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

Dated: 23.12.2021

MINUTES OF THE 46th MEETING OF THE EXPERT APPRAISAL COMMITTEE (INDUSTRY-2 SECTOR PROJECTS) HELD ON <u>13th – 14th December, 2021</u>

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 45^{th} Meeting of the EAC (Industry-2) held during $29^{\text{th}} - 30^{\text{th}}$ November, 2021 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.

The proposal No. IA/HR/IND2/220613/2018, entitled "Panipat Refinery Capacity Expansion from Existing 15 MMTPA to 25 MMTPA within the Existing Refinery Complex by M/S. Indian Oil Corporation Limited (IOCL) located at PR 42-128, Baholi Village, Panipat District, Haryana" was considered by the EAC in its 42nd meeting held on 20-22nd October, 2021. The EAC, after detailed deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions.

The specific condition no. (iii) Mentioned in MoM that is "The treated effluent of 4.2 KLPH shall be sent for deep sea discharge through diffuser recommended by NIO". However, this condition is not relevant to Panipat Refinery. This matter has been deliberated in the EAC. EAC has agreed to remove this condition.

Details of the proposals considered during the meeting **conducted through Video Conferencing (VC)**, deliberations made and the

recommendations of the Committee are explained in the respective agenda items as under: -

13th December, 2021 (Monday)

Agenda No. 46.1

Proposed 300 KLPD Grain based Ethanol Plant along with 6.0 MW Cogeneration Power Plant at Village Chandrao, Tehsil Indri, District Karnal, Haryana by M/s. RSLD Biofuels Private Limited-Consideration of Environment Clearance- Consideration of Environment Clearance.

[IA/HR/IND2/239468/2021, J-11011/480/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s J.M. EnviroNet Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed 300 KLPD Grain based Ethanol Plant along with 6.0 MW Cogeneration Power Plant at Village Chandrao, Tehsil Indri, District Karnal, Haryana by M/s. RSLD Biofuels Private Limited.

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

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

Unit	Capacity	Product
Grain Based Ethanol Plant	300 KLPD	Product: Ethanol (Bio-fuel) By-product: DDGS &CO ₂
Co-generation Power Plant	6.0 MW	Power

The details of products and capacity are as under:

Total project area is 5.21 hectares (52100 m2) for installation of Ethanol plant. Industry will develop greenbelt in an area of 33% i.e.,1.72 ha (17200 m^2) out of total area of the project.

The estimated project cost is Rs.100 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 9.10 Crores and the Recurring cost (operation and maintenance) will be about Rs. 0.92 Crores / annum. No. of working days will be 350 days/annum. Total Employment will be 150 persons (Permanent 120 & Temporary 30) during operation phase. Industry proposes to allocate Rs. 1.0 Crore (1%of total project cost) towards Corporate Environmental Responsibility.

There are no National Parks, Wildlife Sanctuaries, Reserved Forests (RF)/ Protected Forests (PF), Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius. Nala/Drain – Dhanaura Escape (Adjacent in West direction), Shekhpura Drain (4.0 km in WNW direction), Hanauri Drain (6.0 km in WSW direction), Khurdban Drain (6.5 km in NNW direction) Khera Drain (7.5 km in WSW direction), Rakshi Nala (~8.5 km in NNW direction); Canal – Augmentation Canal (2.5 km in NW direction), Murad Nagar Drain Canal (4.5 km in WNW direction), Western Yamuna Canal (~6.5 km in NW direction); River-Purani Nadi (1.5 km in East direction), Yamuna River (3.0 km in SE direction), Budhi Nadi (~6.0 km in East direction)are the water bodies which lies within 10 km radius.

Total fresh water requirement will be 1200 KLPD (1180 KLPD Process & 20 KLPD Domestic) which will be sourced from Groundwater. Effluent of 1695 KLPD will be treated through state of art CPU/Effluent Treatment Plant of 1800 KLPD capacity. The plant will be based on Zero Liquid Discharge system.

Power requirement for Ethanol plant will be 6.0 MW, which will be sourced from the 6.0 MW Co-generation Power Plant. Unit will be having D.G. Sets of 2 x 1000 KVA which will be used as standby during power failure. Adequate Stack height (6.5 m) will be provided as per CPCB norms. Boiler of 50 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 72 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm³.

Details of process emissions generation and its management:

CO2 (235 TPD) generated during the fermentation process will be collected and sold to authorized vendors.

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

• Solid waste from the Grain based operations generally comprises of fibres and proteins in the form of DDGS (135 TPD), which will be ideally

used as Cattle, poultry & fish feed ingredients.

• Ash (64 TPD) from proposed boiler to be transferred in covered vehicles to the nearby brick/cement manufacturers.

• Used oil (1.0 KL/annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 300 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations EAC directed PP to submit an undertaking for the following commitments:

- Land is in the possession of the company and Land use conversion is not required as the area does not fall within the limits of Urban Area & Controlled Area.
- Brick manufacturing plant shall be installed for utilization of fly ash.
- Industry shall install solar power of at least 10% capacity of the total power requirement of the company in nearby villages.

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

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

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

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

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

- (i). As per OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 300 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iv). Total fresh water requirement shall not exceed 1200 KLPD which will be sourced from Groundwater. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. As proposed, rainwater to the tune of 18347 cum/annum will be collected in tanks and utilized in various plant activities.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing plant shall be installed for utilization of fly ash.
- (vi). CO2 plant will be installed to capture CO2 generated during fermentation process.
- (vii). PP proposed to allocate Rs. 40 Lakhs/annum for occupational health safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the

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

- (viii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (ix). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (x). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xi). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xii). The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Development of greenbelt shall be completed along with commissioning of the project.
- (xiii). PP proposed to allocate Rs. 1.00 Crores for improving infrastructure in the public schools nearby. All the proposed activities under CER shall be completed within 2 years.
- (xiv). There shall be at least 15% space of total project area inside the plant premises earmarked for parking of vehicles for raw materials and finished products as per CPCB norms and no parking to be allowed outside on public places.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

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

Agenda No. 46.2

Expansion of Sugar Factory from 10,000 to 15,000 TCD, Cogen from 32 to 52 MW & Distillery from 80 to 300 KLP, Satara, Maharashtra by M/s Jarandeshwar Sugar Mills Pvt. Ltd.-Consideration of Environment Clearance.

[IA/MH/IND2/238182/2021, J-11011/8/2000-IA II(I)]

The Project Proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed expansion of of Sugar Factory from 10,000 to 15,000 TCD, Cogen from 32 to 52 MW & Distillery from 80 to 300 KLPD, Satara, Maharashtra by M/s Jarandeshwar Sugar Mills Pvt. Ltd.

The proposed expansion of Sugar Factory, Cogeneration Plant are listed at activity 5(j) and 1(d) under 'Category B' and all molasses based distillery >100 KLPD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A". As the Sugar, Cogen & Distillery projects are located in same premises as an integrated project complex, the entire proposal of expansion of Sugar, Cogen and Distillery is appraised at Central Level by Expert Appraisal Committee (EAC).

The Standard ToR has been issued by Ministry vide letter No. J-11011/299/2021-IA-II (I) dated 24th August, 2021 for Expansion of Sugar Factory from 10,000 TCD to 15,000 TCD, Cogeneration from 32 MW to 52 MW & Distillery from 80 KLPD to 300 KLPD. Public hearing for proposed expansion project was conducted at project premises on 30.09.2021 presided by Additional District Magistrate, Satara.

SEIAA, Maharashtra has issued EC earlier vide letter no. SEIAA-EC-0000000250 dated 26.04.2018 for existing 10,000 TCD Sugar Factory & 32 MW Cogeneration plant & EC vide no. SIA/MH/IND2/53002/2019 dated 26.06.2020 to the existing 80 KLPD Distillery unit in favor of M/s Jarandeshwar Sugar Mills Pvt. Ltd.

Certified compliance report has been issued by submitted by IRO, MoEF&CC, Nagpur vide letter No EC- 1113 /RON/2020-NGP/8800 dated

01.11.2021. ATR has been submitted by the Industry to IRO vide letter dated 16.11.2021.

Industrial unit	Product& By-	llaM	Quantity			
	product	UoM	Existing	Expansion	Total	
	Sugar	MT/D	1200	600	1800	
	By-Product					
Sugar Factory	Bagasse	MT/D	2800	1400	4200	
	Press Mud	MT/D	400	200	600	
	Molasses	MT/D	400	200	600	
Co-gen Plant	Power Generation	MW	32	20	52	
Distillery Unit	Rectified Spirit/ ENA/ Ethanol/ Absolute Alcohol (AA)	KLPD	80	220	300	
	By-product					
	Fusel Oil	MT/D	5	15	20	
	CO ₂	MT/D	60	170	230	

The details of products and capacity are as under:

Total plot land area is 8,12,633.29 M². Existing Sugar Factory, Cogeneration Plant & Distillery Built- up is 1,63,036.13 M², additional built up for proposed Sugar Factory, Cogeneration Plant & Distillery expansion is 12,920.29 M². Industry has already developed Green Belt in an area of 3,02,323 M² (37% out of total plot area). Moreover, additional Green Belt area of 16,253 M² (2% out of total plot area will be developed). After establishment of distillery, the total Green Belt area would be 3,18,576 M² which accounts for 39% of total plot area.

The estimated project cost is Rs.537.438 Crores including existing investment of Rs. 358.95 Crores. The distillery will be operated for 330 days. Total capital cost earmarked towards environmental pollution control measures under expansion project will be Rs. 14.45 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.30 Crores per annum. Total Employment will be 867 persons as direct & indirect persons after expansion. Industry proposes to allocate Rs.1.5 Crores @ of 0.84% towards Corporate Environmental Responsibility.

There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 Km Study Area. River Tilganga is flowing at 4.5 Km (NW) & Vasana River at 8.7 Km (W).

