

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

Dated: 28.01.2023

**Meeting ID: IA/IND2/13429/24/01/2023
MINUTES OF MEETING OF THE EXPERT APPRAISAL COMMITTEE
(INDUSTRY-2 SECTOR PROJECTS)
HELD ON 24th - 25th January, 2023**

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

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

(ii) Confirmation of minutes: The EAC, having taken note that final minutes were issued after incorporating comments received from the EAC members on the minutes of its Meeting (ID: IA/IND2/13414/09/01/2023) held on 09th -10th January, 2023 conducted through Video Conferencing (VC), confirmed the same. After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

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

24th January, 2023 (Tuesday)

Agenda No. 01

Greenfield Project of Grain Based Distillery Plant of 200 KLD (2 Phase x 100 KLD) and Cogeneration Power Plant of 6.0 MW (2 Phase x 3 MW) located near Vill. Bhedra Nawagaon, Block- Rajnandgaon, Dist- Rajnandgaon of Chhattisgarh State by M/s. Nav Durga Fuel (P) Limited– Re-consideration of Environmental Clearance

[IA/CG/IND2/402306/2022, IA-J-11011/428/2022-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its EAC meeting ID: IA/IND2/13410/21/12/2022 held on 21st -22nd December, 2022 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

Sl. No.	ADS by MOEFCC	Reply of PP
1.	PP clarified that plot area proposed for the project is 13.47 ha. Accordingly, plot area to be considered as 13.47 ha instead of 12.97 ha.	Plot area of proposed project is 13.47 Ha., which includes 12.97 available land and 0.5 Ha. of land is covered under natural nallah passing through the project area. Office of Exe. Engineer, Water Resources Deptt. has granted NOC for the project with construction of VRB on the nallah vide letter ref. no. 2412/Tech/2022 dt: 01.08.2022. However, during meeting PP clarified that without considering nala the total plot area is 12.97 Ha which is under possession of the company. Accordingly, committee accepted the total plot area as 12.97 Ha.

2.	PP informed that 13.47 ha land is acquired as three pieces/portion of land. However, Ownership document was presented only for one piece of land. PP was not able to provide evidence of acquisition of all three piece of land.	12.97 of land area has been acquired under registered sale deed (5 nos.) through 3 different sellers. Copy of registered sale deed is submitted.
3.	PP informed that 25 grown up mango trees are located in the proposed project site, which shall be retained. Accordingly, the Committee suggested that PP shall submit revised layout plan retaining the existing mango trees.	All the 25 grown up mango trees will be preserved and retained. Copy of updated layout plan with all mango trees is submitted.

EAC found the response submitted by PP for ADS satisfactory.

The Project Proponent and the accredited Consultant M/s. Enviro Infra Solutions Pvt. Ltd., Ghaziabad, (NABET Certificate No. NABET/EIA/2123/SA 0181/Rev.01 and validity 22nd Feb.'2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project 200 KLPD Grain Based Ethanol Plant and 6 MW Cogeneration Power Plant (Fuel to be use Rice Husk / Biomass Briquette) located near Vill. Bhedra Nawagaon, Block- Rajnandgaon, Dist- Rajnandgaon of Chhattisgarh State by M/s. Nav Durga Fuel (P) Limited (NDFPL).

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

The details of products and capacity as under:

S. No.	Name of Unit	Name of Product / By Product	Production Capacity
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1	Distillery (Broken Rice / Maize raw material)	Ethanol	200 KLPD
2	Power Cogeneration	Power	6.0 MW
3	DDGS Dryer	DDGS	160 TPD
4	Fermentation Unit	CO ₂	160 TPD

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

Total land area required is 12.97 Hectares. Greenbelt will be developed in total area of 5.71 hectares i.e., 44.02 % of total project area. The estimated project cost is Rs. 273 Crores. Capital cost of EMP would be Rs. 8.95 Crores and recurring cost for EMP would be Rs. 2.7 Crores per annum. Industry proposes to allocate Rs. 2.75 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 70 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. There are no Reserve forests/protected forests within 10 Km. radius. River Shivnath is at a distance of 12 Km in E direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.41 µg/m³, 1.2 µg/m³, 0.81 µg/m³ and 0.97 µg/m³ with respect to PM10, PM2.5, SO2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 800 m³/day which will be met from Borewells within premises. Application has been submitted to CGWA vide Application No. 21-4/7375/CT/IND/2022 Dt: 28.09.2022. Effluent (Condensate/spent lees/blowdown etc.) of 470 m³/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 1200 m³/day. Raw stillage (1586 KLPD :quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 25 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid

discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 6 MW and will be met from proposed 6 MW cogeneration power plant. 32 TPH Rice husk/briquette fired boiler will be installed. APCE ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for the proposed boiler. 2 Nos. 1000 KVA and 1 No. 500 kVA DG set will be used as standby during power failure and stack height (3.5 m. above roof of the building) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 60 meters will be installed for controlling the particulate matter emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ (160 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (160 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (85 TPD) will be supplied to fly ash brick manufacturers.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.1 TPD) and STP Sludge (0.025 TPD) will be used as manure.

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

Total land of 12.97 Hectares is under possession of the company and land use conversion application has been submitted to Office of SDO (Revenue),

Rajnandgaon, Chhattisgarh dated 02.08.2022. EAC found the response satisfactory.

During deliberations, EAC discussed following issues:

- PP clarified that without considering nala the total plot area is 12.97 Ha which is under possession of the company. Accordingly, committee accepted the total plot area as 12.97 Ha.
- PP has submitted risk management plan for the project.
- PP has to comply with the conditions stipulated in NOC dated 01.08.2022 for the nala passing within vicinity of the project site.
- Capital expenditure and operational expenditure of EMP; activities of CER shall be implemented as per details proposed below.

Capital cost and recurring cost of EMP are given below:

S.No	Particulars	Amount in INR, Lakhs
One Time Installation Cost		
1.	Installation of Air Pollution Control System	225.0
2.	Installation of MEE, CPU & DWGS Dryer System	385.0
3.	Solid waste such as Garbage, process and ETP storage and odor management system	25.0
4.	Green Belt Development	50.0
5.	Installation of Tertiary Water Treatment Plant	30.0
6.	Installation of Fire Safety System	75.0
7.	Installation of Solar Power System	60.0
8.	Rain Water Harvesting System	45.0
	Total	895.0
Recurring Cost / Annum		
1.	Environmental Monitoring	25.0
2.	Maintenance Cost of Air Pollution Control System	75.0
3.	Maintenance of MEE, CPU & DWGS Dryer System	125.0
4.	Greenbelt maintenance	25.0
5.	Maintenance of ETP / STP / Water Treatment Plant	20.0
	Total	270.0
	Grand Total	1165.0

Details of CER with proposed activities and budgetary allocation:

S.No	CER Activities	Timeline with Budget allocation (Lakhs)		
		Upto Dec. 2023	Upto Dec. 2024	Total
1.	Support to Govt. Health Care agencies for improvement and upgradation of existing health infrastructure in Rajnandgaon District	50	50	100
2.	Financial assistance & Support to agriculture deptt. for implementation of PM Kusum Yojana for Harvesting of Solar Power and Installation of standalone solar powered agricultural pumps.	50	50	100
3.	Skill development for 100 nos. local youths (as per employability potential) from villages within 10 km. radius. Training Charges Rs. 7500/= plus Rs. 2500/= stipend per month for 3 months. (Rs. 15000 / youth)	7.5	7.5	15
4.	Development of Rain Water Collection Pond in 2 nos. villages within 10 Km. radius	20	20	40
5.	Tree Plantation within 10 Km. Radius in consultation with DFO	10	10	20
	TOTAL CER AMOUNT (Lakhs)	137.5	137.5	275

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

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

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

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

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

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

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

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

- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iv). PP shall comply with the conditions stipulated in NOC dated 01.08.2022 for the nala passing within vicinity of the project site. Additional thick green belt shall be developed on both sides of the drain. No effluent shall be discharged into the drain.
- (v). NOC from the Central Ground Water Authority (CGWA) shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
- (vi). Total fresh water requirement shall not exceed 800 m³/day, which will be met from Borewells within premises. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vii). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the Condensate Polishing Unit (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
- (viii). APCD ESP with a stack height of 60 meters will be installed with the 32 TPH Rice husk/briquette fired boiler fired boiler for controlling the

particulate emissions within the statutory limit of 50 mg/Nm³. SO₂ and NO_x emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/systems will be conducted annually.

- (ix). Boiler ash (60 TPD) shall be supplied to fly ash brick manufacturers. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.
- (x). CO₂ (160 TPD) generated during the fermentation process is being/will be collected by utilizing CO₂ scrubbers and sold to authorized vendors/collected in proposed bottling plant.
- (xi). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xiv). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste;

(b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

- (xvi). The green belt of at least 5-10 m width shall be developed 5.71 hectares i.e., 44.02 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines and in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.
- (xvii). PP proposed to allocate Rs. 2.75 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed by December, 2024 in consultation with District Administration.
- (xviii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (xix). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
- (xx). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall

install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

- (xxi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.
- (xxii). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 02

Expansion of Grain based Distillery (120 to 300 KLPD) & Co-generation Power Plant (2.5 to 9.0 MW) by installation of new 180 KLPD Grain based Ethanol Plant at Village Sangat Kalan, Tehsil Bathinda, District Bathinda, Punjab by M/s. Om Sons Marketing Private Limited – Consideration of amendment of Environmental Clearance

[IA/PB/IND2/285683/2022, IA- J11011/274/2 011-IA-II (I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. F. No. J-11011/274/2011-IA II (I) dated 03.01.2022 for the project for carrying out expansion of Grain Based Distillery from 120 KLD to 300 KLD & increase in capacity of Co-generation Power Plant from 2.5 to 9.0 MW located at village Sangat Kalan, Tehsil-Bathinda, District-Bathinda, Punjab by M/s Om Sons Marketing Private Limited.

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

S. No.	Particulars	Detail as per EC Granted	Additional detail for Amendment in EC	Detail after amendment	Justification/reasons
GENERALS					For using the same for Parking of vehicles, green belt development and construction of laboratory for ETP, storage area for ETP chemicals and office for ETP staff
1.	Land Area in acre	25.34	11.5	36.84	
2.	Green area in acre	8.41	7.5	15.91(43%)	
3..	Cost of the project	Rs 200 cr	Rs 3.96 cr	Rs 203.96 cr	

During deliberations, EAC discussed following issues:

- PP informed that EC dated 03.01.2022 has been implemented and CTO for the 300 KLPD distillery project has been obtained. Accordingly, the committee desired to submit the CCR from IRO.
- Committee also suggested to submit updated layout plan considering the additional proposed land.
- Land ownership documents of the additional land shall be submitted.
- Addendum submitted to EMP report is completely plagiarised which was submitted for EC granted with minor edit of total land area. In this regard, PP shall also submit addendum to EMP report considering the proposed changes envisaged for the addition of land.

Accordingly, proposal was deferred for want of above additional information. Above all additional information shall be submitted online to the PARIVESH portal for further consideration by EAC.

Agenda No. 03

Proposed 250 KLPD Grain Based Distillery Plant with 6 MW Cogeneration Power Plant located at Survey no. 86, Village: Asnad-394540, Taluka – Olpad, District- Surat, Gujarat M/s. Vector Infraprop Pvt. Ltd. - Consideration of Environmental Clearance.

[IA/GJ/IND2/409741/2022, IA-J-11011/528/2022-IA-II (I)]

The Project Proponent and the accredited Consultant M/s. En-vision Enviro Technologies Pvt. Ltd. (NABET certificate no. NABET/EIA/2023/RA0212 and validity 07/12/2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 250 KLPD Grain based Ethanol Plant & 6 MW Co-generation power plant located at Village - Asnad, Tehsil - Olpad, District - Surat, State - Gujarat by M/s. Vector Infraprop Pvt. Ltd.

