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

Dated: 11.04.2023

Meeting ID: IA/IND2/13474/05/04/2023

MINUTES OF MEETING OF THE EXPERT APPRAISAL COMMITTEE

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 05th -06th April, 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/IND2/13470/25/03/2023) held on 25thMarch, 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: -

05th April, 2023 (Wednesday)

Agenda No. 01

Proposed Grain Based 200 KLD Fuel Ethanol Plant & 6.0MW Co-Generation Power Plant located at Khasara no 142/1,142/2, 142/3, 146/8, 142/5, at village Agariya, District- Narsinghpur, Madhya Pradesh By M/s. Mahakaushal Sugar And Power Industries Ltd.- Re-Consideration of Environmental Clearance.

[IA/MP/IND2/ 419588/2023, IA-J-11011/356/2021-IA-II(I)

The proposal was earlier considered by the EAC (Ind-2) in its meeting/meeting ID- IA/IND2/13463/16/03/2023 held on 16.03.2023 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:

No.	ADS by MoEFCC	Reply by PP
1.	**PP shall add some more area and submit the revised plant layout.**	In line of direction given , PP has added 3.65 hact more land which in the name of the director of the company i.e. Mr Sahil Raza and same has already been diverted . Hence total land is increased from 14.65 acres (5.9286 hact) to 23.92 acres (9.58 Hact.) The Revised layout , land document and the document of diversion pertaining to additional land have been submitted on Parivesh Portal.
2	PP shall submit revised the incremental GLCs for NO_x	**PP has** proposed agro fuel for proposed boiler wherein they will use 15 % coal as auxiliary fuel only. In accordance with the revised calculation the MGLC of NO_X reduced to **1.17 ug/m^3**. The calculation of MGLC for fuel to be used is given as below : **Emission Rate Calculation for NOx** Volumetric rate at 160 ^oC (273^oK) = cross sectional area of the stack at the top (m) x exist velocity (m/sec) = (3.14/4) x $(3.0)^2$ x (16) m^3/sec = 113.04 m^3/sec Volumetric flow rate at NTP = (113.04 x 298)/433 = 77.80 m^3/sec

No.	ADS by MoEFCC	Reply by PP
		Hence Emission rate of NO_x = volumetric flow rate at NTP x emission norms of NO_x = (77.80x100)/1000 mg/sec = 7.78 gm/sec

EAC found the response submitted by PP for ADS satisfactory.

The Project Proponent and the accredited Consultant M/s. Creative Enviro Services (NABET certificate no. NABET/EIA/2023/SA-0162 and validity 13.06.2023 made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to for the 200 KLPD Grain based Ethanol Plant & 6.0 MW Co-generation power plant (biomass based) project located at Khasara 142/1,142/2, 142/3, 146/8, 142/5,138/4,138/5,149/2,149/3,149/1, 151/2, 151/3,1156, 159 at village Agariya District Narsinghpur M.P. of M/sMahakaushal Sugar And Power Industries 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:

Sr No	Name of Unit	Name of the product/by product	Production Capacity
1	Grain Based Fuel ethanol Unit	Ethanol	200 KLPD
2	Co-Generation Power Plant	Power	6 MW
3	DWGS Dryer	DDGS	102-110 TPD
4	Fermentation Unit	Carbon Di Oxide	150 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.

Based on recommendation of Committee, PP has increased plot area from 14.65 acres (5.9286 hact) to 23.92 acres (9.58 Hact.). Out of total plot area, Greenbelt will be developed in total area of 3.2 hectares i.e., 34% of total plot area. The estimated project cost is Rs. 179 Crores. Capital cost of EMP would be Rs. 34.06 Crores and recurring cost for EMP would be Rs. 1.2015 Crore per annum. Industry proposes to allocate Rs. 2.50 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 148 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors / Reserve forest/Protected forest etc. within 10 km distance. Water bodies: River Sher is at a distance of 5.25 Km in ESE direction. PP has submitted NOC dated 18.08.2021 from Narsingh Forest Division stating that proposed project site is 250 m away from forest land. PP has submitted NOC dated 4.02.2023 from the Office of Executive Engineer, Hiran Jal Sansadhan sambhang, Jabalpur stating that proposed project does not falls under flood zone.

PP has submitted the revised AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.75 µg/m^3, 1.12 µg/m^3, 3.11 ug/m^3 and 1.17 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 800 m^3 /day which will be met from Shinduri River for which consent has been obtained from WRD of Govt of MP vide no Vra. P. Ni. M./31/ Tech/ ra Sat-990/2021/503 dated 14.09.2021. Effluent (Condensate/spent lees/blow-down etc.) of 1599 m^3 /day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 1600 KLPD. Raw stillage (1538 KLPD :quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. 20 KLPD STP will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 5555 KWH and will be met from proposed 6 MW cogeneration power plant. 50 TPH biomass (rice husk) fired boiler will be installed. 15% Coal will be used as auxiliary fuel. ESP -APCE with a 60

m stack height will be installed for controlling the Particulate Matter emissions within the statutory limit of 30 mg/Nm^3 for the proposed 50 TPH boiler. 2X1000 KVA of DG set will be used as standby during power failure and 30 m high stack will be provided with the proposed DG sets as per CPCB norms.

Details of Process emissions generation and its management:

- APCE- ESP with a 60 m stack height will be installed for controlling the Particulate Matter emissions with the boiler.
- Online Continuous Emission Monitoring System will be installed with the stack and data. will be transmitted to CPCB/SPCB servers.
- CO_2 (150 TPD) generated during the fermentation process will be collected by utilizing. CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (102-110 TPD) will be sold as cattle feed / fish feed / prawn feed.
- Boiler ash (10-15 TPD) will be used for will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure.
- Used oil (1 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.2 TPD) and STP Sludge (0.05 TPD) will be used as manure.

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

Total land of 9.58 Hectares is under possession of the company and is owned by the proponent which has been covered for industrial purposes vide letter no Prastu-01/A.V.A./2015 dated 14.08.2015 and 189 and 192 /A-2/ 21-22 dated 30.09.2021. EAC found the information satisfactory.

Capital cost and recurring cost of EMP are given below:

Capital Investment for proposed Environmental Protection (Rs. in Lacs		
S. No.	**Particular**	**Proposed Cost**
1.	ESP + Stack + On line Monitoring equipment	240
2	M.E.E	1100
3	Waste Water Treatment Plant for Process Condensate	450
4	Decanter & Dryer	1550
5	Green Belt development	7.25 @ 11
6	Occupational Health & Safety	50.00
7	Misc RWH etc	5.0
	Total	**3406**
Total Recurring Cost (EMP + Plantation + Monitoring)		
Sr	**Particular**	**Proposed Amount (Rs in Lacs) per annum – Recurring**
1	Maintenance of Plantation and Plant site 7500 @ Rs 45/- per plant	2.25
2	Occupational health and Safety exp. @ 100 no Rs 25000 per workers	25
3	Environmental Monitoring cost	12.93 @ 13.0
4	O&M cost for APC, CPU, etc	80.0
	Grand Total	**120.25**

Details of Extended EMP (CER) with proposed activities and budgetary allocation:

Proposed Budget under Corporate Environment Responsibilit (CER)			
S.N.	**Major Activity Heads**	**Physical Nos. & Village**	**Total (Rs. In Lakhs)**
1	RWH pits in the surrounding villages	4 nos. each in Agriya, Bichai, Narsighpur and Gadarwara Villages	20.00
2.	Repair/ maintenance/ provision of infrastructure facility to School for library, playground and	04 primary /middle school at village Agriya, Bichai, Narsighpur and Gadarwara villages	50.00

	Laboratory		
3.	Impart training to the local villagers for skill development &providing employment to them in the industry	Training to 50 unemployed youth of Agriya, Bichai, Narsighpur and Gadarwara Villages	70 .00
4.	Deepening of existing bore wells/ponds in nearby villages for drinking water. Construction of new borewell in nearby villages as per requirement	04 villages namely Agriya, Bichai, Narsighpur and Gadarwara Villages	30.00
5	Provision of solar units and lights at school and streets of villages	Agriya, Bichai, Narsighpur, Gadarwara	40.00
7	Health (Infrastructure for Primary Health Center, Veterinary Hospitals/ Dispensaries) at Agriya, Narsinghpur, Gadarwara etc	Iin Village Agriya	40.00
		Total	**250**

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). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the surface water for the distillery 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 800 m^3/day, which will be sourced from Shinduri River. No ground water recharge shall be permitted within the premises. No ground water abstraction shall be permitted. 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). ESP with a 60 meters high stack will be installed with the Rice Husk fired 50 TPH boiler for controlling the Particulate Matter emissions within the statutory limit of 30 mg/Nm^3. 15% coal will be used as auxiliary fuel. SO_2 and NO_x emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.

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

(viii). Boiler ash (15 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises/supplied to brick manufacturers/ given to farmers to be used as manure. PP shall use Rice Husk as main fuel and 15% Coal as an auxiliary fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises.

(ix). CO_2 (150 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(x). PP shall allocate at least Rs. 0.5 Crore as capital expenditure and Rs. 0.25 Crore as operational expenditure 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 in 3.2 hectares i.e., 34.00 % of total project area with 4-6 feet saplings and 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.

(xvi). 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 commissioning of the plant in consultation with District Administration.

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

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

(xix). Continuous online (24x7) monitoring system for stack emissions/effluent shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous

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

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

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

Agenda No. 02

Proposed Expansion of sugar Unit 60 KLPD to 300 KLPD Distillery Plant (Ethanol) village Malkup, Tal: Parner, District Ahmednagar, Maharashtra by M/s Sopanrao Balkrishna Dhasal Agro products Ltd - Consideration of Environmental Clearance.

[IA/MH/IND2/421154/2023, IA-J-11011/115/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Techno Green Environmental Solutions, Pune (Certificate No.: NABET/EIA/2124/IA0081 (Rev.01) valid July 5, 2024) made a detailed presentation on the salient features of the project and informed that the proposal is for Environmental Clearance to the Expansion of sugar Unit 60 KLPD to 300 KLPD Distillery Plant (Ethanol) village Malkup, Tal: Parner, District Ahmednagar, Maharashtra by M/s Sopanrao Balkrishna Dhasal Agro products Ltd.

As per EIA Notification 2006 (Schedule 5 (g) Category A); however, as per in the MoEFCC Notification S.O. 345(E), dated the 17th January, 2019, notification number S.O. 750(E), dated the 17th February, 2020,

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

The details of products and capacity as under:

Sr. No.	Name of unit	Name of the product/ by-product	Existing Production capacity	Additional production capacity	Total production capacity
1	Distillery (Syrup/B-Heavy Molasses/ C-Heavy Molasses)	RS/ENA	60 KLPD	-	60 KLPD
		Ethanol	60 KLPD	240 KLPD	200 KLPD
		CO_2	44.4TPD	182 TPD	226.4 TPD
2	Co-gen power plant for distillery	Electricity	2 MW	4 MW	6 MW
3	Sugar Mill	Sugar Crushing	1250 TCD	-	1250 TCD

State Environment Impact Assessment Authority (SEIAA), Maharashatra has issued the EC to 60KLPD distillery on 22nd February 2022. (SEIAA EC identification Number EC22B022MH151431 dated 22/02/2022). Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Nagpur vide Letter no- EC-1983/1983/RON/2023-NGP/1151 dated 22nd February 2023. Action Taken Report has been submitted through mail to IRO, MOEFCC, Nagpur on 27th February 2023 for partial compliances.Greenbelt has been developed in 1.5 ha instead of 3.2 ha land. PP informed that total green belt area is 3.2 ha. Industry has developed green belt on 1.5 ha area. Green Belt is yet to be developed on 1.7 ha area wherein a total of 6300 saplings will be planted in the month of April and May 2023 for which, budget of Rs

2205000/-has been earmarked to achieve the greenbelt target. PP has submitted copy of CTO dated 28.11.2022 issued by MPCB for 60 KLPD Molasses based distillery. The Committee was satisfied with the response.

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

Total plant area after expansion will be 15.88 ha which is under possession of the company and converted to industrial use. No additional land will be acquired for the expansion of project as the same will be carried out within the existing premises. Out of the total plant area, 5.24 Ha. i.e., 33% of the total plant area is earmarked for green belt development. Industry has developed green belt with 1700 Nos of plants on 1.5 ha area. Balance Green belt will be developed on 3.74 ha land with 9350 no of plants (2500 Plants per ha). The estimated project cost is Rs.300.00 Crores. Capital cost of EMP would be Rs. 15.13 Crores and recurring cost for EMP would be Rs. 0.64 Crores per annum. Industry proposes to allocate Rs 2.25 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 127 persons as direct & indirect.

Capital Cost and recurring cost of EMP

Sr. No	**Attribute**	**Budget in (Rs lakh)**	
		Capital	**Recurring**
1	Air Pollution Emission control		
	Incineration boiler & ESP upgradation	2500.00	30.00
	CO_2Plant capacity upgradation	300.00	5.0
2	Water & Wastewater management		
	MEE plant	500.00	15.00
	CPU for distillery	350.00	10.00
	CPU for sugar	200	5.0
3	SolidWasteManagement	50.00	5.0
4	GreenBeltDevelopment	53.35	2.5
5	Online Monitoring System & Environment Monitoring	20.0	4.6

Sr. No	Attribute	Budget in (Rs lakh)	
		Capital	Recurring
1	Air Pollution Emission control		
	Incineration boiler & ESP upgradation	2500.00	30.00
	CO_2Plant capacity upgradation	300.00	5.0
2	Water & Wastewater management		
	MEE plant	500.00	15.00
	CPU for distillery	350.00	10.00
	CPU for sugar	200	5.0
	(stack,AmbientAir,WaterandSoilandNoise)		
6	RainWaterHarvesting	15.00	2.0
7	Health&Safety	50.00	5.0
	Total	**4038.35**	**84.1**

Details of CER with proposed activities and budgetary allocation:

Sr. No.	Proposed Activity	Proposed Budget (in Rs. Lakh)
1.	Drinking water facility in ZP schools of Bhalawani, Bhangadwadi, Nagbendwadi, Malkup	20
2.	Solar street lamp in Malkup, Bhangadwadi,, Nagbendwadi, BhalwaniVillages	30
3.	Infrastructure to Primary Health Centre_Bhalwani (Medical Equipment's, testing laboratory and building, water facility and treatment)	100
4.	Development of infrastructure in ZP schools Bhalawani, Bhangadwadi, Nagbendwadi, Malkup as per requirement such as digital classrooms with computer,	150

	projector, LED and library for students.	
	Total	300

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. present within 10km distance. Reserve forest Bhondewadi is adjacent at East direction, Manjardhar RF at 0.9 km distance in SW, waghachiwadi RF at 3.2 km diatnce in NW direction. River Mula is at a distance 15 Km in North direction, Bhalwani Lake is at distance of 3.70 km towards SE direction, Kapari River is at a distance 2.10 km towards South direction and Bhandgaon Lake is at a distance of 5.70 km in W direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.72 $\mu g/m^3$, 2.98 $\mu g/m^3$ and 0.11 $\mu g/m^3$ with respect to PM_{10}, SO_2& NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total freshwater requirement of distillery complex after expansion will be 971 m^3/day (during off season) and 653 m^3/day (during season). which will be met from Mula Dam. NOC has been obtained from Executive Engineer, Mula Irrigation division, Ahmednagar, Permission Letter No.- 2732/2021 dated 29th July 2022.

Existing effluent generation is 500 m3/day from 60 KLPD distillery using C- Molasses which is treated in Condensing Polishing Unit (540 m^3/day capacity). Proposed effluent generation will be 1320 M3/day and 1675 m^3/day from distillery using Syrup and B- heavy molasses as raw Material respectively which will be treated through upgraded Condensing Polishing Unit (1750 m^3/day capacity) and treated effluent will be recycled/reused in the process or cooling tower make up.

In Existing 60 KLPD distillery: Spent wash (480 m^3/day) is treated through Multi Effect Evaporator (MEE) and concentrated spent wash is burnt in 21TPH incinerator boiler. Ash is sold to brick manufacturers.

Expansion 240 KLPD distillery: Spent wash will be treated through Multi Effect Evaporator (MEE) followed by incineration boiler and concentrated spent wash is burnt in incineration Boiler. Ash will be sold to brick manufacturers. Domestic waste water is will be treated in STP of capacity 20 m^3/day. The plant is will be based on Zero Liquid discharge system and treated effluent will not be discharged outside the factory premises.

Total power requirement of distillery after expansion will be 5.4 MW which will be sourced from the existing 2 MW and proposed 4 MW Captive power plant from existing 21 TPH incineration boiler which will be upgraded to 55 TPH incineration boiler. APCE as ESP with a 70 m high stack is already installed with the existing 21 TPH boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3. Concentrated spent wash & bagasse/coal shall be used as fuel in the 55 TPH incineration boiler. Coal will be only used as a supporting fuel to burn concentrated spent wash in incineration boiler. PP informed that applying proposal under B2 category because generated power and steam will be used for distillery operation only. Industry has existing 432.5 KVA x 2KVA DG set which is used as standby during power failure and stack height (6m) is provided as per CPCB norms.

Details of Process emissions generation and its management:

- APCE as ESP with a stack height of 70 m is installed with the existing 21 TPH Incineration Boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3.
- Online Continuous Emission Monitoring System is being be installed with the stack and data is transmitted to CPCB/SPCB servers. Same practices will be followed after expansion also.
- CO_2 (226.4 TPD) generated during the fermentation process will be bottled in CO_2 bottling plant and sold to beverage industries.

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

- Concentrated spent wash (120 m^3/day) from existing 60 KLPD is burn in incineration Boiler.
- Concentrated spent wash (B- heavy 270 m^3/day & Syrup 72 m^3/day) generated from expansion of distillery by 240 KLPD will be forwarded to incineration Boiler.
- Total Boiler ash (B- heavy: 67.34TPD and Syrup: 28.97TPD) after expansion of distillery will be given to brick manufacturing/ cement manufacturing industries.
- CPU sludge (5 TPD) will be used as manure.
- Yeast Sludge (21 TPD) and 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 capacity of distillery 60 KLPD to 300 KLPD will be used for manufacturing fuel ethanol only.

During deliberations, EAC discussed following issues:

1. PP informed that total green belt area is 3.2 ha. Industry has developed green belt on 1.5 ha area. Green Belt is yet to be developed on 1.7 ha area. In remaining plot area of 1.7 ha, a total of 6300 no of saplings will be planted in the month of April and May 2023 for which, budget of Rs 2205000/-has been earmarked to achieve greenbelt target. Regarding control of fugitive emission, PP informed that regular water sprinkling is being done. Internal road is under construction and completed in 2 months. Bagasse will be stored in cover shed, which will be constructed during proposed expansion.
2. Industry increased Cost for CER from Rs. 2.25 Cr to Rs. 3.0 Cr and will be implemented before commissioning of the proposed project.
3. Air Dispersion modelling was carried out considering existing 40 TPH Bagasse fired boiler, existing 21TPH Incineration Boiler and proposed 34TPH incineration boiler. Revised Report of Air Dispersion modelling is incorporated in EMP.
4. Revised capital in Cost of EMP will be Rs. 4038.35 Lakhs and operation and maintenance cost will be Rs. 84.1 Lakhs.
5. Ethanol storage will be for five days ie. 750 KL x 2 tank. EAC

suggested to provide one additional tank of 750 KL.

6. Existing capacity of CPU is 540 m^3/day and additional 1200 m^3/day capacity of CPU will be installed to treat the effluent from expansion of Distillery unit.
7. For utility power utilization like Building, Street lights and ancillary requirements we shall use 15% power through Solar source.
8. The Committee was of the view that existing 21TPH incineration boiler cannot be upgraded to 55 TPH incineration boiler. Therefore, PP informed that a separate 34 TPH incineration boiler will be installed. Spentwash (90 TPD) + bagasse (456 TPD) and 15% Indian coal @ 13 TPD will be consumed as fuel in the boiler.
9. Regarding proposed Green Belt development on additional 2.04 ha land in order to achieve 33 % greenbelt of the total plot area, PP informed that the factory will develop balance green belt within one year. 5-10 m wide green belt will be developed around the periphery of factory and 1-2 lines of trees shall be planted along both sides of internal roads. Plants will be planted around distillery plant, Bagasse, ash storage etc. Trees growing to a height of 5m or more will be planted. Plantation of trees will be undertaken in around the area in alternating rows to prevent horizontal pollution dispersion. Industry has allocated about Rs. 23.50 Lakhs towards development of greenbelt in upcoming one year.
10. The Committee noted that the Wet scrubber along with 65 m high stack is installed with 40 TPH boiler in the existing sugar. It was suggested to install ESP in place of wet scrubber within 2 years from the date issuance of EC.

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 380 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). PP shall develop greenbelt in 5.24 ha land. This includes development of greenbelt in plot area of 1.7 ha, for which, a total of 6300 no of 4-6 feet saplings will be planted in the month of April and May 2023 and 5000 no of saplings will be planted in 2.04 ha land within one year in order to achieve 33 % greenbelt of the total plot area. Accordingly, State Pollution Control Board 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 implement the said condition.

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

(v). NOC from the Concerned Local authority shall be obtained before start of the plant construction and drawing water from Mula Dam for the distillery 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 obtains such permission. No ground water shall be used for the plant operations.

(vi). Total fresh water requirement shall not exceed 971 m^3/day, which will be sourced from Mula dam. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(vii). The spent wash shall be concentrated in MEE and concentrated spent wash shall be incinerated in the incineration boiler. Other lean effluents Spent lees, MEE Condensates and utility effluents shall be treated in the condensate polishing unit (CPU) comprising of three

stage RO. The treated permeate will be reused in cooling tower water makeup and for molasses dilution. The RO rejects will be taken back to MEE. Treated effluent will be recycled/reused for make up water of cooling towers/process etc. No wastewater or treated water from integrated unit of sugar mill and distillery shall be discharged outside the premises and Zero Liquid Discharge shall be maintained for all the units namely sugar, Distillery and Cogen Power Plant. STP shall be installed to treat sewage generated from factory premises. PP shall ensure to implement Zero Liquid Discharge (ZLD) in the existing and expansion of sugar factory and cogeneration plant including proposed Distillery.

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

(ix). As proposed, the wet scrubber attached with the existing 40 TPH bagasse fired Boiler shall be upgraded with ESP for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 within 2 years of issuance of EC. ESP with a stack height of 70 m will be provided to the proposed 34 TPH incineration Boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. ESP with a stack height of 70 m is provided with the existing 21 TPH incineration Boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NO_xemissions from the incineratorboilers shall be less than 100 mg/Nm^3.Coal will be used as auxiliary fuel along with bagasse in the incineration boiler. No coal shall be used as fuel in the 40 TPH bagasse fired boiler. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(x). Boiler ash (B- heavy: 67.34TPD and Syrup: 28.97TPD) after expansion of distillery will be given to brick manufacturing/ cement manufacturing industries. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises. PP shall discontinue existing bio-composting plant within 2 years from data of issue of EC letter. Capacity of Spent wash lagoon shall not exceed 5 days retention period.

(xi). Existing CO_2 (92TPD) bottling plant and 290 TPD CO_2 generated during the fermentation process will be bottled in CO2 bottling plant and sold to beverage industries.

(xii). PP shall allocate at least Rs. 1.0 Crore/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.

(xiii). 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.

(xiv). 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.

(xv). 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.

(xvi). 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.

(xvii). The green belt of at least 5-10 m width has already been developed in 5.24 hectares i.e., 33.0 % of total project area which shall be thickened with tree density @ 2500 trees per hectares, mainly along the plant periphery which shall be maintained. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed.

(xviii). PP proposed to allocate Rs. 3.0 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed in consultation with District Administration.

(xix). 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 ensure no direct entry or exit of the vehicles from Main Road/Highway and it shall be through slip road only

(xx). 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.

(xxi). 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.

(xxii). 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.

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

Agenda No. 03

Proposed 120 KLPD Molasses based Distillery located at Village Sr. No. 22, 25, 27, 1/1, Village Imampur, Dist. And Taluka Bidar, Karnataka by The Naranja Sahakari Sakkare Karkhane Ltd- Re-consideration of Environment Clearance.