Ambient air quality monitoring was carried out at 8 locations during January to March 2019 and baseline data indicates that ranges of concentrations of PM_{10} (50.0–67.1 µg/m³), $PM_{2.5}$ (14.8–29.7 µg/m³), SO_2 (14.8–29.7 µg/m³), NOx (20.2–35.4µg/m³) and CO (0.01-0.9 ppm) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the expansion project would

be 0.22 μ g/m³ PM₁₀ (towards East), 0.55 μ g/m³ PM_{2.5} (towards East), 1.38 SO₂ μ g/m³ (towards East) and 0.83 μ g/m³ NO_x (towards East). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement after Expansion of Sugar Factory, Co-generation Plant & Distillery project will be 10,605 M³/Day. Out of which 639 M³/Day will be fresh water taken from Tilganga River. The total effluent generated from Sugar Factory & Cogeneration Plant after expansion will be 980 M³/Day; treated in existing ETP & treated effluent will be used for green belt development. Effluent generated after expansion of distillery unit will be in the form of raw spentwash 2400 M³/Day. Here, raw spentwash shall be concentration in Multiple (Five) Effect Evaporator (MEE). Concentrated spentwash of 480 M³/Day (1.6 KL/KL of alcohol against norm of 8 KL/KL of alcohol) shall be incinerated in existing 28 TPH incineration boiler. Other effluent generated from in the form boiler & cooling blowdown, condensate, lab-washing & DM backwash 2,432 M³/Day will be treated in Condensate Polishing Unit (CPU) & Process Condensate Treatment Plant (PCTP). Treated effluent will be fully recycled in process to achieve ZLD.

Power requirement for proposed expansion project will be 13.5 MW will be procured from own 52 MW cogeneration plant. Existing Unit has 2 DG sets having capacity 1000 KVA each. No new DG set will be installed under expansion unit. Existing unit has 160 TPH bagasse fired Cogenration boiler and Spentwash & coal fired 28 TPH Incineration Boiler. Additionally, One 100 TPH bagasse fired boiler will be installed. ESP with a stack of height of 75 M will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boiler.

Details of process emissions generation and its management:

The CO₂ generation shall take place in fermenters of the distillery. CO₂ to the tune of 230 MT/Day shall be released from 300 KLPD distillery plant. CO₂ shall be bottled and supplied to manufacturers of beverages.

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

				y (MT/D)	
No.	Unit	Туре	Existing	After Expansion	Disposal
1	Sugar	ETP	0.5	0.8	Used as manure

Details of Solid waste generated & its management

	Factory & Co-gen	Sludge			
	Plant	Boiler Ash (Bagasse)	33	55	To Brick manufacturing / as manure
	Distillery	Boiler Ash (Coal + Sp. Wash)	38	153	To Brick manufacturing
2	,	Yeast Sludge	14	50	Used as manure
		CPU Sludge	0.65	2.5	

Details of Hazardous waste generated & its management

No	Industria		Quantity	(MT/Yr.)	
	l Unit	Category	Existin g	After Expansion	Disposal
		Spent Oil – Cat.5.1	0.54	3.0	Forwarde
1	- 5	Contaminate d Cotton Waste- Cat. 33.3	0.4	0.5	d to authorize d re- processor
	Distillery	Empty Containers- Cat. 33.1	30	80	Forwarde d to authorize d re-seller

During the deliberations PP has made a detailed presentation on the CCR and EAC found the action taken report on CCR to be satisfactory. During the presentation EAC has noted that some portion of water reservoir proposed for Rain Water Harvesting is located outside the boundary limit of the Industry. Further, EAC opined that sludge stream is allowed to pass through a series of pits and sludge is allowed to settle in the open pits which create a lot of odour nuisance and sludge handling problems which is contravention to ZLD. In this regard, EAC desired the following additional information from PP:

- PP shall submit a revised plan layout w.r.t proposed water reservoir as some part of it is coming outside the boundary of the Industry.
- PP shall submit a revised plan for ZLD.

Accordingly, proposal was <u>deferred</u> for the needful

<u>Agenda No. 46.3</u>

Establishment of 300 KLPD Distillery unit & 2 X 6 MW Cogeneration unit Bagalkot Karnataka by M/s. Indian Cane Power Limited-Consideration of Environment Clearance.

[IA/KA/IND2/239972/2021, J-11011/45/2021-IA-II(I)]

The Project Proponent and the Accredited Consultant M/s. Environmental Health and Safety Consultants Pvt. Ltd made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project establishment of 300 KLD Distillery Unit & 2 x 6 MW Co-generation unit at Sy. Nos. 101, 102, 116, 117, 118, & 119 of Uttur Village, Mudhol Taluk, Bagalkot District, Karnataka by M/s. Indian Cane Power Limited.

All Molasses based distilleries>100 KLPD & Non-Molasses based distilleries >200 KLD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification dated 14.9.2006 and as amended on 13.6.2019 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC). It was informed that no litigation is pending against the proposal.

Standard ToR has been issued by Ministry of Environment, Forests & Climate Change vide letter No. IA-J-11011/45/2021-IA-II(I) dated 17.02.2021. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 27.10.2021 chaired by Additional Deputy Commissioner, Bagalkot. The main issues raised during the public hearing are related to Employment opportunities to local Villagers and Suggestions to take care of Air Quality, Water Quality and Solid Waste Management.

The details of products and capacity are as under:

SI.No.	Product Details	Prop	osed Quan	itity		
A. Proc	ducts					
1	Rectified Spirit		315 KLPD			
2	ENA		300 KLPD			
3	Ethanol 300 KLPD					
4	Power (Co-generation)	2 X 6 MW (12 MW)				
B. By-	products					
5	Spent wash powder or Potash derived from spent wash drying as By-product	Cane Syrup	B-Heavy	C- Molasses		
		24 TPD	116 TPD	195 TPD		
6	CO ₂	235 TPD	235 TPD	235 TPD		

The proposed Distillery unit is coming in the Existing M/s. ICPL Sugar and Co-generation industry premises for which existing land area of 64749.7 m² (16 Acres) is reserved and additional 178062 m² (44 Acres) will be purchased from adjacent lands for the proposed Distillery Unit. Industry will develop greenbelt in an area of 33 % i.e., 80937.1 m² (20 Acres) out of 242811 m^2 (60 Acres) total area of the project.

The estimated project cost is Rs. 439.71 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 482.545 Lakhs and the Recurring cost (operation and maintenance) will be about Rs.70.40 Lakhs per annum. Total Employment will be 240 persons as direct & 50 persons indirect after establishment of the proposed project. Industry proposes to allocate Rs. 6.60 Crores @ of 1.5 % of the total investment towards Corporate Environment Responsibility

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc., within 10 km distance from the project site. Ghataprabha River is flowing at a distance of 4.5 Km in North direction.

Ambient air quality monitoring was carried out at 8 locations during Study period from 1^{st} March to 31^{st} May and the baseline data indicates the ranges of concentrations as: PM10 (79.01µg/m3), PM2.5 (29.93µg/m3), SO2 (10.61µg/m3) and NO2 (28.08 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be Maximum concentration predicted is 1.11 µg/m3 for PM, Maximum concentration predicted is 0.15 µg/m3 for SO2 and Maximum concentration predicted is 0.26 μ g/m3 for NO2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The water fresh water requirement shall not exceed 2399 KLPD irrespective of feedstock used and it will be met from Ghataprabha River. Effluent of 1482 KLD to 2436 KLD based on feed i. e. Cane Juice/Syrup, BH- Molasses & C- Molasses will be treated through CPU of capacity 2400 KLD. The CPU will be based on Zero Liquid discharge system.

Power requirement for the project will be 6600 kW/h and will be met from own 2x6 MW Co-generation Existing Sugar unit has DG set of 1250 KVA capacity and the same will be utilized for the proposed Distillery Unit also. DG set is used as standby during power failure. Stack height of 32 m will be provided as per CPCB norms. 2 x 45 TPH or 90 TPH bagasse fired boiler will be installed. ESP (Electro Static Precipitator) will be provided for boiler with a stack of height of 85 m for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boilers.

Sources	Mitigation Measures
The emissions generated from the project mainly from 2 x 45 TPH or 1 x 90 TPH Boiler, Existing DG Set of capacity 1 x 1250 KVA, Loading / Unloading of bagasse/coal, Vehicular Movement for Loading and unloading of finished products and raw materials, Fugitive emission from fly ash storage area.	•

Details of	Solid	waste/Hazardous	waste	generation	and	its
managemer	nt:					

SI. No.	Waste	Quantity TPD	Method of collection	Method of Storage	Mode of disposal
A. S	olid Waste				
			Collected	Segregation	Neerby
	_		în .	at source	Nearby
1	Domestic	60	separate	then	municipal
-	solid waste	Kg/day	bins for	domestic	agencies &
			organic &	organic	recyclers.
			in-organic	waste will be	

SI. No.	Waste	Quantity TPD	Method of collection	Method of Storage	Mode of disposal
				composted, while the inorganic solid waste will be handed over to Municipality	
2	Yeast sludge from fermenter and digester	9000 Kg/ day	Mechanical conveyor		Used as manure.
3	Sludge from CPU	0.015 MT/day	Sludge drying beds		
4	Fly Ash	28 TPD	Mechanical conveyor into common silo for further disposal	Ash silo	Sold to brick manufacturers, Excess will be used in landfilling.
5	Bottom Ash	12 TPD		Ash silo	
В. Н	azardous W	aste	1	1	
7	Used oil from DG sets	0.3 KL/A	Stored in leak proof sealed barrels	Stored at an identified place with proper sign board	Usually the oil is very less, Used as lubricants for Conveyor chains and sprockets within the industry to avoid use of fresh oil.
8	Oil Soaked Cotton	100 Kgs/A	Storage Yard		Used for light up/ start-up of

SI. No.	Waste	Quantity TPD	Method of collection	Method of Storage	Mode of disposal
	waste				Incineration
					Boiler
9	Empty Barrels /Containers	10-15 No's	Storage Yard		Disposed to Local farmers and Employees for house hold usage.

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

- Proposed fresh water requirement is high and directed that fresh water requirement shall not exceed 3 kL fresh water consumed per kL production of ethanol.
- Development of greenbelt to be completed along with commissioning of the project.
- Sugar factory and distillery unit shall be treated as an integrated complex and no form of composting shall be done.
- Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Fund for occupational health and safety will be increased to Rs. 70 Lakhs per annum.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler. Coal may be used for commissioning of the plant.
- At least 15% of the total plant area will be reserved for parking along with the facilities of toilets, drinking water facility and restrooms.
- The proposed budget of Rs 6.60 crores towards CER shall be spent on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- PP shall submit CTO compliance report from SPCB and the compliance status of the Industry shall be satisfactory.

PP has agreed to the above commitments. However, PP has not submitted undertaking as desired by EAC. In this regard, all the commitments have been imposed as specific conditions.

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

The Committee noted that the EMP report is in compliance of the ToR. 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). PP shall submit CTO compliance report from SPCB and the compliance status of the Industry shall be satisfactory.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). The project proponent will treat and reuse the treated water within the integrated industry and no waste or treated water shall be discharged outside the premises. Effluent shall be treated through CPU and the plant will be based on Zero Liquid discharge system.
- (iv). Sugar factory and distillery unit shall be treated as an integrated complex and no form of composting shall be done. Electro-Static

Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler. Coal may be used for commissioning of the plant. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.

