on installation of RO plant for providing Drinking Water to nearby Villages. Further, operational expenditure after installation of RO

plant shall be met by PP. All works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

PP agreed to the commitment sought above. However no undertaking has been received from the PP. Therefore, the commitments sought are being imposed as specific conditions.

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 EIA/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 EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

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

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

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

- (i). As canal is passing at a distance of 0.01 km to the proposed site; at least 500 m distance shall be maintained from the river for proposed production operations. Further, no effluent shall be discharged into it.
- (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). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (iv). Total fresh water requirement shall not exceed 16 m³/day will be met from Private Tankers. Prior permission shall be obtained from the concerned regulatory authority.
- (v). 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. Mobile ETP coupled with RO shall be installed to reuse the treated water in drilling system. Size of the waste shall be equal to the hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.
- (vi). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (vii). The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- (viii). Approach road shall be made pucca to minimize generation of suspended dust.
- (ix). The project proponent shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- (x). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate

drainage system shall be created for oil contaminated and non-oil contaminated.

- (xi). Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.
- (xii). Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xiii). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xiv). The project proponent shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xv). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xvi). On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations.
- (xvii). PP proposed to allocate Rs. 25 Lakhs towards CER which shall be spent on installation of RO plant for providing Drinking Water to nearby Villages. Further, operational expenditure after installation of RO plant shall be met by PP. All works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

- (xviii). No lead acid batteries shall be utilized in the project/site.
- (xix). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xx). Oil content in the drill cuttings shall be monitored and report & shall sent to the Ministry's Regional Office.
- (xxi). The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

Agenda No. 51.16

Installation of 300 KLPD Grain based Ethanol Plant by M/s. HPCL-Mittal Energy Limited (HMEL) located at Raman Village, Talwandi Sabo Tehsil, Bathinda, Punjab - Consideration of Environment Clearance.

[IA/PB/IND2/251903/2022, J-11011/20/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Engineers India Limited, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Installation of 300 KLPD Grain based Ethanol Plant by M/s. HPCL-Mittal Energy Limited (HMEL) located at Raman Village, Talwandi Sabo Tehsil, Bathinda, Punjab.

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.

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

The details of products and capacity are as under:

S.No.	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1.	Ethanol	-	300 KLD	300 KLD
2.	DDGS	-	252 TPD	252 TPD
3.	CO2	-	228 TPD	228 TPD

Total project area is 9.3 hectares (93000 m²) and the same has been in the possession of M/s. HMEL. The industry will develop greenbelt in an area of 3.19 Ha which is 34.3% of the total project area. The estimated project cost is Rs. 302 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 4 crores and the recurring cost (operation and maintenance) will be about Rs. 0.5 crores per annum. Direct employment will be 101 and indirect will be around 500 during operation phase. HMEL proposes to allocate Rs. 1.5 crores towards Corporate Environment Responsibility (CER).

There are no National Parks, Reserved Forests (RF)/ Protected Forests (PF), Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km radius of the proposed project.

Total fresh water requirement for the Grain based Ethanol Plant will be 1083 KLD. Water demand will be met from adjacent HMEL refinery. Effluent of 816 KLD will be generated which will be treated in the existing Effluent Treatment Plant of adjacent HMEL refinery. The plant will be based on Zero Liquid Discharge system.

Power requirement for the proposed project will be 7 MW and sourced from adjacent HMEL refinery. No boiler is envisaged for the proposed project.

Details of process emissions generation and its management:

CO₂ (228 TPD) generated during the fermentation process will be collected and sold to authorized vendors.

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

Hazardous waste generated from the Ethanol project will be used oil of 5 Tons/annum from plant machinery/gear boxes, which will be sold out to the SPCB authorized recyclers. ETP sludge of 50 Tons/annum will be disposed in Refinery SLF.

As per the 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 300 KLPD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- Entire project shall be ZLD and no single drop of water shall be discharged outside of plant premises.
- PP shall utilize fresh water @3.9 KL/KL of ethanol production.
- 20% of the total plant area will be reserved for parking.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP shall meet 10% (750 KW) of the total power requirement from solar power.
- Industry shall allocate Rs. 2.0 Crores towards CER. An amount of Rs. 1.5 Crores shall be used for construction/up-gradation for adopting three public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc and remaining amount of Rs. 0.5 Crores shall be used for providing solar lights/solar power in nearby villages. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

PP agreed to the commitment sought above. However no undertaking has been received from the PP. Therefore, the commitments sought are being imposed as specific conditions.

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

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 300 KLPD shall be 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 @3.9 KL/KL and will be met from Surface water from adjacent HMEL refinery. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. 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. PP shall meet 10% (750 KW) 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). 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, 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.
- (xiv). The proposed budget allocation Rs. 2.0 Crores towards CER. An amount of Rs. 1.5 Crores shall be used for construction/up-gradation for adopting three public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc and remaining amount of Rs. 0.5 Crores shall be used for providing solar lights/solar power in nearby villages. Further, the works under CER Plan shall be

implemented in consultation with District Collector before the commissioning of project.

- (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, 20% shall be allotted solely for parking purposes.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.17

Expansion of Sugar crushing capacity from 11000 TCD to 15000 TCD, Distillery 150 KLPD to 400 KLPD (C Molasses/B Heavy Molasses/ Juice and Syrup) and Co-generation 13 MW by M/s. Vitthalrao Shinde Sahakari Sakhar Karkhana Limited (VSSSKL) located at Village - Gangamainagar, Post Pimpalner, Tal. Madha, Dist. Solapur, Maharashtra - Consideration of Environment Clearance.

[IA/MH/IND2/252455/2019, J-11011/376/2016-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Paramarsh Servicing Environment and Development, Lucknow 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 Sugar crushing capacity from 11000 TCD to 15000 TCD, Distillery 150 KLPD to 400 KLPD (C Molasses/B Heavy Molasses/ Juice and Syrup) and Co-generation 13 MW by M/s. Vitthalrao Shinde Sahakari Sakhar Karkhana Limited (VSSSKL) located at Village - Gangamainagar, Post Pimpalner, Tal. Madha, Dist. Solapur, Maharashtra.

The project/activities are covered under category A of item 5 (g) 'Distilleries' of the Schedule to the EIA, 2006 and requires appraisal at

central level by the sectoral Expert Appraisal Committee (EAC). The proposal has been submitted under the Ministry's EIA Notification, 2006 amendments vide Notification no. S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750(E) dated 17th February 2020, S.O. 980(E) dated 02nd March, 2021. Accordingly, the proposal has been appraised as category 'B2' project.

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

Ministry had issued EC earlier vide letter No. J-11011/57/2009-IA-II (I) dated 20.11.2019 from MoEF&CC, New Delhi for 60 KLPD to 150 KLPD distillery, Sugar 8500 TCD to 11000 TCD and Cogen Unit 38 MW to 49 MW.

Certified Compliance Report (CCR) was issued by IRO, MoEFCC, Nagpur vide letter No. 1104/RON/2019-NGP/8672 Dated 29th September, 2021. Site visit was carried out on 07.07.2021. Action Taken Report (ATR) was submitted by IRO, MoEFCC Nagpur vide letter No. EC-1104/RON/2019-NGP/9287 on 14th February, 2022. Action Taken Report is found satisfactory by the EAC and recommended the proposal.

The details of products and capacity are as under:

Sr. No.	Description	Unit	Exiting Capacity	Proposed Capacity	Total	Remark
1.	Sugarcane	TCD	11000	4000	15000	Increased from 4000
2.	Distillery	KLPD	150	250	400	Increased from 250
3.	Co-generation unit	MW	49	--	49	No Change
4.	Cogen for proposed distillery	MW	6	7	13	New establishment of Cogen unit for distillery

Existing land area is 636502.00 m² & additional 213498.00 sq.mt land available for proposed expansion. Industry has already developed / will develop greenbelt in an area of 33.28 % i.e., 282887.00 m² out of net plot area of the project. The estimated project cost is Rs. 934.0 including existing investment. Total capital cost earmarked towards environmental pollution control measures for existing & proposed unit is Rs. 95.2 Crores and the Recurring cost (operation and maintenance) will be about Rs. 85.55 Crores per annum. Total Employment for proposed expansion unit will be 678 persons as direct & 500-1000 persons indirect after expansion. Industry proposes to allocate Rs. 9.34 crores @ 1 % towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body Ujani Dam: 8 km in North West Direction, Nimgaon Talav: 2.2 km in North East Direction Saptane Talav: 3.1 km in South West Direction.

Total water requirement is max 5600 m³/day of which fresh water requirement of max 779m³/day will be met from (Ujjani Dam Management Water Division, Bhimanagar. Effluent of quantity 4000 m³/d (Raw Spent wash – max 1070 + Process Condensate – max 2930 + spentleese- 800 m³/day) spent wash will be concentration in MEE followed by incineration boiler and Process condensate will be treated in Condensate Polishing Unit. The plant will be based on Zero Liquid Discharge system.