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

The details of products and capacity as under:

S. No.	Name of Unit	Name of the Product/by-product	Production capacity
1.	Distillery	Absolute Alcohol(Ethanol)	250 KLPD
2.	Cogeneration power plant	Power	6 MW
3.	DWGS dryer	DDGS	120 TPD
4.	Fermentation unit	Carbon di-oxide	190 TPD

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

Total land area required is 12.5 hectares. Greenbelt will be developed in total area of 4.1819 hectares i.e., 33.5% of total project area. The

estimated project cost is Rs. 210 Crores. Capital cost of EMP would be Rs. 50.25 Crores and recurring cost for EMP would be Rs. 4.73 Crores per annum. Industry proposes to allocate Rs. 3.15 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 65 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Water bodies: natural pond is adjacent to site in SSW direction. River Kim is at a distance of 3.86 km.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $1.69 \mu\text{g}/\text{m}^3$, $3.52 \mu\text{g}/\text{m}^3$ and $1.40 \mu\text{g}/\text{m}^3$ with respect to PM_{10} , SO_2 and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1,302 CMD which will be met from Takarma Distry. NOC has been obtained by M/s. Vector Infraprop Pvt. Ltd. vide letter no. O. No. HSDO/vector infra/asnad/water availability/ws/644 dated 21/11/2022. However, committee suggested to reduce the fresh water requirement to 1000 KLD. Effluent (Condensate/spent lees/blow down etc.) of 1,371 CMD quantity will be treated through Condensate Polishing Unit of capacity 1,450 CMD. Raw stillage 1,865 TPD will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 12 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 6.25 MW and will be met from proposed 6 MW cogeneration power plant/ 0.25 MW state grid. 45 TPH Imported coal fired boiler will be installed. APCE ESP + Flue Gas Desulphurization (FGD) with a stack height of 50 m will be installed with the boiler for controlling the particulate emissions within the statutory limit of $30 \text{ mg}/\text{Nm}^3$. 1,250 kVA DG set will be used as standby during power failure and stack height (15m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE ESP + Flue Gas Desulphurization (FGD) with a stack height of 50 m will be installed with 45 TPH capacity boiler for controlling the particulate matter & SO₂ emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ (190 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to Industries producing carbonated products.

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

- DDGS (Distilled Dried Grains Stillage) (120 TPD) will be sold as cattle and Poultry feed / fish feed / prawn feed.
- Boiler ash (7,840 TPD) will be sent to cement manufacturing industry.
- Used oil (0.5 Tonne per annum) will be sold to authorized recyclers.
- CPU sludge (1,547 TPD) and STP Sludge (0.3 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the proposed capacity of 250 KLPD will be used for manufacturing fuel ethanol only.

Total land of 12.50 Hectares is leased from M/s. Luna Chemicals Industries Pvt. Ltd. for a tenure of 25 years and under possession of the company. Land use conversion has been completed vide letter no. 4/TP/N.A./Reg.549/92-93 Dated 30/12/1994. EAC found the response satisfactory.

During deliberations, EAC discussed following issues:

- PP shall submit revised layout incorporating rain water harvesting storage for 60 days and by having separate entry to Industry removing spent wash storage lagoon. Accordingly PP vide letter dated 25.01.2023 submitted the revised layout as desired by EAC.
- PP clarified that CRZ boundary is at 898.04 meters in NNW direction and the KRBC water offtake point of Luna Chemical is separate and the Proposed water off take point of KRBC for Vector Infraprop Pvt.

Ltd. is separate point.

- The committee noted that the proposed project is located in the premises of M/s. Luna Chemical Industries Pvt Ltd which is engaged in distillery activity. Now, M/s. Luna Chemical Industries Pvt Ltd has given land to M/s. Vector Infraprop Pvt. Ltd for setting up of the proposed grain based distillery. Accordingly, the committee also reviewed the CCR of M/s. Luna Chemical Industries Pvt Ltd issued by GPCB. PP informed that existing unit of M/s. Luna Chemical Industries Pvt Ltd is very old and EC is not applicable. The committee found the compliance report satisfactory.
- The undertaking in support of Adequate Scrubbing with ESP for boiler, 10% solar power utilization, Revised Environment Pollution Control Measures cost, Revised CER Plan.
- The copy of MoU with M/s. J K Lakshmi Cement Limited and email addressed to M/s. Sanghi Industries Limited in respect to fly ash disposal.
- Separate water reservoir to be established to meet the fresh water demand.

Details of capital and recurring cost of EMP:

Sl. No.	Env. Attribute	Description	Capital Cost in Crores	Recurring Cost in Crores/Annum
1	Air	Air pollution control system (ESP, Flue Gas Desulphurization (FGD) system etc.) online monitoring system, stack monitoring facility	3.60	0.40
2	Water	Scrubbing system, compressing system, liquefying system and storage for CO ₂ removal	4.00	0.40
		Treatment system for spent wash, effluent, DWGS centrifuge decanter, DDGS dryer for ZLD system	30.00	3.00
		Condensate Polishing unit for wastewater treatment, online meters, monitoring	5.40	0.50

		facility		
		Rainwater harvesting systems and stormwater drainage network	0.30	0.10
3	Hazardous Management	Disposal of waste and its compliances	0	0.01
4	Fire & Safety	Fire Hydrant system with automation, Fire Extinguishers, water sprinklers, PPES and safety equipment, sprinklers etc.	2.50	0.10
5	Occupational Health	First Aid; medical equipment with antidotes;	0.50	0.15
6	Noise	Noise Reduction Systems	0.10	0.01
7	Green Belt Development	Tree plantation, Green Belt maintenance	0.40	0.04
8	AWH Monitoring	Env. Monitoring through NABL/MoEF&CC lab	0.30	0.02
9	CER	As per Om dtd. 1/5/2018 & amended thereafter	3.15	0
		Total	50.25	4.73

Details of CER activities:

S N	Area	Activities	Villages	Year wise Allocation of Amount (INR In Lacs) for CER activities					Grand Total
				Year					
				1 st	2 nd	3 rd	4 th	5 th	
1	Infrastructure	Contribution in installation of RO plant (Rs. 5.5 lacs for per full fledge plant) x 04 units	Mandr oi, Pardi Zakhri, Asnad	6	5	4.5	3.5	3	22
		Providing infrastructure facilities for internal village roads and Paver	Asnad, Koba, Mandroi, Kamrol	21	18	15	12	6	72

S N	Area	Activities	Villag es	Year wise Allocation of Amount (INR In Lacs) for CER activities					
				Year					Gran d Total
				1 st	2 nd	3 rd	4 th	5 th	
		block construction to control dust emissions (Rs. 18 lacs x 4 units)	i						
2	Education	Providing educational support at schools – Computers, Projectors and Gadgets for Online Learning / E-Learning Efficiency, sanitation facilities to schools (Rs. 1.5 lacs x 3 units)	Koba, Pardi, Mandroi	1.5	1.5	1.5	0	0	4.5
		Support local vocational training institutes (Rs. 2 lacs x 5 units)	Asnad, Koba, Mandroi, Kamroli	3.5	3	1.5	1	1	10
3	Health	To support local public health centers with infrastructure facilities (Rs. 12 lacs for 5 years)	Sarsana	4	3	3	2	1	13
4	Environment	Provision of Solar panels (Rs. 1.8	Koba, Pardi,	1.8	1.8	1.8	1.8	0	7.2

S N	Area	Activities	Villag es	Year wise Allocation of Amount (INR In Lacs) for CER activities					
				Year					Gran d Total
				1 st	2 nd	3 rd	4 th	5 th	
		lacs per 3 kW system x 4 units)	Mandr oi						
		Solar Street Light 200 nos. of units (Rs 21,500/- per unit)		12	10	8	7	6	43
		Distribution of tree guard, sapling and pots; plantation to outside of roads (Rs. 950 per sapling x 500 unit for Five years)	Asnad, Koba Pardi, Mandr oi, Kamrol i	4.7 5	4.7 5	4.7 5	4.7 5	4.7 5	23.7 5
		Contribution in providing rainwater harvesting structures in nearby villages. 50 Nos of RWH structures (Rs. 60,000/- per unit)	Asnad, Koba, Mandr oi, Kamrol i,	8	7	6	5	4	30
		Pond deepening (30 lacs x 3 unit)		30	0	30	0	30	90
Total (Rs.in Lacs)				92. 55	54. 05	76. 05	37. 05	55. 75	315

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

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.
- (v). Total fresh water requirement shall not exceed 1302 m³/day, which will be met from Takarma Distry. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days rainfall capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

- (vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the Condensate Polishing Unit (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
- (vii). No effluent shall be discharged into the nearby water reservoir.
- (viii). APCE ESP with Lime Dosing with a stack height of 50 m will be installed with the 45 TPH coal fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm³. SO₂ and NO_x emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
- (ix). Boiler ash (7840 TPD) shall be sent to cement manufacturing industry. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.
- (x). CO₂ (190 TPD) generated during the fermentation process is being/will be collected by utilizing CO₂ scrubbers and sold to authorized vendors/collected in proposed bottling plant.
- (xi). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

- (xii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xiv). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xv). The company shall undertake waste minimization measures as below
(a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi). The green belt of at least 5-10 m width shall be developed 4.1819 hectares i.e., 33.5 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. Green belt shall be developed within one year. Additional green belt shall be developed towards the water reservoir in the south.
- (xvii). PP proposed to allocate Rs. 3.15 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xviii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project

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

- (xix). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
- (xx). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/Director/CEO as per company hierarchy.
- (xxii). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 04

Proposed Grain Based Distillery Plant (100 KLPD) along with Co-Generation Power Plant of 7.5 MW located at Khasra No. 314/2, 338/1, 327, 328, 329, 330, 336, 335, 339, 340, 349 Village: Kandarka, Tehsil: Berla, Dist: Bemetara, Chhattisgarh by M/s. Varda Energy & Engineering Pvt. Ltd. – Consideration of amendment of Environmental Clearance

[IA/CG/IND2/ 295407/2022, IA-J-11011/388/2021-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide EC Identification No.-EC22A060CG114975 File No.- IA-J-11011/388/2021-IA-II(I) Dated 24.03.2022 for the project proposed Grain Based Distillery Plant (100 KLPD) along with Co-Generation Power Plant of 7.5 MW located at Khasra No. 314/2, 338/1, 327, 328, 329, 330, 336, 335, 339, 340, 349 Village: Kandarka, Tehsil: Berla, Dist: Bemetara, Chhattisgarh by M/s Varda Energy & Engineering Pvt Ltd.

The project proponent has requested for amendment in the EC with the 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.	Cond. No. 8 (Page no.2)	Distance of Kharun River- 1.8 km, E from Project site.	Distance of Kharun River – 0.125 km, E from project site.	Inadvertently distance of Kharun River was mentioned by typographic mistake in agenda Annexure 1 (Brief Writeup) during EAC meeting.

During deliberations, EAC discussed following issues:

- The committee noted that PP has concealed the facts regarding distance of Karuna River while granting of EC dated 24.03.2022. Accordingly, the committee suggested that Show Cause Notice may be issued to the consultant M/s. AmplEnviron Pvt Ltd.
- It was desired that as per this Ministry's OM No. 22-39/20200IA III dated 14.02.22, PP has to submit HFL of river and RL of the proposed site as certified by concerned District Magisterial/ Executive Engineer from State water resource Deptt. or any other Officer authorized by State Govt. as Karuna river flows at a distance of 0.125 km from the proposed project site.

In view of above, committee suggested to return the proposal in present form. Accordingly, proposal was returned in present form

Agenda No. 05

Installation of 9 MMTPA Grass root Cauvery Basin Refinery located at Panangudi Village, Tehsil & District Nagapattinam, Tamilnadu by M/s. Chennai Petroleum Corporation Limited – Consideration of amendment of Environmental Clearance

[IA/TN/IND2/76843/2018, IA- J-11011/276/2018-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. File No.J.-11011/276/2018-IA-II(I) dated 13.10.2020 for the project for Installation of 9 MMTPA Grass root Cauvery Basin Refinery located at Panangudi Village, Tehsil & District Nagapattinam, Tamilnadu by M/s. Chennai Petroleum Corporation Limited.