[IA/KA/IND2/422277/2023, IA-J-11011/309/2022-IA-II(I)

The Project Proponent and the accredited Consultant **M/s. MITCON Consultancy and Engineering Services Ltd.** (NABET certificate no. **NABET/EIA/2124/RA 0229_Rev 02** and validity **05.02.2024**) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the Proposed **120 KLPD** Molasses based Distillery located at Village Sr. No. 22, 25, 27, 1/1, Village Imampur, Dist. And Taluka Bidar, Karnataka by **The Naranja Sahakari Sakkare Karkhane Ltd.**

All molasses-based distilleries and cane juice/non-molasses-based distillery (>100 KLD) are listed at S.N. 5(g) respectively of Schedule of

Environment Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The products manufactured will be Rectified spirit/ Extra Neutral Alcohol/Absolute Alcohol/Ethanol for which industry will utilize C Molasses/ B Heavy Molasses and Cane Syrup as a raw material. The distillery plant will be operated using steam and power that will be generated by proposed boiler of 32 TPH capacity and captive power generation from 3.2 MW TG. The boiler will utilize spent wash/bagasse as a fuel. Sugarcane syrup and molasses will be taken from the sugar unit which industry is expanding from 2500TCD to 4000TCD TCD. The proposed expansion shall be carried out within existing sugar premises. The industry shall be in operation for 330 days, in a year. The details of products and capacity as under:

Sr. No.	**Unit**	**Product/By-product**	**Existing**	**Proposed**	**Total**
1	Distillery	RS/ENA/AA/ Ethanol	-	120 KLPD	120 KLPD

Standard Terms of Reference have been obtained vide F. No**. IA-J-11011/309/2022-IA-II(I)** dated **16.08.2022**. No litigation is pending against the present proposal. KSPCB vide letter no KSPCB/RO(BDR)/NSSK/2022-23 dated 10.03.2023 has inspected the site on 10.03.2023 and submitted satisfactory compliance report on conditions prescribed in the consent for operation.

Public Hearing for the proposed project had been conducted by the **Karnataka State Pollution Control Board** on **28.11.2022** at **The Naranja Sahakari Sakkare Karkhane Ltd.** chaired by **Deputy Commissioner**. The main issues raised during the public hearing and their action plan:

Sr. No.	**Name and address of the person along with suggestions, views, comments etc.,**	**Reply given by project proponent / Consultant**	**Budget Allocation**	**Timeline**
1	Shri. Ramesh S/o ShantappaKadanchi, KhatakChincholi He opined that, only sugar manufacturing is not enough for the sugar factory. They should also produce other related byproducts which will improve financial conditions. Hence the farmers will get higher prices. As the farmers get benefit by	Industry is thankful to all villagers & farmers for welcoming the proposed expansion. Farmers will get benefited as Sugar will get stability due to Proposed Distillery.	Total project cost is 120 Cr.	Establishment of Distillery will take 90-120 weeks

	growing mixed crops, summarily by producing other byproducts in the sugar factory will be beneficial to the sugar factory. **Co-generation Ethanol, Bagasse will be profitable to the factory. Hence we support the establishment of Distillery unit.**			
2	Shri. Satish Biradar, BhatambraBhalki TQ: He opined that, by only producing sugar in sugar factory will not bring profit, but by producing other byproducts in sugar factory will be profitable. We have no objection for establishment of Distillery unit.	Industry is thankful to all villagers & farmers for welcoming the proposed expansion. After Distillery establishment existing sugar unit will get stability and ultimately Farmers will be benefited	Total project cost is 120 Cr.	Establishment of Distillery will take 90-120 weeks
3	Sri. EknathMetre, Tarnalli village: He informed that, we have no objection for establishment of Distillery plant	Industry is thankful to all villagers & farmers for welcoming the proposed expansion.	-	-
4	Sri. Kailash PatilNagral: He opined that, there will be employment generation by establishing the distillery unit. He further informed by establishing Distillery unit farmers will get higher prices	Dr. Hemangi Nalavade, Project consultant, replied that, the employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled)	Total project cost is 120 Cr.	Establishment of Distillery will take 90-120 weeks
5	Sri. SharathDurgale, Bolegaon Village: He informed that, by the establishment of the Distillery there will not be migration of people for Job. Establishment of Distillery will be beneficial to the industry and also for them	Dr. Hemangi Nalavade, Project consultant, replied that, the employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people.	Total project cost is 120 Cr.	Establishment of Distillery will take 90-120 weeks
6	Sri. SangmeshTankaleBhatmbra: He informed by producing the byproducts in the sugar factory will double the income of the farmers	After Distillery establishment existing sugar unit will get stability and ultimately Farmers will be benefited	Total project cost is 120 Cr.	Establishment of Distillery will take 90-120 weeks
7	Sri. SidduKadodiDhanura: He informed that, they have no objection for the establishment	Industry is thankful to all villagers & farmers for welcoming the	-	-

	of the Distillery unit	proposed expansion.		
8	Sri. RamraoKishanaraonBeneknalli Village: He informed that, he is happy that, the Distillery unit is being established in his village	Industry is thankful to all villagers & farmers for welcoming the proposed expansion.	Total project cost is 120 Cr.	Establishment of Distillery will take 90-120 weeks
9	Sri. DilipTarnali: He informed that, there will be decrease in usage of chemical fertilizer due to availability of Bio-compost from the distillery. There will be improvement in financial conditions & will generate employment for the educated people. Surrounding educational institution will be benefitted from CSR. He informed that, they will not have any problems due to establishment of Distillery unit & where as it will bring them prosperity. We can change the misnomer of Bidar as backward District and take this place to prosperity.	Industry is thankful to all villagers & farmers for welcoming the proposed expansion. The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. CSR activity shall be done through the CSR funds of the factory. Additionally CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted.	CER cost 2.5 Cr.	~ 2023-2024 Before plant commissioning**.**
10	Sri. Channakeshava Reddy Hyderabad: He informed the ETP and STP should be constructed properly. Online flow meter should be installed to ETP and shall be kept in operational 24 hours a day. Soil, Air, Water quality should be maintained. The CSR grants should be utilized properly. He asked to furnish the details of CSR funds utilization in the existing sugar industry. The urged that permanent employment should be given to those who have lost their land for this distillery unit.	Dr. Hemangi Nalavade, Project consultant, replied that, the industry shall be installing CPU of 1000 CMD and STP of 10 CMD. Online flow meters shall be installed and connected to SPCB and CPCB servers. Air pollution will be controlled through ESP. The details of CSR activities to be conducted. CER activities like Filtered Water Supply with pipeline and storage tank, Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be	**1.Water pollution**- CPU , STP Capital Cost: 550 Lakhs Operational Cost: 5 Lakhs **2. Online Continuous** Emission Monitoring System (OCEMS) Capital cost: 40 Lakhs O&M cost: 2 Lakhs/ A **3. Air pollution** control through ESP: 3.1 Cr 4. Regular Environmental monitoring will be done: 25.0 lakhs	Shall be installed in 8-10 months after receipt of the EC copy. CER will be execute before Plant commission on ~2023-2024

		conducted.The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people.	**5. CER** cost 2.5 Cr.	
11.	Smt. Manjula, GnyanakendraSevaSamste, Chitradurga District: She informed that, there is a need to setup factories to eliminate unemployment. She said it should be done without any harm to locals & farmers.	Dr. Hemangi Nalavade, Project consultant, replied that, no harm shall be caused to the locals and the farmers due to the establishment of the industry.	The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people.	-
12	Sri. M. SatyanarayanHydrebad Pollution control equipment's shall be installed in a proper manner otherwise there is a possibility of getting disability. Minimum 5% of employment should be given to physically disable people. He said that tricycle should be given to the physical disabled people under the CSR funds.	Pollution control equipment's shall be installed and regular maintenance shall be done. CPU of 1000 CMD and STP of 5 CMD shall be installed for waste water treatment. Stack shall be provided with ESP with approx. 99.9 % efficiency. The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. CSR activity shall be done through the CSR funds of the factory. CER activities like Filtered Water Supply with pipeline and storage tank , Solar	**Water pollution**- CPU, STP Capital Cost: 550 Lakhs O&M Cost: 5 Lakhs/A **Online Continuous** Emission Monitoring System (OCEMS) Capital cost: 40 Lakhs O&M cost: 2 Lakhs/ A **Air Pollution (Incineration Boiler, ESP, Stack, ID fan and other auxillaries)** Capital cost: 5000 Lakhs O&M cost: 80.5 Lakhs/ A **CER** cost 2.5 Cr.	Shall be installed in 8-10 months after receipt of the EC copy. CER will be execute before Plant commissi on ~2023-2024.

		lamps, awareness, training program for better yield and Infrastructure facility in schools etc. will be conducted.		
13	Sri. Pradeep H. Chitradurga District: He informed that, establishment of the unit will help to generate employment for surrounding village peoples.	Industry is thankful to all villagers & farmers for welcoming the proposed expansion. The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled)	Total project cost is 120 Cr.	Establishment of Distillery will take 90-120 weeks
14	Sri. NagendraVaijinathPatilChambol village: He informed that by establishment this Distillery unit, financially will benefits to both farmers and industry. This benefits should reach every farmer. He said he is very happy for the establishment of distillery and he urged to establish the same at the earliest	Industry is thankful to all villagers & farmers for welcoming the proposed expansion.	Total project cost is 120 Cr.	Establishment of Distillery will take 90-120 weeks
15	M. Krishna Murthy Hydrebad He informed by giving 10% to 15% CSR grants will help surrounding community to progress, in water treatment plant and other developmental works. This unit will generate employment to the unemployed. He urged to grant environment clearance at earliest.	Industry shall be carrying out CER activity.CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools etc. will be conducted. The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled)	CER Cost: 2.5 Crore	Before commissioning of the project activity.

Action plan for issues raised in the representations during PH

Sl. No.	Representations received during Public hearing	Compliance	Budget	Timeline

1.	**Name:**Dr.B.R.Ambedkar,Sahitya Samskrutika KridaKala Yuvakara Sangha (Ri.), Bommenahalli, Tq. and Dist.Chitradurga–577 520. The feasibility report of this project M/s. The NaranjaSahakariSakkareKarkhane Ltd., reg. of Imampur Village, Bidar Taluka and District. The project will be beneficial generatingvariousemploymentopportunitiesforskilled as well as unskilled individually will prefer nearbypeoples for employment green belt will be provided asper norms. The project will provide CSR Activities which willbeutilizedforvariousphysicalandsocialinfrastructur e developmental program such as lightingby LED bulb/ solar panels, distribution of laptops, tableandchairsinschoolsetc,personal.Protectiveequip mentwillbeprovidedtoemployes.Weheartlysupportfor this project. Allthebestforentirecrew.	• The employment shall be provided as per the state government policy. • Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • CSR activity shall be done through the CSR funds of the factory. • Additionally CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted.	CER cost 2.5 Cr.	~ 2023-2024 Before plant commissioning.
2.	Name: SnehaBhandvyaAndharaSeva Trust (Ri.), Manchenahalli, Tq. Gauribidanoor, Dist. Chikkaballapur – 561 211. Date: 28-11-2022. We are also advising the company, 1. Give priority for more plantation in their area to protect pollution. 2. please take up village plantation and avenue plantation. 3. To take up CSR activities in the local area which improve the Socio – Economic status of the local people.	• Greenbelt development will be done in the factory premises and around the factory. • Avenue plantation will be done under CER in the villages	Greenbelt cost for project premises is 25 lakhs Tree plantation in the villages:	Green belt development in the premises will be done in the premises FY

	Thanking you Sir/ Madam. (Premgowda)	• CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted.	45 lakhs CER cost 2.5 Cr	23-24 CER: ~ 2023-2024 before plant commissioning. One time expenditure for the given period
	Name: AksharaGrameenaVikasSamasthe (Reconstruction of Culture) (S.C. Management), Thilak Nagar, Molakalmuru, ChitradurgaDsit. Date: 28-11-2022. Welcoming the proposed project (M/s. The NaranjaSahakariSakkareKarkhane Ltd reg of Imampur Village, Bidar Taluka and Dist), we are advising the company, 1. Campus should organized among the people of the surrounding villages. 2. Conduct skill development training programs for un employed youth and provide employment to eligible candidate. 3. CSR funds for development of affected villages should go through village committees. 4. Unemployment is the major pollution in India that way I am supporting the Industrial Sector please provide the local employment. 5. And we want to grow greenery around the company and nearby villages with Fruit bearing and Medicinal plants. 6. We want to take steps to prevent the release of pollution into the environment as per government regulations. Hence take the necessary steps to grant ECOF the proposed project to the MoEF& CC Department. Thanking sir (R. Krishna)	• CER activities as per MOEFCC guidelines and EAC guidelines will be executed. • CER activities like Filtered Water Supply with pipeline and storage tank, Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted. • Industry shall be installing CPU of 1000 CMD and STP of 10 CMD. Online flow meters shall be installed and connected to SPCB and CPCB servers. Air pollution will be controlled through ESP. • The	CER cost 2.5 Cr **1.Water pollution**- CPU, STP Capital Cost: 550 Lakhs Operational Cost: 5 Lakhs **2. Online Continuous** Emission Monitoring System (OCEMS) Capital cost: 40 Lakhs O&M cost: 2 Lakhs/ A **3. Air pollution** control through ESP: 3.1 Cr **4. Regular**	CER: ~ 2023-2024 before plant commissioning. One time expenditure for the given period Pollution control equipment Shall be installed in 8-10 months after receipt of the EC copy.

		employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • Greenbelt will be developing in the premises. Separate funds have been allocated for them.	Environmental monitoring will be done: **25.0 lakhs** **5. CER** cost 2.5 Cr.a	
	Name: Varsha Environmental Acitivist, Ananthapur, Andhra Pradesh. Date: 28-11-2022. I am here advise to this Project Management, Avenue the plantations at the Project Area. Medical Camps will be conduct the Every Six Month at the Project Villages and Nearby Villages also. Who has been suffering from the Drinking Water they had to provide RO Drinking Water Plants. Green belt Programme will be Development Community Villages. Proper utilization of fly ash shall be ensured as per used for proper Fly Ash A detailed plan of action shall be take care to company. CSR funds will be enhancement to the Development of Community Villages 10 to 15 % Funds. Villagers and Project Management, Coordination Committee is formation and solve the local problems. In this regard you may be recommended to the MoEF& CC and issue to the Environmental	• Greenbelt development will be done in the factory premises and around the factory. • Avenue plantation will be done in the villages under CER. • CER activities as per MOEFCC guidelines and EAC guidelines will be executed. • CER activities like Filtered Water Supply with pipeline and storage tank, Solar lamps, awareness, training program for better yield	**1.Water pollution**-CPU, STP Capital Cost: 550 Lakhs Operational Cost: 5 Lakhs **2. Online Continuous** Emission Monitoring System (OCEMS) Capital cost: 40	CER: ~ 2023-2024 before plant commissioning. One-time expenditure for the given period Pollution control equipment Shall be installed in 8-10 months after receipt

	Clearance/ Permissions to the above Project. Thanking you sir, (R. Venkatesh)	and Infrastructure facility in schools will be conducted. • Total ash 33.6 TPD Fly ash from ESP, bottom ash from boiler will be collected and given to farmers • CER will be executed as per MOEFCC and EAC member's guidelines • EMC cell will be developed by factory, which will address all issues related pollution and coordinate with local villages	Lakhs O&M cost: 2 Lakhs/ A **3. Air polluti on** control throug h ESP: 3.1 Cr **4. Regul ar** Environ mental monito ring will be done: **25.0 lakhs 5. CER** cost 2.5 Cr	of the EC copy.
7.	Name: Ashraya Rural & Urban Environment Development Society (R.), JCR Extension 1st Cross, Chitradurga – 577 501. Date: 28-11-2022. The feasibility report of this project M/s. The NaranjaSahakariSakkareKarkhane Ltd., reg of Imampur village, Bidar Taluk and District). The project will be beneficial in generating various employment opportunities for skilled as well as unskilled individuals will prefer nearby peoples for employment green belt will be provided as per norms. The Project will provide CER activities which will be utilized for various physical and Social Infrastructure developmental program such as lighting by LED bulb/ solar panels distributions of Laptops, table and chairs in school etc. personal protective equipment will be provided to employees. We Hartley support for this project. All the best for entire crews. Thanking you, (Vinutha)	• The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • Greenbelt will be developing in the premises. Separate funds have been allocated for them. • CER activities	CER cost 2.5 Cr.	CER: ~ 2023-2024 before plant commi ssionin g. One-time expen diture for the given period Polluti on control equip ment Shall be install ed in 8-10 month s after

		like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted.		receipt of the EC copy.
8.	Name:Meenakshi Rural Development Society Opp.KSRTC Bus stand, Kudligi, Ballary Dist-583135. Date: 28-11-2022. The feability report of this project M/s. The NaranjaSahakariSakkareKarkhane Ltd., reg. of Imampur Village, Bidar Taluka and District. The project will be beneficial in generating various employment opportunities for skilled as well as unskilled individually will prefer nearby peoples for employment green belt will be provided as per norms. The project will provide CER Activities which will be utilized for various physical and social infrastructure developmental program such as lighting by LED bulb/ solar panels, distribution of laptops, table and chairs in schools etc, personal. Protective equipment will be provided to employes. We heartly support for this project. All the best for entire crew.	• CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted	CER cost 2.5 Cr.	CER: ~ 2023-2024 before plant commissioning. One time expenditure for the given period Pollution control equipment Shall be installed in 8-10 months after receipt of the EC copy.
9.	Name: Mother Dreams Rural & Urban Education Development Society (R) Turebailu, 1st Block Bheemasamudra, Chitradurga Tq., Dist. Date: 28-11-2022. The feability report of this project M/s. The NaranjaSahakariSakkareKarkhane Ltd., reg. of Imampur Village, Bidar Taluka and District. The	• The employment shall be provided as per the state government policy. Total	CER cost 2.5 Cr.	CER: ~ 2023-2024 before plant commi

	project will be beneficial in generating various employment opportunities for skilled as well as unskilled individually will prefer nearby peoples for employment green belt will be provided as per norms. The project will provide CER Activities which will be utilized for various physical and social infrastructure developmental program such as lighting by LED bulb/ solar panels, distribution of laptops, table and chairs in schools etc, personal. Protective equipment will be provided to employes. We heartly support for this project. All the best for entire crew.	manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • Greenbelt will be developing in the premises. Separate funds have been allocated for them. • CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted.		ssionin g. One time expen diture for the given period Polluti on control equip ment Shall be install ed in 8-10 month s after receipt of the EC copy.
10.	Name: Metro Urban and Rural Devalopment Society H.No.32-94/5 Shapurnagar,eedimetla, Hyderabad, 500055. Date: 28-11-2022. We want to take steps to prevent the release of pollution into the environment as per government regulations. Conduct skill development training programs for unemployed youth and provide employment to eligible candidates. CSR funds for development of affected villages should to through village committees. Health camps should be organized among the people of the surrounding villages.	• Industry shall be installing CPU of 1000 CMD and STP of 10 CMD. Online flow meters shall be installed and connected to SPCB and CPCB servers. Air pollution will be controlled through ESP. • Ash will be use as a manure as it is potash rich.	**1.Water pollutio n**- CPU, STP Capital Cost: 550 Lakhs Operatio nal Cost: 5 Lakhs **2. Online Continu ous** Emission	CER: ~ 2023-2024 before plant commi ssionin g. One time expen diture for the given period Polluti

	And we want to grow greenery around the company and nearby villages with fruit barring and medicinal plants. Today unemployment is the major pollution…in India. That way I am supporting the Industrial sector, please provide the local employment.	• The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • Greenbelt will be developing in the premises. Separate funds have been allocated for them. • CER will be executed as per MOEFCC and EAC members guidelines. • CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted. • Greenbelt development will be done in the factory premises and around the factory.	Monitoring System (OCEMS) Capital cost: 40 Lakhs O&M cost: 2 Lakhs/ A **3. Air pollution** control through ESP: 3.1 Cr **4. Regular** Environmental monitoring will be done: **25.0 lakhs 5. CER** cost 2.5 Cr	on control equipment Shall be installed in 8-10 months after receipt of the EC copy.

		• Avenue plantation will be done in the villages under CER.		
11.	Name: Dharani Environment Society, 3-132, High School Road, Nunna, Dist. Vijaywada, Andhra Pradesh – 521212. Date: 27-11-2022. I am P. Srinivasa Reddy, working as NGO. I am hear with recommended unconditionally environmental clearance is to the above project. The management proposed project beneficial to the local village people. As more infrastructure development and improvement to the network of the roads in village area. Provide dust masks to prevent Explosure of dust. Provide personal protective equipment's to workers. Avenue the plantations at project area and development the surrounding villages. Tighten the Tarpaulin sheets on the loading vehicles. Heat near furnace area will be monitored regularly. The management counduct the medical camps to the local village people for the health point of view. The management issue the health cards to them. The company will improve the 5% CSR funds from their net profit. Hence I request you to recommend to MOEF & CC issue to the environmental clearance the above project.	• PPEs will be provided to Labors who are working in the sensitive area. • Avenue plantation will be done in the villages under CER. • Raw material and fuel storage will be covered. Covered transportation will be done. • CER will be executed as per MOEFCC and EAC members guidelines. • The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • Greenbelt will be developing in the premises. Separate funds have been allocated for them	Occupational health Rs.50.0 lakhs Avenue plantation 45 lakhs **CER** cost 2.5 Cr	During project commission 8-10 months. CER: ~ 2023-2024 before plant commissioning. One time expenditure for the given period
12.	Name: RIGHT WAY GLOBAL ORGANIZATION, # 2-	• Avenue	Occupati	During

	1-392/1/13/4, First fliir, Pushpanjali Complex, Nallakunta, Hyderabad, TS. Date: 28-11-2022. I am S.Chandrashekar as a Enviromental volunteer today, I well comes Environment Volunteer public hearing of M/s NaranjaSahakariSakkareKarkhane Ltd., Imampur. Bidar Dist. Karnataka, I am supporting this project and giving few suggestions. To increase greenery surrounding of plant. Management give first priority to local employment. Maintain ETP plant. CSR & CER funds large amount allotment to development of greenery & rural development. Provide safety equipments to all employees. Finally, I recommends to MOEF & CC to grant EC to M/s NaranjaSahakariSakkareKarkhane Ltd.,	plantation will be done in the villages under CER. • The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • ETP will be maintained properly • CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted. • Greenbelt development will be done in the factory premises and around the factory. • Avenue plantation will be done in the villages under CER.	onal health Rs.50.0 lakhs Avenue plantation 45 lakhs **CER** cost 2.5 Cr' ETP cost: 550 Lakhs Recurring cost: 5 lakhs/A	project commission 8-10 months. CER: ~ 2023-2024 before plant commissioning. One time expenditure for the given period