- (v). Total fresh water requirement for the integrated industry shall not exceed 3 kL fresh water consumed per kL production of ethanol and it will be met from Ghataprabha River. Prior permission shall be obtained from the concerned regulatory authority/Irrigation division in this regard, and renewed from time to time. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vii). PP shall allocate Rs. 70 Lakhs per annum for Occupational Health and safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (viii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (ix). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (x). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xi). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Development of greenbelt shall be completed along with commissioning of the project.

- (xiii). PP proposed to allocate Rs 6.60 crores towards CER shall be spent on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xiv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Agenda No. 46.4

Establishment of Cane Juice/Molasses based Dual feed Distillery of capacity 300 KLD with 3500 TCD of Sugar Cane, 10 MW Co-Generation Unit and 4 MW Captive Power Plant from Incineration Boiler , Haveri, Karnataka by M/s VINP DISTILLERIES AND SUGARS PVT. LTD.- Consideration of Environment Clearance.

[IA/KA/IND2/239263/2021, J-11011/69/2021-IA-II(I)]

The Project Proponent and the Accredited Consultant M/s. Environmental Health and Safety Consultants Pvt. Ltd made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project establishment of Cane Juice/Molasses based Dual feed Distillery of capacity 300 KLD with 3500 TCD Sugar Cane, 10 MW Co-Generation Plant and 4 MW Power Generation from Incineration Boiler at Sy. No. 42, 43 and 53 of Konanakere Village, Shiggaon Taluk, Haveri District, Karnataka by M/s. VINP Distilleries and Sugars Pvt. Ltd. All Molasses based distilleries>100 KLPD & Non-Molasses based distilleries >200 KLD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification dated 14.9.2006 and as amended on 13.6.2019 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC). It was informed that no litigation is pending against the proposal.

Standard ToR has been issued by Ministry of Environment, Forests & Climate Change vide letter No. IA-J-11011/69/2021-1A-II(I) dated 11.03.2021. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 17.09.2021 chaired by Deputy Commissioner, Haveri. The main issues raised during the public hearing are related to local employment opportunities.

SI. No	Product Details	Total Quantity
Produ	cts	
1.	Ethanol	300 KLPD
2.	Power	10+4 MW
By- P	roducts	
1.	Bagasse by product from cane crushing unit	
2.	Yeast sludge from fermenter and digester	20 TPD
3.	Fly ash	25 TPD

The details of products and capacity are as under:

The Total land area is 279233 m²; out of which 56656 m² is for proposed project. Industry will develop greenbelt in an area of 33% i.e., 93077.7 m² out of total area of the project.

The estimated project cost is Rs 350 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 570.3 lakhs and the Recurring cost (operation and maintenance) will be about Rs 74.6 lakhs per annum. Total Employment will be 150 persons as direct & 150 persons indirect. Industry proposes to allocate Rs 5.25 Crore @ of 1.5 % towards Corporate Environment Responsibility.

There are No National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. River Varada is flowing at a distance of 24.2 Km from the project site in the South East direction.

Ambient air quality monitoring was carried out at 8 locations during March 2021 to May 2021 and the baseline data indicates the ranges of concentrations as: 59.59 μ g/m3 to 76.96 μ g/m3), PM2.5 (15.61 μ g/m3 to 24.20 μ g/m3), SO2 (6.71 μ g/m3 to 9.80 μ g/m3), NO2 (17.29

 μ g/m3to 24.68 μ g/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.95 μ g/m³, 0.38 μ g/m³ and 0.28 μ g/m³ with respect to PM₁₀, SO₂ and NO₂. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is $5922 \text{ m}^3/\text{day}$ of which fresh water requirement of $1200 \text{ m}^3/\text{day}$ will be met from Varada River. Effluent of 4290 KLD will be treated through 4400 CPU; Sugar plant effluent shall be 260 KLD which will be treated in 500 KLD ETP Plant. The generated 13.5 KLD domestic sewage is treated in STP of capacity 15 KLD. The plant will be based on Zero Liquid discharge system.

Power requirement for proposed project will be 8500 KVA and will be met from New 14 MW Co-Gen Power Plant. DG sets 2 x 750 KVA are used as standby during power failure. Stack (height 10m) will be provided as per CPCB norms to the proposed DG sets. Proposed project will be provided with 40 TPH of incineration Boiler and 50 TPD of bagasse fired boiler. Multi cyclone separator/ bag filter with a stack of height of 85 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boilers.

SI. No.	Sources	Mitigation Measures		
1.	Boiler	Boilers will be provided with Electrostatic precipitator and with a common chimney of 3.7 m diameter with a height of 85 m.		
2.	DG Sets	Adequate stack height and acoustic enclosures will be installed		
3.	CO ₂ released in the fermentation process	By installing CO ₂ recovery Plant		
4.	Fugitive emissions	By provide closed storage, closed handling, conveyance of chemical/materials, Electrostatic precipitator, and water sprinkling in loading and unloading area.		

Details of process emissions generation and its management:

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

SI. No	Solid Waste	Quantity	Method of collection	Mode of Disposal				
1.	Yeast sludge from fermenter and digester	20 TPD	Mechanical conveyor	Used as manure.				
2.	Sugar ETP Sludge	2 TPD	Sludge drying beds					
3.	CPU Sludge	20 TPD	Sludge drying beds					
4.	Boiler Ash	25 TPD	Mechanical conveyor into common silo for further disposal	Sold to brick manufacturers.				
4.	Domestic solid waste	75 Kg/day	Segregated. Domestic organic solid waste will be composted, while the inorganic solid waste will be handed over to nearby KSPCB authorized recyclers.	Nearby municipal agencies & recyclers.				
	Hazardous Waste Generation Details							
1	Used oil from DG sets	0.1 KI/A	Stored at an identified place with proper sign board, Stored in leak proof sealed barrels	Usually the oil is very less, Used as lubricants for Conveyor chains and sprockets within the industry to avoid use of fresh oil.				
2	Oil Soaked Cotton waste	100 Kg/A	Storage Yard	Used for light up/ start-up of Incineration Boiler				
3	Empty Barrels	30-50 No's	Storage Yard	Disposed to Local farmers				

SI. No	Solid Waste	Quantity	Method of collection	Mode of Disposal
	/Containers			

During deliberation EAC sought the following commitments from PP:

- Development of greenbelt to be completed along with commissioning of the project.
- At least 15% of the total plant area will be reserved for parking along with the facilities of toilets, drinking water facility and restrooms.
- Industry shall construct a storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Fund for occupational health and safety will be increased to Rs. 60 Lakhs per annum.
- Sugar factory and distillery unit shall be treated as an integrated complex and no form of composting shall be done
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler. Coal may be used for commissioning of the plant.
- The proposed budget of towards CER shall be be increased to Rs. 5.50 Crores and shall be spent on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has agreed to the above commitments. However, PP has not submitted undertaking as desired by EAC. In this regard, all the commitments have been imposed as specific conditions.

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

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

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). The project proponent will treat and reuse the treated water within the integrated industry and no waste or treated water shall be discharged outside the premises. Effluent shall be treated through CPU and the plant will be based on Zero Liquid discharge system.
- (iii). Sugar factory and distillery unit shall be treated as an integrated complex and no form of composting shall be done. Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler. Coal may be used for commissioning of the plant. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- (iv). Total fresh water requirement for the integrated industry shall not exceed 1200 KLPD which shall be met from Varada River. Prior permission shall be obtained from the concerned regulatory authority/Irrigation division in this regard, and renewed from time to time. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

- (v). CO_2 generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vi). PP proposed to allocate Rs. 60 Lakhs per annum for Occupational Health and safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (x). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Development of greenbelt to be completed along with commissioning of the project.
- (xii). PP shall allocate Rs. 5.50 Crores towards CER and shall be spent on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xiii). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

- (xv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Agenda No. 46.5

Proposed Grain Base fuel ethanol unit of 100 KLD, 2.8 MW Cogeneration power plant By product :50 TPD of CO2 Generation & 46 TPD of DDGS,Gwalior,Madhya Pradesh by M/S DABRA ALCOBREW PRIVATE LIMITED- Consideration of Environment Clearance.

[IA/MP/IND2/239782/2021, J-11011/487/2021-IA-II(I)]

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

The proposal is for environmental clearance to the project Grain Base fuel ethanol unit of 100 KLD, 2.8 MW Co- generation power plant By product :50 TPD of CO2 Generation & 46 TPD of DDGS,Gwalior, Madhya Pradesh by M/s Dabra Alcobrew Pvt Ltd.

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

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

Sr	Product	Existing	Proposed	Total
No	Details	Quantity	Quantity	Quantity

The details of products and capacity are as under:

1.	Fuel Ethanol	Nil	100 KLD of fuel ethanol	100 KLD of fuel Ethanol
2	Co generation of Power	Nil	2.8 MW	2.8 MW
3	DDGS	Nil	46 TPD	46 TPD

The acquired land area is 5.87 ha with proposed built-up area of 20000 sq mtrs. Green belt will be developed in area of 33 % i.e. 1.95 ha of area with 3900 number of trees within 02 years of time.

The estimated project cost is Rs 7550 Lacs. Total capital cost for environmental measures is proposed as Rs 2061 Lacs. The recurring cost (operation and maintenance) will be about Rs 83.80 Lacs per annum. Total Employment will be 90 persons as direct & 105 persons as indirect after the commissioning of project. Industry proposes to allocate Rs. 113 Lacs (1.5% of project cost) towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Four protected forest are reported in the study area. No Major River is flowing within the 10 km radius Seasonal Chachynder River is flowing at 3.45 frrom the site.

Total water requirement is estimated to be 1472 KLD and after recycling & reuse of 1078 KLD of water, net fresh water requirement is estimated to be 394 KLD (3.94 KI per KI) which will be supplied by Water Resource Department Dist Dataia (MP). Spent wash of 603 KLD will be treated through Multi Effect Evaporator with thermal recompression for thin slops evaporation and followed by CPU. The plant will be based on zero liquid discharge concept.

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

Details of process emissions generation and its management:

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

• Provision of ESP at stack of boiler to control the emission below 50 mg per cubic meter for proposed fuel ethanol plant .

Provision of Good quality of coal for boiler having sulphur less than 0.5%

- Provision of Adequate stack height of 42mt for boiler and 30 mt for the DG set

• Provision of Dust collectors system at various material transfer points.

Provision of Online continuous monitoring system for stack of boiler

• Provision of regular monitoring of Ambient air quality

• Development of green belt in time bound manner in consultation with forest department.

• Provision of Dense phase conveying system for ash handling to prevent the fugitive emission.