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

Sl. No.	Para of EC issued by MoEF&CC	To be revised /read as	Justification/ Reasons
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<p>1.</p>	<p>Page 2, para 5: Total water requirement is 3300 cum/hr will be met from Desalination Plant with a design capacity of 3300 cum/hr. Effluent will be treated in a new Effluent Treatment Plant of capacity 550 cum/hr and then treated water will be routed to RO-DM facility. The RO reject of 360 cum/hr will be routed to Desalination Plant. There will be a discharge of 5923 cum/hr to sea through a pipeline.</p>	<p>Page 2, para 5: Total water requirement is 3300 cum/hr will be met from Desalination Plant with a design capacity of 3300 cum/hr. Effluent will be treated in a new Effluent Treatment Plant of capacity 550 cum/hr and then treated water will be routed to RO-DM facility. The RO reject of 360 cum/hr will be routed to Desalination Plant. There will be a discharge of 5923 cum/hr to sea through a pipeline.</p> <p>Desalination Plant Location: Coastal area (Govt. Poromboke land) of Nagore sea shore falling under CRZ-II Zone.</p>	<p>As per the original proposal, Desalination Plant of CBR project was proposed to be installed inside the Refinery premises. Only the sea water intake and brine reject pipelines were to be routed to and from the coastal zone and refinery. The relocation of the Desalination plant from the refinery premises to the seashore has more technical advantages.</p> <p>1) Laying of lengthy/large pipelines, pumping of sea water from the coast to the refinery premises and the reject from the refinery to the sea could be avoided.</p> <p>2) Challenges like laying of HDPE pipeline across roads, railways, river up to the refinery from the sea coast is eliminated.</p> <p>3) As per industry scanning, Desalination</p>
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During deliberations, EAC discussed following issues:

- The committee noted that land for the proposed new site for installation of desalination plant is not under possession of PP. It was also noted that the inlet and outflow points of the proposed desalination plant remains the same. Accordingly, committee suggested that PP shall submit the land possession document of the proposed installation of desalination plant.
- PP shall also submit the marine outfall impact due to change in location of proposed desalination plant.

In view of above, committee suggested to return the proposal in present form. Accordingly, proposal was returned in present form.

Agenda No. 06

Proposed expansion of Gas Processing Complex (GPC) from 1 MMSCMD to 1.5 MMSCMD within the existing Dandewala (DND) block of 250 Sq.km located in Rajasthan by M/s. OIL INDIA LTD RAJASTHAN PROJECT – Consideration of Amendment in Terms of Reference.

[IA/RJ/IND2/296256/2023, IA- J-11011/430/2017-IA-II(I)]

The proposal is for amendment in the ToR granted by the Ministry vide letter no. No IA-J-11011/430/2017-IA-II(I) dated 29.11.2022 for the project Proposed expansion of Gas Processing Complex (GPC) from 1 MMSCMD to 1.5 MMSCMD within the existing Dandewala (DND) block of 250 Sq.km located at Rajasthan by M/s OIL INDIA LTD RAJASTHAN PROJECT.

The project proponent has requested for amendment in the ToR with the details areas under:

S.No	Para Of ToR/EC Issued By MoEF & Cc	Details As Per The ToR/EC	To Be Revised /Read As	Justification Reasons
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1	<p>The Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation</p>	With Public Consultation	Without Public Consultation	<p>Public Hearing was conducted by M/s Oil India Ltd on 08.11.2019 for project named as "Developmental Drilling of 37 onshore wells in Tanot, Dandewala & Bagitibba Mining Lease Block located at village Tanot, Tehsil Ramgarh, District Jaisalmer, Rajasthan by M/s Oil India Ltd" and Environment Clearance (EC) for this project has been granted accordingly on 15.10.2020. It would be worth mentioning that for the proposed expansion project, there will be no additional land Acquisition required. The proposed expansion will be within the existing facility only. Furthermore, due to the proposed expansion project, there will be no additional water requirement and no additional generation of sewage & hazardous waste. In view above and considering the previous Public Hearing within the last three (03) years for a project in the same block, it is requested to reconsider our application & grant an exemption of Public Hearing and issue revised ToR with waiver of Public Hearing for the proposed expansion project.</p>
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During deliberations, PP was unable to explain the provision/rule under which waiver of public hearing has been sought. In this regard, Committee noted that OM dated 11.04.2022 allows expansion of production capacity upto 50% in three phases i.e. 20%, 20% , 10% and there is no provision for expansion of production capacity directly to 50 %. Further, the committee noted the production of formation water and condensate is increasing from 50 KLD to 75 KLD. PP also did not submit the copy no pollution load certificate from the State Pollution Control Board for the proposed project. Therefore, the committee did not accept the proposal for the waiver of Public Hearing.

In view of above, committee suggested to return the proposal in present form. Accordingly, proposal was returned in present form.

Agenda No. 07

Proposed Grain Based Distillery for manufacturing of capacity 100KLD of ENA/ETHANOL, Brewery Unit for manufacturing of 75 KLD (2.5Lakh HLPa) of Beer, IMFL bottling Plant and 3 MW Co-generation Plant by M/s. RKV Spirits Private Limited - Consideration of Environmental Clearance.

[IA/HP/IND2/408676/2022, IA-J-11011/110/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Chandigarh Pollution Testing Laboratory (Certificate No. – NABET/EIA/2225/ RA 0250 valid upto 12th February, 2025 made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 100KLD of ENA/ETHANOL, Brewery Unit for manufacturing of 75 KLD (2.5Lakh HLPa) of Beer, IMFL bottling Plant and 3MW CO-generation Plant located village-Beed Plassi, Tehsil-Nalagarh, District-Solan, State-Himachal Pradesh by M/s RKV Spirits Private Limited.

As per EIA Notification dated 14th Sep, 2006 the proposed grain based distillery project falls under Category "B", Project or Activity 5(g) 'Distillation'. But, as the project falls within 5km of inter State boundary of

Punjab, it is to be treated as category "A" and Environmental Clearance is appraised at central level.

The details of products and capacity as under:

S.No.	Name of Unit	Name of product/by-product	Production capacity
1.	Distillery	ENA ETHANOL	42 KLPD 58 KLD
2.	Brewery	BEER	75 KLD
3.	Bottling	IMFL bottling	4243 cases per day (14 lakh cases per annum)
3.	Co-generation power plant	Power	3.0 MW
4.	DWGS dryer	DDGS	152 TPD
5.	Fermentation Unit	Carbon di-oxide	70 TPD

The committee noted that as per Decision Support System on Parivesh Portal the proposal attracts Forest Clearance as the proposed site is falling inside the Bir Plassi protected forest area under Nalagarh Forest Division. In this regard, the committee noted that PP has not disclosed any details related to the presence of forest area and also not applied for Forest Clearance. Accordingly, the committee suggested to obtain Forest Clearance for the proposed project.

In view of above, committee suggested to return the proposal in present form. Accordingly, proposal was returned in present form.

Agenda No. 08

Proposed 100 KLPD grain-based Fuel Ethanol plant and 1 x 3 MW of captive power plant (Coal or Biomass), located at Survey No: 27/1/1, 27/2/1, 27/2/2, 27/2/3 & 27/2/4 Hulasagera Village of Hanamasagar Hobli, Kustagi Taluka, Koppal District, Karnataka by M/s. Banashri Bio-Refineries Private Limited - Consideration of Environmental Clearance.

[IA/KA/IND2/403764/2022, IA-J-11011/461/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited (NABET / EIA/ 1922 / SA 0148 valid upto 11-03-2023) , made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for proposed 100 KLPD grain-based Fuel Ethanol plant and 1 x 3 MW of captive power plant (Coal or Biomass), located at Survey No: 27/1/1, 27/2/1, 27/2/2, 27/2/3 & 27/2/4 Hulasagera Village of Hanamasagar Hobli, Kustagi Taluka, Koppal District, Karnataka by M/s Banashri Bio-Refineries Private Limited.

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

The details of products and capacity as under:

S. NO.	NAME OF UNIT	NAME OF THE PRODUCT	PRODUCTION CAPACITY
1	Ethanol plant	Ethanol	100 KLPD
2	Power plant	Electricity	3.0 MW
<u>BY-PRODUCTS</u>			
1	Ethanol plant	DDGS	80 TPD
2	Ethanol plant	CO ₂ recovery	76 TPD

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

Total land required is 6.98 Ha. (17.25 acres). Greenbelt will be developed in total area of 2.44 Ha. (6.03 acres) i.e 34.95 % of total project area. The estimated project cost is Rs. 166.28 Crores. Capital

cost of EMP would be Rs. 19.65 Crores and recurring cost of EMP would be Rs. 2.1 Crores per annum. Total Employment will be 100 persons.

There are no National parks / Wild life sanctuaries, Biosphere Reserves, Tiger / Elephant reserves, Wildlife corridors etc. within 10 Km radius. Hanamasagar Block RF is at a distance of 7.7 Kms. Ikal Nala is at a distance of 3.8 Kms. Few tanks/ ponds are present within 10 Km. radius. As per the Topographical map there are two first order streams passing through the site. But There are no streams observed in site and same is also confirmed by Asst Director of land records Kushtagi, Karnataka vide letter no. KST/GEN/JR/records-723/2022-23 dated 15-11-2022.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $0.1 \mu\text{g}/\text{m}^3$, $0.1 \mu\text{g}/\text{m}^3$, $0.5 \mu\text{g}/\text{m}^3$, and $0.5 \mu\text{g}/\text{m}^3$ with respect to PM_{10} , $\text{PM}_{2.5}$, SO_2 and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be $400 \text{ m}^3/\text{day}$ which will be sourced from Ground water. Application has been submitted to Directorate of Ground water for drawing Ground water. Effluent (Condensate/spent lees/blow down etc.) of $592 \text{ m}^3/\text{day}$ quantity will be treated through Condensate Polishing Unit of capacity 600 KLPD. Raw stillage (600 KLPD quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 5 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

The power requirement will be 3 MW and will be met from the proposed 1 x 3 MW captive power plant. 1 x 30 TPH Biomass / Coal fired boiler will be installed. APCE Electro Static Precipitator with a stack height of 48 m will be installed for controlling the particulate emissions within the statutory limit of $30 \text{ mg}/\text{Nm}^3$ for the proposed boiler. 2 x 1000 KVA DG set will be used as standby during power failure and stack height (3 m above building) will be provided as per the CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP of 5- fields with a stack height of 48 meters will be provided to 30 TPH boiler for effective dispersion of sulphur dioxide emission into the atmosphere.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated (76 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

Details of solid waste/Hazardous wastegeneration and its management:

- DDGS (Distilled Dried Grains Stillage) (80 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (55.2 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (0.3 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.2 TPD) and STP Sludge (0.05 Kg/day) will be used as manure.

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

Total land of 6.98 Ha. (17.25 acres) is registered with the company name and converted to non agricultural land. EAC found satisfactory.

During deliberations, EAC discussed following issues:

- The committee noted that the consultant has proposed non-Process effluent (Backwash from DM plant & Boiler blowdown) of 33 KLD will be neutralized in a neutralization tank and will be utilized for greenbelt development, dust suppression and ash conditioning, which is not adequate for adhering to ZLD. Accordingly, committee suggested that non-process effluent should be treated and recycled/re-used for process. It was also advised consultant to comply with ZLD concept in spirit and letter.
- 34.95 % of total area i.e. 2.44 Ha (6.03 Acres) will be developed with greenbelt (6030 nos. of plants) within the plant premises within one year time period. We do hereby confirm that, we will develop

- indigenous species in consultation with Local DFO.
- PP shall provide filter press in treatment of Condensate & other non process effluent in Condensate Polishing Unit (CPU).