		• PPEs will be provided to Labors who are working in the sensitive area.		
13.	Name:PrajaSamasyaluParishkaraVedika. R/o Chinnasuram, Mandal, Dist. Nallgonda. Date: 28-11-2022. I am KattaYadagiri working as Environment volunteer in the past 3 years. We are also advising the company. We want to take steps to prevent the release of pollution into the environment as per Govt. regulations. Conduct skill development training programs for unemployed youth and provided employment to eligible candidates. CSR funds for development of affected villages should go through village committees. Health camps should be organized among the people of the villages. And we want to grow greenery around the company and nearby villages with fruit barring and medicinal plants. Today unemployment is the major pollution in India. That way I am supporting the industrial sector. Please provide the local employment.	• Industry shall be installing CPU of 1000 CMD and STP of 10 CMD. Online flow meters shall be installed and connected to SPCB and CPCB servers. Air pollution will be controlled through ESP. • Ash will be use as a manure as it is potash rich. • The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • ETP will be maintained properly • CER will be executed as per MOEFCC and EAC members guidelines. • Greenbelt development will be done in the factory premises and	**1.Water pollution**- CPU, STP Capital Cost: 550 Lakhs Operational Cost: 5 Lakhs **2. Online Continuous** Emission Monitoring System (OCEMS) Capital cost: 40 Lakhs O&M cost: 2 Lakhs/ A **3. Air pollution** control through ESP: 3.1 Cr Avenue plantation 45 lakhs **CER** cost 2.5 Cr Green belt in the factory premises: 35 Lakhs	During project commission 8-10 months. CER: ~ 2023-2024 before plant commissioning. One time expenditure for the given period

		around the factory. • Avenue plantation will be done in the villages under CER.		
14.	Name: FIGHT AGAINST GLOBAL WARMING. H.No. 3-1-724, LB Nagar Hyderabad – 500074, Telangana State. Date: 28-11-2022. I went to give a few suggestions to the company management as below. The company management should not release dust, sound pollution into the environmental according Govt. norms. Development of green belt around the plant and along the head roads areas. Personal protective equipments will be provide to all workers. The company should maintain periodic monitoring of noise levels in plant premises and in nearby villages. Regular water sprinkling on head roads, it is reduce dust pollution. The company should conduct various socio-economic welfare activities and infrastructure improvement measures in the near by villages. The management should give top priority to local people for employment for semi skilled and unskilled jobs. I am recommending to central pollution control panel of MOEF & CC to give permission to the M/s NaranjaSahakariSakkareKarkhane Ltd.,	• PPEs will be provided to Labors who are working in the sensitive area. • Greenbelt development will be done in the factory premises and around the factory. • Periodic monitoring will be done • Regular water sprinkling will be done • CER will be executed as per the guidelines • The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people.	Green belt in the factory premises : 35 Lakhs Occupational health Rs.50.0 lakhs Recurring cost of Environment monitoring is 3 lakhs/A **CER** cost 2.5 Cr	During project commission 8-10 months. CER: ~ 2023-2024 before plant commissioning. One time expenditure for the given period
15.	Name: YMNR CHARITABLE TRUST Reg No.: V IV A/2659 CS/7/2019 Post office Road, Rayadurgam, AnantapuramDist - 515865 Date: 28.11.2022 We are also advising the company Please take precautionary measure to control dust	• PPEs will be provided • Green belt will be done in the factory premises • The	Green belt in the factory premises : 25 Lakhs	

	pollution. Give priority for more plantations in their area to protect pollution. Please give top priority to local people in employment opportunities. Please take up village plantation and avenue plantation. Please conduct medical and health camps for local public and for the employees. To take up CSR activities in the local area which improve the socio economic satatus of the local people	employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • Avenue plantation will be done in the villages under CER • CER will be executed as per the guidelines • CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted.	Occupational health Rs.50.0 lakhs Recurring cost of **CER** cost 2.5 Cr Avenue plantation 45 lakhs	
16.	Name: G.K. Education & Rural Urban Development Society (R.) Donate Red Spred Green Save Blue BarageriBeedi, 1st Cross, Challakere road Chiradurga- 577501, Karnataka State Email: gkerudsiciety@gmail.com Date:28.11.2022 The feasibility report of this project (M/S/The NaranjaSahakariSakkareKarkhane Ltd Reg. of Imampur village Bidar Taluka and district). The Project will be beneficial in generating various employment opportunities for skilled as well as unskilled individually will prefer nearby peoples for	• The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50	CER cost 2.5 Cr.	~ 2023-2024 Before plant commissioning.

	employment. Green belt will be provided as per normal. The project will provided CER activities which will be utilized for vorious physical and social infrastructure developmental programmed such as lighting by LED bulb /solar panels distribution of laptops table and cahirs in schools etc. personal protective equipment will be provided to employees. We heartly support for this project .all the best for entire crew.	unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. CSR activity shall be done through the CSR funds of the factory. Additionally CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted.		
17.	Name: DANDA KONDAMMA CHARITABLE TRUST T. SUNESULA (Village & Post), Yerraguntla R.S.(Mandal), Y.S.R. Dist. Email: yckreddy5@gmail.com Date: 28.11.2022 Proposed establishment of sugar com juice / B-heavy molasses /C based distillery of 120 KLPD in the premises of existing sugar industry at sy.No.22,25,27,1/1 Q5 Imampur Village Bidar Taluka Dist in an area of 31.13 Acres by M/S NaranjaSahakariSakkareKarkhane Ltd reg. Pollution permission request regarding I support toproject in for pollution permission. Suggestion : CSR funds use only affected village only. Trees rounded factory limits. Help to poor people. Jobs Temporary & permanent only local. recommended to MOEF & CC .	• Avenue plantation will be done in the factory premises • CER will be executed as per the guidelines • CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted. • The	CER cost 2.5 Cr. Green belt in the factory premises : 25 Lakhs	~ 2023-2024 Before plant commissioning. Green belt will be developed during project commission 8-10 months.

		employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people.		
18.	Name: Friends of the Earth, Social Sevices, Ammanabole(V), Narketpally (M), Nalgonda (D) – 508 254 (T.S.). Date: 27-11-2022. I am A. Venkat Reddy Working as NGO Since 15 yrs. I am herewith recommended unconditionally environmental clearance is to the above project. I am whole heartedly supporting the industrial activity. In my opinion unemployment is the major pollution to society. It is the time to address the need for industrial development along with protecting ecological balance. I am giving you few suggestions to maintain ecological balance and development of your Industry activity. The management proposed project beneficial to the local village people. As more infrastructure development and improvement to the network of the roads in the village area. Provide dust masks to prevent Explosure of dust. Provide personal protective equipments to workers. Avenue the plantations at the project area and developed in surrounding villages. Tighten the Tarpaulin sheets on the loading vehicles. Heat near furnace area will be monitored regularly. The management conduct the medical camps to the local village people for the health point of view. The management issue the health cards to them. My humbly request you to construct water harvesting structures and storage to store rain water it is useful for you usage in Industry and	• The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • PPEs shall be provided • Avenue plantation will be done in the villages • Raw material and fuel storage will be covered. Covered transportation will be done. • CER will be executed as per the MoEFCC guidelines	CER cost 2.5 Cr. Green belt in the factory premises : 25 Lakhs Infrastructure cost for primary school: 58.50 Lakhs	~ 2023-2024 Before plant commissioning. Green belt will be developed during project commission 8-10 months.

	also develop ground water levels in this area. And aslowhatever usage water for your industry. Collect and storage in rain season it is useful in non rain days for your industry. Please take up village plantation in nearby villages and also avenue plantation for internal roads on which roads your vehicles transport the materials to control dust pollution. My request is you should give priority to plant fruit baring plants and medicinal value plants instead of normal plants it is useful to control dust pollution and also available fruits nearby villages. Please give top priority to the local educated unemployed youth to give employment in your industry. Please conduct health camps and motivate health immunity development awareness programs. Please support rural primary education for weaker sections. Once again my best wishes and supporting to you industrial development at the same time please maintain the Ecological balance and environmental safety. I am congratulating your environmental consultancy which has prepared detailed EIA report to your project is very good and satisfactory. The company will improvement to the 5% CSR Funds from their net profit. Hence I request you to recommend to MoEF& CC issue to the environmental clearance of M/s. The NaranjaSahakariSakkareKarkhane Ltd reg. proposed establishment of sugar cane juice/ B-Heavy Molasses/ C based distillery of 120 KLPD in the premises of existing sugar industry at Sy.No. 22, 25, 27, 1/1 of Imampur Village, Bidar Taluk and District in an area of 31.13 acres. Thanking you sir, (A. Venkat Reddy, NGO)	• Infrastructure facility will be developed in the primary schools like Building auditorium/ multipurpose hall halls(6 no.), Lab equipment, library facility Laptops (16 no.), benches, black boards (24 boards, four in each village school), projector and screen (6 no. each), sports equipment's in schools in each village. • CSR will be executed as per MoEFCC guidelines		
19.	Name: Green Social Services Society, Ammanabole(V), Narketpally (M), Nalgonda (D) – 508 254 (T.S.). Date: 27-11-2022. I am A. Shankar Reddy Working as NGO Since 15 yrs. I am herewith recommended unconditionally environmental clearance is to the above project. I am whole heartedly supporting the industrial activity. In my opinion unemployment is the major pollution to society. It is the time to address the need for industrial development along with	• Avenue plantation will be done in the factory premises • CER will be executed as per the guidelines • CER activities like Filtered Water Supply with pipeline	CER cost 2.5 Cr. Green belt in the factory premises : 25 Lakhs Infrastru cture	~ 2023-2024 Before plant commi ssionin g. Green belt will be

	protecting ecological balance. I am giving you few suggestions to maintain ecological balance and development of your Industry activity. The management proposed project beneficial to the local village people. As more infrastructure development and improvement to the network of the roads in the village area. Provide dust masks to prevent Explosure of dust. Provide personal protective equipments to workers. Avenue the plantations at the project area and developed the surrounding villages. Tighten the Tarpaulin sheets on the loading vehicles. Heat near furnace area will be monitored regularly. The management conduct the medical camps to the local village people for the health point of view. The management issue the health cards to them. My humbly request you to construct water harvesting structures and storage to store rain water it is useful for you usage in Industry and also develop ground water levels in this area. And aslowhatever usage water for your industry. Collect and storage in rain season it is useful in non rain days for your industry. The management proposed project beneficial to the local village people. As more infrastructure development and improvement to the network of the roads in the village area. Please take up village plantation in nearby villages and also avenue plantation for internal roads on which roads your vehicles transport the materials to control dust pollution. My request is you should give priority to plant fruit baring plants and medicinal value plants instead of normal plants it is useful to control dust pollution and also available fruits nearby villages. Please give top priority to the local educated unemployed youth to give employment in your industry. Please conduct health camps and motivate health immunity development awareness programs. Please support rural primary education for weaker sections. Once again my best wishes and supporting to you industrial development at the same time please maintain the Ecological balance and environmental safety.	and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted. • The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100 skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • Raw material and fuel storage will be covered. Covered transportation will be done. • Infrastructure facility will be developed in the primary schools like Building auditorium/ multipurpose hall halls(6 no.), Lab equipment, library facility Laptops (16 no.), benches, black boards (24 boards, four in each	cost for primary school: 58.50 Lakhs Avenue plantation 45 lakhs	develo ped during projec t commi ssion 8-10 month s.

	I am congratulating your environmental consultancy which has prepared detailed EIA report to your project is very good and satisfactory. The company will improvement to the 5% CSR Funds from their net profit. Hence I request you to recommend to MoEF& CC issue to the environmental clearance the M/s. The NaranjaSahakariSakkareKarkhane Ltd reg. proposed establishment of sugar cane juice/ B-Heavy Molasses/ C based distillery of 120 KLPD in the premises of existing sugar industry at Sy.No. 22, 25, 27, 1/1 of Imampur Village, Bidar Taluk and District in an area of 31.13 acres. Thanking you sir, (A. Shankar Reddy, NGO)	village school), projector and screen (6 no. each), sports equipment's in schools in each village.		
20.	Name: SAVE BIRDS AND ANILAMS ENVIRONMENT SOCIETY, #10-113, Keshav Nagar Colony, Venkatadripalem, Miryalaguda, Nalgonda District, Telangana State. Date: 28-11-2022. I am P. Vijaylaxmi, working as NGO. I am hearwith recommended unconditionally environmental clearance is to the above project. The management proposed project beneficial to the local village people. As more infrastructure development and improvement to the network of the roads in village area. Provide dust masks to prevent Explosure of dust. Provide personal protective equipments to workers. Avenue the plantations at project area and development the surrounding villages. Tighten the Tarpaulin sheets on the loading vehicles. Heat near furnace area will be monitored regularly. The management counduct the medical camps to the local village people for the health point of view. The management issue the health cards to them. The company will improve the 5% CSR funds from their net profit. Hence I request you to recommend to MOEF & CC issue to the environmental clearance the above project.	• PPEs will be provided to labours while working. • Avenue plantation will be done in the factory premises • CER will be executed as per the guidelines • CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted. • The employment shall be provided as per the state government policy. Total manpower shall be 150 during construction phase (100	CER cost 2.5 Cr. Green belt in the factory premises : 25 Lakhs Avenue plantation 45 lakhs Occupational health Rs.50.0 lakhs	~ 2023-2024 Before plant commissioning. Green belt will be developed during project commission 8-10 months.

		skilled and 50 unskilled) and 164 during operation phase (96 skilled and 68 unskilled) and preferences shall be given to local people. • Raw material and fuel storage will be covered. Covered transportation will be done.		
21.	Name: Earth Green Development Society, NGO, Reg. Office H.No.5-12-555/1A, Srinivas Colony B.T.S Nalgonda, 508001 - Telangana State. Date: 28-11-2022. I am T. Satti Reddy, working as NGO. I am hearwith recommended unconditionally environmental clearance is to the above project. The management proposed project beneficial to the local village people. As more infrastructure development and improvement to the network of the roads in village area. Provide dust masks to prevent Explosure of dust. Provide personal protective equipments to workers. Avenue the plantations at project area and development the surrounding villages. Tighten the Tarpaulin sheets on the loading vehicles. Heat near furnace area will be monitored regularly. The management counduct the medical camps to the local village people for the health point of view. The management issue the health cards to them. The company will improve the 5% CSR funds from their net profit. Hence I request you to recommend to MOEF & CC issue to the environmental clearance the above project.	• PPEs will be provided to labours while working. • Avenue plantation will be done in the factory premises • CER will be executed as per the guidelines • CER activities like Filtered Water Supply with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted. • Raw material and fuel storage will be covered. Covered transportation will be done.	CER cost 2.5 Cr. Green belt in the factory premises : 25 Lakhs Avenue plantation 45 lakhs Occupational health Rs.50.0 lakhs	~ 2023-2024 Before plant commissioning. Green belt will be developed during project commission 8-10 months.
22.	Name: Nature Environment Protection H.No.7-45, Chandupatla (V), Nakrekal (M), Nalgonda (D)-508211(T.S). Date: 28-11-2022. We wish to take steps not to release the pollution in the Environment from the company	• CER will be executed as per the guidelines • CER activities like Filtered Water Supply	CER cost 2.5 Cr.	~ 2023-2024 Before plant

	according to government norms. Skill Development Training Programmer's should conduct for unemployed youth, and given Employment who is eligible. CSR Funds Should go through the village committees to the development of villages. Have to conduct health camps in the village's people. Also we wish to go greenery surroundings the company. Hence, proposed please take necessary steps to sanction from ministry of forest and climate and concerned departments permission.	with pipeline and storage tank , Solar lamps, awareness, training program for better yield and Infrastructure facility in schools will be conducted.		commissioning. Green belt will be developed during project commission 8-10 months.

The Committee was satisfied with the response of PP regarding action plan to address the issues raised during PH and representations received.

Total plot area acquired for project is **12.58** hectares. Greenbelt will be developed in the total area of **4.14** hectares i.e., **33%** of total project area. The estimated project cost is Rs. **120.00** Crores. Capital cost of EMP would be Rs. **9.61** Crores and recurring cost for EMP would be Rs. **0.57** Crores per annum. Industry proposes to allocate Rs. **1.80** Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be **314** (Construction and operation phase) persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. River Manjara is flowing at a distance of 2.15 Km in NW direction.

Ambient air quality monitoring was carried out at 9 locations during March 2022 to May 2022 and the baseline data indicates the ranges of concentrations as: PM10 (42.1 to 65 µg/m^3), PM2.5 (15 to 30 µg/m^3), SO2 (5.5 to 12.1 µg/m^3) and NO2 (10.1 to 18.5 µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.91 µg/m^3 and 0.060 µg/m^3, 2.5 µg/m^3 and 1.45 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 465 CMD which will be met from River Manjra. The water permission is obtained from **Water Resources Dept. K.B.J.N.N** dated **03.11.2003**. Spent wash will be concentrated in MEE and concentrated spent wash will be used as fuel in incineration boiler to achieve zero discharge. Effluent of 947 CMD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 1000 KLPD which comprises ultra filtration followed by RO. 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.

Power requirement will be **2.8 MW,** which will be met from the proposed **3.2 MW** captive power plant. **32 TPH** incineration boiler will be installed. APCE **Electrostatic Precipitator** with a stack of height of **60** m will be installed for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1000 kVA DG set will be used as standby during power failure and stack height (12 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Process emission will be in the form of CO2. It will be generated from Fermentation unit. This will be scrubbed and bottled/ dry ice and sold.
- The whole process will be carried out in closed condition so as to avoid any chances of VOC emissions.
- 32 TPH boiler will be equipped with Electrostatic precipitator and 60 m high stack as APC measures.

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

- Spent wash ash of 31.2 TPD will be used as a manure
- Bagasse ash of 2.4 TPD will be used as a manure
- Yeast sludge of 23 TPD will be used as a manure
- CPU sludge of 1.7 TPD will be used as a manure
- STP sludge of 0.48 TPD shall be sent to authorized recycler

Total land of **12.58** Hectares is under possession of the company and land use conversion has been completed vide letter no. Rev/L.A/CR-2/1991-92 dated 14.08.2014

Revised Capital cost and recurring cost of EMP are given below:

Sr. No	**Construction phase (with Break-up)**	**Capital Cost**	**O & M (Annual)**
		(Amount in lakhs)	**(Amount in lakhs)**
1	Environmental monitoring	_	2
2	During site preparation	3	0
3	Noise and solid waste management	2	0
4	Water and waste water	5	0

5	Occupational health	4	2
6	Greenbelt development	5	5
	Total	19	9
Sr. No	**Operation Phase (with Break-up)**	**Capital Cost (Amount in lakhs)**	**O & M (Amount in lakhs)**
1	**Air pollution**		
	Incineration Boiler	3500	50
	ESP	1000	20
	Stack	300	10
	ID fan and other auxiliaries	200	0.5
2	**Online Continuous Emission Monitoring System (OCEMS)**	40	2
3	**Water pollution**- CPU , STP	550	5
4	Environmental Monitoring (Air, water, waste water, Soil, Solid waste, Noise)	20	3
5	Occupation health	50	5
6	Green belt	25	3
7	Solid waste	6	2
8	Rain water harvesting	50	3
	Total	**5741**	**103.5**

During deliberations, EAC discussed following issues:

(i). PP informed that they have obtained consent to operate vide no. AW 329527 dated 31.01.2022 with validity upto 30.06.2025. Certified compliance report dated 10.03 2023 issued by KSPCB has been submitted. The Committee deliberated on the CCR.

(ii). PP has submitted revised **CER Activities:**

Sr. No.	**CER Activity**	**Location**	**Quantities(numbers)**	**Period**	**Details**	**Total Amount in Rs. One time expenditure**	**~ 2023-2024 before plant commissioning. One time expenditure for the given period**
1	Water Supply with pipeline and storage tank	Dadapur village	5	2023-2024	Filtered water supply/ water filters along with the pipeline and water storage tank cost	5,80,000	
		Kaneli village	7			7,00,000	
		Janwada village	5			5,60,000	
		Sanganalli village	6			7,50,000	
		Naulaspur village	7			7,00,000	
		Markal village	6			6,50,000	

		Naulaspur village	13			7,60,000	
						47,00,000	
2	Providing Solar street lamps nearby	Chambol	15	2023-2024	Solar street lamps will be provided at strategic locations like Gram panchayat, primary health care centres, schools and major chowk etc.	4,50,000	
		Dadapur	15			4,50,000	
		Kaneli	15			4,50,000	
		Janwada	15			4,50,000	
		Sanganalli	15			4,50,000	
		Naulaspur	15			4,50,000	
		Markal	15			4,50,000	
		KauthaKhurd	15			4,50,000	
		Kangti	15			4,50,000	
		Fatepur	15			4,50,000	
		Kazipur	15			4,50,000	
						49,50,000	
3	Avenue plantation in nearby vicinity	Chambol	1600	2023-2024	Native tree species & locations with help of social forestry and local planning authority	8,00,000	
		Dadapur	1400			7,00,000	
		Kaneli	1800			9,00,000	
		Janwada	1400			7,00,000	
		Sanganalli	1400			7,00,000	
		Naulaspur	1400			7,00,000	
						45,00,000	
4	Support and awareness to local farmers to yield better crop productivity	Fatepur	4	**Each activity will be performed once in 2023-2024**	Training program on • Varieties of sugarcane and best cultivation practises. • Organic farming ☐☐Good Agricultural Practices ☐☐Pests, Disease And Biological pest control	5,00,000	
		Kazipur	4			5,00,000	
		Aliamber	4			5,00,000	
		Islampur	4			5,00,000	
		Naulaspur	4			5,00,000	
		Markal	4			5,00,000	
		KauthaKhurd	4			5,00,000	
		Kangti	4			5,00,000	
		Kaneli	4			5,00,000	
		Sanganalli	4			5,00,000	
						50,00,000	
5	Provision of	Chambol primary school	Probable quantities are given	2023-202	Building auditorium/ multipurpose	10,50,000	

	infrastructure facilities such as auditorium halls, Laptops and filtered drinking water facilities in schools	Dadapur	in description	4	hall halls(6 no.), Lab equipment, library facility Laptops (16 no.), benches, black boards (24 boards, four in each village school), projector and screen (6 no. each), sports equipment's in schools in each village	9,50,000	
		Kaneli				10,00,000	
		Janwada				9,50,000	
		Sanganalli				9,50,000	
		Naulaspur				9,50,000	
						58,50,000	
	TOTAL AMOUNT Rs.					**2,50,00,000**	

(iii). PP has submitted the list of revised greenbelt species with the existing and proposed bifurcation.

(iv). The sugar unit is having a captive power plant of 14 MW which will be biomass based. Existing sugar and cogeneration unti does not require environmental clearance as per EIA Notification 2006. EC for the existing sugar unit is not required as capacity is less than 5000 TCD.

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

(ii). 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.

(iii). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from Manjara river for the distillery activities, State Pollution Control Board 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.

(iv). Total fresh water requirement shall not exceed 465 m^3/day, which will be sourced from Manjara river. 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 shall be used as fresh water thereby reducing fresh water consumption.

(v). The spent wash shall be concentrated in MEE and concentrated spent wash shall be incinerated in the incineration boiler. Other lean effluents Spent lees, MEE Condensates and utility effluents shall be treated in the condensate polishing unit (CPU) comprising of three stage RO. The treated permeate will be reused in cooling tower water makeup and for molasses dilution. The RO rejects will be taken back to MEE. Treated effluent will be recycled/reused for make up water of cooling towers/process etc. No wastewater or treated water from integrated unit of sugar mill and distillery shall be discharged outside the premises and Zero Liquid Discharge shall be maintained for all the units namely sugar, Distillery and Cogen Power Plant. STP shall be installed to treat sewage generated from factory premises. PP shall ensure to implement Zero Liquid Discharge (ZLD) in the existing and expansion of sugar factory and cogeneration plant including proposed Distillery.

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

(vii). ESP with a stack height of 60 m will be provided with the proposed 32 TPH bagasse and spent wash fired incineration Boiler for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually. Coal shall not be used as fuel in the boiler.

(viii). Boiler ash (2.4 TPD) and spent wash ash (31.2 TPD) will be used as manure. PP shall meet 15% of the total power requirement from solar

power by generating power inside plant premises. Capacity of Spent wash lagoon shall not exceed 5 days retention period.

(ix). CO_2 generated during the fermentation process will be bottled in CO2 bottling plant and sold to beverage industries.

(x). PP shall allocate at least Rs. 0.5 Crore/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 plant and other suitable industries for incineration. 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 has already been developed in 4.14 hectares i.e., 33.0 % of total project area which shall be thickened with tree density @ 2500 trees per hectares, mainly along the plant periphery which shall be maintained. 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.

(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 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% i.e 1.82 Ha shall be allotted solely for parking purposes with facilities like rest rooms etc. PP shall ensure no direct entry or exit of the vehicles from Main Road/Highway and it shall be through slip road only

(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. 4

Proposed Expansion of Sugar Crushing Plant from 3500 TCD to 6000 TCD, Co-generation from 14 MW to 30 MW and B Heavy Molasses/Sugar Juice based Distillery of 200 KLPD by Shri. Bhima Shankar Sahakari Sakkare Karkhane Niyamit - Consideration of Environment Clearance.

[IA/KA/IND2/421987/2023,IA-J-11011/125/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Mitcon Consultancy and Engineering Services Ltd (NABET certificateno. NABET/EIA/2124/RA 0229_Rev 2 and validity 05/02/2024) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project "Expansion of Sugar Crushing Plant from 3500 TCD to 6000 TCD, Co-generation from 14 MW to 30 MW and B Heavy Molasses/Sugar Juice based Distillery of 200 KLPD locatedatVillage Dhulked & Margur, Tehsil Indi,District Vijayapura, State Karnataka by M/s. Shri. Bhima Shankar Sahakari Sakkare Karkhane Niyamit. The project is located at Survey number 152/1, 147/1, 145/1, 163/1, 163/2A, 163/2B, 163/2C, 163/2D, 146/1, 146/2, 146/3, 146/4, 148/1 of Dhulked Village Indi Taluka and 40/2, 39, 42/1A, 42/1B, 42/2A, 42/2B, 42/2C, 42/2D, 43/1 and 41/3 of Maragur Village, Indi Taluka, Vijayapura District Karnataka State. The proposal was considered in the EAC meeting held on 23.02.2023 and the Committee returned the proposal in present form for want of additional information. Further PP has submitted revised EIA-EMP report.

