

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

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**Dated: 14.12.2021**

**MINUTES OF THE 45<sup>th</sup> MEETING OF THE EXPERT APPRAISAL  
COMMITTEE**

**(INDUSTRY-2 SECTOR PROJECTS)**

**HELD ON 29<sup>th</sup> – 30<sup>th</sup> November, 2021**

**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 44<sup>th</sup> Meeting of the EAC (Industry-2) held during 22<sup>nd</sup> 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.

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: -

**29<sup>th</sup> November, 2021 (Monday)**

**Agenda No. 45.1**

**Proposed Distillery of capacity 150 KLPD to produce Rectified Spirit/Extra Neutral Alcohol/Ethanol based on "C"/ "B" Heavy Molasses/Sugarcane Juice/Syrup/Grains by M/s. Malhar Sakhar Karkhana Limited located at Gat No. 174 & 175, Village Chandapuri, Tal. Malshiras, Dist. Solapur Maharashtra - Consideration of Environment Clearance.**

**[IA/MH/IND2/236373/2021, J-11011/161/2021-IA-II(I)]**

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

The proposal is for environmental clearance to the project for Proposed Distillery of capacity 150 KLPD to produce Rectified Spirit/Extra Neutral Alcohol/Ethanol based on "C"/ "B" Heavy Molasses/Sugarcane Juice/Syrup/Grains by M/s. Malhar Sakhar Karkhana Limited located at Gat No. 174 & 175, Village Chandapuri, Tal. Malshiras, Dist. Solapur Maharashtra.

All molasses-based distilleries and cane juice/non-molasses-based distillery (>100 KLD) are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The ToR has been issued by Ministry vide letter NO. J-11011/161/2021-IA-II(I) dated 11.05.2021. Public Hearing for the proposed project has been conducted by Maharashtra Pollution Control Board on 05.10.2021 on site at Malhar Sakhar Karkhana Ltd., Solapur and chaired by Additional District Magistrate, Solapur. The main issue raised during the Public Hearing are related to (i) How proposed unit will control the Air pollution and water pollution (ii) Employment generation (iii) How much rate will get to the Sugar cane. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

Sr. no.	Description	Unit	Proposed Capacity	Remark
1	Sugarcane Crushing	TCD	3000	
2	Distillery Unit	KLPD	150	Only One Product at a time
	Rectified Spirit or	KLPD	150	
	Extra Neutral Alcohol or		150	
	Ethanol		150	

Proposed land area is 106400.00 m<sup>2</sup> (26.29 acre). Industry will develop greenbelt in an area of 33 % i.e., 32500.00 m<sup>2</sup> (8.69 acre) out of net plot area of the project. The estimated project cost is Rs. 192.35 Crore. Total capital cost earmarked towards environmental pollution control measures for proposed unit is Rs. 40.8 Crores and the Recurring cost (operation and maintenance) will be about Rs. 3.05 Crores per annum. Total Employment for proposed expansion unit will be 60 persons as direct &

30 persons indirect. Industry proposes to allocate Rs. 2.88 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 from the project site.

Ambient air quality monitoring was carried out at eight locations during March 2021 to May 2021 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (40.5 to 55.9 µg/m<sup>3</sup>), PM<sub>2.5</sub> (18.9– 28.9µg/m<sup>3</sup>), SO<sub>2</sub> (10.3 – 16.9µg/m<sup>3</sup>) and NO<sub>2</sub> (14.6– 20.6µg/m<sup>3</sup>). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 48.17 µg/m<sup>3</sup> to 55.96 µg/m<sup>3</sup>, 24.94 µg/m<sup>3</sup> to 29 µg/m<sup>3</sup>, 14.53 µg/m<sup>3</sup> to 17.8 µg/m<sup>3</sup> and 19.29 µg/ m<sup>3</sup> to 21.5 µg/ m<sup>3</sup> with respect to PM<sub>10</sub>, PM<sub>2.5</sub> Sox and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is max 2635 m<sup>3</sup>/day of which fresh water requirement of max 684.0 m<sup>3</sup>/day will be met from Irrigation Department. Effluent of quantity 495 m<sup>3</sup>/day out of which (Raw spent wash - 100 m<sup>3</sup>/day, spent lees – 300 m<sup>3</sup>/day) spent wash will be concentration in MEE followed by incineration boiler and Process condensate will be treated in Condensate Polishing Unit. The plant will be based on Zero Liquid discharge system.

Power requirement will be 4.2 MW and will be met from 5 MW TG Set connected to proposed 50 TPH Incinerator boiler. DG1 No of 500 kVA DG sets are used as standby during power failure. Stack (height 5m.) will be provided as per CPCB norms to the proposed DG sets. 50 TPH Concentrated spent wash & bagasse fired incineration boiler will be installed. Electrostatic precipitator (ESP) with a stack of height of 65 m will be installed proposed for controlling the particulate emissions within the statutory limit of 150 mg/Nm<sup>3</sup> for the proposed boilers.