Details of capital and recurring cost of EMP:

S.NO	ITEM	Capital Cost (Rs in Crores)	Recurring cost (Rs in Crores/Annum)
1.	Air emission control systems (ESP, stack, bag filters, dust suppression, etc.)	4.0	0.50
2.	Ash handling & management	1.0	0.20
3.	Effluent Treatment Plant	12.0	1.0
4.	Fire fighting	1.0	0.10
5.	Online monitoring equipment (CEMS& OEMS)	0.8	0.11
6.	Greenbelt development	0.35	0.04
7.	Occupational Health & Safety	0.50	0.15
TOTAL		19.65	2.1

Details of CER activities:

S.NO.	Proposed Activity	Proposed Budget (RS. In Crores)
1	Community & Infrastructure Development Programs in Hulsageri village, Miyanpur village, Menasageri village & Hanamgeri village	0.35
2	for Health & Hygiene of the community (Mineral Water plants, construction toilets in Hulsageri village, Miyanpur village, Menasageri village & Hanamgeri village, Distribution of Medicines etc.)	0.53

3	Skill Development A Community Centre will be established in Hulsageri village which will consist of the following: i)Vocational Training Institute with latest tools, machinery & softwares etc. for making them Industry ready. ii)Workshop centre with latest tailoring machines for training women (like tailoring, stitching etc.) iii)Skill development / Computer / IT Training Centre for improving computer knowledge and making Industry ready.	0.59
4	for Education & Sports (Construction of class rooms in schools, providing computers in class rooms, development of library facility in Hulsageri village, Miyanpur village, Menasageri village & Hanamgeri village)	0.19
Total		1.66

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

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

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

Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project.

Conversion of land use (CLU) certificate shall be obtained before start of construction activities.

- (iv). NOC from the Central Ground Water Authority (CGWA) shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.
- (v). Total fresh water requirement shall not exceed 400 m³/day, which will be met from ground water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the Condensate Polishing Unit (CPU). PP shall provide filter press in treatment of Condensate & other non process effluent in Condensate Polishing Unit (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
- (vii). APCE ESP (5 fields) with a stack height of 48 m will be installed with the 30 TPH coal/biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm³. SO₂ and NO_x emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

- (viii). Boiler ash (55.2 TPD) shall be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.
- (ix). CO₂ (76 TPD) generated during the fermentation process is being/will be collected by utilizing CO₂ scrubbers and sold to authorized vendors/collected in proposed bottling plant.
- (x). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xi). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xiii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xiv). The company shall undertake waste minimization measures as below
(a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

- (xv). The green belt of at least 5-10 m width shall be developed 2.44 hectares i.e., 34.95 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.
- (xvi). PP proposed to allocate Rs. 1.66 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
- (xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in

the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.

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

Agenda No. 09

Proposed 100 KLD Grain Based Ethanol plant along with 3.0 MW Cogeneration Power Plant at Survey no. 333, Koyba Halvad Road, Koyba, Tehsil- Halvad, Dist.- Morbi, Gujrat by M/S. Prism Advance Technology Enterprise Private Limited - Consideration of Environmental Clearance.

[IA/GJ/IND2/412023/2022, IA-J-11011/452/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Envisolve LLP (NABET certificate no. NABET/EIA/2124/IA0088 and validity 19/08/2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 100 KLPD Grain based Ethanol Plant & 3 MW Co-generation power plant (Rice Husk) located at Survey no. 333, Koyba-Halvad Road, Village Koyba, Tehsil- Halvad, District Morbi, State-Gujrat by M/S. Prism Advance Technology Enterprise Private Limited.

PP has informed that total land of 3.98 Hectares is under possession of the company. EAC opined that its not feasible to establish a distillery project of 100 KLPD capacity in the proposed land area of 3.98 Ha. In this regard, committee suggested that at least 6 Ha land is required for installation of distillery project of 100 KLPD capacity.

Accordingly, proposal was returned in present form.

Agenda No. 10

Proposed 150 KLPD Grain Based Distillery Plant (Ethanol) along with 3.2 MW Cogeneration Power Plant located at S.NO. 128 ,130 & 132, Ravipahad Village, Mothey Mandal, Suryapeth, Telangana by M/s. NMK Biofuels Pvt Ltd– Consideration of amendment of Environmental Clearance

[IA/TG/IND2/ 296482/2023, IA-J-11011/467/2 022-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. EC Identification No EC22A022TG139639 dated 6th December 2022 for the project proposed 150 KLPD Grain Based Distillery Plant (Ethanol) along with 3.2 MW Cogeneration Power Plant located at S.NO. 128 ,130 & 132, Ravipahad Village, Mothey Mandal, Suryapeth, Telangana by M/s. NMK Biofuels Pvt. Ltd.

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

No	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons
	Para No 9	Total fresh water requirement of 596 m3/day will be met from Paler reservoir. Application submitted to Engineer-Chief (General), dated 08th September 2022. Effluent (Condensate/ Spent lees /blowdown) of 713 m3/day quantity will be treated through Condensate polishing unit of capacity 400	Total fresh water requirement of 596 m3/day will be met from Paler reservoir. Application submitted to Engineer-Chief (General), dated 08th September 2022. Effluent (Condensate/ Spent lees /blowdown) of 713 m3/day <u>quantity will be treated through</u>	800 m3/day capacity of CPU is required to treat 713 CMD of other effluent.

		<p>m3/day. Raw Stillage (1003 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.</p> <p>TP will be installed to treat sewage generated.</p>	<p><u>Condensate polishing unit of capacity 800 m3/day.</u></p> <p>Raw Stillage (1003 KLPD: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.</p> <p>TP will be installed to treat sewage generated.</p>	
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EAC found the justification for amendment sought satisfactory and recommended for amendment in EC as proposed by the project proponent.

All other terms and conditions issued vide EC Identification No EC22A022TG139639 dated 06th December, 2022 remain unchanged.

Agenda No. 11

Proposed Integrated Carbon Complex having 1. Coal Tar Distillation (CTD) Unit having capacity 500,000 TPA 2. Coal Tar Value Added (CTVA) Unit having capacity 400,000 TPA 3. Continuous Zero QI (CZQ) Unit having capacity 150,000 TPA 4. Carbon Black (CB) Unit having capacity 300,000 TPA 5. 54 MW Captive Power Plant (CPP) 6.

Synthetic Graphite Anode (SGA) Unit having capacity 100,000 TPA and 7. Natural Graphite Anode (NGA)Unit having capacity 25,000 TPA by Ms. Epsilon Carbon Ashoka Pvt Ltd (ECAPL) – Consideration of Environmental Clearance

[IA/OR/IND2/410852/2022, IA-J-11011/490/2021-IA-II(I)]

The project proponent and the accredited consultant M/s. Visiontek Consultancy Services Pvt Ltd, Odisha (Schedule 4(b) ii),(NABET certificate no. NABET/EIA/20232/RA 0209 Valid up to: 16.12.2023) & M/s. Hubert Enviro Care Systems (P) Ltd,Chennai, (Schedule 5(e) & 1(d)) (NABET certificate no. NABET/EIA/1922/RA 0172 Valid up to: 20.03.2023 informed that the proposal is for environmental clearance to the project“Proposed Integrated Carbon Complex having 1. Coal Tar Distillation (CTD) Unit having capacity 500,000 TPA 2. Coal Tar Value Added (CTVA) Unit having capacity 400,000 TPA 3. Continuous Zero QI (CZQ) Unit having capacity 150,000 TPA 4. Carbon Black (CB) Unit having capacity 300,000 TPA 5. 54 MW Captive Power Plant (CPP) 6. Synthetic Graphite Anode (SGA)Unit having capacity 100,000 TPA and 7. Natural Graphite Anode (NGA)Unit having capacity 25,000 TPA”located at Sripura Village, Jharsuguda Tehsil, Jharsuguda District, Odisha State by M/s. Epsilon Carbon Ashoka Pvt Ltd (ECAPL).

At the start of presentation, EAC noted that the total land required for the proposed project is 69.642 Ha. However, no land is under possession of the company. Even PP was not able to provide copy of registered lease deed/ sale deed of the 12.545 Ha land which was claimed as under possession of the Industry.

Accordingly, proposal was returned in present form.

25th January, 2023 (Wednesday)

Agenda No. 01

Proposed 300 KLPD grain-based Fuel Ethanol plant and 1 x 6.9 MW of captive power plant (Coal or Biomass), located at Survey No.s:1985, 1986/1, 1987/1, 1987/2, 1988, 1989, 1990, 1991/1,

1991/2, 1992, 1998/E, 2006/E/2, 2007/1, 2007/2, 2008, 2009, 2010/1, 2010/2, 2011/A, 2012/A, 2013/1, 2013/2/2, 2021/A/2/2, 2022/A Dilawarpur Village & Mandal, Nirmal District, Telangana by M/s. PMK Distillations Private Limited – Consideration of Environmental Clearance

[IA/TG/IND2/412825/2023, IA-J-11011/1/202 3-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited (NABET / EIA/ 1922 / SA 0148 valid upto 11-03-2023) , made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 1 x 300 KLPD grain-based Fuel Ethanol plant and 1 x 6.9 MW of captive power plant (Coal or Biomass), located at Survey No.s:1985, 1986/1, 1987/1, 1987/2, 1988, 1989, 1990, 1991/1, 1991/2, 1992, 1998/E, 2006/E/2, 2007/1, 2007/2, 2008, 2009, 2010/1, 2010/2, 2011/A, 2012/A, 2013/1, 2013/2/2, 2021/A/2/2, 2022/A Dilawarpur Village & Mandal, Nirmal District, Telangana by M/s PMK Distillations Private Limited.

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

The details of products and capacity as under:

S. NO.	NAME OF UNIT	NAME OF THE PRODUCT	PRODUCTION CAPACITY
1	Ethanol plant	Ethanol	300 KLPD
2	Power plant	Electricity	6.9 MW
<u>BY-PRODUCTS</u>			
1	Ethanol plant	DDGS	240 TPD
2	Ethanol plant	CO ₂ recovery	228 TPD

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

Total land required is 13.20 Ha. (32.625 acres). Greenbelt will be developed in total area of 4.38 Ha. (10.83 acres) i.e 33 % of total project area. The estimated project cost is Rs. 222.80 crores. Capital cost of EMP would be Rs. 26.5 crores and recurring cost of EMP would be Rs. 4.9 Crores per annum.. Total Employment will be 200 persons.

There are no National parks / Wild life sanctuaries, Biosphere Reserves, Tiger / Elephant reserves, Wildlife corridors etc. within 10 Km radius. Narsapur RF is at a distance of 5.6 Kms, Payarmur RF is at a distance of 8.5 Kms, Kusli RF is at a a distance of 6.5 Kms and Sriramsagar Reservoir is at a distance of 3.5 Kms. Few tanks/ ponds are present within 10 Km. radius.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $0.1 \mu\text{g}/\text{m}^3$, $0.3 \mu\text{g}/\text{m}^3$, and $0.3 \mu\text{g}/\text{m}^3$ with respect to PM_{10} , SO_2 and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be $1200 \text{ m}^3/\text{day}$ which will be met from Surface water. Application has been submitted to SGWB for drawing Ground water & Irrigation Department, Govt. of Telangana for drawing water from Sriram Sagar Reservoir. Effluent (Condensate/spent lees/blow down etc.) of 1775 KLD quantity will be treated through Condensate Polishing Unit of capacity 1800 KL. Raw stillage (1800 KL quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 15 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

The power requirement will be 6.9 MW and will be met from the proposed 1 x 6.9 MW captive power plant. 1 x 65 TPH Biomass / Coal fired boiler will be installed. APCE Electro Static Precipitator with a stack height of 60 m will be installed for controlling the particulate emissions

within the statutory limit of 30 mg/Nm³ for the proposed boiler. 2 x 1000 KVA DG set will be used as standby during power failure and stack height (3 m above building) will be provided as per the CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE ESP with 5- fields with a stack height of 60 meters will be provided to boiler for effective dispersion of sulphur dioxide emission into the atmosphere.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated (228 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

Details of solid waste/Hazardous wastegeneration and its management:

- DDGS (Distilled Dried Grains Stillage) (240 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (120 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.3 TPD) and STP Sludge (0.08 Kg/day) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the proposed capacity of 300 KLPD will be used for manufacturing fuel ethanol only.

Total land of 13.20 Ha. (32.625 acres) is registered with the company name and is converted to non agricultural land. EAC found the response satisfactory.