All Distilleries 5(g) (Molasses based distilleries > 100 KLD), Category "A", 5(j) Sugar industry ≥ 5000 TCD cane crushing capacity, Category "B" and 1(d)" Thermal, Category "B" are listed at Schedule of Environment Impact Assessment (EIA)Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

M/s Shri Bhimashankar Sahakari Sakkare Karkhane Niyamit (SBSSSKN) is an existing cooperative sugar unit. It is an existing 3500 TCD capacity sugar mill producing 11,550 MT/month white crystalline sugar and also producing by-products such as molasses 4740 MT/Month, bagasse 33757 MT/month and Filter Cake (press mud) 4200 MT/month. Now, SBSSKN has decided for expansion of sugar plant from 3500 TCD to 6000 TCD, Cogen Unit from 14 MW to 30MW and proposed new distillery plant of 200

KLPD along with 8MW power generation through incineration boiler in the same premises of existing sugar units. The details of products and capacity as under:

S. No	Unit	Product/by-product	Existing Quantity	Proposed Quantity	Total Quantity
1	Sugarcane crushing plant	-	3500 TCD	2500 TCD	6000 TCD
2	Sugar	Sugar	385 TPD	275 TPD	660 TPD
3	Distillery	Ethanol/RS/ENS/AA	-	200 KLPD	200 KLPD
4	Cogeneration	Power	14 MW	16 MW	30 MW
5	Captive power plant (distillery)	Power	-	8 MW	8 MW
6	**By products**	Bagasse	1085 MTD	775 MTD	1860 MTD
7		Molasses	245 MTD	175 MTD	420 MTD
8		Press mud	140 MTD	100 MTD	240 MTD
9		CO_2	-	135 TPD	135 TPD

Existing industry is operational on the basis of Consent to operate because Sugar unit is 3500 TCD and Cogeneration 14 MW. Thus, Environmental Clearance was not applicable. Latest CTO (air and water) was issued on 13/02/2023 and is valid till 30/06/2027. Certified CTO compliance report dated 21st Jan 2023 issued by Senior environmental officer, KSPCB. Regarding issues of CFO condition w.r.t. implementation of water harvesting system, PP informed that rain water harvesting system and storm water management system will be implemented in the expansion of the project and same will be implemented in this FY of 2023-24. Regarding, display of flow diagram of the pollution control system near to pollution control device, PP informed that Flow diagram of ETP, display board has been placed near ETP area & air pollution control, board and submitted photographs. Regarding irrigation management plan for treated effluent, PP informed that Plan has been prepared and submitted to PCB. However, proposed sugar expansion sugar unit will be based on ZLD, all ETP treated water will be recycled to meet the requirement of fresh water demand in Distillery unit. The Committee was satisfied with response of PP.

Standard Terms of Reference have been obtained vide F.No. IA/J-11011/125/2022-IA-II(I) dated. 19th April 2022. PP informed that no litigation is pending against the proposal.

Public hearing for the proposed project had been conducted by the Karnataka State Pollution Control Board on Dated: 29/10/2022 at Project Site chaired by Additional Deputy Commissioner (ADC). The main issues raised during the public hearing and their action plan along with Budget:

Sr. No.	Issue raised / deliberation	Action Plan	Budget(Lakhs)	Timeline
1.	**Shr. Iljaz Ahmed Imam Saab Kuvir, of Margur village** • He began by expressing his happiness over commencement of this expansion. • He feels that this expansion should have happened long back, and he blames their fate for not happening so. • He informed that this project is a blessing and it can have no harmful effects whatsoever on the environment. • He informed that the sugar cane that is being grown in this region is close to 25 lakh tons, but the industry capacity to utilize the crop is of 6000 tons/day. He requested that this industry has to expand further and the capacity should be raised to 10000 ton/day. • He further adds that, due to this the excess crop that is being produced will be taken by industries located in the State of Maharashtra. • Thus, he informed that, if the capacity of the industry in this region is expanded to 10000 ton/day, farmers of this region will be immensely benefitted and thus can get the desired price for their share of crop. • He stated that, farmers of this region have adopted to cultivate 265 variety sugarcane, due to which the recovery of the crop has come down and based on the recovery made the	• As requested by the farmers to increase the capacity of Sugar production to 10000 TCD, management has decided future expansion of the same. • Industry will provide training programme on verities of sugarcane crop production and how to overcome the challenges faced by the same to all the local farmers, soil enrichment techniques, verities of sugarcane and best agricultural practices, Pest , disease and biological pest control, effect of global warming on crop productivity and its measures.etc.	**CER earmarked for training program 50 lakhs**	2023-2024

Sr. No.	Issue raised / deliberation	Action Plan	Budget(Lakhs)	Timeline
	District commissioner decided the Sugar cane price as Rs. 3044 per Ton of Sugar Cane. • This amount could be increased to 3500 if farmers rectify their mistakes and increase the recovery rate. • He further requested the authorities to conduct a programme so that the challenges faced by the harvesters of this 265 variety sugarcane crop can be understood by all. • He concluded by expressing his belief that there can be no harm to the Environment by this project and requested the authorities to speed up the process of expansion.			
2.	**Sri. Subhash Chandra, of Dhulked village** • He began by expressing his support to the expansion of the industry. • He also assured that the farmers of this region welcome this expansion project. • He concluded by saying that there are no objections for commencement of this proposed expansion project.	• No concerns raised. • Industry is thankful to all villagers & farmers for welcoming the proposed expansion.	-	-
3.	**Sri. HussainsaabBandgisab Patel, of Margur Village** • He began by expressing his belief over the project. • He says that they are satisfied with the assurances given by the factory authorities regarding how harmless this project is for the Environment. • He concluded by requesting the authorities to complete the project at the earliest,	• No concerns raised. • Industry will start the construction of the proposed expansion immediately after acquiring EC from MOEFCC and will complete the project at earliest.	Estimated Project Cost is Rs. 338.84 Cr.	Project establishment in 60-90 weeks
4.	**Sri. AnjaneyaNagenhalli,**	• Industry is	383 lakhs	2023-2024

Sr. No.	Issue raised / deliberation	Action Plan	Budget(Lakhs)	Timeline
	Founder of SamagraParivartanaSamudaya: • He began by saying that, the work done in order to uplift the farmers and to provide employment to the unemployed is almost equivalent to offering prayers to God. • He later thanked all the dignitaries and all the people gathered to this event • He on behalf of his association expressed unwavering support to the project and also mentioned the benefits that can be reaped by commencement of this project, such as, this, expansion generates revenue to the state, the Corporate Social Responsibility funds will contribute to the growth of this region and the employment to the people of this region will be guaranteed. • There will be overall upliftment in the Socio-Economic Development in the surrounding Villages. • He concluded by welcoming the proposed project and the issue of Environmental clearance from Karnataka State Pollution Control Board &MoEF& Govt. of India, New Delhi. • He along with expressing the Support to this project, and mentions how pro-environment his association is, and also requested the authorities to ensure the Corporate Social Responsibility fund is used in a proper manner and to maintain healthy relation with farmers of this region	thankful to all villagers & farmers for welcoming the proposed expansion. • Industry will be implementing Corporate Environment Responsibilities (CER) activities to the nearby areas like Providing Solar street lamps nearby villages, Providing Water filters/ filtered water in nearby schools, Providing Ambulance/ equipment's to the nearby Govt. Hospitals, Infrastructure development in the area, Roads, gutters, providing roof top rain water harvesting system etc. for the overall upliftment of Socio-Economic development in the surrounding villages. • Employment to the local people will be provided.		
5.	**Sri. AnandWali of Salotgi Village, Indi Taluk** • He began by expressing his	• Industry will be implementing	**CER Budget: 383 lakhs**	**2023-2024**

Sr. No.	Issue raised / deliberation	Action Plan	Budget(Lakhs)	Timeline
	concern regarding the most underdeveloped districts of North Karnataka region and also, he mentioned that after Raichur and Yadgir Districts Vijayapura is the district along with the two to be considered as underdeveloped. • He further adds that though there are five rivers flowing in this region, there is water scarcity to the people and during some occasions most of the villages will be flooded. • He says there are so many people who are willing to work, but there are no employment opportunities in this region. • He later adds that the project like this provides employment to the youth of this region. This employment not only sustains an individual, but his family too. • The employment provided in this region will ensure that whole of the family of the employed will be taken out of the poverty, at least by providing the basic necessity like food and shelter. • He concluded by saying that they all will support this project come what may.	Corporate Environment Responsibilities (CER) activities to the nearby areas like Providing Solar street lamps nearby villages, Providing Water filters/ filtered water in nearby schools, Providing Ambulance/ equipment's to the nearby Govt. Hospitals, Infrastructure development in the area, Roads, gutters, providing roof top rain water harvesting system etc. for the overall upliftment of Socio-Economic development in the surrounding villages. • Industry will provide rain water harvesting system on roof top of some government offices and collected water will be treated and stored in storage tanks to mitigate water scarcity		

Sr. No.	Issue raised / deliberation	Action Plan	Budget(Lakhs)	Timeline
		problem in nearby villages. • Industry will give preference to local villagers for permanent & temporary employments during construction as well as operation phase subject to their skills and education.		
6.	**Sri, Prakash JagadevappaPati, of Margur village:** • He began by thanking all the dignitaries on the dais. • He expressed that every farmer of this region is immensely happy with the commencement of this project, but they seldom express about it, as they are hesitating to talk in this event. • He further said that this project will bring immense benefits to the people of this region in terms of employment. • He also requested the factory authorities to increase the capacity from 6000 ton/day to 10000 ton/day, so that the farmers of this region will be benefitted • He concluded by expressing his belief that this project will not cause any ill effects on the Environment.	• No concerns raised • As requested by the farmers to increase the capacity of Sugar production to 10000 TCD, management has decided future expansion of the same. • Industry will be implementing Corporate Environment Responsibilities (CER) activities to the nearby areas like Providing Solar street lamps nearby villages, Providing Water filters/ filtered water in nearby schools, Providing Ambulance/ equipment's	EMP Cost-34.95 Cr. CER cost-3.39 Cr. Estimated Project Cost338.84 Cr.	Project establishment in 60-90 weeks

Sr. No.	Issue raised / deliberation	Action Plan	Budget(Lakhs)	Timeline
		to the nearby Govt. Hospitals, Infrastructure development in the area, Roads, gutters, providing roof top rain water harvesting system etc. for the overall upliftment of Socio-Economic development in the surrounding villages.		

Total existing plant area is 71 Ha, which is under possession of the company and converted to industrial use and no additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 71 Hectares, area earmarked for greenbelt is 23.4 ha i.e. 33% of the total plant area. Out of which, existing 8.2 ha has already been developed as greenbelt and now remaining area i.e. proposed 15.2 ha will be developed as greenbelt & plantation in and around plant premises. The estimated project cost is Rs. 338.84 Crores. Further, PP has submitted revised Capital cost of EMP as Rs. 34.95 Crores and recurring cost for EMP would be Rs. 3.08 Crores per annum. Industry proposes to allocate Rs.3.83 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 270 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger / Elephant Reserves, Wildlife Corridor setc. Within 10km distance. Waterbodies, Krishna Bhagya canal is at a distance of 5.05 km in SW direction & Kal Halla at 4.9 km (SE). River Bhima is at a distance of 2.5 km in NW.

Ambient air quality monitoring was carried out at eight locations during 1stMarch 2022 to 31st May 2022 and the baseline data indicates the ranges of concentrations as: **PM_{10} (51.6 – 65.5 µg/m^3), $PM_{2.5}$**

(22.3 – 27.9 µg/m^3), SO_2 (5.85 – 11.7 µg/m^3) and NO_x (9.4 - 16.2 µg/m^3). As suggested by the Committee in the meeting held on 23/02/2023, ambient air quality monitoring was carried out again at eight locations during 24th Feb 2023 to 12th March 2023 and the baseline data indicates the ranges of concentrations as: **PM10 (40.1 to 72.5µg/m^3), PM2.5 (14.2 to 35.1µg/m^3), SO2 (6.0 to 15.1 µg/m^3) and NOx (10.2 to 25.3µg/m^3).** AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be **0.18 µg/m^3**, **0.113 µg/m^3, 3.4 µg/m^3 and 2.98 µg/m^3** with respect to **PM_{10},$PM_{2.5}$, SO_2 and NO_X.** The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 1266 CMD which will be met from Bhima River. NOC has been obtained from Irrigation Dept. vide letterno.WRD 131 KBS 2016dated. 11/08/2016. Existing effluent generation of Sugar unit is 308 CMD which is treated through ETP of capacity 700 KLD. Total Proposed effluent generation will be 528.33 CMD which will be treated through ETP of capacity 700 KLD. Excess condensate generation which is 2070 CMD which is treated through proposed Condensate Polishing Unit of capacity 2100 CMD. Domestic waste water will be treated in 15 CMD STP. Proposed effluent generation from Distillery unit will be 1550 CMD which will be treated in 1600 CMD Condensate Polishing Unit. Spent wash generation will be 1498 CMD which will be treated by MEE to Conc. spent wash to Incineration boiler to achieve zero discharge. The plant will be based on Zero Liquid discharge system and treated effluent will not be discharged outside the factory premises.

Total power requirement of distillery/ sugar mill after expansion will be 16.5 MW which will be sourced from the existing 14 MW and proposed 16 MW co-generation power plant & 8 MW (distillery captive unit). Existing sugar unit has 90 TPH Biomass fired boiler. Proposed 60 TPH biomass fired new boiler for sugar unit with 74 m stack along with ESP for sugar unit (common stack for existing and proposed sugar boiler) and 45 TPH incineration boiler with 65 m stack along with ESP will be installed. ESP with a stack of height of 74 m is installed with the existing & proposed sugar boiler for

controlling the particulate emissions with in the statutory limit of 50 mg/Nm^3. APCE as ESP will be installed for proposed distillery boiler for controlling the particulate emissions within the statutory limit of 50mg/Nm3. Industry has 1010KVADG set X 2 no's, which will be used as standby during power failure and stack height (11m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management

- **135 TPD CO_2** generated from process will be scrubbed and bottled/dry ice.
- The emissions from the stack will be monitored continuously through online monitoring system for exit concentration of the suspended particulate matter, SO_2 µg/m^3 and NO_x µg/m^3. Also, sampling ports will be provided in the stacks as per CPCB guidelines. If the concentration of these pollutants exceeds the limits, necessary control measures will be taken.
- Stack emissions will be regularly monitored by factory through third party on periodic basis to check the efficiency of air polluting control devices and necessary action

Details of Solid waste/ Hazardous waste generation and its management

- **Bagasse ash(36 TPD)** and **spent wash ash (49.068 TPD)** contain high percentage of potash it is good nutrient for plant growth in agro-field.
- **Coal ash** (**5.4 TPD**) will send to brick manufacturer. Ash disposal agreement will be made accordingly
- **Spent oil (1 TPA)** will be send to authorized recyclers.
- **Press Mud (240 TPD)** will be used as manure
- **Yeast Sludge (41 TPD)** will be used as manure
- **ETP Sludge (0.5 TPD)** will be used as manure
- **STP Sludge (1.5 TPD)** will be used as manure
- **CPU Sludge (4.6 TPD)** will be used as manure

Capital Cost and Recurring Cost of EMP

A	Construction phase (with Break-up)	Capital Cost	O & M (Annual)
		(Amount in lakhs)	
1.	Environmental monitoring	0	5
2.	During site preparation	25	8

3.	Noise and solid waste management	10	5
4.	Water and waste water	10	5
5.	Occupational health	10	5
6.	Greenbelt development	10	5
	Total	**65**	**33**
B	**Operation Phase (with Break-up)**	**Capital Cost**	**O & M**
		(Amount in lakhs)	
1	Air and Noise pollution - ESP , stack and ancillary	1700	80
2	Online Continuous Emission Monitoring System (OCEMS)	50	
3	Water pollution- CPU (2 Nos), STP, Flow meter from Sugar to Distillery	1200	50
4			
5	Environmental Monitoring (Air, water, waste water, Soil, Solid waste, Noise)	80	30
6	Occupation health	100	30
7	Green belt	150	40
8	Solid waste	50	20
9	Rain water harvesting	100	25
	Total	**3430**	**275**
	Total A+ B	**3495**	**308**

During deliberations, EAC discussed following issues:

1. PP will establish in-house laboratory for which budget of Rs. 80 lakh has been earmarked.
2. PP informed that out of two piezometer wells, PP has installed one piezometer well. Remaining one will be installed within one month. However, PP should install 3 piezometer wells around the project site during expansion project.
3. Industry will provide training program on varieties of sugarcane crop production and how to overcome the challenges faced by the same to all the local farmers, soil enrichment techniques etc. Total budget of Rs. 50 lakhs/annum will be allocated for the said training

programme.

4. Water balance of distillery has been revised from 3.1 kl to 2.5 kl. Air cooled condenser will be installed for reduction of water. Sugar plant will be operated on ZLD all treated effluent will be recycled back in the process or in distillery process. Therefore, total water requirement for sugar, distillery and cogeneration will be 1140 m^3/day after expansion.
5. Total greenbelt area earmarked is 23.45 ha (i.e. 57.94 acres). Out of which, existing greenbelt is developed on 8.2 ha land and proposed greenbelt will be developed on 15.23 ha (37.68 acre) land. Total tree will be planted on the proposed greenbelt area is 38100 nos, which will be developed during May to July, 2023. Saplings 4-6 feet height shall be planted. Budget earmarked for greenbelt development is Rs. 1.5 crore. P has submitted month wise action plan for development of greenbelt during May to July, 2023.

Revised CER BUDGET

CER Activity	Location	Quantities	Financial year 2023-24 Total Amount in Rs	Period
Providing Solar street lamps nearby	Margur	15	8,00,000	**Each training program/activity will be performed once in 2023-2024 ~ 2023-2024 before plant commissioning. One-time expenditure for the given period**
	Dhulkhed	15	8,00,000	
	Taddewadi	15	8,00,000	
	Anachi	15	8,00,000	
	Manan Kalgi	15	8,00,000	
	AujMandrup	15	8,00,000	
		90	**48,00,000**	
Providing Water filters/ filtered water in nearby schools	District primary school, AujMandrup	2	1,00,000	
	Sirnala Primary School, Shirnal	2	1,00,000	
	Takali Middle School, Takali	2	1,00,000	
	High School Loni	2	1,00,000	
	Primary school, Halsangi	2	1,00,000	
	Govt LPS AralagundagiVst, Arjanal	2	1,00,000	
	ZP primary school, Algi	2	1,00,000	
	Govt LPS - Elementary school, Ananchi	2	1,00,000	

	Govthps- Primary school, Karur	2	1,00,000
		18	**9,00,000**
Providing Ambulance/ equipment's to the nearby Gov Hospitals	Government Hospital, Halsangi	1	20,00,000
	BALAJI CLINIC, Dhulked	1	20,00,000
	SHRADHA CLINIC, Dhulkhed	1	20,00,000
	Nayana Clinic, Halsangi	1	20,00,000
		4	**80,00,000**
Providing computers in nearby school/ colleges, necessary furniture, projectors, science lab equipment	Govt Degree College, Halsangi	10	11,00,000
	S A P U High School,Halasangi	10	11,00,000
	Shree Rudreshwar High School, Loni	10	10,00,000
	Shree-kamal Public School, Dhulkhed	10	10,00,000
	Government High School, Hingani	10	10,00,000
		50	**52,00,000**
Infrastructure development in the area, Roads, gutters etc.	Margur	5	11,00,000
	Dhulkhed	5	11,00,000
	Taddewadi	5	11,00,000
	Anachi	5	11,00,000
	Manan Kalgi	5	11,00,000
	AujMandrup	5	11,00,000
		30	**66,00,000**
Provision of roof top Rain water Harvesting system on government offices	Margur	2	8,00,000
	Dhulkhed	2	8,00,000
	Taddewadi	2	8,00,000
	Anachi	2	8,00,000
	Manan Kalgi	2	8,00,000
	Yelgi	2	8,00,000
	ShiragurKhalasa	2	8,00,000
	Barur	2	8,00,000
	Arajanal	2	8,00,000
	AujMandrup	2	6,00,000
		20	**78,00,000**
Training programme to nearby villages/ farmers	Margur	Training programme to nearby villages/ farmers on verities of sugarcane crop production and how	4,20,000
	Dhulkhed		4,20,000
	Taddewadi		4,20,000
	Anachi		4,20,000
	Manan Kalgi		4,15,000
	Yelgi		4,15,000

	ShiragurKhalasa	to overcome the challenges faced by the same to all the local farmers, soil enrichment techniques etc. Training program on • Soil enrichment techniques • Varieties of sugarcane and best cultivation practises. • Pests, Disease and Biological pest control • Effect of global warming on crop productivity and its measures	4,15,000	
	Barur		4,15,000	
	Kudal		4,15,000	
	Hingani		4,15,000	
	Arajanal		4,15,000	
	AujMandrup		4,15,000	
			50,00,000	
TOTAL AMOUNT Rs.			**383,00,000**	

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 EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of

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

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

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

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

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

(ii). 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.

(iii). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from Bhima River for the distillery activities, State Pollution Control Board 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.

(iv). Total fresh water requirement shall not exceed 1140 m^3/day m^3/day, which will be sourced from Bhima River. 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.

(v). The spent wash shall be concentrated in MEE and concentrated spent wash shall be incinerated in the incineration boiler. Other lean effluents Spent lees, MEE Condensates and utility effluents shall be treated in the condensate polishing unit (CPU) comprising of three stage RO. The treated permeate will be reused in cooling tower water makeup and for molasses dilution. The RO rejects will be taken back to MEE. Treated effluent will be recycled/reused for make up water of cooling towers/process etc. No wastewater or treated water from integrated unit of sugar mill and distillery shall be discharged outside the premises and Zero Liquid Discharge shall be maintained for all the units namely sugar, Distillery and Cogen Power Plant. STP shall be installed to treat sewage generated from factory premises. PP shall ensure to implement Zero Liquid Discharge (ZLD) in the existing and expansion of sugar factory and cogeneration plant including proposed Distillery.

(vi). At least 04 ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be conducted on monthly basis and report submitted to SPCB and RO, MOEFCC. The ground water

quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office.

(vii). ESP with a stack height of 74 m will be provided with the proposed 60 TPH biomass fired Boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3. ESP with a stack height of 65 m shall be provided with the proposed 45 TPH incineration Boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. Coal shall not be used as fuel in the 60 TPH bagasse fired boiler . SO_2 and NO_x emissions shall be below in 45 TPH incinerator boiler. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (36 TPD) and spent wash (49.068 TPD) after expansion of distillery will be given as manure. Coal ash (5.4 TPD) will be sent to brick manufacturing industries. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises. PP shall discontinue existing bio-composting plant within 2 years from data of issue of EC letter. Capacity of Spent wash lagoon shall not exceed 5 days retention period.

(ix). Existing CO_2 (135TPD) bottling plant and 290 TPD CO_2 generated during the fermentation process will be bottled in CO2 bottling plant and sold to beverage industries.

(x). PP shall allocate at least Rs. 1.0 Crore/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 shall be been developed in 23.45 ha (i.e. 57.94 acres) i.e., 33.0 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery which shall be maintained. Saplings 4-6 feet high shall be planted. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. As informed, out of total greenbelt area earmarked, existing greenbelt is developed on 8.2 ha land and proposed greenbelt will be developed on 15.23 ha (37.68 acre) land. 38100 trees will be planted on the proposed greenbelt area, which will be developed during May to July, 2023. Budget earmarked for greenbelt development is Rs. 1.5 crore. PP has submitted month wise action plan for development of greenbelt during May to July, 2023.

(xvi). PP proposed to allocate Rs. 3.83 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan. Further, all the proposed activities under CER shall be completed in consultation

with District Administration and before commissioning of the plant expansion.