• Provision of enclosure for all the loading & unloading operations, where ever required.

• Provision of cover over coal conveyors belt along with dust suppression system

• Provision of dust mask for workers and instruction of compulsory use.

• Regular maintenance, green belt along the road and water spraying arrangement over approach road of the unit meeting to SH-19

• CO2 generated during the fermentation process will be collected by utilizing CO2 Scrubbers.

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

Following will be solid waste/ Hazardous waste management practice to be adopted by unit:

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

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

During the deliberations EAC directed PP to submit an undertaking for the following commitments:

- Development of greenbelt to be completed along with commissioning of the project.
- At least 15% of the total plant area will be reserved for parking along with the facilities of toilets, drinking water facility and restrooms.
- Industry shall construct a storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Fund for occupational health and safety will be increased to Rs. 50 Lakhs per annum.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Industry shall meet 10% of its total power requirement through renewable energy.
- The proposed budget of towards CER shall be increased to Rs. 1.30 Crores and shall be spent on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has agreed to the above commitments. However, PP has not submitted undertaking as desired by EAC. In this regard, all the commitments have been imposed as specific conditions.

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

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

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

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

- (i). As per OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). Industry shall meet 10% of its total power requirement through renewable energy.
- (iii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iv). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (v). Total fresh water requirement be 394 KLPD which will be supplied by Water Resource Department, Dataia district. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Company will store rain water in storage tanks and reuse this water in process and plant activities. Industry shall construct a storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- (vii). CO2 plant will be installed to capture CO2 generated during fermentation process.
- (viii). PP proposed to allocate Rs. 50 Lakhs/annum for occupational health and safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (x). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Development of greenbelt shall be completed along with commissioning of the project.
- (xiv). PP proposed to allocate Rs. 1.30 Crores and it shall be spent on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area earmarked for parking of vehicles for raw materials and finished products as per

CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.

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

<u>Agenda 46.6</u>

Proposed Grain Base fuel ethanol unit of 200 KLPD, 4.80 MW Cogeneration power plant By product : 98 TPD of CO2 Generation & 102 TPD of DDGS, Umaria, District Jabalpur ,Madhya Pradesh by M/S MAHAKAUSHAL DISTILLERY PVT LTD- Consideration of Environment Clearance.

[IA/MP/IND2/242840/2021, J-11011/511/2021-IA-II(I)]

The PP/consultant intimated that they are not able to attend this meeting due to personal reason and requested to defer the proposal. Therefore, EAC has decided to defer the proposal.

Accordingly, proposal was <u>deferred</u> for the needful

<u>Agenda No. 46.7</u>

Establishment of 180 KLPD Distillery Unit and 8 MW Co-Gen Power Unit Bijapur Karnataka by M/s Someshwar Sugars Limited-Consideration of Environment Clearance.

[IA/KA/IND2/239948/2021, J-11011/42/2021-IA-II(I)]

The Project Proponent and the Accredited Consultant M/s. Environmental Health and Safety Consultants Pvt. Ltd made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project establishment of 180 KLPD Distillery Unit and 8 MW Co-Gen Power Unit at Sy. Nos. 349/3, 350/3, 370, 385/2 & others of Kambagi Village, Bableshwar Taluk, Vijayapura, Karnataka - by M/s. Someshwar Sugars Limited.

All Molasses based distilleries>100 KLPD & Non-Molasses based distilleries >200 KLD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification dated 14.9.2006 and as amended on 13.6.2019 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC). It was informed that no litigation is pending against the proposal.

Standard ToR has been issued by Ministry of Environment, Forests & Climate Change vide letter No. IA-J-11011/42/2021-IA-II(I) dated 17.02.2021. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 10.11.2021 chaired by Additional Deputy Commissioner, Vijayapur. The main issues raised during the public hearing are related to Employment opportunities to local Villagers and Suggestions to take care of Air Quality, Water Quality and Solid Waste Management.

M/s. Someshwar Sugars Limited (SSL) has earlier obtained CFE from KSPCB for Establishment of 2500 TCD of Sugarcane & 15MW Co-gen power plant vide letter No. PCB/253/HPI/2015/5682, Dtd.:20.02.2015. Later on obtained Environmental Clearance from KSEIAA for increase in Crushing capacity from 2500 TCD to 15000 TCD of Sugarcane and Co-generation power plant capacity from 15 MW to 70 MW vide Letter No. SEIAA 5 IND, 2015 Dated 29.07.2016 and also obtained CFE-Exp vide letter No: CTE 304499 Dated 07.12.2017 from KSPCB. The Sugar unit and the Co-gen power plant for which the EC & CFE is obtained is not yet implemented at site due to administrative reasons. As the sugar and Co-gen power plant has not been initiated CTO/ CTO compliance report has not been furnished.

SI. No.	Particulars		Capacity		
A. Produ	ucts				
1	Rectified Spirit	189 KLPD			
2	ENA	180 KLPD			
3	Ethanol	180 KLPD			
4	Power (Co-generation)	8 MW			
B. By-products					
5	Spent wash powder or	Cane BH - C-			
	Potash derived from spent	Syrup	Molasses	Molasses	

The details of products and capacity are as under

	wash drying as By-product	14.4 TPD	69.6 TPD	117 TPD
6	CO ₂		141 TPD	

M/s. SSL has proposed to Establish Distillery of capacity 180 KLD and 8 MW Co-generation power plant in the same premises of Sugar unit at Sy. No. 349/3, 350/3, 370, 385/2 & others of Kambagi Village, Bableshwar Taluk, Vijayapura, with total land area of 36 Acres. The proposed Distillery unit is coming up with an area of 145687 m² (36 Acres). Industry will develop greenbelt in an area of 33 % i.e., 48562.3 m² (12 Acres) out of 145687 m² (36 Acres) total area of the project.

The estimated project cost is Rs. 281.73 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 471.97 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 82.64 Lakhs per annum. Total Employment will be 190 persons as direct & 30 persons as indirect after establishment of the proposed project. Industry proposes to allocate Rs. 4.42 Crores @ of 1.5 % of the total investment towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc., within 10 km distance from the project site. Krishna River is flowing at a distance of 12.95 Kms from the proposed project site in the Southwest direction.

Ambient air quality monitoring was carried out at 8 locations during Study period from 1^{st} March to 31^{st} May and the baseline data indicates the maximum ranges of concentrations as PM₁₀ (74.2µg/m3), PM_{2.5} (28.3µg/m3), SO₂ (8.61µg/m3) and NO2 (21.42 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be Maximum concentration predicted is 0.37 µg/m3 for PM, Maximum concentration predicted is 0.15 µg/m3 for SO₂ and Maximum concentration predicted is 0.24 µg/m3 for NO₂. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total fresh water requirement shall not exceed 1440 KLPD irrespective of feedstock used and it will be met from Krishna River. As of now, Distillery unit will be operated using water from River Krishna, condensate shall be utilized, once after establishment of proposed Sugar Unit. Effluent of 1482 KLD to 2436 KLD based on feed i. e. Cane Juice/Syrup, BH- Molasses & C- Molasses will be treated through CPU of capacity 2400 KLD The CPU will be based on Zero Liquid discharge system.

Power requirement for the project will be 4030 kW/h and will be met from own 8 MW Co-generation unit and for backup power failure DG set

of 1250 KVA capacity will be installed. DG set is used as standby during power failure. Stack height of 32 m will be provided as per CPCB norms. 60 TPH bagasse fired boiler will be installed. ESP (Electro Static Precipitator) will be provided for boiler with a stack of height of 75 m for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boilers.

Details of process emissions general	ation and its management:
Sources	Mitigation Measures
The emissions generated from the project mainly from 60 TPH Boiler, DG Set of capacity 1 x 1250 KVA, Loading / Unloading of bagasse/coal, Vehicular Movement for Loading and unloading of finished products and raw materials, Fugitive emission from fly ash storage area.	ESP will be provided Boilers with stack height of 75m. Existing DG set is installed with a stack height of 32m AS PER CPCB norms. Regular & periodic sprinkling of water on all exposed surfaces to suppress emission of dust.

Details of process emissions generation and its management:

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

Description of waste	Quantity	Method of collection	Mode of disposal		
Domestic solid waste	47.5Kg/day	Collected in bines	Segregated into Organic and Inorganic solid waste and handed over to nearby municipality/Gram Panchayat		
Bottom Ash	18 MT/Day	Mechanical conveyor into silo	Sold to brick manufacturers. Excess		
Fly Ash	08 MT/Day	for further disposal	will be used in land filling.		
Yeast sludge from fermenter and digester	5.4 TPD	Mechanical conveyor	Used in compost plant and used as bio		
Sludge from CPU	0.045 TPD	Sludge drying bed	manure		
Hazardous Waste Generation Details					
Used Oil	0.5 KL/A	Leak Proof Containers	Disposed to authorized KSPCB agency.		
Oil Soaked Cotton waste	100 Kg/A	Storage Yard	Used for light up/ Start-up of		

			Incineration Boiler
Empty Barrels /Containers	30-50 Nos.	Storage Yard	Disposed to Local farmers and Employees for house hold usage.

During deliberation EAC sought the following commitments from PP:

- Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Development of greenbelt to be completed along with commissioning of the project.
- At least 15% of the total plant area will be reserved for parking along with the facilities of toilets, drinking water facility and restrooms.
- Fund for occupational health and safety will be increased to Rs. 50 Lakhs per annum.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler. Coal may be used for commissioning of the plant.
- The proposed budget of crores towards CER shall be increased to Rs. 4.5 Crore and shall be spent on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.

PP has agreed to the above commitments. However, PP has not submitted undertaking as desired by EAC. In this regard, all the commitments have been imposed as specific conditions.

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

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

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). The project proponent will treat and reuse the treated water within the integrated industry and no waste or treated water shall be discharged outside the premises. Effluent shall be treated through CPU and the plant will be based on Zero Liquid discharge system.
- (iii). Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler. Coal may be used for commissioning of the plant. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- (iv). Total fresh water requirement for the integrated industry shall not exceed 1440 KLPD irrespective of feedstock used and it will be met from Krishna River. Prior permission shall be obtained from the concerned regulatory authority/Irrigation division in this regard, and renewed from time to time. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). CO_2 generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vi). PP shall allocate Rs. 50 Lakhs per annum for Occupational Health and Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the

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

- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (x). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Development of greenbelt to be completed along with commissioning of the project.
- (xii). PP proposed to allocate Rs 4.50 crores towards CER and shall be spent on improving infrastructure of public schools in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xiii). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

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

Agenda 46.8

ESTABLISHMENT PROPOSED GRAIN OF BASED ETHANOL DISTILLERY CAPACITY - 300 KLD & CO GEN POWER - 9.0 MW AT KHASRA NO. - 495, 499, 503, 504, 505, 507, 512 TOTAL AREA -4.318 HA (10.67 ACRE) VILLAGE: KISHANPUR, TEHSIL: KICCHA, DISTRICT: UDHAM SINGH NAGAR, STATE: UTTARAKHAND by M/s PRIVATE LIMITED-KICCHA ETHANOLS Consideration of **Environment Clearance.**

[IA/UK/IND2/240820/2021, J-11011/491/2021-IA-II(I)]

The PP/consultant has informed that they had withdrawn the case due to some technical error and refilled new proposal. Therefore, EAC has decided to return the proposal in present form.