Power requirement for distillery will be 13 MW including existing 49 MW and will be met from power generation from existing 49 MW Cogeneration unit and new establishment of 13 MW Cogen unit for distillery. Existing unit has not DG set. Stack (height --m.) will be provided as per CPCB norms to the proposed DG sets. Existing distillery unit 5 nos. of Boilers with capacity 40 TPHx2 nos., 70 TPH, 150 TPH and 40 TPH. Additionally for 70 TPH Concentrated spent wash & bagasse fired incineration boiler will be installed. Electrostatic precipitator (ESP) with a stack of height of 65 m will be installed proposed 70 TPH incineration boiler for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed boilers.

Details of process emissions generation and its management:

Air pollution control measures

Sr. No	Source	Fuel	Pollutant	Control Equipment
Existing				
1	6 Nos. Existing Boilers with capacity 40 TPH x 2, 70 TPH, 150 TPH, 40 TPH	Bagasse and for 40 TPH Coal, Bagasse, Conc. Spentwash	PM, SO ₂ , NOx	3 nos. of 65 and 2 nos. of 85 m stack height and wet scrubber and ESP as APC Equipment is provided
2	Fermentation Unit	--	CO ₂	CO ₂ Recovery Unit
Proposed				
1	1 No of 70 TPH boiler	Bagasse & Coal, Conc. Spentwash	PM, SO ₂ , NOx	65 m stack height and ESP as APC Equipment is provided

2	D. G. Sets 1 Nos of 380 kVA	HSD	PM & SO ₂	5m Stack Height is provided
3	Fermentation Unit	--	CO ₂	CO ₂ Recovery Unit

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

Solid Waste Management

Sr. No.	Waste	Quantity	Treatment	Disposal
1.	Canteen	28 kg/day	Compost	Used as manure in own factory premises
2.	Garden Trash	120 kg/day	Compost	Used as manure in own factory premises
3.	Office Waste	30 kg/day	Collection	Sales
4.	Boiler Ash	Existing: 49 Proposed: 30 TPD	Collection	Mixed with Pressmud and sold as manure
5.	Press mud	600 TPD	Collection	To farmers
6.	Empty containers, discarded products, packing surplus, etc.	20 Nos./M	Collection	Reuse or sale to vendors

Hazardous Waste Management

Sr. No.	Category	Description of waste	Quantity			Mode of Collection and Disposal
			Existing	Proposed	Total	
1.	5.1	Used Oil (kg/M)	1.9	--	0.75	Shall be collected in Leak Proof Containers and utilized as lubricant for bullock carts.

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 EAC sought the following information/commitments from PP:

- Entire sugar and distillery project shall be ZLD and no single drop of water shall be discharged outside of plant premises. The sugar and distillery unit shall be integrated.
- Biocomposting shall not be allowed.
- PP shall allocate at least Rs. 1.0 Crores/annum for Occupational Health Safety.
- Brick manufacturing unit shall be installed within the plant premises for utilization of fly ash.
- 35% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- 20% of the total plant area will be reserved for parking. PP shall provide rest rooms, drinking water, toilets and other facilities for the truck drivers within the premises.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP shall install ESP with the proposed boiler.
- PP shall use bagasse/agro-fuel as a primary fuel of boiler. Only in case of emergency or shortage of bagasse/agro-fuel, PP shall use low sulphur coal with maximum sulphur content of 0.5%.
- PP shall utilize fresh water @3.0 KL/KL of ethanol production.
- PP shall meet 10% (1MW) of the total power requirement from solar power.
- Industry shall allocate Rs. 6.0 Crores towards CER of which Rs. 4.0 Crores shall be used for construction of medium Hospital and remaining amount of Rs. 2.0 Crores shall be used for providing solar lights/solar power in nearby villages. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.
- As per, CCR partial compliance was observed for utilisation of funds earmarked for CER. In this regard, unutilised amount of CER mentioned in EC vide letter No. J-11011/57/2009-IA-II (I) dated 20.11.2019, shall be utilized before the commissioning of expansion.

PP has submitted the desired information as sought above.

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 Notification S.O 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD shall be 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 @3 KL/KL and will be met from Ujjani Dam Management Water Division, Bhimanagar. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Company to 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 in grain based mode and in molasses based mode, spent wash shall be dried and incinerated. Sugar factory and distillery unit shall be treated as an integrated complex and no form of composting shall be done. PP shall meet 10% (1 MW) of the total power requirement from solar power. PP shall install ESP with the proposed boiler. PP shall use bagasse/agro-fuel as a primary fuel of boiler. Only in case of emergency or shortage of bagasse/agro-fuel, PP shall use low sulphur coal with maximum sulphur content of 0.5%. Brick manufacturing unit shall be installed within the plant premises for utilization of fly ash.
- (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. 1.0 Crores/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (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 35% of the total project area before commissioning of project, 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.
- (xiv). PP proposed to allocate Rs. 6.0 Crores towards CER of which Rs. 4.0 Crores shall be used for construction of medium Hospital and remaining amount of Rs. 2.0 Crores shall be used for providing solar lights/solar power in nearby villages. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project. As per, CCR partial compliance was observed for utilisation of funds earmarked for CER. In this regard, unutilised amount of CER mentioned in EC vide letter No. J-11011/57/2009-IA-II (I) dated 20.11.2019, shall be utilized before the commissioning of expansion.
- (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, 20% shall be allotted solely for parking purposes.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.18

Expansion of sugar unit from 7,000 to 10,000 TCD and distillery unit from 60 to 135 KLPD by M/s. Dr. Patangrao Kadam Sonhira Sahakari Sakhar Karkhana Ltd. located at Mohanrao Kadamnagar, Post Wangi, Taluka Kadegaon, Dist. Sangli, Maharashtra - Consideration of Environment Clearance.

[IA/MH/IND2/252993/2022, J-11011/101/2015-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Vasantdada Sugar Institute, 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 sugar unit from 7,000 to 10,000 TCD and distillery unit from 60 to 135 KLPD by M/s. Dr. Patangrao Kadam Sonhira Sahakari Sakhar Karkhana Ltd. located at Mohanrao Kadamnagar, Post Wangi, Taluka Kadegaon, Dist. Sangli, Maharashtra.

The project/activities are covered under category A of item 5 (g) 'Distilleries' of the Schedule to the EIA, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC). The proposal has been submitted under the Ministry's EIA Notification, 2006 amendments vide Notification no. S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750(E) dated 17th February 2020, S.O. 980(E) dated 02nd March, 2021. Accordingly, the proposal has been appraised as category 'B2' project.

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

Ministry had issued EC earlier vide letter no. F. No. J-11011/101/2015 – IA II (I); dated 11th April 2017 for the expansion of sugar unit 2,500 to 7,000 TCD, distillery from 30 to 60 KLPD and cogeneration power plant 22 to 34 MW in favor of M/s. Dr. Patangrao Kadam Sonhira Sahakari Sakhar Karkhana Ltd.

Certified Compliance Report (CCR) was issued by IRO, MoEFCC, Nagpur vide letter F. No. EC -1329/RON/2021-NGP/9017 dated 15th December, 2021. Action Taken Report (ATR) was submitted by IRO, MoEFCC Nagpur vide letter no. EC-1329/RON/2021-NGP/9301 dated 15th February, 2022. Action Taken Report is found satisfactory by the EAC and recommended the proposal.

The details of products and capacity are as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
Sugar unit				
1	Cane crushing	7000 TCD	3000 TCD	10000 TCD
2	Sugar (Recovery@12 %)	840 TPD	360 TPD	1200 TPD
3	Bagasse (by-product)	1960 TPD	840 TPD	2800 TPD
4	Molasses 'C' (by-product)	315 TPD	135 TPD	450 TPD
5	Molasses 'B' (by-product)	420 TPD	180 TPD	600 TPD
6	Press mud (by-product)	280 TPD	120 TPD	400 TPD
Distillery unit				
1	Rectified spirit & impure spirit (5%) or ENA& impure spirit (6%) or Fuel alcohol & impure spirit (5%)	60 KLPD	75 KLPD	135 KLPD
2	Fusel oil (by-product)	240 L/day	300 L/day	540 L/day

Total plot area available with project proponent is 93.55 Ha out of which of existing sugar; cogeneration and distillery unit occupies is 8.41 Ha area required for proposed expansion is approximately 1.33 Ha it will be made available from existing available land. Total greenbelt area requirement of i.e. 33 % on total plot area is 30.87 Ha, out of which factory has already developed approximately 20.55 Ha of area and remaining 10.31 Ha is proposed for greenbelt development during expansion. The estimated project cost is Rs. 21089.29 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 5245.00 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 172.00 lakhs per annum. The project will generate direct employment for 74 persons and 35 will be skilled and remaining semiskilled (Existing manpower to be used). Industry proposes to allocate Rs. 158.00 lakhs (0.75% of capital cost for brown field project) towards Corporate Environment Responsibility.