(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% of the plant area i.e. 10.65 Ha shall be allotted solely for parking purposes with facilities like rest rooms etc. PP shall ensure no direct entry or exit of the vehicles from Main Road/Highway and it shall be through slip road only

(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. 5

Proposed 300 KLPD Grain based Ethanol plant along with 6.5 MW Co-generation power plant under Ethanol Blending Programme at Village Ladpur, Tehsil Talera, District Bundi, Rajasthan by M/s. Pingaksh Beverages Private Limited – Consideration of Environment Clearance

[IA/RJ/IND2/416611/2023, IA-J-11011/108/2022-IA-II(I)]

The Project Proponent and the accredited Consultant J.M. EnviroNet Pvt. Ltd. (NABET certificate no. NABET/EIA/2023/SA 0172 and validity till 7th 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 proposed 300 KLPD Grain based Ethanol plant along with 6.5 MW Co-generation power plant under Ethanol Blending Programme at Village Ladpur, Tehsil Talera, District Bundi, Rajasthan by M/s. Pingaksh Beverages Private Limited.

PP vide email dated 6.04.2023 has requested to withdraw their application as after thorough deliberation, their board has decided to take this step and withdraw our application submitted vide proposal number IA/RJ/IND2 /416611 /2023 and MoEFCC File number is IA-J-11011/108/2022-IA-II(I) and have decided to setup the project as per the submissions and the recommendations of the earlier granted EC to us without enhancing the capacity at this stage of the project.

The Committee advised to apply online on Parivesh portal for withdrawal of EC application for enhanced capacity. The Committee suggested PP to apply for amendment in the existing EC for modification in the specific conditions w.r.t fuel used and fresh water consumption.

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

Agenda No. 06

Proposed 120 KLPD Grain based Ethanol Plant along with 3.0 MW Co-generation power plant at Village Kinala, Tehsil Uklana, District Hisar, Haryana by M/s. Navunnat Bio Fuels Private Limited-Environmental Clearance- Consideration of Environmental Clearance.

[IA/HR/IND2/422600/2023, IA-J-11011/124/2023-IA-II(I)]

The Project Proponent and the accredited Consultant J.M. EnviroNet Pvt. Ltd. (NABET certificate no. NABET/EIA/2023/SA 0172 and validity till 7th 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 proposed 120 KLPD Grain based Ethanol plant along with 3.0 MWCo-generation power plant under Ethanol Blending Programme at Village Kinala, Tehsil Uklana, District Hisar, Haryana by M/s. Navunnat Bio Fuels 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.	Grain Based Ethanol Plant (Grains-broken rice, maize, bajra & sorghum)	Ethanol (Biofuel)	120 KLPD
2.	Co-generation power plant	Power	3.0 MW
3.	DWGS dryer	DDGS	53 TPD
4.	Fermentation unit	Carbon di-oxide	92 PD

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

Total plot area acquired for project is 5.66 hectares. Greenbelt will be developed in total area of 1.87 hectares i.e., 33 % of total project area. The estimated project cost is Rs. 169.15 Crores. Capital cost of EMP would be Rs. 17 Crores and recurring cost for EMP would be Rs. 1.7 Crores per annum. Industry proposes to allocate Rs. 2.0 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 100 persons as direct.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Protected forests, Wildlife Corridors etc. within 10 km distance. Water bodies: Bhakra Canal is present at a distance of 6.0 km in NNW direction within 10 km study area. NOC has been obtained vide letter no 1375-77/3-W dated 17.03.2023 from O/o Executive Engineer, Adamour W/S Division, Hisar stating that there is no flood forming condition in the village Kinala since last 20 years due to chanels.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.312µg/m^3, 0.12 µg/m^3, 0.624µg/m^3 and 0.702µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 495CMD (480 CMD Ethanol Plant, Co-generation power plant & utilities + 15 CMD Domestic & others) which will be met from Groundwater. Application has been submitted to Haryana Water Resources Authority dated 21.03.2023 for obtaining permission for abstraction of groundwater & is under process. Effluent (Process Condensate) of 498 CMD will be treated through Condensate Polishing Unit /Process Condensate Treatment Plant of capacity 600 CMD & Effluent (15 CMD CT Blow down, 65 CMD DM Plant Reject, Washing & 15 CMD Boiler Blow Down) of 95 CMD will be treated through Waste water Treatment Plant of capacity 120 CMD. Raw stillage (698 KLPD) 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 Effluent discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 3.0 MW and will be met from proposed 3.0 MW Co-generation power plant. 25 TPH Biomass /Rice husk or Coal fired boiler will be installed. APCE ESP with a 46 m mhigh stack will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. A 750 KVA DG set will be used as standby during power failure and stack height (6 m) will be provided as per CPCB norms to the proposed DG set.

Details of Process emissions generation and its management

- APCE ESP with a 46 m high stack will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (92TPD) generated during the fermentation process will be collected and sold to vendors as per local demand.

Details of solid waste/Hazardous waste generation and its management

- DDGS (Distilled Dried Grains Stillage) (53 TPD) will be sold as cattle feed.
- Boiler Ash (48 TPD) generated from coal based operations orAsh (26 TPD) generated during biomass based operations will be given to brick manufacturers in covered vehicles.
- Used oil (0.2 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (0.6 TPD), WWTP sludge (0.12 TPD) and STP Sludge (0.007TPD) will be used as manure.

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

Total land of 5.66 Hectares is under possession of the companyand land use conversion is not required. The company has obtained NOC from the Director, Town & Country Planning Haryana vide Memo No. E-Diary-197037/2023/TCP-OFA/933/2023 dated 22.03.2023 stating that the project area falls outside the Urban Areas / Controlled Areas.

Capital cost and recurring cost of EMP are given below:

S. No.	Description		Capital Cost (Crores)	Recurring Cost/annum (Crores)
1.	Air Pollution management	Boiler stack + ESP + Online Monitoring System	6.0	0.6
2.	Effluent Treatment	ZLD System, Condensate polishing unit, ETP and STP	8.0	0.8

3.	Environment monitoring	Lab instrument, Online monitoring System, Third party monitoring, audit	0.95	0.15
4.	Solid waste management	Ash handling & management	1.10	0.105
		Others		
5.	Greenbelt & plantation development	Plantation for greenbelt	0.45	0.045
6.	Rain water harvesting	Required infrastructure	0.50	-
	Total		**17**	**1.7**

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		Total budget allocated (Rs. In lakhs)
		Year 1	Year 2	
1	**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, sports equipments etc. to students, Seating Benches, installation of potable water facilities, construction of sanitized toilets etc.	Rs. 15 Lakhs (Govt school at Village Kinala) (2 nos potable water facilities - Rs.1 lakh, solar panels installation- Rs. 5 lakhs, Rs 9 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, sports equipments, etc)	Rs. 15 Lakhs (Govt school at Village Sahu) (2 nos potable water facilities - Rs.1 lakh, solar panels installation- Rs. 5 lakhs, Rs 9 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, sports equipments, etc)	30

2	**Social Infrastructure Development-** Installation of Solar plant, Village Pond & RWH pond Infrastructure Development, etc.	Rs. 20 Lakhs Village- Sahu (Rs. 10 Lakhs for solar plant, Rs. 10 Lakhs for local ponds & RHW pond development)	Rs. 20 lakhs Village- Kinala (Rs. 10 Lakhs for solar plant, Rs.10 Lakhs local ponds & RHW pond development)	40
3	**Skill development for youth**- Organizing Training programmes for youth/residents in collaboration with District/State government	Rs. 20 Lakhs Village- Kinala (Benefit to be extended to 150 persons)	Rs. 20 Lakhs Village- Sahu (Benefit to be extended to 150 persons)	40
3	**Up gradation of Healthcare facilities-** Provision of oxygen cylinders, Health Check-up camps, medical instruments etc.	Rs. 25 Lakhs (PHC at Village- Sahu) (Provision of 5 oxygen cylinders- Rs. 2.5 lakhs, Health Check- up camps-Rs 7.5 lakhs, Medical instruments-Rs 15 lakhs etc.)	Rs. 25 Lakhs (PHC at Village- Kinala) (Provision of 5 oxygen cylinders- Rs. 2.5 lakhs, Health Check- up camps-Rs 7.5 lakhs, Medical instruments-Rs 15 lakhs etc.)	50
4	**Plantation**–Plantation/ Avenue plantation along roadside, tree plantation in nearby schools/colleges/vacant land/Panchayat bhavan, etc.	Rs. 20 lakhs Village- Kinala (4000 no. of plants to be planted)	Rs. 20 Lakhs Village- Sahu (4000 no. of plants to be planted)	40
			TOTAL	**200**

During deliberations, EAC discussed following issues:

1. The company committed that they will not cut any tree present within the plant premises.

2. The company will use biomass/rice husk or coal as fuel for the proposed boiler. In view of the same, the company will store the coal in covered sheds, all the conveyor belts will be covered, silo for ash collection & APCE ESP will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3.
3. The company has revised the stack height of boiler from 46 meters to 50 meters.
4. The company will supply the fly ash to brick manufacturers in covered vehicles.
5. 33% of total project area, i.e., 1.87 hectares will be developed as greenbelt within plant premises with saplings 4-6 feet high, which will be achieved within one year. Local species like Neem (*Azadirachta indica*), Pipal (*Ficus religiosa*), Karanj (*Pongamia pinnata*), Arjun (*Terminalia arjuna*), Guava (*Psidium guajava*), Java plum (*Syzigium cumini*), Amla (*Phyllanthus emblica*), Chinaberry (*Melia azaderach*), Indian rosewood (*Dalbergia sissoo*), Kassod (*Cassia siamea*), White fig (*ficus virens)*, Babul (*Accasia nilotica*), Kadam (*Authocephalus cadamba*), Spanish cherry (*Mimusops elengi*), Shisham (*Dalbergia sisoo*), Camphor *(Cinnamomum camphora)* will be planted as greenbelt inside the plant premises.
6. There are no hospitals or schools within 1 km of the study area.
7. The company hereby undertakes that the budget of Rs 2.0 Crores for socio economic development activities will be spent in nearby areas within the commissioning of the plant.
8. The company will increase provision of solar power within plant and to the nearby areas from 10% to 15% of total power consumption of the unit in form of solar lights/solar panels/solar gadgets etc. as a part of socio economic developmental activities.

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

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

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

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

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

(i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 120 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form

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

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

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. 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 distillery activities, State Pollution Control Board 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 480 m^3/day, which will be sourced from ground water. 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). ESP with a 50 meters high stack will be installed with the biomass/ Rice Husk/Coal fired 25 TPH boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (48 TPD) will be supplied to brick manufacturers. PP shall use biomass/ Rice Husk / Coal as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises.

(ix). CO_2 (92 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(x). PP shall allocate at least Rs. 0.5 Crore/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 has already been developed in 1.87 hectares i.e., 33 % of total project area shall be maintained 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. Thick green belt shall be developed between the plant boundary and parking area. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop atleast 20 variety of species as a part of greenbelt.

(xvi). PP proposed to allocate Rs. 2.0 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. 07

Proposed 300 KLPD Grain-based Distillery Project (Ethanol) along with Existing Captive Power Plant (7.5 MW) by M/s. CIL Nova Petrochemicals Limited– Consideration of Environmental Clearance.

[IA/GJ/IND2/420905/2023,IA-J11011/124/2023-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Enviro Resources (NABET certificate no. NABET/EIA/2225/RA 0277 and validity 06.07.2025) made a detailed presentation on the salient features of the project and informed that the proposal is for environmental clearance to the project for 300 KLPD Grain based Ethanol Plant & 7.5 MW Co-generation power plant (fuel to be used) located at Village: Moraiya, Tal-Sanand, District- Ahmedabad, State – Gujarat by M/s. Enviro Resources.

The Committee noted that initially the EIA coordinator of the project was not present in the virtual meeting. After several request of the Committee, then he joined after some time. EIA Coordinator was not aware about the existing unit and its type of manufacturing products. Further, committee directed the consultant to prepare EMP report only after visiting and assessing the site conditions and decided to return the proposal in present form.

Further PP presented layout map indicating existing and proposed project. From layout map it appears that proposed distillery unit is shown in one third of entire project site of 7.175 ha land, which comes around 2.4 ha. The available land left for the proposed project is around 2.4 hectare which is very less for establishment of 300 KLPD distillery, keeping in view the compliance of statutory requirement such as development of greenbelt, adequate distance between units from safety angle etc. Committee suggested to revise the proposal by increasing the proposed land area. PP shall also obtain NOC for nearby canal.

Accordingly, proposal was returned in present form.

<u>Agenda No. 08</u>

Expansion of sugarcane crushing capacity from 3500 TCD to 10000 TCD, Co-generation unit from 28 MW to 68 MW and establishment of 350 KLPD distillery based on Sugarcane juice/syrup/C/ B Heavy molasses/ grains as raw material to Produce RS/ENA/Ethanol at Village Desanur, Siruguppa Taluka, Bellary District, Karnataka by M/s. NSL Sugars (Tungabhadra) Limited – Consideration of ToR.

[IA/KA/IND2/ 422293/2023, IA-J11011/125/2 023-IA-II(I)]

The Project Proponent and the accredited Consultant Mantras Green Resources Ltd made a detailed presentation on the salient features of the project and informed that the proposal is for ToR to the project expansion of sugarcane crushing capacity from 3500 TCD to 10000 TCD, Co-generation unit from 28 MW to 68 MW and establishment of 350 KLPD distillery based on Sugarcane juice/syrup/C/ B Heavy molasses/ grains as raw material to Produce RS/ENA/Ethanol at Village Desanur, Siruguppa Taluka, Bellary District, Karnataka by M/s. NSL Sugars (Tungabhadra)Limited.

The products proposed by the industry are listed in schedule of the EIA notification, 2006 under Sr. No. 5(g), 5(j), 1(d).

The details of products and capacity as under:

Sr. No.	Product Name	Existing	Proposed	Total	Remark
1	Sugar Crushing Capacity in TCD	3500	6500	10000	--
2	Cogeneration power plant in MW	28	40	68	--
3	Distillery in KLPD	0	350	350	--
	RS in KLPD or	0	350	350	Only one product at a time
	ENA in KLPD or	0	350	350	
	Ethanol in KLPD from	0	350	350	
4	DDGS (TPD)	--	170	170	Used ascattle feed
5	CO2 (TPD)		230	230	Shall be collected and sold in open market

The industry is currently operating with 3500 TCD sugarcane crushing capacity with Cogeneration plant of 28 MW with EC approved from Karnataka State Environment Impact Assessment Authority (SEIAA) vide. No. SEIAA:56: IND:2008 dated 14th August 2009 issued to M/s Siruguppa Sugars & Chemicals Ltd (SSCL). SSCL took over the sugar factory in the name of M/s Kothari Sugars & Chemicals Ltd. It was started with 1,500 TCD crushing capacity at Desanur Village, Siruguppa Taluka, of Bellary District in Karnataka during 1973-74. SSCL operated this plant till the year 2001-02. The plant was closed till 2005-06 crushing season due to financial problems. NSL Sugars Ltd, a group of the Nuziveedu

Seeds Ltd from Andhra Pradesh, in association with the management of SSCL, resumed the operations of the company in 2006-07. NSLSL acquired the company in June 2010 and it became the wholly owned subsidiary of NSLSL.

The present Consent to Operate has been issued by Karnataka State Pollution Control Board (KSPCB) Vide.No.AW-329847 dated 28/02/2022 valid up to 30.06.2026. Now, the industry wants to expand its sugarcane crushing capacity from 3500 TCD to 10000 TCD. Cogeneration unit from 28 MW to 68 MW and establishment of 350 KLPD distillery unit based on sugarcane juice/syrup/C/B Heavy molasses/grain as raw material

The Industry has existing 1*110 TPH sugar and co-generation boiler. For proposed expansion of sugar unit 1*150 TPH boiler and for distillery unit 1*110 TPH boiler shall be installed. At present, 5 MW power is required for existing sugar factory of 3500 TCD, 28 MW Co-generation power plants. For proposed expansion of sugar and co-generation unit and establishment of distillery unit, the power requirement shall be 26 MW. Hence total power required after proposed expansion of sugar, co-generation unit and establishment of distillery unit shall be 31 MW. The power requirement shall be fulfilled from own 68 MW co-generation unit. The effluent from the Sugar and Co-generation unit are treated based on primary, secondary and tertiary treatment and treated effluent are recycled back for greenbelt development/ gardening. Excess condensate from sugar unit shall be treated in sugar CPU and recycled back in to the process. Distillery effluent (i.e. Spentwash) shall be treated based on MEE followed by drying. Condensate from distillery shall be treated in CPU and recycled back in to the process to achieve Zero Liquid Discharge (ZLD).

During deliberations, EAC discussed following issues:

1. The Committee noted that recently MoEF&CC vide EC Id No. EC22A022KA110157 dated 6.12. 2022 has issued environmental clearance to M/s **NSL Sugars (Tungabhadra)Limited** for establishment of 300 KLPD Grain based Ethanol Plant & 15 MW captive power plant (Bagasse/rice husk based) located at Village Desanur, Tehsil Siruguppa, District Bellary, State Karnataka. PP informed that they have not started any construction work. Now, PP want to surrender EC dated 6.12.2022 and permit to submit the application for

grant for TOR for expansion of Sugar and Cogeneration unit and establishment of distillery.

2. PP submitted the wind rose diagram. Based on wind rose diagram, PP proposed 8 locations for air quality monitoring. PP has proposed 8 ground water monitoring locations, 5 surface water monitoring stations, 8 soil monitoring locations and 8 Noise sampling stations.
3. As per this Ministry's OM No. 22-39/20200IA III dated 14.02.22 regarding guidelines for siting industries which are in close proximity with river. Industry shall not be located within the river flood plain corresponding to one in 25 years flood as certified by concerned District Magistrate/ Executive Engineer from State water resource Dept. or any other Officer authorized by State Govt. for this purpose. PP shall furnish HFL and RL of the proposed project site from the Water Resources Department.
4. Tree census shall be done at the project site. Proposal for number of trees to be cut.
5. Powered formation technology to be opted Instead of spray drying of concentrated spent wash
6. Filter press to be used instead of sludge drying bed.
7. Study of aquatic environment and its impact of proposed project on waterbodies.
8. Environmental Policy of the company.

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 information is in compliance of the PFR. 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 hereby decided to grant Terms of Reference for the proposed project, subject to strict compliance of the following specific conditions, in addition to all standard ToR conditions applicable for such projects.:

1. As per this Ministry's OM No. 22-39/20200IA III dated 14.02.22 regarding guidelines for siting industries which are in close proximity with river. Industry shall not be located within the river flood plain corresponding to one in 25 years flood as certified by concerned District Magistrate/ Executive Engineer from State water resource Dept. or any other Officer authorized by State Govt. for this purpose. PP shall furnish HFL and RL of the proposed project site from the Water Resources Department.
2. Tree census shall be done at the project site. Proposal for number of trees to be cut.
3. Powered formation technology to be opted Instead of spray drying of concentrated spent wash
4. Filter press to be used instead of sludge drying bed.
5. Study of aquatic environment and its impact of proposed project on waterbodies.
6. Environmental Policy of the company.
7. Transportation details and their impact on road network to be submitted in the EIA/MEP report.
8. Air cooled condenser shall be installed in sugar unit to reduce the water requirement.

9. PP shall abandon the existing bio-composting plant.
10. PP shall submit the water balance of integrated sugar, distillery and cogeneration unit by recycling /reusing the treated effluent of sugar in the proposed distillery unit /co-generation power plant during crushing period. ZLD concept shall be implemented. Filter press shall be provided in place of sludge drying bed.
11. Impact due increase traffic shall be assessed and incorporate in environmental management plan.
12. Status of all court cases against the project.

Standard ToR for Sugar unit, Thermal Power Plant & Distillery shall be applicable.

Any Other Item

Agenda No. 09

Proposed 200 KLPD Grain based Ethanol Plant & 5.3 MW Captive power plant (Fuel: Bagasse and Coal) located at Village Jeevanagi, Hobali Mahagaon, Tal. Kamalapur, Dist. Kalaburagi, State Karnataka by M/s. Maashree Distillery Pvt. Ltd. – Re-consideration of Environment Clearance reg.

[IA/KA/IND2/417182/2023; IA-J11011/434/2022-IA-II(I)]

The proposal of M/s. Maashree Distillery Pvt. Ltd. for establishment of 200 KLPD Grain based Ethanol Plant & 5.3 MW Captive power plant (Fuel: Bagasse and Coal) located at Village Jeevanagi, Hobali Mahagaon, Tal. Kamalapur, Dist. Kalaburagi, State Karnataka was considered by the EAC in its meeting held on 23rd February, 2023 . The Committee recommended the proposal for grant of Environmental Clearance.

The Ministry has referred the above proposal to EAC again to seek clarification on usage of fuel in 5.3 MW coal fired captive power plant as well as additional measures prescribed for such power plant.

The proposal was considered by EAC in its meeting held on 5.04.2023. PP and Accredited consultant clarified that the cogeneration power plant of 5.3 MW will be installed for which biomass and 15 % coal as auxiliary will be used as fuel. 9.6 TPH of Husk and 1.1 TPH coal (15 %) will be used as fuel in the boiler. Following measures will be taken to control fugitive emission :

1. Control measures will be taken to control fugitive emissions generated from raw material & fuel handling loading and unloading operations. Closed covered conveyer belt shall be provided for fuel feeding to boiler.
2. Raw material and fuel will be stored in covered area. Separate sheds will be provided for Biomass and Coal.
3. All internal roads shall be constructed as tar roads.
4. Raw material/ fuel will be covered during transportation.
5. Tree plantation will be carried out around plant area for minimizing environmental impacts of the proposed activities over a period of time. Total 9.59 acre land is dedicated for greenbelt development which is 33% of the total plot area.

Process emission and utility operations:

1. Major source of utility emission will be from boiler stack. Industry has proposed to install ESP (5 filed) along with 60 m. high stack with 45 TPH boiler. Stack height is designed on the basis of CPCB guidelines to ensure proper disposal of gas emissions.
2. Two RCC silos of capacity 250 MT *2 with telescopic chute and ash conditioner will be provided.
3. Coal (15% as Auxillary fuel) and bagasse/agri. waste will be used as a fuel in proposed boiler. The ash will be stored in silos. Ash will be sent to brick manufacturers.
4. Continuous Online monitoring system shall be installed.

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, 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). 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 shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total fresh water requirement shall not exceed 807 m^3/day, which will be sourced from ground water. 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 shall be based on 'Zero Liquid Discharge' system and no effluent/treated water shall be discharged outside factory premises.

(vii). ESP (five fields) with a stack height of 60 meterswill be installed with the 45 TPHbiomass /Coal firedboiler for controlling the particulate matter emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (25.7 TPD) will be used for brick manufacturing and supplied to brick manufacturers.PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used.PP shall meet 10% of the total power requirement from solar power by generating power inside plant premises/adjacent/nearby areas. Approach from the project site to the nearest highway will be maintained by the Industry.

(ix). CO_2 (160 TPD) generated during the fermentation process is being/will be collected by utilizing CO_2 scrubbers and it shall be collected in proposed bottling plant.

(x). PP shall allocate at least Rs. 50Lakhs/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 3.88 hectares i.e., 33.0 % of total project area with tree density @ 2500 trees per hectares, mainly along the plant periphery. Saplings 4-6 feet high will be planted . 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.

(xvi). PP proposed to allocate Rs. 3.30 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan for monitorable activities like up-gradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, potable drinking water facilities, solar light/solar power support for uninterrupted power supply, soil nutrient management etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

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

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

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

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

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

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

06th April, 2023 (Thursday)

Agenda No. 01

Greenfield Project of 150 KLD Grain Based Ethanol Plant along with 3 MW Co-generation Power Plant located at Survey No. 977/4, Village- Morwan, Tehsil- Jawad, District- Neemuch, Madhya Pradesh-458220 by M/s Heeramirai Green Energy Pvt. Ltd – Consideration of Environmental Clearance.

[IA/MP/IND2/422975/2023, IA-J-11011/127/2023-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 Grain Based Ethanol Plant of 150 KLD along with 3 MW Co-generation Power Plant located at Survey No. 977/4 in Village- Morwan, Tehsil- Javad, District- Neemuch, Madhya Pradesh by M/s Heeramirai Green Energy 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	Ethanol	150 KLD
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 conduction is not applicable as the project falls under category B2 as per OM dated 16th June, 2021. No litigation pending against the proposal.

Total land area required is 8.27 hectares. Greenbelt will be developed in total area of 2.73 hectares i.e., 33% of total project area. The estimated project cost is Rs. 220 Crores. Capital cost of EMP would be Rs. 33.25 Crores and recurring cost for EMP would beRs. 4.68 Crores per annum. Industry proposes to allocate Rs. 2.2 Crores towardsExtended EMP (Corporate Environment Responsibility). Total Employment will be 114 persons as direct & indirect.