Accordingly, proposal was <u>returned</u> in present form.

<u>Agenda No. 46.9</u>

Proposed establishment of Grain based Ethanol Distillery capacity 300 KLD along with Co gen power 9.0 MW at Khasra No. 495, 499, 503, 504, 507 and 512 in village : Kishanpur, Tehsil : Kiccha, District : Udham Singh Nagar, Uttarakhand of M/s Maa Sheetla Ventures Limited, Unit – Kichha- Consideration of Environment Clearance.

[IA/UK/IND2/241521/2021, J-11011/495/2021-IA-II(I)]

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

The proposal is for environmental clearance to the project proposed establishment of Grain based Ethanol Distillery capacity 300 KLD along with Co gen power 9.0 MW at Khasra No. 495, 499, 503, 504, 507 and

512 in village: Kishanpur, Tehsil: Kiccha, District: Udham Singh Nagar, Uttarakhand of M/s Maa Sheetla Ventures Limited, Unit – Kichha.

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

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

Sr.No.	Product Details	Quantity
1	Ethanol	300 KLD
2	Co-Gen Power	9 MW

The details of products and capacity are as under:

Proposed land area is 4.318 hectares, which is already under the possession of M/s Maa Sheetla Ventures Ltd, Unit – Kichha. Industry will develop greenbelt in an area of 33 % i.e., 1.424 hectares out of total area of the project.

The estimated project cost is Rs 40744 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 5500 Lakh and the Recurring cost (operation and maintenance) will be about Rs 350 Lakh per annum. Total Employment will be 155 persons as direct & indirect. Industry proposes to allocate Rs 407 lakhs towards Corporate Environmental Responsibility.

There is no National Parks)/ Protected Forests (PF), within 10 Km radius. Reserved Forests – Kotkharra Reserved Forest at distance of 8.17 km in north east direction and Barakoli Reserved Forest – 7.42 Km in East Direction. River/ water body – Kichha River flowing at a distance of 7.42 Km in the east direction

Total water requirement for the Grain based Ethanol Plant will be 5040 KLPD out of which 3475 KLPD will be recycled in plant operations. Hence, the fresh water requirement for the project will be 1565 KLPD which will be met from ground water. Spent Wash (Slops) generation from Distillation, will be sent through separation of suspended solids in Decanter Centrifuge, part Thin Slops are concentrated in multi-effect evaporators to form a Thick (Protein) Syrup, which is mixed with the Wet Cake DWG separated earlier from Decanters. This interim product called DWGS has 30-32% w/w Solids is subject to drying in a rotating steam

tube bundle dryer to deliver a value-added by-product – DDGS – Distillers Dried Grains with soluble and which has min. 90% Solids and max 10% moisture. This DDGS sells as Cattle Feed / Poultry Feed / Fish Feed based on its Protein Content. Hence, entire spent wash is decanted, concentrated into syrup in a Multi-Effect Evaporation followed by Drying, in order to achieve Zero Effluent Discharge. Effluent of 1781 KLPD quantity will be treated through state of art CPU/Effluent Treatment Plant of 2100 KLPD capacity (Anaerobic, aerobic, Filters, & RO system). The plant will be based on Zero Liquid discharge system.

Power requirement for proposed project will be 6900 KWH (maximum) will be met from Co-generation power plant of 9.0 MW. Unit has proposed 1 no of boiler of capacity 60 TPH. Electro Static Precipitator(ESP) with a stack of height of 72 m will be installed for controlling the particulate emissions within the statutory limit of 50mg/Nm³ for the proposed boilers.

Details of process emissions generation and its management:

- ESP with a stack height of 72 m will be installed for controlling the particulate emissions. Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated (222 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

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

Waste	Quantity	Uses / Disposal		
Total Ash	8.64 MT/Day	Will be provided to Brick Manufacturer.		
Condensate polishing unit sludge	1.5 KLD	Used as manure.		
Cattle Feed DDGS	115 MT/Day	Will be sold as cattle feed.		

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 300 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations EAC directed PP to submit an undertaking for the following commitments:

- At least 15% of the total plant area will be reserved for parking along with the facilities of toilets, drinking water facility and restrooms.
- Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing unit will be installed within the

plant premises for utilization of fly ash.

- Industry shall meet at least 750 kW of its power requirement through renewable energy.
- The proposed budget of Rs 4.07 crores towards CER and shall be spent on installation of solar power in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- Fund for occupational health and safety will be increased to Rs. 50 Lakhs per annum

PP has agreed to the above commitments. However, PP has not submitted undertaking as desired by EAC. In this regard, all the commitments have been imposed as specific conditions.

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

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

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

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

- (i). As per OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 300 KLPD shall be only for fuel ethanol manufacturing as per self-certification in form of an affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). Industry shall meet at least 750 kW of its power requirement through renewable energy.
- (iii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iv). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (v). Total fresh water requirement shall not exceed 1565 KLPD which will be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a rainwater storage facility of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- (vii). CO2 plant will be installed to capture CO2 generated during fermentation process.
- (viii). PP proposed to allocate Rs. 50 Lakhs/annum for occupational health safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

- (x). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery and it shall be completed along with the commissioning of the project. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Development of greenbelt shall be completed along with commissioning of the project.
- (xiv). PP proposed to allocate Rs 4.07 crores towards CER and shall be spent on installation of solar power in nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). There shall be at least 15% of the total plant area shall be earmarked for parking of vehicles for raw materials and finished products as per CPCB norms along with the facilities of toilets, drinking water facility and restrooms; no parking to be allowed outside on public places.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xviii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

<u>Agenda No. 46.10</u>

Expansion of the Existing Distillery from 90 KLPD to dual feed 300 KLPD under EBP Scheme by M/s. Satish Sugars Limited (SSL) located at Sangankeri Yadwad Road, Hunshyal P.G., Gokak Taluk, Belgaum District, Karnataka - Amendment in Environment Clearance.

[IA/KA/IND2/241145/2021, J-11011/341/2012-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter F. No. J-11011/341/2012-IA II(I) dated 26.10.2021 for Expansion of Distillery from 90 KLPD (even though EC obtained for 120 KLPD) to dual feed 210 KLPD totaling to 300 KLPD under Ethanol Blending Programme (EBP) of MOEF&CC Notification No. S.O.980 (E) 02.03.2021 by M/s. Satish Sugars Limited (SSL) located at Sangankeri Yadwad Road, Hunshyal P.G., Gokak Taluk, Belgaum District, Karnataka.

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

S. No	Para of EC issued by MoEF&CC	Details asper the EC	To be revised, read as	Justification/ reasons
1.	Para 10	2245 m ³ /day of which fresh water requirement of 1288 m ³ /day will be met from Ghataprabha River. Effluent quantity of 1700 m ³ /day	requirement is 2245 m ³ /day of which fresh water requirement of 1288 m ³ /day will be met from Ghataprabha River. Effluent quantity of 1700 m ³ /day will be treated through (02 Nos. of ETP having 850 KLD capacity each) and	preparing for the DPR for expansion of Distillery from 90 KLPD to 300 KLPD, the management has decided to adopt evaporation, concentration and incineration. 2. However, as per the recent advancement in treating the Spent Wash, it was decided that the Raw spent

of 1250 KLD		
will be	of 2400 KLD	
implemented	and the Raw	
to treat the	-	spent wash shall
spent lees,		be dried to
cooling tower		produce potash
and boiler		· · · /
blow down.		drying unit which
Achieve Zero	spent wash shall be dried	
Liquid Discharge		
-	-	
(ZLD) at distillery unit	potash powder in	system. 3. Further, we
by adopting	spray drying	would like to
evaporation,	unit.	draw your kind
concentration		attention that,
and		the plant will be
incineration.		running for 120
		days on cane
		syrup mode and
		remaining 220
		days on Grain
		mode. Because
		of which, the
		spent wash
		generation from
		cane syrup is less
		and it is
		preferable to
		have Spray
		drying unit rather
		than incineration
		boiler.
		It is further
		submitted that,
		for our existing
		Distillery also, we
		had obtained
		Amendment in
		EC on
		07.07.2021
		towards the
		same.

During deliberations, EAC directed PP that no single drop of water shall be discharged outside the plant premises and no bio-composting shall be carried out. After deliberations, EAC found the justifications satisfactory and **recommended** the amendments in EC, as proposed by the project proponent, with all other terms and conditions remain unchanged.

Agenda No. 46.11

Drilling of 25 Nos. wells in 885.35 Sq. Km area of Jaiselmer Basin (comprises of 04 ML and one PEL Block), Rajasthan by M/s. Oil and Natural Gas Corporation Limited- Amendment in Environment Clearance

[IA/RJ/IND2/240140/2021, J-11011/361/2012-IA-II(I)]

The proposal is for extension of validity of Environmental Clearance granted by the Ministry vide letter No. J-11011/361/2012-IA-II (I) dated 09.12.2014 for 'Drilling of 25 Nos. wells in 885.35 Sq. Km area of Jaiselmer Basin (comprises of 04 ML and one PEL Block), Rajasthan' in favour of M/s. Oil and Natural Gas Corporation Limited (ONGCL).

The project proponent has requested for extension of validity of EC with details are as under:

S.	EC issued by	Period of	Justification/ reasons
No.	MoEF& CC	Extension	
1.	F. No. J- 11011/361/2012- IA-II (I) dated 09.12.2014	3 years	 Drilling of ten wells out of total 25 wells was successfully completed. Drilling of remaining 15 wells got delayed as the rig was intermittently deployed at Mehsana Asset, Gujarat & Frontier Basin, Dehradun for various exploration related activities. Presently, the Rig is deployed at Jaisalmer and will complete the drilling of remaining fifteen wells within 3 years i.e. up to December 2024. The task of upgradation of GCS and laying of pipeline is in process and will be completed by July 2022.