PP has informed that Yashawantrao Chavan Sagarshwar wildlife sanctuary is at 7.5 Km towards south from the project site. As per Ministry's S.O. 3105(E), vide dated 16th November, 2015 the Eco-Sensitive Zone is spread over an area of 3.68 square kilometres with an extent up to 100 metres from the boundary of Sagarshwar Wildlife Sanctuary. Thus, the site is more than 7.4 km from the ESZ of the sanctuary. Considering the same, NBWL clearance is not required for the project. Nearest water body is Chinachani dam is approx. 5.0 Km away from proposed site towards southwest.

Water requirement for sugar unit 300 m³/day and for distillery unit 540 m³/day thus total water requirement for proposed expansion will be 840 m³/day will be met from Chinchani dam. Permission from irrigation department is available with project proponent. For sugar mill effluent and spray pond overflow 2000 m³/day: ETP (Existing ETP will be upgraded). For Sewage 20 m³/day: New STP will be installed. For spent wash: For existing 60 KLPD unit: Raw spentwash of 480 m³/day will be treated through Bio-methanation plant (828 Nm³/hr biogas will be generated) after that composting of 102 m³/day biomethanated spentwash with 102 MT/day pressmud will be done. For new 75 KLPD unit: Raw spentwash of 600 m³/day will be concentrated to 127.23 m³/day in spentwash Evaporation plant (SMEE) and finally it will be incinerated in incineration boiler. For spent lees, condensate and other effluent 567 m³/day: Two stage biological treatment followed by tertiary treatment.

Power requirement for Sugar and cogeneration unit: 14.50 MW Source: Captive for Distillery unit: 2.27 MW for proposed 75 KLPD expansion unit (for existing 60 KLPD power requirement is fulfilled from sugar unit) Source: Captive proposed incineration boiler. There are 3 existing boilers of 115 TPH, 32 TPH, 10 TPH. For Proposed expansion additional 2 Boilers i.e. 80 TPH boiler for Sugar Unit and 32 TPH Incineration boiler for distillery unit will be installed. Existing 10 TPH boiler will be discarded.

Details of process emissions generation and its management:

The carbon dioxide emissions from fermentation process will be separated. It will be sent to bottling unit (On boot basis) after separation.

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

S. No.	Waste	Quantity	Disposal
Sugar unit			
1	Sugar ETP sludge (max.)	0.5 TPD	Utilized as manure
2	Bagasse ash	29.52 TPD	Used as soil enriching material OR Sold to brick manufacturers
3	Spent oil from	20-25 KL/A	Spent is burnt in boiler
Distillery unit			
1	Yeast sludge (dry)	2.0-2.5 TPD	Used as soil enriching material
2	Ash from incineration boiler	43.34 TPD	Sold to brick manufacturing units
3	Distillery CPU Sludge	0.7-0.8	Used as soil enriching material

		TPA	
--	--	-----	--

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 75 KLPD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- Entire sugar and distillery project shall be ZLD and no single drop of water shall be discharged outside of plant premises. The sugar and distillery unit shall be integrated.
- Biocomposting shall not be allowed.
- As per observation made by in CCR, PP shall submit six monthly EC compliance report to the Regional Office of MoEF&CC within the required time period. This condition shall be strictly abided.
- CO₂ bottling plant shall be installed within plant premises.
- PP shall utilize fresh water @3.0 KL/KL of ethanol production.
- PP shall allocate at least Rs. 1.0 Crores/annum for Occupational Health Safety.
- PP shall meet 10% (1.5 MW) of the total power requirement from solar power.
- PP shall install ESP with the proposed boiler.
- PP shall use bagasse/agro-fuel as a primary fuel of boiler. Only in case of emergency or shortage of bagasse/agro-fuel, PP shall use low sulphur coal with maximum sulphur content of 0.5%.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing unit shall be installed within the plant premises for utilization of fly ash. PP shall also provision of ash silo for its safe storage.
- Industry shall allocate Rs. 3.0 Crores towards CER of which Rs. 2.0 Crores shall be used for construction/up-gradation for adopting four public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc and remaining amount of Rs. 1.0 Crores shall be used for providing solar lights/solar power in nearby villages. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Magistrate.
- As per CCR, partial compliance was observed for utilisation of funds earmarked for CER. In this regard, unutilised amount of CER mentioned in EC vide letter No. J-11011/101/2015 –IA II (I); dated 11th April 2017, shall be utilized before the commissioning of expansion.

PP has submitted the desired information as sought above.

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 Notification S.O 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 75 KLPD shall be 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 @3.0 KL/KL and will be met from Chinchani dam. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Company to 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 in grain based mode and in molasses based mode, spent wash shall be dried and incinerated. Sugar factory and distillery unit shall be treated as an integrated complex and no form of composting shall be done. PP shall meet 10% (1.5 MW) of the total power requirement from solar power. PP shall use bagasse/agro-fuel as a primary fuel of boiler. Only in case of emergency or shortage of bagasse, PP shall use low sulphur coal with maximum sulphur content of 0.5%. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall also provision of ash silo for its safe storage.
- (vii). CO₂ bottling plant shall be installed within plant premises.
- (viii). PP shall allocate at least Rs. 1.0 Crores/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (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, 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.
- (xiv). Industry shall allocate Rs. 3.0 Crores towards CER of which Rs. 2.0 Crores shall be used for construction/up-gradation for adopting four public schools building with provision of facilities e.g. Class rooms, Playground, Laboratory, Library, Computer class, Toilets, Drinking Water Facilities, Solar light etc and remaining amount of Rs. 1.0 Crores shall be used for providing solar lights/solar power in nearby villages. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Magistrate. As per, CCR partial compliance was observed for utilisation of funds earmarked for CER. In this regard, unutilised amount of CER mentioned in EC vide letter No. J-11011/101/2015 –IA II (I); dated 11th April 2017, shall be utilized before the commissioning of expansion.
- (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.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.19

Grain based Distillery plant capacity of 2X180 KLPD by M/s. Shri Bajrang Chemical Distillery LLP located at Arang Village, Arang Tehsil, Raipur District, Chhattisgarh - Amendment of Environment Clearance.

[IA/CG/IND2/251272/2022, J-11011/470/2021-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter F. No. J-11011/470/2021-IA-II(I) dated 16th December, 2021 for the project Grain based Distillery plant capacity of 2X180 KLPD located at Arang Village, Arang Tehsil, Raipur District, Chhattisgarh in favour of M/s. Shri Bajrang Chemical Distillery LLP.

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

S. NO.	Para of EC issued by MOEF&CC	Details as per the EC	To be revised /read as	Justification/reasons
1	Page No.2 of point NO 2	Grain based Distillery plant capacity of 2X180 KLPD	Grain based Distillery plant capacity of 1X200 KLPD & 1X160 KLPD	To optimise the project cost (capex) as well as operational cost (opex) so as to remain most competitive in the market, we applied for change in configuration. While negotiation for ordering of Plant & Machinery we have realised to minimize cost of production (Capex/Opex) therefore decision of amendment in configuration from 2 X 180 KLD to [1 X 200 + 1 X 160 KLD] has been taken so that cost of production can be minimized.

2	---	Khasara No is 1152	Khasara No is <u>1152/1</u>	There is typographical error in one Khasara No. mentioned Environmental management plan and in online application submitted.
---	-----	--------------------	-----------------------------	--

During deliberations EAC sought the following information/commitments from PP:

- There shall be no change in total production capacity, i.e. it remains 360 KLPD with the change of plant configuration from 2x180 KLPD to 1x 200 KLPD & 1x160 KLPD.
- There shall be no increase in pollution load due to change in plant configuration from 2x180 KLPD to 1x 200 KLPD & 1x160 KLPD.

PP has submitted the desired information sought above.

After details deliberations, EAC found the justifications satisfactory and **recommended** the amendments in EC, as proposed by the project proponent, with all other terms and conditions remain unchanged.

Agenda No. 51.20

Expansion of Sugar Mill (7000 TCD to 12,000 TCD) and Co-generation Power Plant of 33 MW to 37 MW by A B SUGARS LTD at Punjab Amendment of Environment Clearance.