During deliberations, EAC discussed following issues:

- The committee noted that the consultant has proposed non-Process effluent (Backwash from DM plant & Boiler blowdown) of 100 KLD will be neutralized in a neutralization tank and will be utilized for greenbelt development, dust suppression and ash conditioning,

which is not adequate for adhering to ZLD. Accordingly, committee suggested that non-process effluent should be treated and recycled/re-used for process. It was also advised consultant to comply with ZLD concept in spirit and letter.

- The committee noted that proposed land is divided into two parts i.e a large plot in which distillery plant is proposed and a small portion in which parking is proposed. PP informed that both the portions are connected by road of 10 m width which is owned by the company.
- ESP of five field will be installed with the proposed boiler .

Details of capital and recurring cost of EMP:

S.NO	ITEM	Capital Cost (Rs in Crores)	Recurring cost (Rs in Crores/Annum)
1.	Air emission control systems (ESP, stack, bag filters, dust suppression, etc.)	5.0	0.8
2.	Ash handling & management	2.8	0.8
3.	Effluent Treatment Plant	26.0	1.5
4.	Fire fighting	2.0	0.3
5.	Online monitoring equipment (CEMS& OEMS)	0.7	0.2
6.	Greenbelt development	1.2	0.4
7.	Occupational Health & Safety	1.0	0.2
TOTAL		38.7	4.2

Details of CER activities:

S.NO.	Proposed Activity	Proposed Budget (Rs. in Crores)
1	Community & Infrastructure Development Programs in Dilawarpur village, Gundampalli village, Cherlapalli village & Rampur village	0.50
2	for Health & Hygiene of the community (Mineral Water plants, construction toilets in Dilawarpur village, Gundampalli village, Cherlapalli village & Rampur village,	0.70

	Distribution of Medicines etc.)	
3	<p>Skill Development A Community Centre will be established in Dilawarpur village which will consist of the following:</p> <p>i)Vocational Training Institute with latest tools, machinery & softwares etc. for making them Industry ready. ii)Workshop centre with latest tailoring machines for training women (like tailoring, stitching etc.) iii)Skill development / Computer / IT Training Centre for improving computer knowledge and making Industry ready.</p>	1.00
4	<p>for Education & Sports (Construction of class rooms in schools, providing computers in class rooms, development of library facility in Dilawarpur village, Gundampalli village, Cherlapalli village & Rampur village)</p>	0.3
	Total	2.5

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

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 300 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.
- (v). Total fresh water requirement shall not exceed 1200 m³/day, which will be met from Surface water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the Condensate Polishing Unit (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
- (vii). APCE ESP (5 field) with a stack height of 60 m will be installed with the 65 TPH coal/rice husk fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm³. SO₂ and NO_x emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

- (viii). Boiler ash (120 TPD) shall be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.
- (ix). CO₂ (228 TPD) generated during the fermentation process is being/will be collected by utilizing CO₂ scrubbers and sold to authorized vendors/collected in proposed bottling plant.
- (x). PP shall allocate at least Rs. 1.00 Crore for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xi). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xiii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xiv). The company shall undertake waste minimization measures as below
 - (a) Metering and control of quantities of active ingredients to minimize waste;
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

- (xv). The green belt of at least 5-10 m width shall be developed 4.38 hectares i.e., 33.00 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.
- (xvi). PP proposed to allocate Rs. 2.5 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
- (xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

- (xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/Director/CEO as per company hierarchy.
- (xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 02

Expansion of existing distillery unit from 90 KLPD to 210 KLPD, Power plant from 57 MW to 60.5 [54 MW through Co-generation power plant (Fuel : Bagasse along with Coal) 6.5 MW through Incineration boilers (Fuel : Concentrated Spent wash along with coal)], located at Survey No of Hullatti Village 6/1 part, 6/2 part, 7/1 part, 7/2, 9 part, 10, 11 part, 12/1, 12/2, 12/3, 13/1, 13/2, 13/3, 13/4, 14/1 part, 14/2 part, 16/1, 17, 18/1, 18/2, 18/3, 19, 20/1, 21/1, 20/2, 21/2, 22, 23, 24, 25, 26, 27/1, 27/2 A, 27/2B, 28, 30, 31/1, 31/2, 80 part, 81/1, 81/2 A, 81/2B, 81/2C, 81/2D, 82, 83/1, 86 Part, 90, 115/3 Part, 122/A3, 123/2 Part, 124 part, 125/1A Part, 125/1B, 126/part and Survey No of Alloli village 18/1, 18/2, Haliyal Taluk, Uttara kannada District, Karnataka by M/s. E.I.D. Parry (India) Limited –Consideration of Environmental Clearance

[IA/KA/IND2/413530/2022, IA- J-11011/382/2016-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited (NABET / EIA/ 1922 / SA 0148 valid upto 11-03-2023) , made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for expansion of existing distillery unit from 90 KLPD

to 210 KLPD, Power plant from 57 MW to 60.5 [54 MW through Co-generation power plant (Fuel : Bagasse along with Coal) 6.5 MW through Incineration boilers (Fuel : Concentrated Spent wash along with coal)], located at Survey No of Hullatti Village 6/1 part, 6/2 part, 7/1 part, 7/2, 9 part, 10, 11 part, 12/1, 12/2, 12/3, 13/1, 13/2, 13/3, 13/4, 14/1 part, 14/2 part, 16/1, 17, 18/1, 18/2, 18/3, 19, 20/1, 21/1, 20/2, 21/2, 22, 23, 24, 25, 26, 27/1, 27/2 A, 27/2B, 28, 30, 31/1, 31/2, 80 part, 81/1, 81/2 A, 81/2B, 81/2C, 81/2D, 82, 83/1, 86 Part, 90, 115/3 Part, 122/A3, 123/2 Part, 124 part, 125/1A Part, 125/1B, 126/part and Survey No of Alloli village 18/1, 18/2, Haliyal Taluk, Uttara kannada District, Karnataka by M/s E.I.D. Parry (India) Limited.

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

The details of products and capacity as under:

Sr. No	Unit	Name of the Product/By Product	Existing	Expansion	Total
1.	Sugar	Sugar	11500 TCD	--	11500 TCD
2.	Co-gen Power plant	Power	54 MW	--	54 MW
3.	Distillery	Rectified Spirit /ENA/Ethanol	90 KLPD (Rectified Spirit /ENA/Ethanol)	120 KLPD (only Ethanol)	210 KLPD
4.	Power from Incineration boiler	Power	3 MW	3.5 MW	6.5 MW

Ministry has issued Environmental Clearance to the existing Industry for a capacity of 90 KLPD Distillery vide File No. J-11011/382/2016-IA-II dated 11-08-2020. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEF&CC Bangalore, vide File no EP/12.1/2020-12/1/KAR/1091 dated 15th December, 2022. Action Taken Report has been submitted to IRO, MOEFCC, Bangalore dated 24-12-2022 for 5 partial compliances.

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

No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 91.5 Ha (22.6 Acres), 38.5 Ha (95 acres) i.e. 42% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained. The estimated project cost is Rs.161.16 Crores. Capital cost of EMP would be Rs.12.0 Crores and recurring cost for EMP would be Rs.1.02 Crores per annum. Industry propose to allocate Rs. 1.6 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 917 persons as direct & indirect.

Capital cost and recurring cost of EMP are given below:

S.NO	ITEM	Capital Cost (Rs in Crores)	Recurring cost (Rs in Crores/Annum)
1.	Air emission control systems (ESP, stack, bag filters, dust suppression, etc.)	4.0	0.50
2.	Ash handling & management	0.5	0.20
3.	Effluent Treatment Plant	7.0	0.3
5.	Online monitoring equipment (CEMS& OEMS)	0.5	0.02
TOTAL		12.0	1.02

Details of CER with proposed activities and budgetary allocation:

S.NO.	Proposed Activity	Proposed Budget (RS. In Crores)
1	Community & Infrastructure Development Programs	0.55
2	for Health & Hygiene of the community (Mineral Water plants, construction toilets in villages, Distribution of Medicines etc.)	0.50
3	Skill Development A Community Centre will be established in the village which will consist of the following: i)Vocational Training Institute with latest tools, machinery & softwares etc. for making them Industry ready. ii)Workshop centre with latest tailoring machines for training women (like tailoring, stitching etc.) iii)Skill development / Computer / IT Training Centre for improving computer knowledge and making Industry ready.	0.30
4	for Education & Sports (construction of class rooms in schools, providing computers in class rooms, development of library facility)	0.15
5	Other Need based activities	0.10
	Total	1.6

There are no National parks / Wild life sanctuaries, Biosphere Reserves, Tiger / Elephant reserves, Wildlife corridors etc. within 10 Km radius. Unnamed RF is at a distance of 0.8 Kms in South direction. Water bodies: Tattihala river is at a distance of 2.2 Kms in West direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $0.1 \mu\text{g}/\text{m}^3$, $0.1 \mu\text{g}/\text{m}^3$, $0.4 \mu\text{g}/\text{m}^3$, and $0.4 \mu\text{g}/\text{m}^3$ with respect to PM_{10} , $\text{PM}_{2.5}$, SO_2 and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 3491 m³/day (Existing Sugar & Distillery unit: 2771 KLD, Expansion Distillery expansion : 720 KLD) which will be sourced from Kali river. NOC has been obtained from Water Resources Department, Karnataka vide G.O no 78 dated 19-09-2022 and is valid up to 2027. Existing effluent generation is 2494 KLD which is being treated Sugar Plant ETP. Proposed effluent generation will be 280 KLD from the proposed Distillery unit which will be treated in Condensate Polishing unit. Spent wash generated from the analyser column during distillation will be concentrated in Multi Effect Evaporator and concentrated spent wash will be burnt in incineration boiler. Domestic waste water is being treated in Sugar ETP and same will be followed after proposed expansion. Zero liquid discharge system is being following in the existing and same will be followed after proposed expansion project.

The power requirement for the expansion will be 3.5 MW and will be met from the proposed 1 x 3.5 MW captive power plant. 1 x 35 TPH boiler will be installed in which Concentrated spent wash along with Coal / Bagasse will be used fuel. APCE Electro Static Precipitator with a stack height of 50 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm³ for the proposed boiler. 1 x 1000 KVA DG set will be used as standby during power failure and stack height (3 m above building) will be provided as per the CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

Source	Air pollution Control Equipment	Stack height	Particulate emission at the outlet
Existing			
1 x 120 TPH Boiler	Electro Static Precipitators (ESP)	72	<150 mg/Nm ³
1 x 45 TPH Boiler	Electro Static Precipitators (ESP)	44	< 150 mg/Nm ³
1 x 100 TPH Boiler	Electro Static Precipitators (ESP)	72	< 50 mg/Nm ³
1 x 15 TPH Boiler	Electro Static Precipitators (ESP)	50	< 150 mg/Nm ³
Expansion			
1 x 35 TPH Boiler	Electro Static Precipitators (ESP)	50	< 30 mg/Nm ³

- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated (72 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:

- Concentrated Spent wash 144 m³/day will be burnt in Incineration boiler.
- Boiler ash (16 TPD) will be will be given to Group fertilizer unit
- Used oil (0.3 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.2 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed expansion of 120 KLPD will be used for manufacturing fuel ethanol only.

During deliberations, EAC discussed following issues:

- The committee discussed the 5 partial/non compliances reported by IRO and it was noted that PP has not installed OCEMS which is serious non-compliance even after 2 years of grant of EC. The committee suggested to install the OCEMS system within 3 months and to submit credible evidence for procuring OCEMS. Further, PP has not installed 1 MW solar power for which committee suggested to install the same in a phased manner. Further, PP has submitted an undertaking the following activities:
 - a) Time bound action plan for installation of solar power with budget of Rs. 3 crores and they will install 0.5 MW in 6 months and remaining 0.5 MW will be installed by March-2024.
 - b) They have confirmed that silo system for fly ash collection is already installed in the existing plant.
 - c) Continuous online stack monitoring facility for 3 boilers will be installed by April- 2023.
 - d) Particulate emission in the existing 120 TPH Boiler, 100

TPH Boiler, 45 TPH Boiler will be brought down from 150 mg/Nm³ to 50 mg/Nm³ by December - 2024. Industry will upgrade the existing ESP's connected to three nos., of boilers specified above by installation of additional field.