There is no National parks or Wildlife sanctuaries, Wildlife corridors etc. within 10 km distance. Reserve Forests: Nimoda Reserve Forest is at 7.3

km towards NW direction, Juna Bir Reserve Forest is at 7.5 km in West direction and Kanjarda Reserve Forest is at 7.75 km in ESE direction. Leopard (Panthera pardus) comes under Schedule-I species of the Wildlife Protection Act, 1972. The conservation plan has been submitted for the conservation of Leopard to PCCF office, Bhopal dated 09.03.2023 and a budget of 5 Lakhs has been earmarked for the same. Water Bodies: Morwan Dam is at 0.55 km away from the project site towards NW direction. Flood NOC for Morwan Dam has been obtained vide letter no. 562/W-466/Inst./2023 dated 13.03.2023 from the Office of Executive Engineer, Neemuch. Ibu River is at 0.7 km towards WNW direction Malgarh Dam is at 7.2 km distance towards NE direction and Laplya Talab us at 9.5 km towards North direction.

AAQ modelling study for point source emissions indicates that the maximum incrementalGLCs after the proposed project would be 0.19 $\mu g/m^3$, 0.08 $\mu g/m^3$, 1.90 $\mu g/m^3$, 0.94 $\mu g/m^3$and 0.21 $\mu g/m^3$ with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_x andCO. The resultant concentrations arewithin the National Ambient Air Quality Standards (NAAQS). The maximum incremental increase was recorded at 1700m. in ENE direction.

Total fresh water requirement including CPP will be 600m^3/day which will be met from surface water. The application for the permission of withdrawal of surface water from Morwan Dam vide letter no. HE/2023/1012 dated 03.03.2023 has been submitted to competent authority.Domestic effluent will be treated in STP in capacity of 10 KLD.Effluent (Condensate/spent lees/blow-down etc.) of 571 m^3/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 700 KLD each. Raw stillage 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.

Power requirement will be 3 MW and will be met from proposed 3 MW co-generation power plant. 26 TPH of Coal and Rice Husk fired boiler will be installed.

ESP with stack height of 45 m will be installed with the boiler for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 750 kVA DGset will be used as standby during power failure and stack height will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with stack height of 45 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.
- CO_2 (98 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (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 (2.0 Kilolitres per annum) will be sold to authorized recyclers.
- ETP/CPU sludge (77.94 KG/day) and STP Sludge (0.55 KG/day)will be used as manure.

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

Total land of 8.27 Hectares has been allotted to M/s. Heeramirai Green Energy Private Limited by M.P. Industrial Development Corporation Limited vide letter no. 52/MPIDC/B.P.K./2023/764, dated 08.02.2023.

Capital cost and recurring cost of EMP are given below:

S. No.	Particulars	Capital Cost (INR Cr.)	Annual Recurring (INR Cr.)
1.	Air pollution control system ESP on stack of 26 TPH boiler, Stack, Industrial vacuum cleaner, road sweeping machine.	8.0	1.0
2.	Ambient air quality management system (AAQMS) and Continuous emission monitoring system (CEMS)	0.85	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	6.50	1.10
5.	Condensate Polishing unit for water treatment and recycle, STP	5.0	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	---	0.25
13.	Environment management cell	0.50	0.05
14.	CER	2.2	---
Total		**33.25**	**4.68**

Details of CER with proposed activities and budgetary allocation:

S. No.	Description	Budget (INR Cr.)
1.	a.Development of Village roads- Morwan Village road-0.8 km b. Upgradation of portable drinking water facility in nearby Villages i.e. Govt. Higher Sec. School Village Janakpur, JVM English school Morwan, Gurutalai - School Village Gurutalai and Shree Krishna B.Ed College Jawi.	0.60
2.	Installation of solar panels (30 nos.) in Govt. Higher Sec. School Village Janakpur, JVM English school Morwan, Gurutalai - School Village Gurutalai and Shree Krishna B.Ed College Jawi.	0.50
3.	Upgradation of medical facility in nearby hospital such as Donating medical equipment like Beds, Stretcher, Portable Oxygen Cylinder (330 Litre), Oxygen	0.45

	Concentrator (0.5 to 5 Litre), AC (Window AC of 1.5 Ton), in Primary Health Sub Center.	
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 Govt. Higher Sec. School Village Janakpur, JVM English school Morwan, Gurutalai - School Village Gurutalai and Shree Krishna B.Ed College Jawi.	0.35
5.	Awareness Programs (10 nos.) for local farmers to increase soil productivity and water conservation.	0.30
Total		**2.2**

During deliberations, EAC discussed following issues:

- The committee noted that as per Decision Support System on Parivesh Portal the proposal attracts Forest Clearance as the proposed site is falling inside forest land. 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.
- PP will obtain PESO clearance before commencement of any kind of activities of project site.
- PP committed that there will be no direct entry of vehicles from the project site to the proposed State Highway and service lan would be used for entry and exit.
- The extensive plantation will be don towards Neemach-Ratnagarh MDR Road.
- 15 % power requirement will be met through solar energy.
- There will be onsite-off site disaster Managment Plan will be submitted to the District Authority.
- Garland drain will be constructed along the project boundary.

Since proposed site falls inside forest land as per DSS on parivesh portal, it was suggested that PP shall obtain Forest Clearance.

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

Agenda No. 02

Proposed 300 KLPD Cane Juice/ Sugar Syrup/ Grain Based Distillery Plant along with 6.0 MW Co-Generation Power Plant at Village Shamli-Shamla & Gagore, Tehsil Unn, District Shamli, Uttar Pradesh by M/s. Superior Biofuels Private Limited – Consideration of Environmental Clearance.

[IA/UP/IND2/421286/2023, IA-J-11011/3/2020-IA-II(I)]

The Project Proponent and the accredited Consultant J.M. EnviroNetPvt. Ltd. (NABET certificate no. NABET/EIA/2023/SA 0172 and validity till 7th 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 proposed 300 KLPD Cane Juice/ Sugar Syrup/ Grain Based Distillery along with 6.0 MW Co-Generation Power Plant at Village Shamli-Shamla&Gagore, Tehsil Unn, District Shamli, Uttar Pradesh by M/s. Superior Biofuels Private Limited.

As per EIA Notification dated 14th Sep, 2006 and as amended on 13th June, 2019, the project falls under Category "A", Project or Activity '5(g)' Distilleries [Molasses based distilleries>100 KLPD & Non-Molasses based distilleries>200 KLD] and are appraised at Central level in MoEFCC, New Delhi.

The details of products and capacity as under:

S. No.	Units	Products	Capacity
1.	Cane Juice/ Sugar Syrup/ Grain Based Distillery	Ethanol/ Rectified Spirit/Extra Neutral Alcohol	300 KLPD
2.	Co-Generation Power Plant	Power	6.0 MW
3.	DWGS Dryer	DDGS	150 TPD
4.	Fermentation unit	Carbon dioxide	220 D

Standard Terms of Reference has been issued by Ministry of Environment, Forest & Climate Change (MoEFCC) vide letter no. IA-J-11011/3/2020-IA-

II(I) dated 23rd February, 2022 andas amended on 15th February, 2023. PP informed that there is no litigation pending against the project.

Public Hearing for the proposed project was conducted by the Uttar Pradesh Pollution Control Board on 30th May, 2022 at project premises chaired by Ms. Jasjeet Kaur, District Magistrate, Shamli. The main issues raised during the public hearing and their action plan:

S.No	Issues in brief	Action plan in brief	Budget allocated and timeline
1	Water pollution	Proposed project is based on advanced techniques only and not based on bio composting process. The concentrated spent wash generated will be mixed with bagasse and used as fuel in boiler. This is the cleanest technology at present for distillery industry.	Process condensate from MEE, Spent lees, CT Blow down, Boiler Blow down& DM Reject will be treated in CPU/ETP and recycled in process. Domestic waste water will be treated in Sewage Treatment Plant (Capacity 20 KLPD) and reused in Greenbelt. Treatment of secondary streams like spent lees, condensates, blow downs, etc. shall be in closed loop & any discharge outside the distillery shall not be done. Cost for water pollution and control ie, 1) MEE – Capital cost is 3 crore, recurring cost is 0.16 crore 2) Incineration boiler - capital cost is 21 crore and recurring cost is – 0.10 crore 3) Condensate polishing unit- capital cost 1.50 crore and recurring cost - 0.10 crore.
2	Employment opportunities	Approx. 150 skilled/un-skilled workers would be required for the operation of the industry. Local people will be given preference and employed according to their abilities. Along with employment opportunity, local people will also be	Total manpower required for operation of plant is around 150 employees (125 permanent & 25 temporary) and 100 employees (5 permanent & 95 temporary) during construction phase which will be provided to the local people and will be employed as per their skills and abilities.

		provided with training & development.	
3	Plantation in villages & greenbelt development	33% of the project area will be used for greenbelt development. Moreover, the plantation work will be carried out based on Miyawaki technique which uses less land to plant more trees. The project proponent said that besides project site, tree plantation will be done on school/college & other land	33% (2.86 Hectares) of total project area will be developed under greenbelt & plantation with a density of 2500 trees/ha & total native trees planted inside plant will be 7150. The company will be spending Rs. 10 lakhs in two years for plantation in nearby areas.
4	Improvement of damaged roads and provision of street lights	As part of socio economic development plan, the company will be spending Rs 40.0 lakhs on improvement of the nearby roads in Repair works like potholes, ruts, corrugations, paving, widening of lanes etc. in Villages ShamliShamla& Village Unn.	As part of socio-economic development plan, the company will be spending Rs 40.0 lakhs on improvement of the nearby roads in Repair works like potholes, ruts, corrugations, paving, widening of lanes etc. in Villages ShamliShamla& Village Unn.
5	Timely payment to the farmers	Issues regarding payment to farmers will be resolved. The farmers will be paid on time for the sugarcane purchased. Shamli district has 3 distilleries at present, among which M/S Superior Biofuels Food Grains Pvt. Ltd., Unn,	All attempts have been/will be made so that farmers get payments for sugarcane on time. All provision and efforts will be made so as to provide benefits to the people and no harm is done to the environment.

		has made the most payments, but it could still make improvements.	

PP informed that as per suggestion of the Committee they have added 2.55 ha land with the existing plot of 6.10 ha. Total land area acquired is 8.65 hectares. Greenbelt will be developed in total area of 2.86 hectares i.e., 33% of total project area. The estimated project cost is Rs. 100 Crores. Capital cost of EMP would be Rs 30.0 Crores and recurring cost for EMP would be Rs. 0.75 Crores per annum. Further, PP has revised the project cost to Rs. 175 crores and EMP recurring cost from Rs. 0.75 Crores per annum to Rs. 2.5 Crore. Industry has revised the allocation towards Extended EMP (Corporate Environment Responsibility)from Rs. 100 lakhs to Rs 300 Lakhs. Total Employment will be 150 persons as direct & indirect.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Reserve Forest (RF)/Protected Forest (PF) etc. within 10 km distance. Water bodies: River Khokhari Nadi is at a distance of 7.5 km in WNW direction, Nala/Drain/Distributary-Katha Nala is at a distance of 0.2 km in South direction, Hatchhoiya Drain is at a distance of 2.0 km in East direction , Papri Distributary is at a distance of 6.0 km in East direction, Bidauli Distributary is at a distance of 6.5 km in SSE direction, Azizpur Drain is at a distance of7.0 km in WSW direction, Bunta Distributary is at a distance of7.0 km in South East direction, Hangauli Distributary is at a distance of7.0 km in North East direction, Kairana Distributary is at a distance of9.0 km in SSE direction, Khaji Sikandarpur Drain is at a distance of9.5 km in South direction &Rajhar Drain is at a distance of 9.5 km in South East direction.NOC has been obtained from Office of Executive Engineer, Drainage Division, Shamli (Muzaffarnagar) Vide letter no. 166/DDM/Mining Dated 13.02.2023 stating that there is no record of flood in the last 1:25 years at the project location.

Ambient air quality monitoring was carried out at 8 locations during October to December 2021 and the baseline data indicates the ranges of concentrations as: PM_{10} (59.5 to 87.8$\mu g/m^3$, $PM_{2.5}$ (27.5 to 51.5$\mu g/m^3$), SO_2 (6.6 to 22.6$\mu g/m^3$) and NO_2 (13.0 to 39.4$\mu g/m^3$).AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.385$\mu g/m^3$, 0.15$\mu g/m^3$,

0.605µg/m^3 and 0.811µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement will be 1200 CMD which will be met from adjacent Sugar Mill. M/s Superior Biofuels Private Limited has done MoU with M/s Superior Food Grains Limited regarding procuring water from the adjacent own sugar mill for distillery operations with Certificate no. IN-CH40469054386638V dated 09 Feb 2023. Spent Wash/stillage from grain based shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. Spent wash from sugar syrup shall be concentration in MEE and concentrated spent wash shall be burn in the incineration boiler. Effluent of 1515 CMD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 1900 KLPD. STP of capacity 20 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 6.0 MW and will be met from proposed 6.0 MW Co- Generation Power Plant. 50 TPH Concentrated spent wash & Biomass fired boiler will be installed. APCE ESP with a 72 mhigh stack will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boiler. 2 x 1000 KVA DG sets will be used as standby during power failure and stack height 6.5 m each will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- APCE ESP with a 72 m. high stack will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler.
- CO^2 generated (220 TPD) during the fermentation process will be collected and sold to authorized vendors.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.

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

- During Cane Juice/ Sugar Syrup based Operation- Concentrated slop (70 TPD) from Multi Effect Evaporator shall be burnt in the 50 TPH Incineration boiler.
- During Grain based operation - Solid waste from the Grain based operations generally comprises of fibres and proteins in the form of DDGS (150 TPD), which will be ideally used as cattle feed.
- Ash (53 TPD) generated from proposed boiler will be used for supplied to nearby brick manufacturers in covered vehicles.
- Sludge will be dried and given to farmers to be used as soil manure.
- Used oil & grease (1.0 KL/annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

Total project area is 8.65 Hectares out of which 3.94 hectares land has been purchased by M/s Superior Biofuels and converted to industrial land & rest 4.71 hectares land has been leased to M/s Superior Biofuels Private Limited by M/s Superior Food Grains (P) Ltd. for distillery operations which is already industrial in nature.

During deliberations, EAC discussed following issues:

- PP informed that the certified compliance dated of 3.4.2023 of CTO condition has been obtained from SPCB. The Committee suggested them to submit the document to the Ministry.
- As per the earlier recommendations of EAC during ToR amendment for the project, the company had explored some more plots & now has increased the plant area from 6.10 ha to 8.65 ha (41% increase in total area by addition of 2.55 ha land).
- The company has increased the total project cost from Rs. 100 Crores to Rs. 175 Crores. In line with the total project cost, the EMP cost has also been increased from Rs. 30 Crores to Rs. 35 Crores & recurring cost from Rs. 0.75 Crores/annum to Rs. 2.50 Crores /annum.
- Due to increase in project cost, the company has increased the socio economic development activities budget from Rs 1.0 Crore to Rs 3.0 Crores which will be spent in nearby areas within the commissioning of the plant.
- The proposed distillery will be completely based on 'Zero effluent Discharge". Treated water to the tune of 1200 KLPD from adjacent own company Sugar mill i.e. M/s Superior Food Grains Pvt.Ltd.will be used for the proposed distillery activities which will be stored in 2

ponds covering a total area of 12066.5 m^2& 24302.37 m^2 respectively in the premises of M/s Superior Food Grains Pvt.Ltd.

- The company has done MoU with adjacent Sugar mill i.e., M/s Superior Food Grains Pvt. Ltd. for supply of water & cane juice/sugar syrup & submitted the same.
- Sewage Treatment Plant of capacity 20 KLPD will be installed in the adjacent own sugar mill instead of septic tank as stated in Consent to Operate and the treated water will be reused for greenbelt activities.
- Rainwater harvesting will be done inside the plant premises in which 33435.13 cum/annum rainwater will be stored in underground tanks & surface pond and used for plant activities.
- 33% of total project area, i.e., 2.86 hectares will be developed as greenbelt within plant premises which will be achieved within December, 2023. Local species like Arjun (Terminalia arjuna), Kadam (Authocephalus cadamba), Amla (Embelica officinalis), Mango (Mangifera indica), *Indian Beech Tree (Pongamia pinnata)*, Salai (Boswellia serrata), Kalam (Mitragyna parvifolia), Baheda (Terminalia bellarica), Mokha (Schrebera swietenioides), Ashok (Saraca asoca), Bargad (Ficus bengalensis), Gulmohar (Delonix regia), Neem (Azadirachta indica), Peepal (Ficus religiosa), Shisham (Dalbergia sisoo), Moringa (Moringa oleifera), etc. will be planted as greenbelt inside the plant premises.
- The company will increase provision of solar power within plant and to the nearby areas from 10% to 15% of total power consumption of the unit in form of solar lights/solar panels/solar gadgets etc. as a part of socio economic developmental activities.
- The company will install briquetting unit inside plant premises or adjacent land for proper management of fly ash.
- The company will install filter press for sludge management.
- The company hereby undertakes that the alcohol storage section will remain the same as depicted in the plant layout & storage tank sizes will not be changed as per the Risk Assessment Plan submitted. The company will follow all the recommendations for risk mitigation as per the EMP report submitted.
- PP submitted revised cost for Environment Management Plan

Particular		**Capital Cost (In crores)**	**Recurring Cost / annum (In crores)**
Air management	ESP + stack+ Online monitoring system	4.00	0.50

Water Pollution &Effluent Treatment	Effluent Treatment Plant/Condensate polishing unit	1.50	0.50
Spent Wash Treatment Facility	MEE	3.00	0.50
	Incineration Boiler	25.6	0.50
Environment monitoring	Lab instrument	0.30	0.20
	Online monitoring of air and water		
	Third party investment for monitoring		
	Others		
Solid waste management	Ash handling & management	0.10	0.20
Greenbelt & plantation development	Plantation for greenbelt	0.50	0.10
Total		**35 crores**	**2.50 crores**

REVISED ACTION PLAN- SOCIO ECONOMIC DEVELOPMENTAL ACTIVITIES

S. No.	PROPOSED ACTIVITIES	IMPLEMENTATION OF EMP FOR SOCIAL AND INFRASTRUCTURE DEVELOPMENT ON THE BASIS OF PHYSICAL TARGETS		TOTAL BUDGET ALLOCATED (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. 30.0 Lakhs Village Shamli-Shamla (1.5 km stretch- Sugar mill Road)	Rs. 30.0 Lakhs Village Unn (1.5 km stretch- Unn Thana Bhavan Road)	Rs 60.0 lakhs
2	**Social Infrastructure Development**- Installation of Solar Street Light/Solar Lanterns & Village Pond & RWH pond Infrastructure Development, etc.	Rs. 30.0 Lakhs Village Unn (Rs. 20 Lakhs for 500 nos. solar street light, Rs. 10 Lakhs for local pond & RWH pond development)	Rs. 30.0 Lakhs Village Shamli-Shamla (Rs. 20 Lakhs for 500 nos. solar street light, Rs. 10 Lakhs for local pond &	Rs. 60.0 lakhs

			RWH pond development)	
3	**Plantation development**– Plantation/ Avenue plantation along roadside, tree plantation in nearby schools/colleges/vacant land/Panchayat bhavan, etc.	Rs. 15.0 Lakhs (3000 nos in Village Shamli-Shamla)	Rs. 15.0 Lakhs (3000 nos in Village Unn)	Rs 30.0 lakhs
4	**Skill development for youth**- Organising Training programmes for youth/residents in Skill Development centre	Rs. 15.0 lakhs (Village Unn Benefit extended to approx. 150 persons)	Rs. 15.0 lakhs (Village Shamli-Shamla Benefit extended to 150 approx. persons)	Rs. 30.0 lakhs
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, sports equipments etc. to students, Seating Benches, installation of potable water facilities, construction of sanitized toilets etc.	Rs. 35 Lakhs (Govt school at Village Shamli-Shamla) (2 nos potable water facilities - Rs.2 lakh, solar panels installation- Rs. 10 lakhs, Rs 13 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, sports equipments, Rs. 10 lakhs for construction of sanitized toilets etc)	Rs. 35 Lakhs (Govt school at Village Unn) (2 nos potable water facilities - Rs.2 lakh, solar panels installation- Rs. 10 lakhs, Rs 13 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, sports equipments, Rs. 10 lakhs for	Rs. 70.0 lakhs

			construction of sanitized toilets etc)	
6	**Up gradation of Healthcare facilities-** Provision of oxygen cylinders, Health Check-up camps, medical instruments etc.	Rs. 25 Lakhs (PHC at Village Unn) (Provision of 5 oxygen cylinders- Rs. 2.5 lakhs, Health Check- up camps-Rs 7.5 lakhs, Medical instruments-Rs 15 lakhs etc.)	Rs. 25 Lakhs (PHC at Village Shamli-Shamla) (Provision of 5 oxygen cylinders- Rs. 2.5 lakhs, Health Check-up camps-Rs 7.5 lakhs, Medical instruments-Rs 15 lakhs etc.)	Rs. 50.0 lakhs
	TOTAL			**Rs. 300.0 lakhs**

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

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

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

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

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

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

(ii). 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.

(iii). Total fresh water requirement shall not exceed 1200 m^3/day, which will be sourced from adjacent sugar mill of M/s Superior Biofuels Pvt. Ltd. No ground water recharge shall be permitted within the premises. No ground water abstraction shall be permitted. Industry

shall construct a rain water storage pond of 60 rainfall days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

(iv). 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. Spent wash from sugar syrup shall be concentration in MEE and concentrated spent wash shall be burn in the incineration boiler. 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.

(v). ESP with a 72 meters high stack f will be installed with the spent wash and biomass fired50 TPH boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3. Coal shall not be used as fuel in the 50 TPH boiler.At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(vi). Boiler ash (53 TPD) will be supplied to brick. PP shall use spent wash and biomass as fuel for the proposed boiler. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises.

(vii). CO_2 (220 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(viii). PP shall allocate at least Rs. 0.5 Crore/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

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

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

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

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

(xiii). The green belt of at least 5-10 m width shall be developed in 2.86 hectares i.e., 33 % of total project area shall be maintained 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. Thick green belt shall be developed between the plant boundary and parking area. Saplings 4-6 feet in height shall be planted. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop atleast 20 variety of species as a part of greenbelt.

(xiv). PP proposed to allocate Rs. 3.00 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.

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

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

(xvii). Continuous online (24x7) monitoring system for stack emissions/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.

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

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

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

Agenda No. 03

Greenfield Project of 160 KLPD Grain Based Ethanol Plant along with 5 MW Co-generation Power Plant located at Village- Malika & Karnapur, Tehsil- Powayan, Dist.- Shahjahanpur, Uttar Pradesh by M/s TQN Retails Private Limited– Consideration of Environmental Clearance.

[IA/UP/IND2/421292/2023, IA-J-11011/108/2023-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 160 KLD Grain Based Ethanol Plant along with 5 MW Co-generation Power Plant located at Village- Malika & Karnapur, Tehsil- Powayan, Dist.- Shahjahanpur, Uttar Pradesh by M/s TQN Retails Private Limited.