[IA/PB/IND2/255416/2022, J-11011/764/2007-IA II (I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. IA-J-11011/764/2007-IA-II(I) dated 05.01.2021 for the project "Expansion of Sugar Mill (7000 TCD to 12000 TCD) and Co-Generation Power Plant from 33 MW to 37 MW" located at village Randhawa, Tehsil Dasuya, District Hoshiarpur, Punjab in favour of M/s A B Sugars Limited.

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

S. No.	Para of EC issued by MOEF&CC	Details as per EC	To be revised/ read as	Justification/ Reason
1.	Specific point (ii) of the EC letter	"As already committed by the project proponent,	No waste/ treated water shall be discharged	We cannot use 100% of the treated effluent for processing purposes and require the excess

		<p>Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities in the sugar unit and in the Distillery unit. Treated Industrial effluent shall not be used for gardening/ greenbelt development/ horticulture in the project area”.</p>	<p>outside the premises. Treated water shall be reused in the process/ utilities in the sugar unit & as well as for gardening/ greenbelt development/ horticulture in the project area within the premises.</p>	<p>treated water meeting norms of MoEF&CC for use in gardening/ horticulture development within our factory premises. Hence we request to accordingly adjust the condition and we also assure that “no treated water shall be discharged outside the premises of our plant”. This is because</p> <p>-The distillery and sugar units are producing products that are used for edible purposes in adjoining plots but are separate legal identities and have their own water management system.</p> <p>-In-house green area has been increased from 55 acres (32.3% of the plot area) to 62 acres (36.4% of the plot area). Moreover, 4 acres nearby land has been recently purchased by M/s AB Sugars Ltd and this land shall be utilised for green belt development. The requirement of water used in gardening if not met by the treated water, it shall be met by groundwater which is not feasible. Also, if that excess treated water not utilised in gardening then it has to be utilised completely in process and 100% of the treated water generated cannot be used back in the process as it is a highly energy intensive process and we have fully utilised the treated water up to its maximum capacity and thus, excess water will be used for horticulture purposes within the plot.</p> <p>-As per MoEF notification vide gazette no. G.S.R. 35 (E) dated 14th January 2016, final wastewater discharge limit for Sugar Industry is restricted to 200 Litre per tonne of cane crushed. However, by adopting so many measures we have reduced our wastewater discharge to 1114 KLD (as per this notification we are eligible for 2400 KLD on 12000 TCD capacity). Since Cane sugar has</p>
--	--	---	---	---

				<p>surplus water and all water cannot be utilised in different places, we have made our best efforts to reduce it upto 1114 KLD final discharge, so this final discharge may please be allowed for on land plantation/irrigation after treatment in ETP within the premises of the Industry.</p> <p>-Presently the treated water is being used in horticulture within the premises in existing industry and no waste/treated water is being discharged outside the premises and CTO from SPCB has been granted the same condition from time to time.</p>
--	--	--	--	--

During deliberations PP has informed to EAC that following proposals have been granted earlier for usage of treated water for gardening/ greenbelt development/ horticulture in the project area within the premises:

Name of the Industry/ Proposal Number/ Agenda of the Meeting	EAC recommendation
M/s. Aayan Multitrade LLP IA/MH/IND2/152638/2020 Agenda No. 39.2	The project proponent will treat and re-use the treated water within the factory and no waste or treated water shall be discharged outside the premises.
M/s. Jawahar Shetakari Sahakari Sakkar Karkhana Ltd IA/MH/IND2/224565/2021 Agenda No. 41.4	During deliberation, EAC suggested that no waste or treated water shall be discharged outside the premises and allowed treated effluent for in the process/utilities and for gardening/ greenbelt development/ horticulture in own premises only and not to send outside/ used for farming.
M/s. Balrampur Chini Mills, Unit Maizapur IA/UP/IND2/209541/2021 Agenda No. 41.2	The project proponent will treat and re-use the treated water within the integrated industry and no waste or treated water shall be discharged outside the premises. The integrated project sugar factory and

	proposed distillery shall conform to Zero Liquid Discharge.
M/s. Shree Govardhan Sugar Industries IA/GJ/IND2/235755/2021, Agenda No. 45.16	The project proponent will treat and re-use the treated water within the integrated industry and no waste or treated water shall be discharged outside the premises. The integrated project sugar factory and proposed distillery shall conform to Zero Liquid Discharge.

In line with the decisions taken above, EAC **recommended** the amendments in EC, as proposed by the project proponent, with all other terms and conditions remain unchanged.

Agenda No. 51.21

Proposed 100 KLPD Grain Based distillery along with 4.0 MW co-gen Thermal Power Plant by M/s. Oswal Ethanol and Feed Industry Private Limited located at Khasra No. 487 Baman Bardi, District-Neemuch, Madhya Pradesh - Consideration of Environment Clearance.

[IA/MP/IND2/253821/2022, J-11011/31/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. AmplEnviron 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 100 KLPD Grain Based distillery along with 4.0 MW co-gen Thermal Power Plant by M/s. Oswal Ethanol and Feed Industry Private Limited located at Khasra No. 487 Baman Bardi, District-Neemuch, Madhya Pradesh.

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

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

The details of products and capacity are as under:

Unit	Capacity	Product
Grain Based Ethanol Plant	100 KLPD	Product – Fuel Ethanol By Product – DDGS- 62 TPD CO ₂ – 55 TPD
CO- Generation Plant	4.0 MW	Power

Total project area is 15.0 ha for proposed project. Industry will develop greenbelt in an area of 34.13% i.e. 5.12 ha out of total area of the project. The estimated project cost is Rs. 129.5 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 6.00 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.0 Crores / annum. No. of working days will be 330 days/annum. Total Employment will be 150 persons (Permanent 90 & temporary 60) during operation phase. Industry proposes to allocate INR 2.5 Crores of total project cost towards Corporate Environment Responsibility (CER).

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius. Motatank PF – 7.12 km SW, Kotri River -2.0 km, W, Ghambheri river – 5.6 km, WSW are the water bodies found within 10 km radius.

One Time Total water requirement for the project will be 3264 KLD which will be further reduced through recycling & reuse to 2526 KLD. 738 KLD will be fresh water. Fresh water demand for distillery process will be less than 4KL/KL of Ethanol. Water will be sourced from surface water. The application for permission of withdrawal of water has been submitted to Department of Irrigation, Neemuch MP. Effluent will be treated through state of art Effluent Treatment Plant. The plant will be based on Zero Liquid Discharge system.

Power requirement for Ethanol plant will be 4.0 MW, which will be sourced from the 4.0 MW Co-generation Power Plant. Unit will be having D.G. Sets of 1 x 1000 KVA which will be used as standby during power failure. Stack height (30 m) will be provided as per CPCB norms. Proposed Boiler of 36 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 60 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm³.

Details of process emissions generation and its management:

CO₂ (58 TPD) generated during the fermentation process will be collected and sold to authorized vendors.

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

- Solid waste from the Grain based operations generally comprises of fibers and proteins in the form of DDGS (62 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash (60 TPD) generated from boiler will be supplied to brick manufacturers.
- Used oil & grease (0.5 KL/Annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

As per the 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 sought the following information/commitments from PP:

- PP shall utilize fresh water @3.0 KL/KL of ethanol production.
- Entire project shall be ZLD and no single drop of water shall be discharged outside plant premises.
- PP shall meet 10% (500 KW) of the total power requirement from solar power.
- PP shall install ESP with the proposed boiler.
- PP shall use agro-waste as a fuel of boiler.
- Brick manufacturing unit shall be installed within the plant premises for utilization of fly ash.
- 15% of the total plant area will be reserved for parking. PP shall provide rest rooms, drinking water, toilets and other facilities for the truck drivers within the premises.
- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP shall allocate at least Rs. 0.5 Crores/annum for Occupational Health Safety.
- Industry shall allocate Rs. 1.5 Crores towards CER of which Rs. 1.0 Crores shall be used for construction/up-gradation for adopting four public schools building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar etc. and remaining amount of Rs. 0.5 Crores shall be used for providing solar lights/solar power in nearby villages. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

PP has submitted the desired information as sought above.

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 be 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 3.0 KL/KL and will be met from Surface water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. 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. PP shall use agro-waste as a fuel of boiler. Brick manufacturing unit shall be installed within the plant premises for utilization of fly ash. PP shall meet 10% (500 KW) 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, 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.
- (xiv). PP proposed to allocate Rs. 1.5 Crores towards CER of which Rs. 1.0 Crores shall be used for construction/up-gradation for adopting four public schools building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar etc. and remaining amount of Rs. 0.5 Crores shall be used for providing solar lights/solar power in nearby villages. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.
- (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.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.22

Proposed 200 KLD Grain Based Ethanol Plant along with 5.0 MW Co-generation Power Plant by M/s. Greentech Bio Energy LLP located at Village- Salna, Nimchhod under Bheden Tehsil, District- Bargarh, Odisha - Consideration of Environment Clearance.