- e) They will dismantle 15 TPH incineration boiler after commissioning of the expansion project
- f) Entire Non-process effluent will be treated in condensate treatment plant and utilized for greenbelt development, conditioning & dust suppression. They assured that ZLD will be maintained even after proposed expansion also.
- g) Green belt will remain 95 acres only. There will not any reduction in greenbelt due to proposed expansion. The tree plantation density shall be 2500 trees per Ha. Gap plantation shall be done to bridge the gap.

The committee noted that non installation of OCEMS even after 2 years of grant of EC is a serious non-compliance. The committee also noted that even after suggestion, PP did not produce any evidence for intention of procurement of OCEMS.

Accordingly, the proposal was deferred for want of above additional information. Above all additional information shall be submitted online to the PARIVESH portal for further consideration by EAC.

Agenda No. 03

Greenfield Project of 150 KLD Grain Based Ethanol Plant along with 3 MW Co-generation Power Plant located at Khasra no. 394/12 paiki 1,394/15 paiki 2, Village-Vejpur, Tehsil- Desar, District- Vadodara, Gujarat by M/s. Edhas Biofuel Refinery Private Limited- Consideration of Environmental Clearance.

[IA/GJ/IND2/414401/2023, IA-J-11011/18/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. GRC India Pvt Ltd (NABET certificate no. NABET/EIA/2124/RA0213 and valid till 15.02.2024) made a detailed presentation on the salient features of the

project and informed that the proposal is for environmental clearance to the project Greenfield Project of 150 KLD Grain Based Ethanol Plant along with 3 MW Cogeneration Power Plant located at Khasra no. 394/12 paiki 1,394/15 paiki 2, Village- Vejpur, Tehsil- Desar, District-Vadodara, Gujarat by M/s Edhas Biofuel Refinery Private Limited.

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

The details of products and capacity as under:

S. No.	Name of Unit	Name of the product /by-product	Production capacity
1	Distillery	Ethanol	150 KLPD
2	Co-generation power plant	Power	3 MW
3	DWGS dryer	DDGS	75 TPD
4	Fermentation unit	Carbon di-oxide	98 TPD

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

Total land area required is 5.95 hectares. Greenbelt will be developed in total area of 1.96 hectares i.e., 33% of total project area. The estimated project cost is INR Rs. 235.64 Crores. Capital cost of EMP would be INR Rs. 35.5 Crores and recurring cost for EMP would be INR Rs. 4.45 Crores per annum. Industry proposes to allocate Rs. 2.5 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 100 persons as direct & indirect.

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

distance. A Reserve forest is at 9 km towards NE direction from the project site. The canal is at approx. 0.47 km towards South direction from the project site. The NOC for Canal has been obtained from the Deputy Executive Engineer vide letter no. NPCSDn.17/4/11 dated 09.01.2023. Mahi River is at approx. 3 km towards NNW direction from the project site. Sarsi Lake is at approx. 3 km towards SE direction from the project site. The NOC for River has been obtained from the Executive Engineer, Vadodara Irrigation Division vide letter no. Outward/VID/PB-1/NOC/Greenfiled/115 dated 06.01.2023. Mesri River is at approx. 5.8 km towards South direction from the project site. Narmada River's main canal is at approx. 6.7 km towards East direction from the project site. The Kuvach River is at approx. 7.9 km towards South direction from the project site. Kun River is at approx. 8.3 km towards Ne direction from the project site.

AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $0.02 \mu\text{g}/\text{m}^3$, $0.01 \mu\text{g}/\text{m}^3$, $0.36 \mu\text{g}/\text{m}^3$, $0.28 \mu\text{g}/\text{m}^3$ and $1.02 \mu\text{g}/\text{m}^3$ with respect to PM_{10} , $\text{PM}_{2.5}$, SO_2 , NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement including CPP will be 600 KLD which will be met from surface water. The application for permission of withdrawal of ground water has been submitted to CGWA having application no. 21-4/10275/GJ/IND/2023 dated 17.01.2023. The application for permission of withdrawal of surface water has been submitted to competent authority having application ID. 10001336885-2507881 dated 07.01.2023. Effluent (Condensate/spent lees/blowdown etc.) of 571 KLD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 700 KLD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP capacity of 10 KLD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3 MW and will be met from proposed 3 MW cogeneration power plant. 26 TPH Coal based/Biomass boiler will be installed. ESP (5 field) with stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50

mg/Nm³ for the proposed boiler. 500 kVA DG set will be used as standby during power failure and stack height (30 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- Stack height of 30 meters will be installed for controlling the particulate emissions from DG Set.
- CO₂ (98 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant..

Details of solid waste/Hazardous wastegeneration and its management:

- DDGS (Distilled Dried Grains Stillage) (75 TPD) will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (57.64 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (2 Kilolitres per annum) will be sold to authorized re-cycler.
- ETP sludge (0.078 TPD) and STP Sludge (0.00068 TPD) will be used as manure.

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

Total land is 5.95 hectare. Total land is under the possession of company. Current land use is agricultural use. The application has been submitted to the competent authority for land use conversion from agricultural to industrial use having application nos. 31914202204894 & 31914202204900 dated 07.09.2022. EAC found the response satisfactory.

During deliberations, EAC discussed following issues:

- 20 % biomass pellets shall be used in CPP.
- Approach road to the Industry from nearest State/ National Highway shall be maintained by the PP.

- Only surface water shall be used for the project as canal water is available and sufficient storage reservoir should be constructed.
- 15 % power requirement shall be met through solar power.
- ESP (5 field) shall be installed.
- The Committee desired to retain the 25 number exiting trees.

Details of capital and recurring cost of EMP:

S. No	Particulars	Capital Cost (INR Cr.)	Annual Recurring (INR Cr.)
1.	Air pollution control system ESP on stack of 26 TPH low pressure boiler, Stack, Industrial vacuum cleaner, road sweeping machine.	8.5	1.0
2.	Ambient air quality management system (AAQMS) and Continuous emission monitoring	1.20	0.13
3.	Scrubbing system, compressing system, liquefying system and storage for CO ₂ removal.	7.35	0.45
4.	Treatment system for spent wash, DWGS centrifuge decanter, DDGS dryer for ZLD system, Construction of Garland drains, Water Reservoir and Web Camera for ZLD System	6.60	1.10
5.	Condensate Polishing unit for water treatment	6.0	1.0
6.	Rainwater harvesting systems	0.55	0.15
7.	Ash Handling and Management	0.30	0.10
8.	Fire safety and fire-fighting measures	0.50	0.15
9.	Occupational Health Management	0.50	0.15
10.	Noise Reduction Systems	0.35	0.05
11.	Green Belt Development	0.65	0.10
12.	Environment monitoring	---	0.02
13.	Environment management cell	0.50	0.05
14.	CER	2.5	---
Total		35.5	4.45

Details of CER activities:

S.	Description	Budget
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No.		(INR Cr.)
1.	a. Development of Village Roads b. Upgradation of drinking water facility by Installation of RO and water Purifier in nearby i.e. ITI Desar, Ratadiya Primary School, Ratadiya and Shree Prakash Highschool, Kalyana.	0.85
2.	Installation of solar panels (30 nos.) i.e. ITI Desar, Ratadiya Primary School, Ratadiya and Shree Prakash Highschool, Kalyana.	0.75
3.	Upgradation of medical facility in nearby hospital as Donating medical equipment like Beds, Stretcher, Portable Oxygen Cylinder (330 Litre), Oxygen Concentrator (0.5 to 5 Litre), AC (Window AC of 1.5 Ton), in Public Health Center Vejpur and Community Health Centre Desar.	0.55
4.	Development of smart class, distribution of benches, Fans, drinking water facility, Upgradation of sanitary facility (One for male and one for female), Distribution of IT gadgets (students of class 12), Printers, Computers in ITI Desar, Ratadiya Primary School, Ratadiya and Shree Prakash Highschool, Kalyana.	0.35
Total		2.5

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

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

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 150 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the

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

- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.
- (v). PP shall put all efforts to retain 25 number of existing trees. In case relocation of trees is essential then it should be done with prior permission of DFO.
- (vi). Total fresh water requirement shall not exceed 600 m³/day, which will be met from surface water. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vii). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
- (viii). ESP (five fields) with a stack height of 60 meters will be installed with the 26 TPH coal/Biomass fired boiler for controlling the particulate

emissions within the statutory limit of 30 mg/Nm³. SO₂ and NO_x emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

- (ix). Boiler ash (57.64 TPD) shall be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.
- (x). CO₂ (98 TPD) generated during the fermentation process is being/will be collected by utilizing CO₂ scrubbers and sold to authorized vendors/collected in proposed bottling plant.
- (xi). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xiv). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

- (xv). The company shall undertake waste minimization measures as below
(a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi). The green belt of at least 5-10 m width shall be developed 1.96 hectares i.e., 33.0 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map.
- (xvii). PP proposed to allocate Rs. 2.50 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xviii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (xix). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

- (xx). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/Director/CEO as per company hierarchy.
- (xxii). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 04

Greenfield Project of 250 KLD Grain Based Ethanol Plant along with 7 MW Co-generation Power Plant located at Plot No. 16, 17, 23 & 12, Village-Haripur, PO/PS -Kiakata, Tehsil Athmalik, District-Angul, Odisha-759126 by M/s. ASVA Distillers LLP - Consideration of Environmental Clearance.

[IA/OR/IND2/413024/2023, IA-J-11011/11/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. GRC India Pvt. Ltd. (NABET certificate no. NABET/EIA/2124/RA0213 and valid till 15.02.2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project Greenfield Project of 250 KLD Grain Based Ethanol Plant along with 7 MW Co-generation Power Plant located at Plot No.16, 17, 23 & 12, Vill: Haripur, PO/PS: Kiakata, Tehsil: Athmalik, Dist:

Angul:759126, Odisha by M/s ASVA Distillers LLP.

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

The details of products and capacity as under:

S. No.	Name of Unit	Name of the product /by-product	Production capacity
1	Distillery	Ethanol	250 KLPD
2	Co-generation power plant	Power	7 MW
3	DWGS dryer	DDGS	108 TPD
4	Fermentation unit	Carbon di-oxide	118 TPD

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

Total land area required is 12.14 hectares. Greenbelt will be developed in total area of 4 hectares i.e., 33% of total project area. The estimated project cost is INR Rs. 220 Crores. Capital cost of EMP would be INR Rs. 37.05 Crores and recurring cost for EMP would be INR Rs. 5.4 Crores per annum. Industry proposes to allocate Rs. 2.2 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 150 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. The RFs in the study area are as: East Barni Reserve Forest (3 km, NE), Nuagan Reserve Forest (8.6 km, ESE), Mangalpur Reserve Forest (3.2 km, N), West Barni Reserve Forest(6.6 km, NW), Guja Reserve Forest (8.15 km, N), and Bijmalia Protected Forest (7.2 km, N). Water bodies:

Mahadnadi River is at a distance of 1 Km in SW direction. Rodh River is at a distance of 8 km in at a distance of 1 km in SW direction from the project site, Manjour Reservoir/Dam is at distance of 6.7 km in East direction, Salunki Sub river is at a distance of 9.3 km in West Direction, Gadgadi River is at a distance of 9.5 km in North West Direction, Sarubali River is at a distance of 10.6 km in North West Direction, and Bauda Main Canal is at a distance of 12.8 km in SSW Direction. River Mahanadi is at a distance of 1 km for which NOC has been obtained from Angul Irrigation Division, Angul vide letter no. 3944 dated 15.09.2022 stating that the proposed plant is not coming under the flood prone area.

AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $0.22\mu\text{g}/\text{m}^3$, $0.14\mu\text{g}/\text{m}^3$, $2.35\mu\text{g}/\text{m}^3$, $1.9\mu\text{g}/\text{m}^3$ and $1.65\mu\text{g}/\text{m}^3$ with respect to PM_{10} , $\text{PM}_{2.5}$, SO_2 , NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement including CPP will be 1475 KLD which will be met from Mahanadi River. Application has been submitted to water resource department vide letter no. 2021091341000294 dated 17.09.2021. Effluent (Condensate/spent lees/blowdown etc.) of 1230 KLD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 1480 KLD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP capacity of 10 KLD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 7 MW and will be met from proposed 7 MW cogeneration power plant. 60 TPH Coal based/Biomass boiler will be installed. ESP (5 field) with stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of $50\text{ mg}/\text{Nm}^3$ for the proposed boiler. 1000 kVA DG set will be used as standby during power failure and stack height (30 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Online Continuous Emission Monitoring System will be installed

with the stack and data will be transmitted to CPCB/SPCB servers.

- ESP (5 field) with stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for the proposed boiler.
- Stack height of 30 meters will be installed for controlling the particulate emissions from DG Set.
- CO₂ (105 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

Details of solid waste/Hazardous wastegeneration and its management:

- DDGS (Distilled Dried Grains Stillage) (108 TPD) will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (105 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (2 Kilolitres per annum) will be sold to authorized re-cycler.
- ETP sludge (0.17 TPD) and STP Sludge (0.0014 TPD) will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the proposed capacity of 250 KLPD will be used for manufacturing fuel ethanol only.

Total land is 12.14 Hectare, and land has been allotted to M/s Asva Distillers LLP from Orissa Industrial Infrastructure Development Corporation vide letter no. HO/P&A-LA-E-8396/2022/24773 dated 23.09.2022. EAC found the response satisfactory.

During deliberations, EAC discussed following issues:

- The committee noted that an EC Identification No. - EC22A060OR112641 dated 14.10.2022 has been granted to the M/s ASVA Distillers LLP for or establishment of 150 KLPD Grain Based Ethanol Plant along with 4.5 MW co-generation power plant in the same location. As informed by PP, they have not *implemented the said EC dated 14.10.2022 so far. Subsequently, PP has also submitted self certified compliance report of the existing EC.* Now,

PP has proposed the instant proposal with new capacity of 250 KLPD instead of 150 KLPD due to the following the reasons:

- a) Attaining economies of scale.
 - b) Growing demand of Fuel.
 - c) Minimal additional capex requirement for increase in capacity.
 - d) Availability of raw materials and fuel in plenty in the State of Odisha Accordingly, as per OM dated 29th March 2022, PP wish to surrender the earlier EC dated 14.10.2022 to MoEF&CC and obtain new EC for 250 KLPD distillery.
- As per OM dated 08.06.2022 PP has submitted Self-certified six monthly Compliance Report for the EC dated 14.10.2022.
 - Net fresh water requirement shall be reduced to 1000 KLPD for distillery.

Details of capital and recurring cost of EMP:

S. No	Particulars	Capital Cost (In INR Cr)	Annual Recurring (Cost in INR Cr)
1	Air pollution control system ESP with stack, Industrial vacuum cleaner, road sweeping machine, etc.	7.5	1.5
2	Continuous Emission Monitoring System and Ambient Air Quality Monitoring System	1.0	0.50
3	Scrubbing system, compressing system, liquefying system and storage for CO2 removal	5.5	0.50
4	Treatment system for spent wash, DWGS centrifuge decanter, DDGS dryer for ZLD system, Construction of Garland drains, Water Reservoir	8.5	0.75
5	Condensate Polishing unit for water treatment and recycle, STP	4.5	0.75
6	Ash handling and management	1.5	0.30
7	Fire Fighting measures	1.0	0.10
8	In-house Solar power Plant	2.5	0.10
9	Rainwater harvesting systems	0.8	0.10

10	Occupational Health Management	0.50	0.20
11	Noise Reduction Systems	0.3	0.1
12	Green Belt Development	0.75	0.25
13	Environment monitoring	--	0.05
14	Environment management cell	0.5	0.20
15	CER	2.2	--
	Total	37.05	5.4

Details of CER activities:

S. No	Description	Value in INR (Cr)
1.	a. Development of Village roads. b. Upgradation of drinking water facility by Installation of RO and water Purifier in nearby in nearby Village Bhuraghat, Mudapada, Gautampur and Bhagabanpur	0.80
2.	Installation of solar panels (15 nos.) in Village Bhuraghat, Mudapada, Gautampur and Bhagabanpur	0.60
3.	Upgradation of medical facility in nearby hospital such as Donating medical equipment like Beds, Stretcher, Portable Oxygen Cylinder (330 Litre), Oxygen Concentrator (0.5 to 5 Ltr), AC (Window AC of 1.5 Ton) in District Hospital, Roing.	0.50
4.	Development of smart class, distribution of benches, Fans, drinking water facility, Upgradation of sanitary facility (One for male and one for female), Distribution of IT gadgets (students of class 12), Printers, Computers in schools present in nearby in nearby villages i.e., Primary School, Gautampur 1.7km (ENE), Primary School, Kadapada: 2.5 km (WNW)	0.30
	Total	2.2

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

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.
- (iv). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. No ground water shall be used for the plant operations.
- (v). Total fresh water requirement shall not exceed 1000 m³/day for distillery, which will be met from Mahanadi River. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the

accumulated water to be used as fresh water thereby reducing fresh water consumption.

- (vi). Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., is shall be treated in the 'Condensate Polishing Unit' (CPU). 15 KLD STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
- (vii). ESP (five fields) with a stack height of 60 meters will be installed with the 60 TPH coal/Biomass fired boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm³. SO₂ and NO_x emissions shall be less than 100 mg/Nm³. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
- (viii). Boiler ash (105 TPD) shall be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach to the project site to the nearest highway will be maintained by the Industry.
- (ix). CO₂ (105 TPD) generated during the fermentation process is being/will be collected by utilizing CO₂ scrubbers and sold to authorized vendors/collected in proposed bottling plant.
- (x). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

- (xi). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms. PESO certificate shall be obtained.
- (xiii). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xiv). The company shall undertake waste minimization measures as below
(a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 5-10 m width shall be developed 4.00 hectares i.e., 33.0 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. PP shall retain the 23 trees growing in the premises.
- (xvi). PP proposed to allocate Rs. 2.20 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xvii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like

rest rooms etc. PP shall maintain the road connecting the plant and state highway.

- (xviii). Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
- (xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/Director/CEO as per company hierarchy.
- (xxi). PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Agenda No. 05

Proposed 200 KLPD grain-based Fuel Ethanol plant and 1 x 6.0 MW of captive power plant (Biomass/coal), located at Survey No.s: 524/1, 524/2, 526, 538/1, 538/2, 542 Peddavaram Village, Nandigama Mandal, NTR District, Telangana by M/s. Venkata Sudheer Bio Products Private Limited - Consideration of Environmental Clearance.

[IA/AP/IND2/401224/2022, IA-J-11011/390/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited (NABET / EIA/ 1922 / SA 0148 valid upto 11-03-2023) , made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 200 KLPD grain-based Fuel Ethanol plant and 1 x 6.0 MW of captive power plant (Biomass/coal), located at Survey No.s: 524/1, 524/2, 526, 538/1, 538/2, 542 Peddavaram Village, Nandigama Mandal, NTR District, Telangana by M/s Venkata Sudheer Bio Products Private Limited.

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

The details of products and capacity as under:

S. NO.	NAME OF UNIT	NAME OF THE PRODUCT	PRODUCTION CAPACITY
1	Distillery plant	Ethanol	200 KLPD
2	Power plant	Electricity	6.0 MW
<u>BY-PRODUCTS</u>			
1	Distillery plant	DDGS	160 TPD

2	Distillery plant	CO ₂ recovery	152 TPD
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Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. It was informed that there is no litigation is pending against the project.

Total land required is 8.41 Ha. (20.80 acres). Greenbelt will be developed in total area of 2.83 Ha. (7.0 acres) i.e 33 % of total project area. The estimated project cost is Rs. 248.9 crores. Capital cost of EMP would be Rs. 32.9 crores and recurring cost of EMP would be Rs. 2.64 Crores per annum. Industry proposes to allocate Rs. 2.48 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment will be 150 persons.

There are no National parks / Wild life sanctuaries, Biosphere Reserves, Tiger reserves / Elephant reserves, Wildlife corridors etc. within 10 Km radius of project site. Venkataya palem RF is at a distance of 3.0 Kms, Jaggayyapeta RF is at a distance of 2.0 Kms, Gudimetla RF is at a distance of 5.9 Kms and Krishna river is at a distance of 1.6 Kms. Few tanks/ ponds are present within 10 Km. radius of the project site. As per topo map 2 streams are passing through the site but nothing in the project site. Water Resources Department Govt. of Andhra Pradesh has issued NOC duly confirming that there are no streams passing through the project site vide letter no. EE/SPL/VJA/DB/TO/37 dated 13-01-2023.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.1 µg/m³, 0.1 µg/m³, 0.4 µg/m³, and 0.4 µg/m³ with respect to PM₁₀, PM_{2.5}, SO₂ and NO_x. The net resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 800 m³/day which will be sourced from Ground water & Surface water. Application has been submitted to SGWB for drawing Ground water & Irrigation Department, Govt. of Andhra Pradesh for drawing water from Krishna river. Effluent (Condensate/spent lees/blow down etc.) of 1183 m³/day quantity will be treated through Condensate Polishing Unit of capacity 1200 KLPD. Raw stillage (1200 KLPD quantity of raw spent wash from distillation) will be treated in decanter followed by MEE and then dryer to produce DDGS. Non-Process effluent (Backwash from DM plant & Boiler blowdown) of 67

KLD will be neutralized in a neutralization tank and will be utilized for greenbelt development, dust suppression and ash conditioning after ensuring compliance with treated effluent quality as per MoEF / SPCB Standards. STP of capacity 10 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

The power requirement will be 6 MW and will be met from the proposed 1 x 6.0 MW captive power plant. 1 x 50 TPH Biomass / Coal fired boiler will be installed. APCE Electro Static Precipitator with a stack height of 55 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm³ for the proposed boiler. 2 x 1000 KVA DG set will be used as standby during power failure and stack height (3 m above building) will be provided as per the CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE- ESP with 5- fields with a stack height of 59 meters will be provided to boiler for effective dispersion of sulphur dioxide emission into the atmosphere.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated (152 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors (dry ice manufacturers/soft drink manufacturers).

Details of solid waste/Hazardous wastegeneration and its management:

- DDGS (Distilled Dried Grains Stillage) of 160 TPD will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (110.4 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises.
- Used oil (0.5 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.3 TPD) and STP Sludge (0.08 Kg/day) will be used as manure.

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

proposed capacity of 200 KLPD will be used for manufacturing fuel ethanol only.

Total land of 8.41 Ha. (20.80 acres) is registered with the company name and entire land is converted to non agricultural land. EAC found the response satisfactory.

Details of capital and recurring cost of EMP:

S.NO	ITEM	Capital Cost (Rs in Crores)	Recurring cost (Rs in Crores/Annum)
1.	Air emission control systems (ESP, stack, bag filters, dust suppression, etc.)	4.00	0.50
2.	Ash handling & management	2.40	0.60
3.	Effluent Treatment Plant	22.00	1.00
4.	Fire fighting	1.50	0.1
5.	Online monitoring equipment (CEMS& OEMS)	0.50	0.25
6.	Greenbelt development	0.50	0.04
7.	Occupational Health & Safety	2.00	0.15
TOTAL		32.9	2.64

Details of CER activities:

S. NO.	Proposed Activity	Proposed Budget (Rs. in Crores)
1	Community & Infrastructure Development Programs in Peddavaram village, Cheruvukommupalem village, Ramanayyapeta village & Konayapalem village	0.40
2	for Health & Hygiene of the community (Mineral Water plants, construction toilets in Peddavaram village, Cheruvukommupalem village, Ramanayyapeta village & Konayapalem village etc.)	0.60

3	Skill Development A Community Centre will be established in Konnayapalem village which will consist of the following: i)Vocational Training Institute with latest tools, machinery & softwares etc. for making them Industry ready. ii)Workshop centre with latest tailoring machines for training women (like tailoring, stitching etc.) iii)Skill development / Computer / IT Training Centre for improving computer knowledge and making Industry ready.	1.00
4	for Education & Sports (Construction of class rooms in schools, providing computers in class rooms, development of library facility in Peddavaram village, Cheruvukommupalem village, Ramanayyapeta village & Konayapalem village)	0.48
	Total	2.48

During deliberations, EAC discussed following issues:

1. The Committee noted that there are discrepancies in the layout map and KML file provided to the members which are not matching.
2. The Committee suggested that PP shall meet the fresh water requirement from surface water instead of ground water.
3. NOC to be obtained from Revenue Department for road passing through the plot area.
4. Filter Press shall be installed in place of Sludge drying beds proposed in the wastewater treatment system.
5. Solar Panels shall be installed for generation of 15% of the total power requirement of the plant.
6. List of plant species to be planted for the proposed greenbelt alongwith action plan to be provided.
7. Details of CER to be revised after removing mineral water plants.