The Expert Appraisal Committee, after detailed deliberations **recommended** for extension of validity 3 years i.e up to 08th December, 2024 in the EC vide letter No. J-11011/361/2012-IA-II (I) dated 09.12.2014 with all other terms and conditions remain unchanged.

14th December, 2021 (Tuesday)

<u>Agenda No. 46.12</u>

Proposed 60 KLPD Grain based Distillery (for fuel ethanol) by M/s. MSRT Industries Pvt. Ltd. located at Lakhanayakankoppa Village, Taluka Ramdurg, District Belgavi, Karnataka -Consideration of Environment Clearance.

[IA/KA/IND2/238828/2021, J-11011/478/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. MITCON Consultancy & Engineering Services Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Proposed 60 KLPD Grain based Distillery (for fuel ethanol) by M/s. MSRT Industries Pvt. Ltd. located at Lakhanayakankoppa Village, Taluka Ramdurg, District Belgavi, Karnataka.

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

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

The details of products and capacity are as under:

Sr. No.	Particulates	Capacity			
Produ	icts				
1.	Ethanol	60 KLPD			
2.	Captive power plant 2.0 MW				
By Pr	oducts				

3.	DDGS	40 TPD
4.	CO ₂	45 TPD

The land area available for the project is 75000 m². Industry will develop greenbelt in an area of 33.33 % i.e., 25000 m² out of total area of the project. The estimated project cost is Rs 80.87 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 2.9 Cr. and the recurring cost (operation and maintenance) will be about Rs. 29 lakhs per annum. Total employment will be 190 persons as direct & indirect. Industry proposes to allocate Rs. 1.7 Cr. @ 2.0% of Total Project Cost (Rs. 80.87 Cr.) towards Corporate Environment Responsibility.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger / Elephant Reserves, Wildlife Corridors etc., within 10 km distance from the project site, However, Reserved Forest is at 500 m in North Direction. River Malaprabha is flowing at a distance of 6.6 km in NE direction.

AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.083 $\mu g/m^3$, 0.055 $\mu g/m^3$, 6.49 $\mu g/m^3$ and 5.42 $\mu g/m^3$ with respect to PM₁₀, PM_{2.5}, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 682 m³/day of which fresh water requirement of 442 m³/day will be met from Malaprabha River. Distillery effluent of 252 m³/day* quantity will be treated through 300 m³/day condensate treatment plant. The plant will be based on Zero Liquid Discharge (ZLD) system. (215 m³/day *the raw stillage generated will be sent to decanter followed by MEE followed by dryer).

Power requirement will be 2.0 MW and will be met from own captive power generation (22 TPH boiler which will run T.G set of 2.0 MW capacity). Proposed unit will have 500 kVA x 1 No. DG sets will be used only as standby during power failures. Stack height >11 m will be provided as per CPCB norms to the proposed DG sets. Proposed 22 TPH boiler will be installed with 2.0 MW captive power generation for proposed Distillery. Electrostatic precipitator with 45 m stack will be installed for proposed boiler for controlling of particulate emission within statutory limit of 115 mg/Nm³ for the proposed boiler.

Project Activity	Anticipated pollutant	Management
Process emissions	CO ₂ and Negligible	CO_2 shall not be release in the air. CO_2 will be scrubbed for Bottling.

Details of process emissions generation and its management:

Stack, Fugitive emissions, material handling.	PM ₁₀ , PM _{2.5} , NO _x , SO ₂ , CO ₂	Distillery unit: Electrostatic precipitator with 45 m stack
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Details of Solid waste/Hazardous waste generation and its management:

Sr. No.	Type of waste	Quantity	Final Disposal		
1.	DDGS	40 TPD	DDGS is the by-product and will be sold to cattle/poultry feed.		
2.	Coal Ash	14 TPD	Coal ash will be sold to brick manufacturers.		
3.	CPU Sludge	0.6 TPD	CPU sludge will be used as manure		
4.	Spent oil (5.1)	0.5 KL/Annum	Quantity of Spent oil will be negligible and shall be sent to authorized recycler		

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

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

- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- 15% of the total plant area will be reserved for parking.
- CO₂ bottling plant shall be installed.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- PP shall meet 10% of the total power requirement from renewable energy source.
- PP shall use coal only as initiating fuel. For further operation biomass shall be used.
- PP shall allocate at least Rs. 50 Lakhs for Occupational Health Safety.
- PP shall utilize fresh water @4.0 KL/KL of ethanol production.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Entire project shall be ZLD and no single drop of water shall be discharged outside plant premises.
- PP shall install ESP with the boiler.
- The proposed budget allocation of Rs. 2.0 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar

light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.

PP has submitted the desired information as sought above.

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

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

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

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

(i). As per OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 60 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of an affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the

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

- (ii). As per Ministry's OM No 22-76/2014-IA-III dated 07th October, 2014 EC shall become invalid in case the actual land for the project site turns out to be different from the land proposed or the proposed land is not under possession of the Industry.
- (iii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iv). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (v). Total Fresh water requirement shall not exceed @4.0 KL/KL and will be met from Malaprabha River. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall use coal only as initiating fuel. For further operation biomass shall be used. ESP shall be installed with the boiler. At least 10% of the total power requirement shall be met from renewable energy source.
- (vii). CO₂ bottling plant shall be installed.
- (viii). PP shall allocate at least Rs. 50 Lakhs for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
 - (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
 - (x). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.

- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiv). PP proposed to allocate Rs. 2.0 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.
- (xv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xviii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

<u>Agenda No. 46.13</u>

Proposed expansion of Distillery unit from 48 KLPD to 168 KLPD (using Sugar syrup/ B-Heavy molasses /grains as raw materials) by M/s. E.I.D. - Parry (India) Limited located at Sankili Village, Regidi Amadalavalasa Mandal, Srikakulam District, Andhra Pradesh - Consideration of Environment Clearance.

[IA/AP/IND2/50730/2014, J-11011/157/2003-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Proposed expansion of Distillery unit from 48 KLPD to 168 KLPD (using Sugar syrup/ B-Heavy molasses /grains as raw materials) by M/s. E.I.D. - Parry (India) Limited located at Sankili Village, Regidi Amadalavalasa Mandal, Srikakulam District, Andhra Pradesh.

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

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

Ministry had issued EC earlier vide EC letter No. F. No. J-11011/157/2003-IA-II dated 08/09/2004 to the existing project 40 KLPD distillery plant and EC letter F. No. J-11011/270/2007-IA II (I) dated 17-08-2007 for expansion of Sugar plant from 2500 TCD to 5000 TCD. Later EC amended on 25-02-2015 for treatment of spent wash. SEIAA, Andhra Pradesh has issued EC for expansion of Distillery unit from 40 KLD to 48 KLD vide EC letter no. SEIAA/AP/SKLM/IND/11/2019/1455 dated 10-09-2020.

Existing plant is having valid Consent For Operation issued by Andhra Pradesh State Pollution Control Board vide order No. APPCB/VSP/VSP/331/HO/CFO/2021 dated 15th November, 2021 and same is valid up to 28th February, 2026.

Certified Compliance Report (CCR) on existing Environmental clearance order was issued by IRO, MOEFCC Vijayawada vide letter No. IRO/VIJ/EPA/MISC/111-01/2021 dated 19/08/2021.

S. No.	Unit	Product/ By Product	Existing Capacity	Expansion Capacity	After Expansion Capacity
1.	Distillery	Rectified Spirit / ENA / Ethanol /	48 KLPD	120 KLPD (only Ethanol)	168 KLPD
2.	Co- generation power plant	Electricity	16MW	-	16 MW
3.	Sugar	Sugar	5000 TCD		5000 TCD
4.	Power from incineration boiler	Electricity	1.06 MW		1.06 MW

Existing land area is 8,36,000 m² and no additional land will be used for proposed expansion. Industry has already developed greenbelt in an area of 33.9% i.e 2,83,400 m² out of total area of project. The estimated project cost for expansion project is Rs. 100 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 10.0 Crores and the Recurring cost (operation and maintenance) will be about Rs. 2.0 Crores per annum. Total Employment will be 100 persons as direct & 100 persons indirect after expansion. Industry proposes to allocate Rs. 1.5 Crores @ 1.5 % towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Nagavali River is flowing at a distance of 1.1 Kms in N direction.

Total water requirement is 1800 m^3 /day of which fresh water requirement of 610 m^3 /day. The water drawl permission has been obtained from irrigation department Govt of Andhra Pradesh for 8,00,000 cubic yards/annum which is valid up to 18-05-2024. Existing permission is sufficient & no separate permission will be required. Effluent of 720 m³ /day quantity will be treated through MEE and Condensate Polishing Unit when grains are used as raw material and treated through MEE followed by incineration in Boiler when Sugarcane juice / B-Heavy molasses is used as raw material. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 3000 KVA including existing

2000 KVA and will be met from Captive power plant of 1.06 MW and Cogeneration power plant of 16 MW. Existing unit has 2 Nos of DG sets of 500 KVA & 1000 KVA of Capacity, additionally 1000 KVA DG sets are used as standby during power failure. Existing unit has 2 x 35 TPH Bagasse Fired Boilers, 10.5 TPH and 15 TPH Incineration boilers. ESP with a stack of height of 45 m has been installed for 2 x 35 TPH boilers for controlling the particulate emissions within the statutory limit of 100 mg/Nm³, ESP with a stack height of 40 m has been installed for 10.5 TPH to bring down the emissions within the statutory limit of 100 mg/Nm³ and Bag filters with a stack of 51 m has been installed for 15 TPH boiler for controlling the particulate emissions within the statutory limit of 50 mg/Nm³. No additional boilers are proposed for the proposed expansion of Distillery unit from 48 KLD to 168 KLD.

Details of process emissions generation and its management:

- ESP has been provided to the 2 x 35 TPH boilers to bring down the the particulate matter to below 100 mg/Nm³.
- The exhaust gases from the boiler are being discharged into the atmosphere through a stack of 45 m height for effective dispersion of gases into the atmosphere.
- ESP has been provided to 10.5 TPH Boiler to bring down the particulate matter to below 100 mg/Nm³.
- The exhaust gases from the boiler are being discharged into the atmosphere through a stack of 40 m height for effective dispersion of gases into the atmosphere.
- Bag filters have been provided to the 15 TPH Boiler to bring down the particulate matter to below 50 mg/Nm³.
- The exhaust gases from the boiler are being discharged into the atmosphere through a stack of 51 m height for effective dispersion of gases into the atmosphere.
- CO₂ generated (80.4 TPD) during the fermentation process will be collected by utilizing CO2 scrubbers and sold to authorized vendors.