[IA/OR/IND2/254316/2022, J-11011/37/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Grass Roots Research & Creation India (P) 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 200 KLD Grain Based Ethanol Plant along with 5.0 MW Co-generation Power Plant by M/s. Greentech Bio Energy LLP located at Village- Salna, Nimchhod under Bheden Tehsil, District- Bargarh, Odisha.

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.

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

The details of products and capacity are as under:

SL. No	Units	Proposed Capacity
1	Installed Capacity	Grain Base Distillery of 200 KLD
2	Major Raw Material	Grain (Maize)
3	Final Product & By-Product	Ethanol (200 KLD) DDGS- 140 TPD CO ₂ - 110 TPD
2	Co-Generation Power Plant (1 x 45 TPH-AFBC)	5.0 MW

Total land required for the project is 8.49 Ha. Industry will develop greenbelt in an area of 33% of total project area i.e. 2.81 Ha out of total area of the project. The estimated project cost is Rs. 249.50 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 777 lakh and the Recurring cost (operation and maintenance) will be about Rs. 112 lakh per annum. Total Employment will be 202 persons as direct & indirect due to the project. Industry proposes to allocate 1% of total project cost towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Details of River /water body:

Location	Direction	Distance
Jhaun River	SW	0.75
Mahanadi River	E	3.5
Kulijhari Jhor	NNE	4.3
Bada Bandha Pond	W	6.4
Khinda Pond 1&2	E	7.9
Tabloni Degan RF	ESE	8
Papanga Rf	SW	8.5

One Time Total water requirement for the project will be 2967 KLD which will be further reduced through recycling & reuse of 2147 KLD. Total fresh water demand for distillery operation is 820 KLD @4.1 KL of water/KL of Ethanol. Net fresh water requirement including power plant of 5.0 MW is 1109 KLD @5.5 KL/KL of ethanol production, which will be sourced from surface water augmented with rain water. The applications for permission of withdrawal of surface water has been submitted to Department of Water Resources vide application no 2022011041000322 dated 11.01.2022. Effluent of 877 KLD quantity will be treated through 1000 KL/D ETP/CPU. The plant will be based on Zero Liquid Discharge system.

During operation phase power requirement will be 5.0 MW /Day and will be fulfilled by 5.0 MW Co-generation power plant within the project site. For emergency, 1 DG set of 500 KVA will be installed within the plant area. Project will have 45 TPH AFBC boiler will be installed. ESP and bag filter with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers. Regular monitoring will be done to ensure that ambient air quality standards to meet all the time. All the internal roads will be asphalted.

Details of process emissions generation and its management:

CO₂ generated during fermentation process will be collected, purified, liquefied and sold to vendors.

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

Type of Waste	Quantity	Storage	Utilization/ Disposal
DDGS – (by product) (Dried distillers’ grains with soluble)	46,200 TPA	Covered shed	Sold as Cattle Feed, Poultry & Fisheriesr

Ash from boiler	34,650 TPA	Silo	Sold to Bricks manufactures in nearby area
Waste papers/Boxes	3.5 TPA	Covered shed	Sold to recyclers
Used Oil	2.0 KL	HDPE drums in covered shed	Used for oiling the machine in house and balance will be given to authorized re-cycler
Spent Resin from DM Plant	2.0 KL	HDPE drums in covered shed	Given to authorized re-cycler
ETP Sludge	104.36 Kg/Day	Stored in the dedicated Place	Given to authorized re-cycler

As per the 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 KLD will be used for manufacturing fuel ethanol only.

During deliberations EAC sought the following information/commitments from PP:

- Brick manufacturing unit shall be installed within the plant premises for utilization of fly ash. Ash generated shall be stored in silos.
- PP shall install ESP with the proposed boiler.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP shall utilize fresh water @3.0 KL/KL of ethanol production.
- Entire project shall be ZLD and no single drop of water shall be discharged outside plant premises.
- PP shall meet 10% (600 KW) of the total power requirement from solar power.
- 15% of the total plant area will be reserved for parking. PP shall provide rest rooms, drinking water, toilets and other facilities for the truck drivers within the premises.
- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety.
- Industry shall allocate Rs. 3.0 Crores towards CER of which Rs. 1.0 Crores shall be used for construction/up-gradation for adopting two public schools building with provision of facilities e.g. Class rooms,

playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar etc., amount of Rs. 1.0 Crores shall be used for providing solar lights/solar power in nearby villages and remaining amount of Rs. 1.0 Crores shall be used for up-gradation of infra-structure of primary health centre. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

PP has submitted the desired information as sought above.

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 KLD shall be 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 @3.0 KL/KL and will be met from Surface water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. 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. Brick manufacturing unit shall be installed within the plant premises for utilization of fly ash. Ash generated shall be stored in silos. PP shall meet 10% (600 KW) 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, 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.
- (xiv). PP proposed to allocate Rs. 3.0 Crores towards CER of which Rs. 1.0 Crores shall be used for construction/up-gradation for adopting two public schools building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar etc., amount of Rs. 1.0 Crores shall be used for providing solar lights/solar power in nearby villages and remaining amount of Rs. 1.0 Crores shall be used for up-gradation of infra-structure of primary health centre. Further, the works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.
- (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.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.23

Expansion of molasses distillery capacity from 30 KLPD to Multi-feed (C molasses, B Heavy Molasses, Cane Juice/Syrup) 120 KLPD at Ashoknagar, Village Nipani Wadgaon, Taluka Shrirampur, District Ahmednagar, Maharashtra State by M/s Ashok Sahakari Sakhar Karkhana Limited- Consideration of Environment Clearance

[IA/MH/IND2/251521/1992,ENV(NOC)1092/1717/CR-309/D-1]

The Project Proponent and the accredited Consultant M/s. Mantras Green Resources 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 expansion of molasses distillery capacity from 30 KLPD to Multi-feed (C molasses, B Heavy Molasses, Cane Juice/Syrup) 120 KLPD at Ashoknagar, Village Nipani Wadgaon, Taluka Shrirampur, District Ahmednagar, Maharashtra State by M/s Ashok Sahakari Sakhar Karkhana Limited.

The project/activities are covered under category A of item 5 (g) 'Distilleries' of the Schedule to the EIA, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC). The proposal has been submitted under the Ministry's EIA Notification, 2006 amendments vide Notification no. S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750(E) dated 17th February 2020, S.O 980(E) dated 02nd March, 2021. Accordingly, the proposal has been appraised as category 'B2' project.

Standard ToR and public Hearing is not applicable as the project falls under category B2 as per OM dated 2nd March, 2021 and 16th June, 2021. It was informed that no litigation is pending against the project.

Environment Department, Maharashtra had issued EC earlier vide letter no. ENV (NC) 1092/1717/CR-309/D-I Dated 2nd June 1993 to the existing project for establishment of 30 KLPD Distillery in favour of M/s. by Ashok Sahakari Sakhar Karkhana Limited, Ashoknagar, Village Nipani Wadgaon, Taluka Shrirampur, District Ahmednagar, Maharashtra State.

Certified Compliance Report (CCR) on existing Environmental clearance was issued by IRO, MOEFCC Nagpur vide File No.EC-1423/RO/2021-NGP/9071 Dated 23.12.2021. The Site visit of RO was carried out on

24.10.2021. Three Non compliances issued against Specific conditions. Industry submitted action plan report to RO MoEF&CC on 01.01.2022.

The details of products and capacity are as under:

Sr. No.	Product Name	Existing	Proposed	Total
1	Sugar Crushing Capacity in TCD	2500	00	2500
2	Cogeneration power plant in MW	15	00	15
3	Distillery in KLPD	30	90	120
	Rectified Spirit	30	--	30
	Extra Neutral Alcohol		--	
	Ethanol		90	120
4	Carbon Dioxide CO2 (CMD)	--	115	115

Existing land area is 341200.00 m², net plot area is 298216.00 m² and no additional land will be used for proposed expansion. Industry has already developed / will develop greenbelt in an area of 33.01 % i.e., 98451.33 m² out of net plot area of the project.

The estimated project cost for proposed expansion is Rs. 97.21 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 44.65 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.60 Crores per annum. Total Employment will be 60 persons as direct & 90 persons indirect after expansion. Industry proposes to allocate Rs 0.9721 Crores @ of 1 % towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Pravara River is flowing at a distance of 5.5 Kms towards Southwest direction.