Accordingly, the proposal was deferred for want of above additional information. Above all additional information shall be submitted online to the PARIVESH portal for further consideration by EAC.

Agenda No. 06

Expansion of Grain Based Ethanol Plant from 200 KLPD to 500 KLPD along with Co-generation Power Plant from 10 MW to 20 MW under Ethanol Blending Programme at Village: Jawaharpur, Tehsil: Misrikh, District: Sitapur, Uttar Pradesh by M/s. Dalmia Bharat Sugar and Industries Limited, Grain Distillery Unit- Jawaharpur – Consideration of Environmental Clearance

[IA/UP/IND2/414564/2023, IA-J-11011/341/2006-IA-II (I)]

The Project Proponent and the accredited Consultant M/s. JM EnviroNet Pvt. Ltd. (NABET/EIA/2023/SA 0172 and validity till 07th August, 2023) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for Expansion of existing Distillery unit from 200 KLPD to 500 KLPD & Co-generation Power Plant from 10 MW to 20 MW (Rice Husk/Bagasse/Biomass based) located at Village: Jawaharpur, Tehsil: Misrikh, District: Sitapur, Uttar Pradesh by M/s Dalmia Bharat Sugar and Industries Limited, Grain Distillery Unit- Jawaharpur.

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

The details of products and capacity as under:

S. No	Name of unit	Name of the product/byproduct	Existing Production capacity	Additional Capacity	Total production capacity
1	Distillery (Grains like broken rice,	Ethanol	200 KLPD	300 KLPD	500 KLPD

	maize, barley & sorghum)				
2	Co-generation Power Plant for distillery	Power	10 MW	10 MW	20 MW
3	DWGS dryer	DDGS	91 TPD	144 TPD	235 TPD
4	Fermentation unit	Carbon di-oxide	150 TPD	225 TPD	375 TPD

Ministry has issued Environmental Clearance to the existing industry for a capacity of 200 KLPD Grain based Ethanol plant & 10 MW Co-generation Power Plant vide F. No. J- 11011/341/2006-IA II(I) dated 21st September, 2021. Certified Compliance report of Existing EC has been obtained from Integrated Regional Office, MoEFCC, Lucknow vide F. no. IV/ENV/UP/Ind-30/591/2021 dated 06.01.2023.

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

Total plant area after expansion will be 10.5 Ha (existing plant area - 7.5 Hectares and additional land required - 3.0- Hectares for proposed capacity) which is under possession of the company and converted to industrial use. Out of the total plant area 2.48 Hectares i.e. 33% of the total plant area has already been developed as greenbelt & plantation and the same will be maintained. As a part of expansion, 1.0 ha i.e., 33% of the additional land will be developed as greenbelt in and around plant premises & will be densified and maintained. Hence, total greenbelt area after expansion will be 3.48 ha. The estimated project cost for expansion project is Rs. 120 Crores. Capital cost of EMP would be Rs. 20 Crores and recurring cost for EMP would be Rs. 2.0 Crores per annum. Industry proposes to allocate Rs. 1.2 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 150 persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves within 10 km distance. 2 unnamed Reserved Forests and 7 unnamed Protected Forests lies within 10 km radius. Water bodies: Saunri Nadi is at a distance of ~7.5 km in South direction, Beta Nadi

is at a distance of ~8.0 km in South direction, Sarayan River is at a distance of ~8.5 km in ENE direction, Kaimahra Distributary is at a distance of ~1.0 km in SE direction), Arthana Distributary is at a distance of ~2.0 km in West direction, Ramkot Distributary is at a distance of ~4.5 km in NNE direction, Sitapur Branch is at a distance of ~5.5 km in WSW direction, Machhrehta Distributary is at a distance of ~6.5 km in ESE direction, Behat Distributary is at a distance of ~7.0 km in SE direction, Islamnagar Distributary is at a distance of ~7.0 km in WNW direction & Pirai Nala is at a distance of ~9.0 km in NE direction are present within 10 km radius.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the expansion project would be 0.62 µg/m³, 0.248 µg/m³, 1.30µg/m³ and 2.11 µg/m³ with respect to PM₁₀, PM_{2.5}, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Existing fresh water requirement is 946 KLPD and after expansion total freshwater will be 1946 KLPD. The additional fresh water requirement for expansion project will be 1000 KLPD which will be sourced from groundwater. Application has been submitted to Ground water Department (Namami Gange & Rural Water Supply Department) Ministry of Jal Shakti Government of Uttar Pradesh for freshwater withdrawal of 365100 m³/annum vide application no. STPR0123NIN0051 dated 11.01.2023 and is under process. Existing effluent generation is 1067 CMD from distillery which is treated through Condensate Polishing Unit/Effluent Treatment Plant (capacity 1300 CMD). Proposed effluent generation will be 1565 CMD from distillery which will be treated through proposed/upgraded Condensate Polishing Unit (capacity in 1700 CMD). Raw stillage (2655 KLPD) will be sent to decanter followed by MEE followed by dryer to produce DDGS. Domestic waste water is being/will be treated in existing STP of capacity 200 KLPD. The plant is being/will be based on Zero Liquid discharge system and treated effluent/water is being/will not be discharged outside the factory premises.

Total power requirement of distillery after expansion will be 13.0 MW which will be sourced from proposed 20 MW Co-generation power plant in distillery. Existing distillery has 60 TPH Rice Husk/Bagasse/Biomass fired boiler. 60 TPH Rice Husk/Bagasse/Biomass based fired boiler will be installed in distillery. APCE Electrostatic Precipitator (ESP) with a stack of height of 50 m is

installed with the existing boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm³. APCE Electrostatic Precipitator (ESP) with a stack height of 50 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for the proposed boiler. Industry has 2 x 1500 KVA DG sets which will be used as standby during power failure and stack height (10 m) has been provided as per CPCB norms.

Details of Process emissions generation and its management:

- APCE Electrostatic Precipitator (ESP) with a stack of height of 50 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm³. APCE Electrostatic Precipitator (ESP) with a stack height of 50 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for the proposed boiler.
- Online Continuous Emission Monitoring System is being/will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ (375 TPD) generated during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (235 TPD) is being/will be sold as cattle feed.
- Boiler ash (122 TPD) is being/will be given to farmers & brick manufactures in covered vehicles only.
- Used oil (0.5 Kilolitres per annum) is being/will be sold to authorized recyclers.
- CPU sludge (3 TPD) and STP Sludge (0.1TPD) is being/will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed expansion of 300 KLPD will be used for manufacturing fuel ethanol only.

Capital cost and recurring cost of EMP are given below:

Sl. No.	Description	Capital Cost in Crores	Recurring Cost in Crores/annum
1.	Air Management Boiler stack+ ESP & Ash	8	0.94
2.	Spent wash Treatment MEE & Dryer	7	0.5
3.	Fugitive Emission Internal Road & Grain	2	0.01
4.	Effluent Treatment Condensate Polishing Unit & STP	1	0.5
5.	Environment monitoring Lab instrument, Monitoring instruments	0.5	0.02
6.	Greenbelt plantation & Plantation for greenbelt &	0.5	0.02
7.	Rain water Rooftop & runoff	1	0.01
	Total	20	2.0

Details of CER with proposed activities and budgetary allocation:

S. No.	PROPOSED ACTIVITIES	IMPLEMENTATION OF EMP FOR SOCIAL AND INFRASTRUCTURE DEVELOPMENT ON THE BASIS OF PHYSICAL TARGETS		PROPOSED BUDGET (RS. IN LAKHS)
		Year 1	Year 2	
1	Repair & improvement of existing roads- Repair works in nearby roads like potholes, ruts, corrugations, paving, widening of lanes etc.	Rs. 20 Lakhs Village-Jawaharpur (0.5 km stretch-Chinni Mill road)	Rs. 20 Lakhs Village-Moharavan (0.5 km stretch-village road)	40
2	Social Infrastructure Development- Installation of Solar Street Light, Solar Lanterns, assistance to	Rs. 7.5 Lakhs Village-Moharavan (Rs. 5 Lakhs for	Rs. 7.5 lakhs Village-Jawaharpur (Rs. 5 Lakhs for	15

	Anganwadi centres, Village Pond Infrastructure Development, etc.	30 nos. solar street light, Rs. 2.5 Lakhs for local ponds development)	30 nos. solar street light, Rs. 2.5 Lakhs local ponds development)	
3	Densification of plantation -Gap Filling of existing plantations/ Avenue plantation along roadside, tree plantation in nearby schools/colleges/vacant land/Panchayat bhavan, etc.	Rs. 7.5 lakhs Village- Jawaharpur (850 no. of plants to be planted)	Rs. 7.5 Lakhs Village- Moharavan (850 no. of plants to be planted)	15
4	Skill development for youth - Organising Training programmes for youth/residents in Skill Development centre	Rs. 7.5 Lakhs Village- Moharava (Benefit to be extended to 80 persons)	Rs. 7.5 Lakhs Village- Jawaharpur (Benefit to be extended to 80 persons)	15
5	Up gradation of School infrastructure & Educational facilities - Provide Interactive smart class equipments /gadgets/solar panels like desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, water bottles, sports equipments etc. to students, Seating Benches, installation of water purifiers, construction of sanitized toilets etc.	Rs. 17.5 Lakhs (Govt school at Village Jawaharpur) (3 nos water purifiers- Rs. 0.5 lakhs, 2 nos. sanitized toilets- Rs 5 lakhs, solar panels installation- Rs. 10 lakhs, Rs 2 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags,	Rs. 17.5 Lakhs (Govt school at Village Moharava) (3 nos water purifiers- Rs. 0.5 lakhs, 2 nos. sanitized toilets- Rs 5 lakhs, solar panels installation- Rs. 10 lakhs, Rs 2 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags,	35

		water bottles, sports equipments, etc)	water bottles, sports equipments, etc)	
GRAND TOTAL				120
<p><i>*The above action plan will be implemented during project implementation phase.</i></p> <p><i>**The activities given in the above table are excluding the Pollution Control and mitigation measures which are included in EMP Cost.</i></p>				

During deliberations, EAC desired the following information:

- 3 Existing effluent lagoons shall be dismantled.
- Sludge drying bed shall be replaced with filter press.
- CER budget shall be increased to Rs. 3.00 Crores. Accordingly, revised details shall be submitted.
- PP shall justify usage of 200 klpd water for the horticulture purpose.
- PP shall elaborate the process of capturing CO₂ from the plant.
- APCE Electrostatic Precipitator (ESP) with a stack of height of 50 m is installed with the existing boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm³ as coal is used as a fuel.

In view of the foregoing and after deliberations, the Committee recommended that subcommittee of EAC Industry-II comprising Dr. Sanjay V. Patil, Dr. J. S. Sharma, Shri. J.S. Kamyotra and representative of MoEF&CC shall undertake a site visit to the existing plant site to review the existing pollution control measures implemented on site and to suggest additional pollution control measures for the proposed capacity. Based on the site visit report the instant proposal for EC shall be considered. PP shall also submit the above complete information on the PARIVESH portal.

Accordingly, proposal was deferred for submission of additional information and site visit by the sub-committee.

GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iii) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local

Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal.

- (vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (viii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (ix) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at <https://parivesh.nic.in/>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (x) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- (xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

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

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