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

S. No.	Waste / By product	Quantity (TPD) after proposed expansion project	Proposed method of disposal
1.	Ash from the boilers (2 x 35 TPH)	60	Is being given to brick manufacturing units. The same will be followed after proposed expansion project
2.	Filter cake	200	Is being used as manure for greenbelt development / given to farmers. The same will be

S. No.	Waste / By product	Quantity (TPD) after proposed expansion project	Proposed method of disposal	
			followed after proposed	
			expansion project	
3.	Yeast sludge	2.5	Shall be utilized as organic	
			manure.	
4.	K ASH	20	Will be sold as fertilizer	
5.	DDGS	108	Will be sold as cattle feed	

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 120 KLPD will be for manufacturing of fuel ethanol only.

During deliberations, EAC directed PP to submit Certified Action Taken Report from concerned IRO, MoEFCC for non-compliances mentioned in Certified Compliance Report.

Accordingly, proposal was <u>deferred</u> for the needful.

<u>Agenda No. 46.14</u>

Proposed 135 KLPD Grain based Ethanol Plant along with 3.0 MW Cogeneration Power Plant by M/s. SMS Biofuel Private Limited located at Village Chhidgaon Mel, Tehsil Timarni, District Harda, Madhya Pradesh - Consideration of Environment Clearance.

[IA/MP/IND2/241908/2021, J-11011/499/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. J.M. EnviroNet Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Proposed 135 KLPD Grain based Ethanol Plant along with 3.0 MW Cogeneration Power Plant by M/s. SMS Biofuel Private Limited located at Village Chhidgaon Mel, Tehsil Timarni, District Harda, Madhya Pradesh.

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

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

Unit	Capacity	Product
Grain Based Ethanol Plant	135 KLPD	Product: Ethanol (Bio-fuel) By-product: DDGS &CO ₂
Co-generation Power Plant	3.0 MW	Power

The details of products and capacity are as under:

Total project area is 9.3 hectares (93000 m²) for installation of Ethanol plant. Industry will develop greenbelt in an area of 33% i.e., 3.07 ha (30700 m²) out of total area of the project. The estimated project cost is Rs. 110.5 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 25.0 Crores and the Recurring cost (operation and maintenance) will be about Rs. 2.85 Crores / annum. No. of working days will be 350 days/annum. Total Employment will be 120 persons (Permanent 100 & Temporary 20) during operation phase. Industry proposes to allocate Rs. 1.10 Crores (1% of total project cost) towards Corporate Environment Responsibility (CER).

No National Parks, Wildlife Sanctuaries, Reserved Forests (RF)/ Protected Forests (PF), Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius.Handia Branch (~0.5 km in West direction), Ganjal River (~2.0 km in East direction), Morand Nadi (~2.5 km in ENE direction), Raigarh Distributary (~5.0 km in ENE direction), Left Bank Main Canal (~7.0 km in SSE direction) are the water bodies which lies within 10 km radius.

Total fresh water requirement will be 599 KLPD (281 KLPD Ethanol plant, 298 Co-generation Power Plant, Utilities & Auxiliaries & Pump sealing & 20 KLPD Domestic) which will be sourced from groundwater and rainwater. Effluent of 621 KLPD will be treated through state of art PCTP/Effluent Treatment Plant of 800 KLPD capacity. The plant will be based on Zero Liquid Discharge system.

Power requirement for Ethanol plant will be 2.5 MW, which will be sourced from the 3.0 MW Co-generation Power Plant. Unit will be having D.G. Sets of 1 x 1500 KVA which will be used as standby during power failure. Adequate Stack height (9 m) will be provided as per CPCB norms. Boiler of 27 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 45 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm³.

Details of process emissions generation and its management:

 CO_2 (102 TPD) generated during the fermentation process will be collected and sold to authorized vendors.

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

- Solid waste from the Grain based operations generally comprises of fibres and proteins in the form of DDGS (63 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash (30 TPD) from proposed boiler to be transferred in covered vehicles to the nearby brick manufacturers.
- Used oil (0.5KL/annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 135 KLPD will be for manufacturing of fuel ethanol only.

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

- PP shall allocate at least Rs. 50 Lakhs per year for Occupational Health Safety.
- PP shall meet 10% (Approx. 250 KW) of the total power requirement from solar power.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- The proposed budget allocation of Rs. 1.5 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc.
- The company will not use any banned disinfectants inside the plant premises. Only eco-friendly disinfectants will be used.

PP has submitted the desired information as sought above.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent. The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

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

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

- (i). As per OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 135 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of an affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iv). Total Fresh water requirement shall not exceed 599 KLPD (281 KLPD Ethanol plant, 298 Co-generation Power Plant, Utilities & Auxiliaries & Pump sealing & 20 KLPD Domestic) and will be met from groundwater and rainwater. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to

time. No ground water recharge shall be permitted within the premises.

- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall meet 10% (Approx. 250 KW) of the total power requirement from solar power.
- (vi). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vii). PP shall allocate at least Rs. 50 Lakhs per annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (viii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (ix). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (x). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xi). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiii). PP proposed to allocate Rs. 1.5 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc.

- (xiv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products as per CPCB norms and no parking to be allowed outside on public places.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xvii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Agenda No. 46.15

Proposed Grain Based Distillery capacity 600 KLPD (1X400 KLPD & 1X200 KLPD) with 15 MW Co-generation power by M/s. Jurala Organic Farm and Agro Industries LLP Unit-I located at Chittanur Village, Marikal Mandal Narayanpet District, Telangana - Consideration of Environment Clearance.

[IA/TG/IND2/241233/2021, J-11011/492/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Pioneer Enviro Laboratories and Consultants Private Limited, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Proposed Grain Based Distillery capacity 600 KLPD (1X400 KLPD & 1X200 KLPD) with 15 MW Co-generation power by M/s. Jurala Organic Farm and Agro Industries LLP Unit-I located at Chittanur Village, Marikal Mandal Narayanpet District, Telangana.

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

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

S.No.	Product Details	Production quantity
Product		
1	Ethanol	600 KLPD
2	Power	15 MW
By product		
1	DDGS	330 TPD
2	CO ₂	340 TPD

The details of products and capacity are as under:

Total land area of 13.19 Ha. (32.6 acres) is allocated for the proposed project, which will be used for proposed Grain Based Distillery Project. Number of operational days of plant will be 350 per annum. Industry will develop greenbelt in an area of 33 % i.e., 11.0 Acres out of total area of the project. The estimated project cost is Rs. 602.5 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 54.5 Crores and the Recurring cost (operation and maintenance) will be about Rs. 2.9 Crores per annum. Total Employment will be 500 persons as direct & indirect. Industry proposes to allocate Rs. 8.1 Crores @ 1.3 % towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Manne Vagu is flowing at a distance of 0.5 Km. in East direction.

Total water requirement is 2700 m^3 /day will be met from Koilasagar lift Irrigation Scheme. Effluent of 4240 m^3 /day quantity will be treated through MEE and Condensate Polishing Unit. The plant will be based on Zero Liquid discharge system.

The Unit's own Power cogeneration will be 15 MW generation out of which 15 MW will be used for captive power requirement. 2 Nos. 500 KVA DG sets will be used in case of emergency. 100 TPH Coal/Biomass/ Briquettes Boiler will be installed and ESP with a stack of height of 83 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/NM³ for the proposed boiler. Travelling Grate Boiler will be equipped with ESP for controlling process emission. Bag filters with dust collectors will be installed in Grain handling & milling area and DDGS Dryer section to minimize fugitive emissions. Boiler Ash (220 TPD) & ETP Sludge (316 Kg/Day) will be generated as solid waste from the proposed distillery project. Waste lube oil from DG Sets will be generated as Hazardous Waste. Boiler ash will be sold to cement manufacturing units / fly ash brick manufacturers / ceramic industry. ETP Sludge will be reused as biocompost for green belt development.

Details of process emissions generation and its management:

- ESP with a stack height of 83 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated (340 TPD) during the fermentation process will be collected by utilizing CO2 scrubbers and sold to authorized vendors.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 600 KLPD will be for manufacturing of fuel ethanol only.

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

- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- Entire project shall be ZLD and no single drop of water shall be discharged outside of plant premises.
- PP shall utilize fresh water @4.0 KL/KL of ethanol production.
- PESO certificate shall be obtained.
- 15% of the total plant area will be reserved for parking.
- CO₂ generated from the process shall not be released to the atmosphere and shall be bottled/made solid ice and utilized/sold to authorized vendors.
- PP shall confirm that the entire land is under the possession of the company and land is converted for non-agricultural use.
- PP shall meet 10% (1.5 MW) of the total power requirement from solar/wind power.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- PP shall allocate at least Rs. 80 Lakhs for Occupational Health Safety.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP shall install ESP with the boiler.
- The proposed budget allocation of Rs. 9.0 Crores towards CER and shall be used before commissioning of the plant. An amount of Rs. 4.5 Crores shall be spent on establishment of solar power in nearby villages and the balance amount of Rs. 4.5 Crores shall be spent for construction/up-gradation of school building nearby villages with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. others as per the need base.

PP has submitted the desired information as sought above.

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

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

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

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

- (i). As per OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 600 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of an affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). PP shall confirm that the entire land is under the possession of the company and land is converted for non-agricultural use.

- (iii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iv). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (v). Total Fresh water requirement shall not exceed 2400 KLD (@4.0 KL/KL) and will be met from Koilasagar lift Irrigation Scheme. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall install ESP with the boiler and meet 10% (1.5 MW) of the total power requirement from solar/wind power.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP shall allocate at least Rs. 80 Lakhs for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (x). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms. PESO certificate shall be obtained.
- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below(a) Metering and control of quantities of active ingredients to minimize

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

- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiv). PP proposed to allocate Rs. 9.0 Crores towards CER and shall be used before commissioning of the plant. An amount of Rs. 4.5 Crores shall be spent on establishment of solar power nearby villages and the balance amount of Rs. 4.5 Crores shall be spent for construction/upgradation of school building nearby villages with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. others as per the need base.
- (xv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xviii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

<u>Agenda No. 46.16</u>

Proposed 120 KLPD Grain Based distillery along with 4.0 MW cogen Thermal Power Plant by M/s. Dashrath Prasad Industries Pvt. Ltd. Located at Village -Tekulapalli, Penuballi Mandal, District Khammam, Telangana - Consideration of Environment Clearance.

[IA/TG/IND2/237186/2021, J-11011/463/2021-IA-II(I)]

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

The proposal is for environmental clearance to the project for Proposed 120 KLPD Grain Based distillery along with 4.0 MW co-gen Thermal Power Plant by M/s. Dashrath Prasad Industries Pvt. Ltd. Located at Village - Tekulapalli, Penuballi Mandal, District Khammam, Telangana.