Total water requirement is 1457 m³/day of which fresh water requirement of 476 m³/day will be met from Pravara Right Bank Canal. Effluent generated from existing 30 KLPD unit of 262 m³/day quantity is treated based on concentration in reboiler followed by composting principles to achieve zero liquid discharge. The effluent from proposed 120 KLPD Distillery i.e spentwash The raw spent wash (1045 CMD- 14% Solids) shall be fed to concentration in MEE (60% Solids) followed by burnt in to incineration boiler. The evaporator condensates (801 CMD) shall be treated in proposed condensate polishing unit based on primary, secondary and tertiary treatment along with other dilute effluent streams (Spentlees-120 CMD, Boiler blow down of 18 CMD, Cooling tower blow down of 32 CMD, and Fermenter washings of 15 CMD totaling to 986 CMD) and recycled back as process water. The project will be based on Zero Liquid discharge system.

Power requirement after expansion will be 2.5 MW. including existing 1

MW and will be met from Proposed 3 MW TG Set connected to 1*35 TPH Incinerator boiler. 1*500 KVA DG sets will be used as standby during power failure. Stack (height 6 m) will be provided as per CPCB norms to the proposed DG sets.

For Existing unit of 30 KLPD, the steam is sourced from sugar unit. 1*35 TPH incinerator (Conc. Spentwash + Bagasse / Coal fired) boiler will be installed. Electrostatic Precipitator (ESP) with a stack of height of 70 m will be installed for controlling the particulate emissions within the statutory limit of 100 mg/Nm³ for the proposed boilers.

Details of process emissions generation and its management:

- For proposed 1*35 TPH incinerator boiler, ESP will be provided to bring down the particulate matter to below 100 mg/Nm³ and stack height of 70 meters will be provided for effective dispersion of gases into the atmosphere.
- CO₂ generated (115 CMD) during the fermentation process will be collected by utilizing CO₂ scrubbers, bottled and sold to authorized vendors.

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

Details of non-hazardous waste generated and its disposal

Sr. No.	Description of waste	Raw Material			Mode of Collection and Disposal
		C Molasses	B Heavy Molasses	Sugarcane Juice/Syrup	
1	Incineration Boiler Ash (MT/D)				
	Bagasse as fuel	54.8	36.0	23.9	Mixed with press mud and CPU sludge and sold as manure
	Coal as fuel	60.8	41.6	31.7	
2	CPU Sludge (MT/A)	150			Mixed with Incinerator boiler ash along with press mud and sold as manure
Other Solid Wastes					
Sr. No.	Description of waste	Quantity (Kg/M)		Mode of Collection and Disposal	
1.	Paper waste	50		Manually collected and stored in a designated area and sold to scrap vendors	
2.	Plastic waste	40			
3.	Municipal Solid waste				
	Non-Biodegradable	250		Manually collected and sold to scrap vendors	
	Bio-degradable	3000		Used in Composting	

Details of hazardous waste generated and its disposal:

Sr. No.	Category	Description	Quantity	Disposal
1	5.1	Used Oil	40 LPA	Collected in leak proof

				container and Used as lubricant oil for bullock carts
2	33.1	Empty barrels/containers	5 Nos	Sold to authorized recycler

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 90 KLPD will be for manufacturing of fuel ethanol only.

During deliberations PP made a brief presentation on CCR and ATR, EAC found the compliance status satisfactory. Further, EAC sought the following information/commitments from PP:

- (i). Industry shall install solar power of at least 500 kW within plant/nearby villages as a part of EMP.
- (ii). Fresh water requirement shall not exceed 3.0 kL fresh water consumed/kL production of Ethanol. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (iii). Electro-Static Precipitator (ESP) will be installed with the proposed boiler. Incineration boiler ash shall pelletized, transported in closed trucks to be sold as manure.
- (iv). CO₂ generated during fermentation shall be scrubbed and bottled.
- (v). PP shall allocate at least Rs. 50 Lakhs per annum for Occupational Health Safety.
- (vi). The proposed budget towards CER be increased to Rs. 1.20 Crores and shall be spent on upgrading infrastructure of public schools in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be borne by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has submitted the desired commitments/information sought above in the form of undertaking except for points (v) which is imposed as specific condition.

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 OM dated 16th June, 2021, project falls in category B2 and the proposed expansion of 90 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of an 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. Industry shall install solar power of at least 500 kW within the plant/nearby villages as a part of EMP.
- (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). Total Fresh water requirement shall not exceed 3.0 kL fresh water consumed/kL production of Ethanol will be met from Pravara Right Bank Canal. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. 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.

- (v). Spent wash shall be treated in MEE followed by burning in to incineration boiler. Electro-Static Precipitator (ESP) will be installed with the proposed boiler. Incineration boiler ash shall pelletized, transported in closed trucks to be sold as manure.
- (vi). CO₂ generated during fermentation shall be scrubbed and bottled.
- (vii). PP proposed to allocate at least 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.
- (viii). 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.
- (ix). 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.
- (x). 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.
- (xi). The company shall undertake waste minimization measures as below
(a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, 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.
- (xiii). PP proposed to allocate Rs. 1.20 Crores towards CER which shall be spent on upgrading infrastructure of public schools in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be borne by the Industry. All the proposed activities

under CER shall be completed before the commencement of operations of the plant.

- (xiv). 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.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 52.24

Proposed 100 KLPD grain based distillery project along with 2.5 MW co-gen power plant and ZLD unit at village Kurana, tehsil Israna, district Panipat, Haryana by M/s. Hare Hari Chemicals Pvt. Ltd.- consideration of environment clearance

[IA/HR/IND2/255895/2022, J-11011/54/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Vardan Environet., 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 project along with 2.5 MW co-gen power plant and ZLD unit at village Kurana, tehsil Israna, district Panipat, Haryana by M/s. Hare Hari Chemicals Pvt. Ltd.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16th June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR & Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

Sr.No.	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1	Ethanol	0.0	100 KL/Day	100 KL/Day
2	Power (through Co-Gen Power Plant)	0.0	2.5 MW	2.5 MW

Total area for proposed project is 15.09 acre. About 6.17 acre area (40.91% of total project area) proposed for greenbelt development.

The estimated project cost is Rs. 100.0 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 788.37 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 45.25 Lakhs per annum. During Operation Phase man power requirement will be estimated 100 Nos. and during construction phase it is estimated as 200 No. Industry proposes to allocate Rs. 112.75 Lakhs approx. 1.12 % towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Indira canal is at a distance of 2.0 km in W direction from the project site.

Total water consumption in the project will be 500 KLD and will be sourced from Canal water near to the project site. Condensate Polishing Unit (CPU) has been proposed along with Tertiary Treatment for Recycling. RO unit, ACF has been proposed to ensure Zero Liquid Discharge (ZLD).

Power requirement for the project is 2.5 MW. Total power requirement for the unit will be sourced from Own Co-Gen Power Plant of 2.5 MW capacity. Husk/Biomass based boiler of 25 TPH capacity is proposed. Quantity of Husk/Biomass will be 160 TPD. D.G. sets of 1 x 500 KVA will be installed for the power backup.

Details of process emissions generation and its management: The major sources of air emissions from the proposed projects include non-point and point source emissions. The major sources of air pollution from the proposed project will be from flue gas emission, process emission and vehicular emissions. Electrostatic Precipitator will be provided as air pollution control equipment for proposed boiler. The emissions from the boiler are passed through ESP before releasing into atmosphere through

the stacks. The proposed boiler stack heights of 40 m will be provided for proper dispersion of the air pollutants.

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

Type of Waste	Quantity (TPA)	Storage	Utilization/ Disposal
DDGS - (by product) (Dried distillers' grains with soluble)	19800	Covered shed	Sold as Cattle Feed, Poultry & Fisheries. Required agreement will be done.
Ash from CPP	9000	Silo	Bricks manufacturing unit will be installed with the project site to handle the ash.
Waste papers/Boxes	2-3	Covered shed	Sent to authorized recyclers
Used Oil	2.5 KL	HDPE drums in covered shed	Given to authorized recycler. Required agreement will be done.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 100 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations, EAC sought the following information/commitments from PP:

- Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.
- Fresh water requirement shall not exceed 3.0 kL fresh water consumed/kL production of Ethanol. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos.
- Industry shall install CO₂ plant for efficient collection of CO₂.
- PP shall allocate at least Rs. 50 Lakhs per annum for Occupational Health Safety.
- The proposed budget towards CER be increased to Rs. 1.50 Crores of which Rs. 1.0 Crore shall be spent on upgrading infrastructure of public schools and the rest Rs. 0.50 Crore on installation of solar power in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be borne by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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 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 OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project

- (iii). 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. Industry shall install solar power of at least 10% of its total power requirement within the plant/nearby villages as a part of EMP.
- (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). Total fresh water requirement shall not exceed 3.0 kL fresh water consumed/kL production of Ethanol which will be sourced from Canal water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage facility 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. Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos.
- (vii). Industry shall install CO₂ plant for efficient collection of CO₂.
- (viii). PP proposed to allocate 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 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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.
- (xiv). PP proposed to allocate Rs. 1.50 Crores towards CER of which Rs. 1.0 Crore shall be spent on upgrading infrastructure of public schools and the rest Rs. 0.50 Crore on installation of solar power in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be borne by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.25

Proposed 60 KLD grain based distillery & 1.5 MW cogeneration plant at Alipurduar, West Bengal by M/s Sangam Bio-refinery Limited- Consideration of Environment Clearance

[IA/WB/IND2/248365/2021, J-11011/11/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Paramarsh Servicing Environment & Development., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed 60 KLD grain based distillery & 1.5 MW cogeneration plant at Alipurduar, West Bengal by M/s Sangam Bio-refinery Limited.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16th June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR & Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

S. No.	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1	Ethanol	0	60 KLD	60 KLD
2	Power Cogeneration	0	1.5 MW	1.5 MW
3	DDGS	0	Maize :38 TPD	Maize :38 TPD

Total land area is 3.34 Ha. which will be used for proposed Grain Based Distillery Project. Permission for land conversion has been obtained from Govt. of West Bengal vide Case No. CN/2022/2002/22, Dt: 18.02.2022. Industry will develop greenbelt in an area of 33 % i.e., 1.10 Ha. (11000 m²) out of total area of the project.