As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provisionin 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	160 KLD
2	Co-generation power plant	Power	5 MW
3	DWGS dryer	DDGS	108 TPD

4	Fermentation unit	Carbon di-oxide	98 PD

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

Total land area required is 6.49 hectares. Greenbelt will be developed in total area of 2.142 hectares i.e., 33% of total project area. The estimated project cost is INR Rs. 224.5 Crores. Capital cost of EMP would be INR Rs. 33.6 Crores and recurring cost for EMP would be INR Rs. 4.5 Crores per annum. Industry proposes to allocate Rs. 2.25Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 110 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Wildlife Corridors etc. within 10 km distance. Biandpur Reserve Forest is at 4.2 km towards NW, Sareli Khurd RF is at 6.5 km towards East, North Kathna RF is at 8 km towards SE, Lohangpur RF is at 8.6 km towards NE, Chhapa Bojhi RF is at 9.1 km towards ENE, Nathapur RF is at 9.4 km towards SSW, Kurria Birana RF is at 9.5 km towards East. Conservation plan for schedule I species has been submitted to The Principal Chief Conservator of Forest (PCCF), Lucknow, Uttar Pradesh and a budget of 5.0 Lakhs has been earmarked for the same. Pond is at 0.34 km towards NNW; Joknai River is at 2.6 km towards West; Gomati River is at 4 km towards West; Bhainsi River is at 9.5 km towards SW.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.12µg/m^3, 0.07 µg/m^3, 0.29 µg/m^3, 0.59 µg/m^3 and 0.9 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement including CPP will be 640 m^3/day which will be met from groundwater. The application for withdrawal of ground water has been applied to Ground Water Department, Govt. of Uttar Pradesh vide application No. SHJP0323NIN0047 dated 03.03.2023. Effluent (Condensate/spent lees/blowdown etc.) of 590 m^3/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 700 KLPD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 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 3.5 MW and will be sourced from proposed 5 MW co- generation power plant, the rest will be supplied to state grid. 45 TPH using rice husk with coal as auxillary fuel fired boiler will be installed. ESP with stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1 x 500 kVA DG sets will be used as standby during power failure and stack height (10m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 60 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (98 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (108 TPD) will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (35.2 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises of capacity approx. 1.85 Cr. bricks per annum.
- Used oil (2.0 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (28.35 kg/day) and STP Sludge (0.48 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 160 KLPD will be used for manufacturing fuel ethanol only. Total land is 6.49 ha and 100% land is under possession of the company. CLU application has been submitted to the Sub Divisional Magistrate, Shahjahanpur, U.P. for conversion of agricultural land to Industrial land vide letter no. TQNRPL/CLU/20230224 dated 24.02.2023.

Capital cost and recurring cost of EMP are given below:

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.	7.0	0.75
2	Continuous Emission Monitoring System and Ambient Air Quality Monitoring System	0.85	0.25
3	Scrubbing system, compressing system, liquefying system and storage for CO2 removal	5.0	0.50
4	Treatment system for spent wash, DWGS centrifuge decanter, DDGS dryer for ZLD system, Construction of Garland drains, Water Reservoir	6.0	0.75
5	Condensate Polishing unit for water treatment and recycle, STP	3.0	0.50
6	Ash handling and management	1.5	0.25
7	Fire Fighting measures	0.60	0.20
8	In-house Solar power Plant	4.0	0.25
9	Rainwater harvesting systems	1.0	0.20
10	Occupational Health Management	0.50	0.20
11	Noise Reduction Systems	0.30	0.10
12	Green Belt Development	0.85	0.20
13	Environment monitoring	0	0.10
14	Environment management cell	0.75	0.25
15	CER	2.25	-
	Total	**33.6**	**4.5**

Details of CER with proposed activities and budgetary allocation:

S. No	Description	Value in INR (Cr)
1.	a. Development of Village roads- Khutar road b. Upgradation of drinking water facility by by installation of water purifier in nearby villages Malika and Village Karnapur	0.60
2.	Installation of solar panels (15 nos.) in Village Malika and Village Karnapur	0.55
3.	Upgradation of medical facility in nearby hospital or in Govt Hospital.	0.55
4.	Development of schools of nearby area/villages and educational support services for children/students and 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.	0.60
5.	Awareness Programme (10 nos.) for farmers for increasing soil productivity and water conservation.	0.20
	Total	**2.50**

During deliberations, EAC discussed following issues:

- PP informed that they will prepare On-site and Off-site Disaster Management Plan and submit to competent authority before commencement of any kind of activity on project site. They will obtain PESO Clearance before commencement of any kind of activity on project site.
- The maximum incremental increase for NO_X, PM_{10} and SO_2 was observed at a distance of 5100 m.
- PP informed that biomass will be used as fuel for Co-generation power plant and 15 % Coal as auxiliary fuel will be used.
- 15% of power requirement will be met through solar energy.
- PP informed that they have applied for obtaining NOC from CGWA
- They will install five field Electro Static Precipitator (ESP) with boiler stack to control the particulate and gaseous emissions.
- They will construct Garland drain all along the project boundary.

- PP has carried out revised AAQ modelling study for point source emissions (boiler and DG set) indicates that the maximum incremental GLCs after the proposed project would be 0.46 µg/m^3, 0.18 µg/m^3, 3.74 µg/m^3, 0.72 µg/m^3 and 2.14 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- PP has submitted revised list of plant species to be planted.
- Revised process flow diagram of ETP comprising RO has been submitted. Treated effluent will be recycled back in process and cooling tower make up.
- Remodelling of risk assessment, considering storage capacity.
- PP shall relocate the ethanol storage tanks from entrance of the plant. PP shall ensure that location of the storage tanks should be decided in such a way that impact of the risk under abnormal conditions/ worst case scenario shall remain within the plant boundary level. Further, all the safety measures shall be taken and permission from the PESO shall be obtained before construction of plant.

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

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

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. 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 distillery activities, State Pollution Control Board shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total fresh water requirement shall not exceed 640 m^3/day, which will be sourced 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). 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 with a stack height of 50 meters will be installed with the Rice Husk fired 45 TPH boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. 15 % Coal will be used as auxiliary fuel. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (35.2 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use Rice Husk as main fuel and 15% coal as auxiliary fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises.

(ix). CO_2 (98 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(x). PP shall allocate at least Rs. 0.5 Crore/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

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

(xii). PP shall ensure that location of the storage tanks should be decided in such a way that impact of the risk under abnormal conditions/ worst case scenario shall remain within the plant boundary level. Further, all the safety measures shall be taken and permission from the PESO shall be obtained before construction of plant. 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.

(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 has already been developed in 2.142 hectares i.e., 33 % of total project area shall be maintained 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. Thick green belt shall be developed between the plant boundary and parking area. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop atleast 20 variety of species as a part of greenbelt.

(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. 04

Greenfield Project of 160 KLD Grain Based Ethanol Plant along with 4.5 MW Co-generation Power Plant located at located at Village- Daranagar, Arthari, Pargana-Jalalabad, Tehsil- Kalan, Dist- Shahjahanpur, Uttar Pradesh by M/s YTT Industries Private Limited– Consideration of Environmental Clearance.

[IA/UP/IND2/423087/2023, IA-J-11011/129/2023-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 160 KLD Grain Based Ethanol Plant along with 4.5 MW Co-

generation Power Plant located at Village- Daranagar, Arthari, Pargana-Jalalabad, Tehsil- Kalan, Dist- Shahjahanpur, Uttar Pradesh by M/s YTT Industries Private Limited.

As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provisionin 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	160 KLD
2	Co-generation power plant	Power	4.5 MW
3	DWGS dryer	DDGS	108 TPD
4	Fermentation unit	Carbon di-oxide	98 PD

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

Total land area required is 7.59 hectares. Greenbelt will be developed in total area of 2.5 hectares i.e., 33% of total project area. The estimated project cost is INR Rs. 190.15. Crores. Capital cost of EMP would be INR Rs. 28.5 Crores and recurring cost for EMP would be INR Rs. 7.15 Crores per annum. Industry proposes to allocate Rs. 1.9 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 145 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, wildlife corridors etc. within 10 km distance. Conservation plan for schedule I species has been submitted to PCCF, Lucknow and a budget of 0.05 Crores has been earmarked for the same. Reserve Forest is at 4.1 km towards NE; Pond is at 0.2 km towards WSW; Aril Nadi is at 1.5 km towards E; Bahata Nala is at 3 km towards SW; Purnihai Talab is at 3.3 km towards E; Sot Nadi is at 4.5 km towards SW. Flood NOC for pond has been obtained from office

executive engineer, Sharda Canal Section, Shahjahanpur dated 21.03.2023.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.24 µg/m^3, 0.1 µg/m^3, 0.41 µg/m^3, 1.21µg/m^3 and 1.06 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement including CPP will be 640 m^3/day which will be met from ground water. The application for withdrawal of ground water has been applied to Ground Water Department, Govt. of Uttar Pradesh vide application No. SHJP0323NIN0048 dated 17.03.2023. Effluent (Condensate/spent lees/blowdown etc.) of 590 m^3/day quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 700 KLPD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 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 4.5 MW and will be met from proposed 4.5 MW co- generation power plant. 40 TPH Coal and Rice Husk fired boiler will be installed.ESP with stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 1 x 500 kVA DG sets will be used as standby during power failure and stack height (10 mtr) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- ESP with a stack height of 60 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (98 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (108 TPD) will be sold as cattle feed/fish feed/ prawn feed.

- Boiler ash (35 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises of capacity approx. 1.85 Cr. bricks per annum.
- Used oil (2.0 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (28.35 kg/day) and STP Sludge (1.09 kg/day) will be used as manure.

As per Notification S.O 2339(E), dated 16thJune, 2021, PP has submitted self- certification in the form of notarized affidavit declaring that the proposed capacity of 160 KL/day will be used for manufacturing fuel ethanol only.

Total land available is 7.59 ha. 4.70 ha is under the possession of company & for remaining 2.89 ha registered sale agreement is executed. CLU application has been filled to the Sub Divisional Magistrate, Shahjahanpur, U.P for conversion of agricultural land to Industrial land.

Capital cost and recurring cost of EMP are given below:

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.	5.5	1.5
2	Continuous Emission Monitoring System and Ambient Air Quality Monitoring System	0.85	0.25
3	Scrubbing system, compressing system, liquefying system and storage for CO_2 removal	4	1.0
4	Treatment system for spent wash, DWGS centrifuge decanter, DDGS dryer for ZLD system, Construction of Garland drains, Water Reservoir	4.5	1.25
5	Condensate Polishing unit for water treatment and recycle, STP	2.75	0.50
6	Ash handling and management	1.5	0.25
7	Fire Fighting measures	0.6	0.15

8	In-house Solar power Plant	3.5	1.0
9	Rainwater harvesting systems	1	0.25
10	Occupational Health Management	0.5	0.20
11	Noise Reduction Systems	0.3	0.10
12	Green Belt Development	0.85	0.20
13	Environment monitoring	0	0.25
14	Environment management cell	0.75	0.25
15	CER	1.9	-
	Total	**28.5**	**7.15**

Details of CE:- with proposed activities and budgetary allocation:

S. No	**Description**	**Value in INR (Cr)**
1.	a. Development of Village roads. b. Upgradation of portable drinking water facility in nearby Village Patna Devkali and Village Ikauna Sheopuri	0.60
2.	Installation of solar panels (15 nos.) in Village Patna Devkali and Village Ikauna Sheopuri	0.40
3.	Upgradation of medical facility in nearby hospital or in Govt Hospital.	0.40
4.	Development of schools of nearby area/villages and educational support services for children/students and 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.	0.30
5	Awareness programmes (10 Nos) for the farmers for enhancing soil productivity in nearby villages.	0.20
	Total	**1.90**

During deliberations, EAC discussed following issues:

- PP informed that an amount of 3.0 Cr has been earmarked for Corporate Environment Responsibility.
- PP informed that they will maintain additional 20m of buffer zone for entry exit of project through service lane.
- PP informed that they have increased no. of trees for green belt from 6300 to 7200. Revised list of trees to be planted has been submitted.
- Ethanol storage tank capacity is 1600 KL; No. of Tanks = 6 no. x 250 KL + 1 no. x 100 KL.
- PP informed that the total land available is 7.59 ha. 4.70 ha is under the possession of company & for remaining 2.89 ha registered sale agreement is executed by Sub Registrar Office, Shahjahanpur dated 18.03.2023.
- CLU application has been submitted to the Sub Divisional Magistrate, Shahjahanpur, U.P dated 16.03.2023 for conversion of agricultural land to Industrial land. CL
- 15% of power requirement will be met through solar energy.
- PP informed that they have applied for obtaining NOC from CGWA
- They will install five field Electro Static Precipitator (ESP) with boiler stack to control the particulate and gaseous emissions.
- They will construct Garland drain all along the project boundary.
- PP has carried out revised AAQ modelling study for point source emissions (boiler and DG set) indicates that the maximum incremental GLCs after the proposed project would be 0.14 $\mu g/m^3$, 0.02 $\mu g/m^3$, 0.45 $\mu g/m^3$, 0.77 $\mu g/m^3$ and 0.26 $\mu g/m^3$ with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- PP has submitted revised list of plant species to be planted.
- Remodelling of risk assessment, considering storage capacity.
- PP shall ensure that location of the storage tanks should be decided in such a way that impact of the risk under abnormal conditions/ worst case scenario shall remain within the plant boundary level. Further, all the safety measures shall be taken and permission from the PESO shall be obtained before construction of plant.
- Revised process flow diagram of ETP comprising RO has been submitted. Treated effluent will be recycled back in process and cooling tower make up.

S.N.	Description	Amount in Rs. (Cr,)
1	a. Development of Village roads b. Upgradation of portable drinking water facility in nearby Village Patna Devkali and Village Ikauna Sheopuri	1.00
2	Installation of solar panels (15 nos.) in Village Patna Devkali and Village Ikauna Sheopuri	0.60
3	Upgradation of medical facility in nearby hospital or in Govt Hospital.	0.50
4	Development of schools of nearby area/villages and educational support services for children/students and 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	0.60
5	Awareness programmes (10 Nos) for the farmers for enhancing soil productivity in nearby villages.	0.30
Total		3.00

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

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

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

(iii). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. 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 distillery activities, State Pollution Control Board shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total fresh water requirement shall not exceed 640 m^3/day, which will be sourced 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). 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 with a stack height of 60 meters will be installed with the Rice Husk/coal fired 40 TPH boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission

levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (35 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use Rice Husk/coal as fuel. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises.

(ix). CO_2 (98 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(x). PP shall allocate at least Rs. 0.5 Crore/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

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

(xii). PP shall ensure that location of the storage tanks should be decided in such a way that impact of the risk under abnormal conditions/ worst case scenario shall remain within the plant boundary level. Further, all the safety measures shall be taken and permission from the PESO shall be obtained before construction of plant. 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.

(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 has already been developed in 2.5 hectares i.e., 33 % of total project area shall be maintained 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. Thick green belt shall be developed between the plant boundary and parking area. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop atleast 20 variety of species as a part of greenbelt.

(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. 05

Greenfield Project of 150 KLD Grain Based Distillery Plant along with 4.5 MW Co-generation Power Plant located at Plot No. NS G-7, Industrial Area Nawanagar, District- Buxar, Bihar by M/s Swadeshi Fuels LLP - Environmental Clearance– Consideration of Environmental Clearance.

[IA/BR/IND2/423213/2023,IA-J-11011/135/2023-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 4.5 MW Cogeneration Power Plant located at Plot No. NS G-7, Industrial Area Nawanagar, District- Buxar, Bihar – 802129 by M/s Swadeshi Fuels 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	150 KLPD
2	Co-generation power plant	Power	4.5 MW
3	DWGS dryer	DDGS	75 TPD
4	Fermentation unit	Carbon di-oxide	98 PD

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

Total land area required is 6.07 hectares. Greenbelt will be developed in total area of 2 hectares i.e., 33% of total project area. The estimated project cost is INR Rs. 186.02 Crores. Capital cost of EMP would be INR Rs. 31.11 Crores and recurring cost for EMP would be INR Rs. 5.8 Crores per annum. Industry proposes to allocate Rs. 2 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 103 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance. No reserve forest or protected area is present within 10 km

study area. Buxar Canal is at a distance of 6.3 km in W diection and Ara Canal is at a distance of 4.4 km in ENE direction. Thora Nadi is at 4.8 km towards W direction from the project site. Kao Nadi is at 3 km towards S direction from the project site. Kesath Distributary is in SE direction at a distance of 2 km and Sikaria Distributary is in ENE direction at a distance of 4.35km from the plant. Bhojpur Distributary is in S direction at a distance of 1.35 km for which NOC has been obtained from Office of Executive Engineer Water Resource Department vide letter no. 2/M.A-03-08/2022 dated 25.03.2023.

AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.07µg/m^3, 0.04µg/m^3, 1.3µg/m^3, 1.16µg/m^3 and 1.0 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement including CPP will be 600 KLD which will be met from ground water. The application for permission of withdrawal of ground water has been submitted to CGWA having application no. 21-4/1392/BR/IND/2023, dated 27/01/2023. Effluent (Condensate/spent lees/blowdown etc.) of 632 KLD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 800 KLD. Raw stillage will be sent to decanter followed by MEE and dryer to produce DDGS. STP capacity of 10 KLDwill be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

Power requirement will be 4.5 MW and will be met from proposed 4.5 MW cogeneration power plant. 50 TPH Coal based and Biomass fired boiler will be installed. ESP with Stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 2 x 500 kVA DG set will be used as standby during power failure and stack height (11 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management:

- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- ESP with stack height of 60 meters will be installed for controlling the particulate emissions from DG Set.
- CO_2 (98 TPD) generated during the fermentation process will be

collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (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 (0.0863 TPD) and STP Sludge (0.001 TPD) will be disposed through local agency.

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 KL/day will be used for manufacturing fuel ethanol only.

Total land is 6.07 hectare. Total land has been allotted to the company for 90 years on lease basis by Bihar Industrial Area Development Authority (BIADA) vide reference no. 493/D; dated-28/01/23.

Capital cost and recurring cost of EMP are given below:

S. No	Particulars	Capital Cost	Annual Recurring
1.	Air pollution control system ESP on stack of 50 TPH boiler, Stack, Industrial vacuum cleaner, road sweeping machine.	7.50	1.25
2.	Ambient air quality management system (AAQMS) and Continuous emission	0.85	0.25
3.	Scrubbing system, compressing system, liquefying system and storage for CO_2	5.5	0.75
4.	Treatment system for spent wash, DWGS centrifuge decanter, DDGS dryer for ZLD system, Construction of Garland drains,	6.0	1.50
5.	Condensate Polishing unit for water treatment and recycle, STP	6.5	1.25
6.	Rainwater harvesting systems	0.65	0.15
7.	Occupational Health Management	0.50	0.20
8.	Noise Reduction Systems	0.35	0.05

9.	Green Belt Development	0.75	0.10
10.	Environment monitoring	---	0.25
11.	Environment management cell	0.50	0.05
12.	CER	2	---
Total		**31.1**	**5.8**

Details of CER with proposed activities and budgetary allocation:

S. No	Description	Value in INR (Cr)
1.	Development of Kukur Bhuka Village roads 1km,Potable drinking water facility in nearby village Jawahar Navodaya Vidyalaya, Buxar, R L S Y High School, Ranvirpur - 25 Lakhs	1.0
2.	Installation of solar panels (30 nos.) in village-Amirpur Near Village, Farid Hospital, Rampur and Primary Hospital.	0.55
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 Farid Hospital, Rampur.	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 village- Jawahar Navodaya Vidyalaya, Buxar, R L S Y High School, Ranvirpur.	0.45
5.	Awarness program for farmers for increase in productivity of soil.	0.25
Total		**2.0**

During deliberations, EAC discussed following issues:

- PP informed that an amount of 2.5 Cr has been earmarked for Corporate Environment Responsibility.
- PP informed that total 73 nos. Of trees are present with project site and 25 nos. Of trees to be cut.
- PP informed that they have increased the no. of tree species for greenbelt from 12 to 20.
- 15% of power requirement will be met through solar energy.
- PP informed that they have applied for obtaining NOC from CGWA
- They will install five field Electro Static Precipitator (ESP) with boiler stack to control the particulate and gaseous emissions.
- PP has carried out revised AAQ modelling study for point source emissions (boiler and DG set) indicates that the maximum incremental GLCs after the proposed project would be 0.4 $\mu g/m^3$, 0.01 $\mu g/m^3$, 3.45 $\mu g/m^3$, 1.96 $\mu g/m^3$ and 0.31 $\mu g/m^3$ with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- PP has submitted revised list of plant species to be planted.
- Remodelling of risk assessment, considering storage capacity.
- PP shall ensure that location of the storage tanks should be decided in such a way that impact of the risk under abnormal conditions/ worst case scenario shall remain within the plant boundary level. Further, all the safety measures shall be taken and permission from the PESO shall be obtained before construction of plant.
- Revised process flow diagram of ETP comprising RO has been submitted. Treated effluent will be recycled back in process and cooling tower make up.

S.N.	Description	Amount in Rs. (Cr,)
1	Development of Kukur Bhuka Village roads 1km, Potable drinking water facility in nearby village Jawahar Navodaya Vidyalaya, Buxar, R L S Y High School, Ranvirpur - 25 Lakhs	0.80
2	Installation of solar panels (30 nos.) in village- Amirpur Near Village, Farid Hospital, Rampur and Primary	0.50

	Hospital.	
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 Farid Hospital, Rampur.	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 village- Jawahar Navodaya Vidyalaya, Buxar, R L S Y High School, Ranvirpur.	0.45
5	Awareness program for farmers for increase in productivity of soil.	0.25
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). Tree shall not be cut without prior permission of Forest Department.

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

(v). NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the distillery activities, State Pollution Control Board 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 600 m^3/day, which will be sourced 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.

(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 with a stack height of 60 meters will be installed with the Rice Husk/coal fired 50 TPH boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to

achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(ix). Boiler ash (57.4 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use Rice Husk/coal as fuel. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises.

(x). CO_2 (98 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(xi). PP shall allocate at least Rs. 0.5 Crore/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). PP shall ensure that location of the storage tanks should be decided in such a way that impact of the risk under abnormal conditions/ worst case scenario shall remain within the plant boundary level. Further, all the safety measures shall be taken and permission from the PESO shall be obtained before construction of plantThe 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.

(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 has already been developed in 2.0 hectares i.e., 33 % of total project area shall be maintained 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. Thick green belt shall be developed between the plant boundary and parking area. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop atleast 20 variety of species as a part of greenbelt.

(xvii). 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.

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

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

plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

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

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

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

Agenda No. 06

Expansion of Grain based Distillery from 60 KLPD to 285 KLPD along with Cogeneration Power plant from 3 MW to 10 MW under Ethanol Blending Programme at Village Mahanad, Block Polba-Dadpur, District Hoogly, West Bengal by M/s. Alpine Distilleries Private Limited – Consideration of Environmental Clearance.

[IA/WB/IND2/423164/2023, J-11011/227/2012-IA-II(I)]

The Project Proponent and the accredited Consultant J.M. EnviroNet Pvt Ltd. (NABET certificate no. NABET/EIA/2023/SA 0172 and validity till 7th

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 Grain based Distillery from 60 KLPD to 285 KLPD along with Cogeneration Power plant from 3 MW to 10 MW under Ethanol Blending Programme at Village Mahanad, Block Polba-Dadpur, District Hoogly, West Bengal by M/s. Alpine Distilleries Private Limited.

As per the MoEF&CC, Notification number S.O. 345(E), dated 17th January, 2019, notification number S.O. 750(E), dated 17th February, 2020, S.O. 980 (E) dated 02nd March, 2021 & S.O. 2339(E), dated 16th June, 2021 a special provision in the EIA Notification, 2006 (Schedule 5 (g)), a special provision in the EIA Notification, 2006-(Schedule 5(g)) "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."

M/s. Alpine Distilleries Private Limited is proposing Expansion of Grain based Distillery from 60 KLPD to 285 KLPD & Co-Generation Power Plant from 3.0 to 10.0 MW at Village Mahanad, Block Polba-Dadpur, District Hoogly, West Bengal to contribute in the Ethanol blending programme of Government of India. The existing plant area is 11.12 acres (4.5 ha); additional area required for expansion is 11.88 acres (4.81 ha) which is already under the possession of the company, hence after expansion, the total plant area will be 23 acres (9.31 ha). Out of the total land area of 23 acres (9.31 ha), 15.3 acres (6.19 ha) is already converted for industrial use as per conversion orders from Office of The Additional District Magistrate & District Land And Land Reformation Officer, Hooghly Government of West Bengal and for remaining 7.7 acres (3.11 ha) land, application for land use conversion has been submitted to Land & Land Reforms And Refugee Relief & Rehabilitation Department, Government of

West Bengal vide Application No. CONV2021060200331 dated 04.09.2021 & under process

The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by product	Existing Production capacity	Additional Production capacity	Total production capacity
1	Distillery (Grain - broken rice, maize, barley & sorghum) based)	Existing: RS /ENA Additional: Ethanol	60 KLPD RS/ENA	225 KLPD Ethanol only	285 KLPD
3.	Co-generation power plant for distillery	Power	3.0 MW	7.0 MW	10.0 MW
3	DWGS Dryer	DDGS	25 TPD	99 TPD	124 TPD
4	Fermentation unit	Carbon di-oxide	50 TPD	173 TPD	223 D

Ministry has issued Environmental Clearance to the existing industry for Grain based Distillery (60 KLPD) along with Co-generation Power Plant (3.0 MW) at Village Mahanad, Block Polba-Dadpur, District Hoogly, West Bengal vide letter no. J-11011/227/2012- IA II (I) dated 23rd February, 2015. Certified compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Kolkata vide File no. 102-483/ 13/ EPE dated 11.03.2023. IRO has clarified that site visit was conducted on 24.02.2023. No non compliance was observed during the visit. The Committee was satisfied with the response of PP.