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

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

Unit		Capacity	Product
Grain	Based Ethanol	120 KLPD	Product – Fuel Ethanol
Plant			By Product – DDGS- 57.4 TPD
			CO ₂ – 90.6 TPD
CO-	Generation	4.0 MW	Power
Plant			

The details of products and capacity are as under:

Total project area is 11.35 Acres for proposed project. Industry will develop greenbelt in an area of 36.65% i.e. 4.16 acres out of total area of the project. The estimated project cost is Rs. 148.72 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 6.09 Crores and the Recurring cost (operation and maintenance) will be about Rs. 1.0 Crores / annum. No. of working days will be 330 days/annum. Total Employment will be 150 persons (Permanent 90 & temporary 60) during operation phase. Industry proposes to allocate INR 3.5 Crores of total project cost towards Corporate Environment Responsibility (CER).

There are No National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius. Kannegiri Reserved forest – 7.12 km N and Katravani Vagu – 0.17 km W, Katravani Cheruvu – 0.64 km NW, Tekulapalli Cheruvu – 1.73 km NE, Nagarjuna Sagar 21st Main Branch Canal – 1.79 km N, Devara cheruvu –

1.88 km ENE, Pond Near Korlagudem – 2.36 km SSW, Kanukula Cheruvu – 2.94 km NW, Erra Cheruvu – 3.25 km NW, Tummalapalli Cheruvu – 3.38 km ENE, Padamata vagu – 4.31 km S, Nagarjuna Sagar 21st Main Branch Canal – 4.71 km ESE, Madhira Branch Canal – 5.14 km SW are the water bodies found within 10 km radius.

One Time Total water requirement for the project will be 2,258 KLD which will be further reduced through recycling & reuse to 1,681 KLD. 577 KLD will be fresh water. Fresh water demand for distillery plant will be less than 4KL/KL of Ethanol and will be sourced from surface water. The application for permission of withdrawal of water has been submitted to Department of Irrigation, Telangana. Effluent will be treated through state of art Effluent Treatment Plant. The plant will be based on Zero Liquid discharge system.

Power requirement for Ethanol plant will be 4.0 MW, which will be sourced from the 4.0 MW Co-generation Power Plant. Unit will be having D.G. Sets of 1 x 1000 KVA which will be used as standby during power failure. Stack height (30 m) will be provided as per CPCB norms. Proposed Boiler of 36 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 58 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm3.

Details of process emissions generation and its management:

 CO_2 (90.6 TPD) generated during the fermentation process will be collected and sold to authorized vendors.

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

- Solid waste from the Grain based operations generally comprises of fibers and proteins in the form of DDGS (57.4TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash (70 TPD) generated from boiler will be supplied to brick manufacturers.
- Used oil & grease (0.5 KL/Annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 120 KLPD will be for manufacturing of fuel ethanol only.

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

• Existing temporary shed shall be demolished before commencing construction of grain based ethanol project.

- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- CO₂ shall not be released to atmosphere and shall be bottled.
- PP shall utilize fresh water @3.8 KL/KL of ethanol production.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP shall meet 10% of the total power requirement from solar power.
- Entire project shall be ZLD and no single drop of water shall be discharged outside of plant premises.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- 15% of the total plant area will be reserved for parking.
- PP shall allocate at least Rs. 60 Lakhs for Occupational Health Safety.
- PESO certificate shall be obtained.
- The proposed budget allocation of Rs. 4.0 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.

PP has submitted the desired information as sought above.

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

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

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

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

- (i). As per OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 120 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of an affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). Existing temporary shed shall be demolished before commencing construction of grain based ethanol project.
- (iii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iv). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (v). Total Fresh water requirement shall not exceed @3.8 KL/KL and will be met from surface water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall meet 10% of the total power requirement from solar power.

- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP shall allocate at least Rs. 60 Lakhs for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
 - (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
 - (x). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms. PESO certificate shall be obtained.
 - (xi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiv). PP proposed to allocate Rs. 4.0 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.
- (xv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes.

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

<u>Agenda No. 46.17</u>

Proposed establishment of Grain Based Ethanol Distillery of Capacity 60 KLD along with Co Gen Power Plant – 2.0 MW by M/s. Maa Sheetla Ventures Limited located at Plot No 26KA and 27KA, Village- Surpur, Tehsil – Kaladhungi, Distt – Nainital, Uttarakhand - Reconsideration of Environment Clearance.

[IA/UK/IND2/234907/2021, J-11011/447/2021-IA-II(I)]

The proposal was earlier placed before the EAC (Ind-2) in its 43rd meeting held on 08th-09th November, 2021 wherein EAC deferred the proposal.

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

S. No	ADS	Reply of PP	Observation of EAC
1.	EAC desired that the proposal shall be considered only after obtaining document from competent authority related with conversion of land use to industrial purpose.	Change of Land Use	

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

The proposal is for environmental clearance to the project for Proposed establishment of Grain Based Ethanol Distillery of Capacity 60 KLD along with Co Gen Power Plant – 2.0 MW by M/s. Maa Sheetla Ventures Limited located at Plot No 26KA and 27KA, Village- Surpur, Tehsil – Kaladhungi, Distt – Nainital, Uttarakhand.

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

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

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

The details of products and capacity are as under:

Proposed land area is 2.214 hectares, which is already under the possession of M/s. Maa Sheetla Ventures Ltd. Industry will develop greenbelt in an area of 33 % i.e., 0.730 hectares out of total area of the project. The estimated project cost is Rs 8496 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 1750 Lakh and the Recurring cost (operation and maintenance) will be about Rs. 250 Lakh per annum. Total Employment will be 125 persons as direct & indirect. Industry proposes to allocate Rs. 120 lakhs towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Reserved Forests –Nihal Reserve Forest at distance of 1.77 km in south direction. River/ water body Gularghate Nadi flowing at a distance of 1.30 Km in the South direction.

Total water requirement for the Grain based Ethanol Plant will be 1017 KLPD out of which 647 KLPD will be recycled in plant operations. Hence, the fresh water requirement for the project will be 370 KLPD which will be met from ground water. Spent Wash (Slops) generation from Distillation, will be sent through separation of suspended solids in Decanter Centrifuge, part Thin Slops are concentrated in multi-effect

evaporators to form a Thick (Protein) Syrup, which is mixed with the Wet Cake DWG separated earlier from Decanters. This interim product called DWGS has 30-32% w/w Solids is subject to drying in a rotating steam tube bundle dryer to deliver a value-added by-product – DDGS – Distillers Dried Grains with soluble and which has min. 90% Solids and max 10% moisture. This DDGS sells as Cattle Feed / Poultry Feed / Fish Feed based on its Protein Content. Hence, entire spent wash is decanted, concentrated into syrup in a Multi-Effect Evaporation followed by Drying, in order to achieve Zero Effluent Discharge. Effluent of 355 KLPD quantity will be treated through state of art CPU/Effluent Treatment Plant of 600 KLPD capacity (Anaerobic, aerobic, Filters, & RO system). The plant will be based on Zero Liquid Discharge system.

Power requirement for proposed project will be 1507 KWH (maximum) will be met from Co-generation power plant of 2 MW. Unit has proposed 1no of boiler of capacity 20 TPH. Electro Static Precipitator (ESP) with a stack of height of 65 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for the proposed boilers.

Details of process emissions generation and its management:

- ESP with a stack height of 65 m will be installed for controlling the particulate emissions. Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO₂ generated (44 TPD) during the fermentation process will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.

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

Waste	Quantity	Uses / Disposal
Total Ash	3.3	Will be provided to Brick
	MT/Day	Manufacturer Industry.
Condensate polishing unit sludge	1 KLD	Used as manure.
Cattle Feed DDGS	22 MT/Day	Will be sold as cattle feed.

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

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

- Electrostatic precipitator shall be installed with proposed boiler.
- PP shall use only rice husk/other biomass as fuel in boiler.

- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- 15% of the total plant area will be reserved for parking.
- PP shall utilize fresh water @4.0 KL/KL of ethanol production.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Entire project shall be ZLD and no single drop of water shall be discharged outside plant premises.
- PP shall meet 10% of the total power requirement from solar power.
- The proposed budget allocation of Rs. 1.20 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.

PP has submitted the desired information as sought above.

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

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

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

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

- (i). As per OM dated 16th June, 2021, project falls in category B2 and the proposed capacity of 60 KLD shall be only be used for fuel ethanol manufacturing as per self-certification in form of an affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iv). Total Fresh water requirement shall not exceed @ 4.0 KL/KL and will be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed.Electrostatic precipitator shall be installed with the proposed boiler. PP shall use only rice husk/other biomass fuel in boiler. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- (vi). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vii). Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties

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

- (viii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (ix). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (x). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xi). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiii). The proposed budget allocation of Rs. 1.20 Crores towards CER and shall be used for construction/up-gradation of school building with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector before commissioning of the project.
- (xiv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products as per CPCB norms and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB

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

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

<u>Agenda No. 46.18</u>

Proposed 100 KLD Grain based Ethanol plant along with 3.0 MW captive power plant by M/s. Karvjya Ethnoxy Private Limited located at 2 D.O.(A), Stone no 24/2, 24/10, Murba No 49 & 50, Under Panchyat 1 L.M, Near Village Bhopalpura, Tehsil Suratgarh, District Sri Ganganagar, Rajasthan - Reconsideration of Environment Clearance.

[IA/RJ/IND2/235120/2021, IA-J-11011/443/2021-IA-II(I)]

Project proponent has requested to withdraw the proposal due to nonavailability of land conversion documents. Therefore, EAC has decided to return the proposal in present form.

Accordingly, proposal was <u>returned</u> in present form.

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

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

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

S. No.	Name and Address	Designation		
1.	Dr. J. P. Gupta	Chairman		
2.	Sh. R.K. Singh	Member		
3.	Dr. Y.V. Rami Reddy	Member		
4.	Dr. T. Indrasena Reddy	Member		
5.	Sh. S. C. Mann	Member		
6.	Sh. Ashok Agarwal	Member		
7.	Dr. T. K. Joshi	Member		
8.	Dr. J. S. Sharma	Member		
9.	Sh. Dinabandhu Gouda, CPCB	Member		
10.	Sh. Sanjay Bist, IMD	Member		
11.	Sh. Ashok Kr. Pateshwary,	Member		
	Director, MoEFCC	Secretary		
MoE	MoEFCC			
12.	Dr. Mahendra Phulwaria	Scientist `C'		
13.	Sh. Kanaka Teja	Research Assistant		