The estimated project cost is Rs 92 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 4.44 Crores and the Recurring cost (operation and maintenance) will be about Rs 0.96 Crores per annum. Total Employment will be 75 persons as direct & 25 persons indirect. Industry proposes to allocate Rs. 1.50 Crores towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Dimdima River is flowing at a distance of 1 Km. in South-East direction.

Total water requirement is 818 m³/day of which fresh water requirement of 246 m³/day will be met from proposed 1 nos. Borewells. Effluent of 475 m³/day quantity will be treated through MEE and Condensate Polishing

Unit followed by ACF & PSF. The plant will be based on Zero Liquid discharge system.

Power requirement will be 1500 KVA and will be met from Captive Power Plant. DG sets will be used as standby during power failure. Stack (height 15 m.) will be provided as per CPCB norms to the proposed DG sets. 25 TPH Rice Husk/Coal fired boiler will be installed. ESP with a stack of height of 60 m. will be installed for controlling the particulate emissions within the statutory limit of 50 mg/NM³ for the proposed boiler.

Details of process emissions generation and its management:

Boiler will be equipped with ESP for controlling process emission. Bag filters with dust collectors will be installed in Grain handling & milling area and DDGS Dryer section to minimize fugitive emissions.

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

Boiler Ash (18 TPD) & ETP Sludge (30 Kg/Day) will be generated as solid waste from the proposed distillery project. Waste lube oil from DG Sets will be generated as Hazardous Waste. Boiler ash will be sold to fly ash bricks manufacturing units. ETP Sludge will be reused as biocompost for green belt development.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 60 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations, EAC sought the following information/commitments from PP in the form of undertaking:

- (i). Industry shall install solar power of at least 400 kW within plant/nearby villages as a part of EMP.
- (ii). Fresh water requirement shall not exceed 180 KLPD. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (iii). Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos. Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- (iv). PP shall allocate at least Rs. 50 Lakhs per annum for Occupational Health Safety.
- (v). Industry shall allocate Rs. 1.50 Crores towards CER of which Rs. 1.0 Crore shall be spent on upgrading infrastructure of public schools and the rest Rs. 0.50 Crore on installation of solar power in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be met by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has agreed to commitments/information sought above except for point (iv) which has been imposed as specific condition.

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 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 OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 60 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project

- (iii). 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. Industry shall install solar power of at least 400 kW within the plant/nearby villages as a part of EMP.
- (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). Total fresh water requirement shall not exceed 180 KLPD which will be from proposed borewell. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage facility 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. Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos. Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP proposed to allocate 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 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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.
- (xiv). PP proposed to allocate Rs. 1.50 Crores towards CER of which Rs. 1.0 Crore shall be spent on upgrading infrastructure of public schools and the rest Rs. 0.50 Crore on installation of solar power in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be borne by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.26

Proposed 150 KLPD Grain Based Distillery and 3MW co-generation Power Plant at Vaishali, Bihar by M/s UAL Industries Limited - Consideration of Environment Clearance.

[IA/BR/IND2/251456/2022, J-11011/18/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Paramarsh Servicing Environment & Development., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed 150 KLPD Grain Based Distillery and 3MW co-generation Power Plant at Vaishali, Bihar by M/s UAL Industries Limited.

All grain based distilleries producing ethanol, solely to be used for Ethanol Blended Petrol Programme of the Government of India are listed at S.N. 5(ga) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 amendment vide S.O 2339 dated 16th June 2021 under category 'B-2' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The project proposal is exempted from obtaining ToR & conducting Public Hearing as per EIA notification, 2006 amendment vide S.O 2339 dated 16th June 2021. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

S. No.	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1	Ethanol	0	150 KLD	150 KLD
2	Power Cogeneration	0	3.0 MW	3.0 MW
3	DDGS	0	62 TPD	62 TPD

Total land area is 7.69 Ha. which will be used for proposed Grain Based Distillery Project. Permission for land conversion has been obtained from Govt. of Bihar vide letter No. 05, Dt: 05.04.2013 & 1466 Dt: 23.5.2014. Industry will develop greenbelt in an area of 33 % i.e., 2.54 Ha. (25300 m²) out of total area of the project.

The estimated project cost is Rs 176 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 9.57 Crores and the Recurring cost (operation and maintenance) will be about Rs 2.25 Crores per annum. Total Employment will be 145 persons as direct & 75 persons indirect. Industry proposes to allocate Rs. 1.50 Crores towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Ganga is flowing at a distance of 12 Km. in

North direction and River Gandak is flowing at a distance of 13 in West direction.

Total water requirement is 2448 m³/day of which fresh water requirement of 915 m³/day will be met from proposed 2 nos. Borewells. Effluent of 1460 m³/day quantity will be treated through MEE and Condensate Polishing Unit followed by ACF & PSF. The plant will be based on Zero Liquid discharge system.

Power requirement will be 3000 KVA and will be met from Captive Power Plant. DG sets will be used as standby during power failure. Stack (height 15 m.) will be provided as perCPCB norms to the proposed DG sets. 32 TPH Rice Husk/Coal fired boiler will be installed. ESP with a stack of height of 60 m. will be installed for controlling the particulate emissions within the statutory limit of 50 mg/NM³ for the proposed boiler.

Details of process emissions generation and its management:

Boiler will be equipped with ESP for controlling process emission. Bag filters with dust collectors will be installed in Grain handling & milling area and DDGS Dryer section to minimize fugitive emissions.

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

Boiler Ash (40-45 TPD) & ETP Sludge (75 Kg/Day) will be generated as solid waste from the proposed distillery project. Waste lube oil from DG Sets will be generated as Hazardous Waste. Boiler ash will be sold to fly ash bricks manufacturing units. ETP Sludge will be reused as biocompost for green belt development.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 150 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations, EAC sought the following information/commitments from PP:

- (i). Industry shall install solar power of at least 400 kW within plant/nearby villages as a part of EMP.
- (ii). Fresh water requirement shall not exceed 450 KLPD. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (iii). Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos. Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- (iv). PP shall allocate at least Rs. 50 Lakhs per annum for Occupational Health Safety.
- (v). Industry shall allocate Rs. 1.50 Crores towards CER of which Rs. 1.0 Crore shall be spent on upgrading infrastructure of public schools and the rest Rs. 0.50 Crore on installation of solar power in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be borne by the Industry. All the

proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has agreed to commitments/information sought above except for point (iv) which has been imposed as specific condition.

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 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 OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 150 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an 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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project
- (iii). 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. Industry shall install solar power of at least 400 kW within the plant/nearby villages as a part of EMP.
- (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). Total fresh water requirement shall not exceed 1249 KLPD which will be sourced from canal water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage facility 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. Brick manufacturing plant shall be installed for utilization of fly ash. Ash generated shall be stored in covered silos. Electro-Static Precipitator (ESP) will be installed with the proposed boiler.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP proposed to allocate 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 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. 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.
- (xiv). PP proposed to allocate shall allocate Rs. 1.50 Crores towards CER of which Rs. 1.0 Crore shall be spent on upgrading infrastructure of public schools and the rest Rs. 0.50 Crore on installation of solar power in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be borne by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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. 51.27

Expansion of Distillery from EC granted Capacity 150 KLPD to 250 KLPD & Co-Generation Power Plant from 5.0 MW to 7.0 MW within existing plant premises at Village Bhadson, Tehsil Indri, District Karnal (Haryana) by M/s. Piccadly Agro Industries Ltd.- Consideration of Environment Clearance.