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

Total plant area after expansion will be 9.31 ha (existing plant area 4.5 Hectares and additional land required 4.81 Hectares for proposed capacity). Out of the total plant area, 3.08 ha i.e., 33 % of total plant area will be developed under greenbelt & plantation in and around plant premises. The estimated cost of the proposed Expansion project is Rs. 225.0 Crores. Capital cost of EMP would be Rs. 25.0Crores and recurring cost for EMP would be Rs. 2.5Crores per annum. Industry proposes to allocate Rs. 2.25Crores towards Extended EMP (Social developmental activities). Total Employment after expansion will be 443persons as direct.

There are no National Parks, Reserved Forests (RF) / Protected Forests (PF), Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km radius. Water bodies: Kunti Nadi is at a distance of 3.0 km in SSW direction, Kana Nadi is at a distance of 3.5 km in East direction &Kedarmati Nadi is at a distance of 5.5 km in SSE direction within 10 km study area.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 0.358 µg/m3, 0.143 µg/m3, 0.608 µg/m3 and 0.716 µg/m3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement after expansion will be 1292CMD (Existing 368 CMD & proposed 924 CMD for proposed Ethanol plant) which will be met from ground water. The Committee asked to restrict the fresh water requirement at the tune of 4 KL per KL of alcohol produced i.e. 1140 KLPD. NOC has been obtained from Office of the Geologist, Geological Sub-Division II C Chinsurah-Hooghly, West Bengal for abstraction of 560 KLPD ground water through Permit No. P071400200000038902TME dated 24/10/2013, Permit No. P071400200000039503TME dated

24/11/2013 and Permit No. P7140010000000011105TME dated 22/12/2010 respectively. The company has also submitted application to State Water Investigation Directorate (SWID) vide AIN 0133251230200024 dated 16.03.2023, AIN 0133251230200028, AIN 0133251230200029, AIN 0133251230200030 & AIN 0133251230200031 dated 20.03.2023 for 1500 KLPD Ground Water abstraction & is under process. Existing effluent generation is 114CMD which is treated through Condensate Polishing Unit /Effluent Treatment Plant of capacity 240CMD. Proposed effluent generation (Process Condensate 934 CMD, CT blowdown 20 CMD, DM plant reject & washing 110 CMD, Boiler blow-down 29 CMD) will be 1093CMD which will be treated through additional Condensate Polishing Unit /Effluent Treatment Plant of capacity 1300 CMD. Raw stillage (proposed 1309 TPD) will be sent to decanter followed by MEE and dryer to produce DDGS. Domestic waste water will be treated in STP of capacity 20 KLPD. The plant is being/will be based on Zero Effluent discharge system and treated effluent/ water is being/will not be discharged outside factory premises.

Total power requirement after expansion will be 10.0 MW which will be sourced from 10.0 MW Co-generation power plant. Existing distillery has 25TPHcoal fired boiler.55 TPH Biomass/ Rice husk fired (along with 15% coal as auxiliary fuel) boiler will be installed as a part of the expansion project. APCE ESPwith a stack height of 40 m is installed with the existing boiler for controlling the particulate emission within the statutory limit. APCE ESP with stack height of 60m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/Nm3 for the proposed boiler. Biomass alongwith 15 % coal as auxiliary fuel will be used in the boiler. Industry has existing 1x1000 KVA DG set & proposed 1x1000 KVA DG set will be used as power backup during power failure and stack height (7.0 m) will be provided as per CPCB norms to the proposed DG set.

Details of Process emissions generation and its management:

- APCE ESP with a stack height of 40 m is installed with the existing 25 TPH Coal fired boiler for controlling the particulate emissions within the statutory limit. APCE ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 30 mg/$Nm^3$for the proposed 55 TPH Biomass/Rice husk fired (along with 15% coal as auxiliary fuel) boiler.
- Online Continuous Emission Monitoring System is being/will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO2 (223TPD) generated during the fermentation process is being/will be collected and sold to authorized vendors as per local demand.

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

- DDGS (Distilled Dried Grains Stillage) (124 TPD) is being/will be sold as cattle feed.
- Boiler ash (105 TPD) generated from the boiler will be supplied to brick/cement manufacturers in covered vehicles.
- Used oil & grease (0.5 Kilolitres per annum) is being/ will be sold to authorized recyclers.
- ETP/CPU sludge (1.54 TPD) and STP Sludge (0.01 TPD) 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 expanded capacity of 225 KLPD will be used for manufacturing fuel ethanol only.

Capital cost and recurring cost of EMP are given below:

S. No.	Description		Capital Cost (Crores)	Recurring Cost/annum (Crores)
1.	Air Pollution management	Boiler stack + ESP	8.0	0.8
2.	Effluent	ZLD System -	13	1.3

	Treatment	Condensate polishing unit /WWTP and STP		
3.	Environment monitoring	Lab instrument, Online monitoring System, Third party monitoring, audit	1	0.1
4.	Solid waste management	Ash handling & management	2	0.25
5.	Greenbelt &plantation development	Plantation for greenbelt	0.5	0.05
6.	Rain water harvesting	Required infrastructure	0.5	-
	Total		**25**	**2.5**

Details of CER with proposed activities and budgetary allocation:

Proposed Activities	**Proposed budget in 1st Year**	**Proposed budget in 2nd Year**	**Total Expenditure (lakhs)**
Education - Infrastructure development in Govt schools & classroom development, Provision of digital education in school & laptop distribution, sanitation facilities, safe drinking water etc.	Rs. 39.5 lakhs (High School in Village Mahanad) (6 nos of water purifiers-Rs. 1.2 lakhs, 8 nos. of sanitized toilets Rs 16 Lakhs, Solar panel installation Rs. 15 lakhs, Rs. 7.3 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, water bottles, sports equipments, etc)	Rs. 39.5 lakhs (Govt school in Village Sitle) (6 nos of water purifiers-Rs. 1.2 lakhs, 8 nos. of sanitized toilets Rs 16 Lakhs, Solar panel installation Rs. 15 lakhs, Rs. 7.3 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, water bottles, sports equipments, etc)	Rs. 79.0
Health facilities- Distribution of medical instruments, oxygen cylinders to	Rs 23 lakhs (PHC in Village Dakshinpara) (Rs. 9 Lakhs for medical	Rs 23 lakhs (PHC in Village Sitle) (Rs. 9 Lakhs for medical instruments	Rs. 46.0 Lakhs

nearby health centre and hospitals	instruments &Rs. 14 Lakhs for oxygen cylinders)	&Rs. 14 Lakhs for oxygen cylinders)	
Skill Development - Establishment of Skill Development centre for Youth & organising Training programmes for youth/residents	Rs 11 lakhs (Village Sitle- Benefits to be extended to 100 persons)	Rs 11 lakhs (Village -Mahanad Benefits to be extended to 100 persons)	Rs. 22.0 Lakhs
Infrastructure development- Solar street light installation along with road &Panchayatbhavan, rainwater harvesting system & avenue plantations, village road repair, etc	Rs 9 lakhs (45 nos. of Solar street light for Village Mahanad)	Rs 9 lakhs (45 nos. of Solar street lights for Village Sitle)	Rs. 78.0 Lakhs
	Rs 15 lakhs (Village Sitle 1 no. RWH pond)	Rs 15 lakhs (Village Sitle 1 no. RWH Mahanad)	
	Rs 15 lakhs (Avenue plantation of 2,000 saplings in Village Mahanad)	Rs 15 lakhs (Avenue plantation of 2,000 saplings in Village Sitle)	
TOTAL			**Rs.225 Lakhs**

During deliberations, EAC discussed following issues:

- PP undertakes that they will not cut any trees present within the plant premises.
- Out of the total plant area, 3.08 ha i.e., 33 % of total plant area will be developed under greenbelt & plantation in and around plant premises which will be achieved within one year. Local species like Neem (*Azadirachta indica*), Ashok (*Saraca asoka*), Bahera (*Terminalia bellirica*), Mango (*Mangifera indica*), Arjun (*Terminalia arjuna)*, Pipal (*Ficus religiosa*), Kadam (*Authocephalus cadamba*), Shaora (*Streblus asper Lour*), Shisham (*Dalbergia sisoo*), Moringa *(Moringa oleifera Lam*), Dumur (*Ficus racemose*), Amla (*Phyllanthus emblica*), Bhawarmal (*Hymenodictyon orixense*), Banyan Tree (*Ficus benghalensis*), *Indian Beech Tree (Pongamia pinnata),*

Mahogany (Swietenia mahagoni) etc. will be planted as greenbelt inside the plant premises. Action plan for the same has been submitted**.**

- The company has increased the socio economic development activities budget from Rs 2.25 Crores to Rs 3.0 Crores which will be spent in nearby areas within the commissioning of the plant. Revised plan for the same is submitted**.**
- The company will increase provision of solar power within plant and to the nearby areas from 10% to 15% of total power consumption of the unit in form of solar lights/solar panels/solar gadgets/solar plant etc. as a part of socio economic developmental activities.
- The company will install filter press for sludge management.
- PP undertakes that the alcohol storage section will remain the same as depicted in the plant layout & storage tank sizes will not be changed as per the Risk Assessment Plan submitted. The company will follow all the recommendations for risk mitigation as per the EMP report submitted. Risk Assessment Plan already submitted.
- PP submitted the revised CER plan

REVISED CER PLAN WITH PROPOSED ACTIVITIES AND BUDGETARY ALLOCATION

Proposed Activities	**Proposed budget in 1st Year**	**Proposed budget in 2nd Year**	**Total Expenditure (lakhs)**
Education - Infrastructure development in Govt schools & classroom development, Provision of digital education in school & laptop distribution, sanitation facilities, safe drinking water etc.	Rs. 39.5 lakhs (High School in Village Mahanad) (6 nos of water purifiers-Rs. 1.2 lakhs, 8 nos. of sanitized toilets Rs 16 Lakhs, Solar panel installation Rs. 15 lakhs, Rs. 7.3 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, water	Rs. 39.5 lakhs (Govt school in Village Sitala) (6 nos of water purifiers-Rs. 1.2 lakhs, 8 nos. of sanitized toilets Rs 16 Lakhs, Solar panel installation Rs. 15 lakhs, Rs. 7.3 lakhs for desktop computers, projectors, Interactive White Boards and distributing study materials, school bags, water bottles, sports equipments,	Rs. 79.0

	bottles, sports equipments, etc)	etc)	
Health facilities- Distribution of medical instruments, oxygen cylinders to nearby health centre and hospitals	Rs 23 lakhs (PHC in Village Dakshinpara) (Rs. 9 Lakhs for medical instruments &Rs. 14 Lakhs for oxygen cylinders)	Rs 23 lakhs (PHC in Village Sitala) (Rs. 9 Lakhs for medical instruments &Rs. 14 Lakhs for oxygen cylinders)	Rs. 46.0 Lakhs
Skill Development - Establishment of Skill Development centre for Youth & organising Training programmes for youth/residents	Rs 15 lakhs (Village Sitala - Benefits to be extended to 80 persons)	Rs 15 lakhs (Village -Mahanad Benefits to be extended to 80 persons)	Rs. 30.0 Lakhs
Infrastructure development- Solar street light installation along with road &Panchayat bhavan, rainwater harvesting system & avenue plantations, village road repair, etc	Rs 18 lakhs (90 nos. of Solar street light for Village Mahanad, Meghsar)	Rs 18 lakhs (90 nos. of Solar street lights for Village Sitala, Nagarpara)	Rs. 145.0 Lakhs
	Rs 30 lakhs (Village Sitala 2 no. RWH pond)	Rs 30 lakhs (Village Mahanad 2 no. RWH)	
	Rs 25 lakhs (Avenue plantation of 5,000 saplings in Village Mahanad)	Rs 24 lakhs (Avenue plantation of 4,800 saplings in Village Sitala)	
TOTAL			**Rs. 300 Lakhs**

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 additional capacity of 225 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 distillery activities, State Pollution Control Board shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total fresh water requirement shall not exceed 1140 m^3/day, which will be sourced 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). 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 with a stack height of 40 meters is installed with the existing coal fired 25 TPH boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. ESP with a stack height of 60 meters is installed with the proposed (biomass and 15% coal) fired TPH boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm3. Biomass alongwith 15 % coal as auxiliary fuel will be used in the boiler. SO2 and NOx emissions shall be less than 100 mg/Nm^3. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.

(viii). Boiler ash (105 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use biomass as main fuel and 15 % coal as auxiliary fuel in the boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises.

(ix). CO_2 (223 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(x). PP shall allocate at least Rs. 0.5 Crore/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 has already been developed in 3.08 hectares i.e., 33 % of total project area shall be maintained 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. Thick green belt shall be developed between the plant boundary and parking area. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop atleast 20 variety of species as a part of greenbelt.

(xvi). PP proposed to allocate Rs. 3.0 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. 07

Greenfield Project of 65 KLD Grain Based Ethanol Plant along with 1.1 MW Co-generation Power Plant located at Khewat no. 05 & 06, Khata No. 108 & 105, Khasra No. 917/857/562 & 935/857/562, Village- Madoon, Tehsil- Rajpura, District- Samba, State- Jammu & Kashmir by M/s Brij Agrochem Industries Private Limited – Consideration of Environmental Clearance.

[IA/JK/IND2/423300/2023,IA-J-11011/138/2023-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 65 KLPD Grain Based Ethanol Plant along with 1..1 MW Co-generation Power Plant located at Khewat no. 05 & 06, Khata No. 108 & 105, Khasra No. 917/857/562 & 935/857/562, Village- Madoon, Tehsil-Rajpura, District- Samba, State- Jammu & Kashmir, 184121 by Brij Agrochem Industries Private Limited.

As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provision in the EIA Notification, 2006-(Schedule 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	65 KLPD
2	Co-generation power plant	Power	1.1 MW
3	DWGS dryer	DDGS	26 TPD
4	Fermentation unit	Carbon di-oxide	25 TPD

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

Total land area required is 4.42 hectares. Greenbelt will be developed in total area of 1.46 hectares i.e., 33% of total project area. The estimated project cost is INR Rs. 93.90 Crores. Capital cost of EMP would be INR Rs. 14.59 Cr. and recurring cost for EMP would be INR Rs. 3.90 Crores per annum. Industry proposes to allocate Rs. 0.94 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 135 persons as direct & indirect.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Ban Forest is at a distance of 7.8 km (N). Ujh Canal, Bein River and Basantar River is at a distance of 2.6 km (W), 5.2 km (E) and 9.5 km (NW) respectively. Bharbhari Nala is at a distance of 0.2 km in West direction from the project site for which NOC has been obtained from the Office of the Chief Engineer (I &FC) department, Jammu, vide letter no-IFCJ/Works/24921-23 dated 25.03.2023 subject to verification of the land by Revenue Department with regard to gair mumkin darya, Gair mumkin nallah, Khad etc. I & FC Department also mentioned that nallah namelt Bhabari is passing at a distance of 200 m from the proposed site. As such site is free from flood prone area and there is no history of flood in last 30 years.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.63µg/m^3, 0.42µg/m^3, 1.19 µg/m^3, 0.61

μg/m^3 and 0.38 μg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement including CPP, domestic etc. will be 260 KLD which will be met from Ground Water Supply. Application has been submitted to the Chief Engineer PHE Department, Jammu dated 18.02.2023. Effluent (Condensate/spent lees/blowdown etc.) of 244 KLD quantity will be treated through Condensate Polishing Unit/Effluent Treatment Plant of capacity 300 KLD. Raw stillage quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. 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.

Total Power Requirement is 1.5 MW. 1.1 MW of power requirements will be fulfilled by 1.1 MW Co-generation Power Plant and remaining 0.4 MW will be fulfilled from local grid supply. 15 % of power requirement will be met through solar plant. 12 TPH Coal and Rice Husk fired boiler will be installed. ESP with stack height of 40 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boiler. 530 kVA DG set will be used as standby during power failure and stack height (10 mtr) 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 40 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO_2 (25 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in installed bottling plant.

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

- DDGS (Distilled Dried Grains Stillage) (9300 TPA) will be sold as cattle feed/fish feed/ prawn feed.
- Boiler ash (8,750 TPA) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises of

capacity approx. 1.85 Cr. bricks per annum.

- Used oil (1.0 Kilolitres per annum) will be sold to authorized recyclers.
- CPU sludge (69.8 TPA) and STP Sludge will be used as manure.

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 160 KL/day will be used for manufacturing fuel ethanol only.

Total land 4.42 ha is under possession of the Company and land use conversion has been completed vide letter No. 16/DCS/CLU of 2022 dated 30.03.2022, 07/DCS/CLU dated 31.05.2022 of 2022.

Capital cost and recurring cost of EMP are given below:

S. No	Particulars	CapitalCost (INRCr.)	Annual Recurring (INRCr.)
1.	Airpollution control system ESP on stack of 12TPH boiler, Stack, Industrial vacuum cleaner, road	3	1.25
2.	Ambient air quality management system (AAQMS)and Continuous emission monitoring system(CEMS)	0.70	0.20
3.	Scrubbing system, compressing system, liquefying System and storage for CO_2 removal.	3.2	0.50
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	2	0.50
5.	Condensate Polishing unit for water treatment and recycle,STP	2	0.75
6.	Rain water harvesting systems	0.50	0.15
7.	Occupational Health Management	0.5	0.15
8.	Noise Reduction Systems	0.5	0.05
9.	GreenBelt Development	0.75	0.10
10.	Environment monitoring	---	0.20
11.	Environment management cell	0.5	0.05

12.	CER	0.94	---
Total		**14.59**	**3.90**

Details of CER with proposed activities and budgetary allocation:

S.	Description	Value in INR (Cr)
1.	Development of Village roads (0.2 km) Upgradation of drinking water facility by Installation of RO and water Purifier in nearby villages Madoon, Samba (Jammu & Kashmir)	0.49
2.	Installation of solar panels (30 nos.) in villages – Madoon, Samba, Jammu & Kashmir	0.15
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 hospitals of Madoon, Samba, Jammu & Kashmir	0.10
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 villages – Madoon, Samba, Jammu & Kashmir.	0.10
5.	Awareness Programs (10 nos.) for local farmers to increase soil productivity	0.10
Total		**0.94**

During deliberations, EAC discussed following issues:

- NOC has been obtained from the Office of the Chief Engineer (I &FC) department, Jammu, vide letter no-IFCJ/Works/24921-23 dated 25.03.2023 subject to verification of the land by Revenue Department with regard to gair mumkin darya, Gair mumkin nallah, Khad etc. I & FC Department also mentioned that nallah namelt Bhabari is passing at a distance of 200 m from the proposed site.

As such site is free from flood prone area and there is no history of flood in last 30 years.

- PP clarified that proposed site is free from gair mumkin darya/nallah etc. Further PP explained that revenue department has issued CLU means the proposed site is free from gair mumkin darya/nallah etc. PP has obtained CLU permission from the Government of Jamu and Kashmir to use the land for industrial purpose. CLU has been obtained vide CLU order no. 16/DCS/CLU of 2022 dated 30.06.2022, 7/DCS/CLU of 2022 dated 31.05.2022.
- PP informed that an amount of 1.5 Cr has been earmarked for Corporate Environment Responsibility.
- PP informed that they have increased the no. Of tree species for greenbelt from 12 to 19.
- 15% of power requirement will be met through solar energy.
- PP informed that they have applied for obtaining NOC from CGWA
- They will install Electro Static Precipitator (ESP) with boiler stack to control the particulate and gaseous emissions.
- PP has carried out revised AAQ modelling study for point source emissions (boiler and DG set) indicates that the maximum incremental GLCs after the proposed project would be 0.35 $\mu g/m^3$, 0.14 $\mu g/m^3$, 0.19 $\mu g/m^3$, 0,42 $\mu g/m^3$ and 0.66 $\mu g/m^3$ with respect to PM_{10}, $PM_{2.5}$, SO_2, NO_2 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- PP has submitted revised list of plant species to be planted.
- Remodelling of risk assessment, considering storage capacity.
- PP shall ensure that location of the storage tanks should be decided in such a way that impact of the risk under abnormal conditions/ worst case scenario shall remain within the plant boundary level. Further, all the safety measures shall be taken and permission from the PESO shall be obtained before construction of plant.
- Revised process flow diagram of ETP comprising RO has been submitted. Treated effluent will be recycled back in process and cooling tower make up.

S.N.	Description	Amount in Rs. (Cr,)

1	a. Development of Village roads (0.2 km) b. Upgradation of drinking water facility by Installation of RO and water Purifier in nearby villages Madoon, Samba (Jammu & Kashmir)	0.60
2	Installation of solar panels (30 nos.) in villages – Madoon, Samba, Jammu & Kashmir	0.30
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 hospitals of Madoon, Samba, Jammu & Kashmir	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 villages – Madoon, Samba, Jammu & Kashmir.	0.2
5	Awareness Programs (10 nos.) for local farmers to increase soil productivity	0.20
Total		1.5

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 65 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 distillery activities, State Pollution Control Board shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

(v). Total fresh water requirement shall not exceed 260 m^3/day, which will be sourced 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). 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 with a stack height of 40 meters will be installed with the Rice Husk/coal fired 12 TPH boiler for controlling the particulate emissions within the statutory limit of 30 mg/Nm^3. SO_2 and NOx

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

(viii). Boiler ash (25 TPD) will be used for brick manufacturing in proposed brick manufacturing plant inside plant premises. PP shall use Rice Husk/coal as fuel. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 15% of the total power requirement from solar power by generating power inside plant premises.

(ix). CO_2 (25 TPD) generated during the fermentation process will be collected by utilizing CO_2 scrubbers and it shall be sold to authorized vendors/collected in proposed bottling plant.

(x). PP shall allocate at least Rs. 0.25 Crore/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

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

(xii). PP shall ensure that location of the storage tanks should be decided in such a way that impact of the risk under abnormal conditions/ worst case scenario shall remain within the plant boundary level. Further, all the safety measures shall be taken and permission from the PESO shall be obtained before construction of plant. 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.

(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 has already been developed in 1.46 hectares i.e., 33 % of total project area shall be maintained 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. Thick green belt shall be developed between the plant boundary and parking area. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop atleast 20 variety of species as a part of greenbelt.

(xvi). PP proposed to allocate Rs. 1.5 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. 08

Proposed 500 KLPD Grain based Ethanol Plant along with 7.5 MW Cogeneration Power Plant at Village Karimganj, Tehsil Shahabad, District Rampur, Uttar Pradesh by M/s. Ajudhia Biofuels Private Limited – Consideration of Environmental Clearance.

[IA/UP/IND2/421967/2023,J-11011/227/2012-IA-II(I)]

The Project Proponent and the accredited Consultant J.M. EnviroNet Pvt. Ltd. (NABET certificate no. NABET/EIA/2023/SA 0172 and validity till 7th 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 proposed 500 KLPD Grain Based Ethanol Plant along with 7.5 MW Co-generation Power Plant at Village Karimganj, Tehsil Shahabad, District Rampur, Uttar Pradesh by M/s. Ajudhia Biofuels Private Limited.

Total land area required for setting up of proposed project is 10.65 hectares. Further, EAC also noted that PP has acquired 10.65 ha land from adjacent unit by executing lease agreement. However, lease agreement has been executed for 10 years only. As per the current practices, registered lease agreement is required for atleast 20 years.

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

ANNEXURE

GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE

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

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

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

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

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

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

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

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

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

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

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

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

S. No.	Name and Address	Position
1.	Shri S. C. Mann	Chairman
2.	Dr. J. S. Sharma	Member
3.	Prof. Y. V. Rami Reddy	Member
4.	Dr. Onkar Nath Tiwari	Member
5.	Shri. J.S. Kamyotra	Member
6.	Dr. Rahul Rameshrao Mungikar	Member
7.	Dr. Sanjay V. Patil (VSI)	Member
8.	Dr. Seshagiri Rao Ambati (5.04.2023)	Member
9.	Shri A. N. Singh, Scientist 'E'	Member Secretary
MoEFCC		
10.	Dr. Mahendra Phulwaria	Scientist 'C'
11.	Mr. Kanaka Teja	Research Assistant

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