[IA/HR/IND2/257063/2016, J-11011/495/2008- 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 expansion of Distillery from EC granted Capacity 150 KLPD to 250 KLPD & Co-Generation Power Plant from 5.0 MW to 7.0 MW within existing plant premises at Village Bhadson, Tehsil Indri, District Karnal (Haryana) by M/s. Piccadly Agro Industries Ltd.

The project/activities are covered under category A of item 5 (g) 'Distilleries' of the Schedule to the EIA, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC). The proposal has been submitted under the Ministry's EIA Notification, 2006 amendments vide Notification no. S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750(E) dated 17th February 2020, S.O. 980(E) dated 02nd March, 2021. Accordingly, the proposal has been appraised as category 'B2' project.

Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 2nd March, 2021 and 16th June, 2021. It was informed that no litigation is pending against the project.

Ministry has issued following ECs for the existing project:

- (i). F. No. J-11011/196/2006- IA II (I) dated 13th September, 2006 for 60 KLPD Molasses based distillery Plant
- (ii). F. No. J-11011/495/2008- IA II (I) dated 23rd October, 2008 as amended on 25.05.2016 for Expansion of Molasses/Grain based distillery unit from 60 KLPD to 90 KLPD & 3 MW Cogeneration Power Plant.
- (iii). F. No. J-11011/495/2008-IA-II(I) dated 06th February, 2020 for Expansion of Grain/Molasses based Distillery Plant (90 KLPD to 150 KLPD) & Co-generation Power Plant (3.0 MW to 5.0 MW)

Certified Compliance Report (CCR) was issued by IRO, Chandigarh vide F. No.: 04-222/06/IRO/823-824 dated 28th December, 2021. It was

informed that PP has not yet started the production of 150 KLPD plant and compliance status of EC for capacity 150 KLPD could not be verified during the site visit. Therefore, compliance status of ECs obtained for 60 KLPD Vide Letter No. J-11011/196/2006- IA II (I) dated 13th September, 2006 and for Expansion of Molasses/Grain based distillery unit from 60 KLPD to 90 KLPD & 3 MW Cogeneration Power Plant Vide Letter No. J-11011/495/2008- IA II (I) dated 23rd October, 2008 have been issued wherein 3 partial compliances have been mentioned.

The details of products and capacity are as under:

Units	Capacity as per granted EC dated 06th February, 2020	Additional Capacity	Total Capacity after expansion
Distillery	150 KLPD (90 KLPD Grain / Molasses based Distillery Plant operational and 60 KLPD Distillery plant under implementation)	100 KLPD	250 KLPD
Product	Extra Neutral Alcohol/ Rectified spirit/ Ethanol, Malt spirit	Ethanol (Bio-fuel) Only	-
Co-generation power plant	5.0 MW (3 MW Plant operational and 2 MW plant under implementation)	2.0 MW	7.0 MW

Existing plant area is 28.3 hectares (283000 m²). No additional land is required for the expansion, as the same will be done within the existing plant premises. Out of the total plant area, 9.3 ha (93000) area has already been covered under greenbelt / plantation.

The estimated project cost for expansion is Rs. 65 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 10 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.5 Crores / annum. No. of working days will be 350 days/annum. Existing manpower requirement is 130 persons. Total Employment after expansion will be 200 persons during operational phase. Industry proposes to allocate Rs. Rs 0.65 Crores@1% of total project cost towards Corporate Environment Responsibility.

There are no national parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Protected Forest (PF), Wildlife Corridors etc. lies within 10 km radius of the plant site. Bir Seonti Reserved Forest (7.5 km in North direction) falls within 10 km radius study area. Chautang

Nadi – Seasonal (2.5 km in West direction), Sirsa Branch Canal (3.0 km in South direction), Khand Nala - Seasonal (7.5 km in NNW direction) and Western Yamuna Canal (5.5 km in SW direction) are the water bodies found within 10 km radius.

Existing fresh water requirement is 984 KLPD for 150 KLPD Grain based operations, bottling plant & Others which is being / will be sourced from groundwater. For 100 KLPD Grain based Distillery plant, additional 434 KLPD is required. After expansion total fresh water requirement will be 1418 KLPD. Existing effluent generation for plant is 674 m³/day. Additional effluent generation will be 473 m³/day. Total Effluent of 1147 m³/day after expansion will be treated through state of art CPU/Effluent Treatment Plant of 1500 KLPD capacity. The plant is being/will be based on Zero Liquid Discharge system.

Existing power requirement is 4.0 MW and additional 2.0 MW of power will be required for expansion & installation. Thus, the total power requirement after expansion will be 6.0 MW which will be sourced from proposed 6.0 MW Co-generation power plant. Unit is having two D.G. Sets of 500 KVA each which is being/will be used as standby during power failure. Adequate Stack height (5 m) has been provided as per CPCB norms. Two Existing boilers of capacity 25 TPH each and 8 TPH (stand-by) and stack height of 30 m each with Bag filter as Air Pollution Control Equipment is already present for controlling the particulate emissions within the statutory limit of 50 mg/Nm³. No boiler has been proposed as a part of the expansion.

Details of process emissions generation and its management: CO₂ generated (182 TPD) during the fermentation process is being/will be collected and sold to authorized vendors.

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

- Spent wash from existing Molasses based distillery will be/is being concentrated in Multi-effect evaporator (MEE) and burnt as fuel in incineration boiler.
- Solid waste from the Grain based operations generally comprises of fibres and proteins in the form of DDGS (103 TPD), which will be ideally used as Cattle Feed.
- Ash (50 TPD) from the boiler is being /will be used for brick manufacturing. Company is being supply ash to nearby cement/brick manufacturers in covered vehicles.
- Used oil & grease (1.0 KL/annum) generated from the plant machinery/ gear boxes as hazardous waste is being/will be sold out to the CPCB authorized recycler.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 100 KLPD will be for manufacturing of fuel ethanol only.

During deliberations PP made a brief presentation on CCR and ATR, EAC found the compliance status satisfactory. It was informed to EAC that the Industry has not achieved production capacity of 150 KLPD as granted in the existing EC; Industry is operating at 90 KLPD which is around 60% of the granted EC. In this regard PP has informed that the additional 60 KLPD Distillery Plant along with 2 MW Co-generation Power Plant mentioned in the existing EC is under implementation. Industry wants to participate in EBP and to contribute in the same, is proposing to expand Distillery from EC granted Capacity 150 KLPD to 250 KLPD & Co-Generation Power Plant from 5.0 MW to 7.0 MW within existing plant premises. EAC found the justification satisfactory. In this regard, it was suggested to EAC that a tentative timeline for achieving operational capacity of 150 KLPD may be sought from PP. However, EAC opined that such information is not required. After detailed deliberations, EAC sought the following information/commitments from PP:

- (i). Industry shall install solar power of at least 600 kW within plant/nearby villages as a part of EMP.
- (ii). Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (iii). Ash generated shall be stored in silos and it shall be transported in closed trucks for transportation outside the plant.
- (iv). PP shall allocate at least Rs. 50 Lakhs per annum for Occupational Health Safety.
- (v). Industry shall allocate Rs. 1.00 Crores towards CER which shall be spent on upgrading infrastructure of 2 public schools in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be borne by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has submitted the desired commitments/information sought above in the form of undertaking.

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 OM dated 16th June, 2021, project falls in category B2 and the proposed expansion of 100 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of an 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. Industry shall install solar power of at least 600 kW within the plant/nearby villages as a part of EMP.
- (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). Total Fresh water requirement shall not exceed 1418 KLPD which shall be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. 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.

- (v). Spent wash shall be concentrated followed by incineration.
- (vi). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vii). PP proposed to allocate at least 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.
- (viii). 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.
- (ix). 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.
- (x). 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.
- (xi). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, 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.
- (xiii). PP proposed to allocate Rs. 1.00 Crores towards CER which shall be spent on upgrading infrastructure of 2 public schools in nearby villages. Further, operational expenditure after completion of up gradation of schools shall be borne by the Industry. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

- (xiv). 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.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (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.

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	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Sh. R.K. Singh	Member
3.	Dr. Y.V. Rami Reddy	Member
4.	Dr. T. Indrasena Reddy	Member
5.	Sh. S.C. Mann	Member
6.	Sh. Ashok Agarwal	Member
7.	Dr. T. K. Joshi	Member
8.	Dr. J. S. Sharma	Member
9.	Sh. Dinabandhu Gouda, CPCB	Member
10.	Sh. Sanjay Bist, IMD	Member
11.	Sh. Ashok Kr. Pateshwary, Director, MoEFCC	Member Secretary
MoEFCC		
12.	Dr. Mahendra Phulwaria	Scientist 'C'
13.	Sh. Kanaka Teja	Research Assistant