### **Details of process emissions generation and its management:**

#### **Air pollution control measures**

<b>Sr. No</b>	<b>Source</b>	<b>Fuel</b>	<b>Pollutant</b>	<b>Control Equipment</b>
<b>Proposed</b>				
1	1 No of 50 TPH boiler	Bagasse & coal	PM, SO <sub>2</sub> , NO <sub>x</sub>	60 m stack height and wet scrubber as APC Equipment is provided
2	Fermentation Unit	--	CO <sub>2</sub>	CO <sub>2</sub> Recovery Unit
3	D. G. Sets 1 Nos of 500	HSD	PM & SO <sub>2</sub>	5m Stack Height is provided

Sr. No	Source	Fuel	Pollutant	Control Equipment
	kVA			

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

**Solid Waste Management**

Sr. No.	Description of waste	Quantity	Mode of Collection and Disposal
	Bagasse as fuel for boiler		
1.	Fly/ Boiler Ash	172.8 MT/M	Ash generated shall be sold to brick manufacturer/ sold as manure
2	Bottom Ash	43.2 MT/M	
Coal as fuel for boiler			
	Fly/ Boiler Ash	806.4 MT/M	Ash generated shall be sold to to brick manufacturer/ sold as manure
	Bottom Ash	201.6 MT/M	
3.	ETP Sludge	300 MT/A	ETP Sludge and Pressmud shall be sold as manure.
Other Solid Wastes			
1.	Paper waste	0.01 MT/M	Manually collected and stored in a designated area and sold to scrap vendors
2.	Plastic waste	0.01 MT/M	
3.	Municipal Solid waste		
	Non-Biodegradable	7 MT/M	Manually collected and sold to scrap vendors
	Bio-degradable	10 MT/M	Used as manure.

**Hazardous Waste Management**

Sr. No.	Category	Description of waste	Quantity	Mode of Collection and Disposal
1.	5.1	Used Oil	1.01 KL/A	Shall be collected in Leak Proof Containers and utilized as lubricant for bullock carts/ Biodiesel firms

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

- (i). Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- (ii). 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- (iii). 15% of the total plant area will be reserved for parking.
- (iv). PP shall utilize fresh water 4.0 KL/KL ethanol.
- (v). Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). PP shall utilize 10% of the total power requirement from solar power.
- (vii). PP shall use coal only as initiating fuel.
- (viii). PP shall install the incineration boiler with ESP as Air pollution control system.
- (ix). PP shall install CO<sub>2</sub> plant within premises.
- (x). PESO certificate shall be obtained.
- (xi). The PP proposed a budget allocation of Rs. 3.0 Crores towards CER and it shall be used for construction/up-gradation of school building with provision of facilities e.g. Toilets, Drinking Water Facilities, Computers/Laptops and Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector.
- (xii). PP shall allocate at least Rs. 50 Lakhs for Occupational Health Safety.

PP has submitted the commitments above except for point (xii).

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

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

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

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iii). Total fresh water requirement shall not exceed 600.0 m<sup>3</sup>/day (4.0 KL/KL) and will be met from Irrigation Department Neera Right Bank Canal. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (iv). The spent wash/other concentrates shall be treated by concentration followed by incineration. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall install the incineration boiler with ESP as Air pollution control system. Coal shall be used only as initiating fuel. PP shall utilize 10% of the total power requirement from solar power.
- (v). PP shall install CO<sub>2</sub> plant within premises.

- (vi). 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.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms. PESO certificate shall be obtained.
- (ix). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (x). The company shall undertake waste minimization measures as below  
(a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xii). PP proposed to allocate Rs. 3.0 Crores towards CER and it shall be used for construction/up-gradation of school building with provision of facilities e.g. Toilets, Drinking Water Facilities, Computers/Laptops and Solar light etc. Further, the works under CER Plan shall be implemented in consultation with District Collector.
- (xiii). There shall be 15 % space of total project area 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.
- (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. 45.2**

**Proposed integrated project of 10000 TCD Sugar, 41 MW Co-generation power plant & 220 KLPD Distillery/ Ethanol Plant along with 8 MW incineration boiler based power generation by M/s. K P R Sugar and Apparels Limited located at village Chinamageri and Choudapur, Tal. Afzalpur, Dist. Kalaburagi, Karnataka - Consideration of Environment Clearance.**

**[IA/KA/IND2/190438/2020, J-11011/333/2020-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 integrated project of 10000 TCD Sugar, 41 MW Co-generation power plant & 220 KLPD Distillery/ Ethanol Plant along with 8 MW incineration boiler based power generation by M/s. K P R Sugar and Apparels Limited located at village Chinamageri and Choudapur, Tal. Afzalpur, Dist. Kalaburagi, Karnataka.

All molasses based distillery >100 KLPD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The Standard ToR has been issued vide letter No. IA-J-11011/333/2020-IA-II (I) dated 02 Jan 2021. Public Hearing for the proposed project has been conducted by the Karnataka State Pollution Control Board on 06.08.2021 at Project Site and chaired by Deputy Commissioner, kalaburagi. The main issues raised during the public hearing are related to queries on employment, odor and effluent management. It was informed that no litigation is pending against the project.



**The details of products and capacity are as under:**

<b>Sr. No.</b>	<b>Particulates</b>	<b>Capacity</b>
1.	Sugar Plant	10000 TCD
2.	Distillery/ Ethanol plant- RS/ ENA/AA/Ethanol (One at a time or in combination)	220 KLPD
3.	Cogeneration Plant (Power generation through Incineration Boiler)	41 MW 8 MW

The land area available for the project is 425597.058 m<sup>2</sup>. Industry will develop greenbelt in an area of 33.57 % i.e., 142866.2 m<sup>2</sup> out of total area of the project. The estimated project cost is Rs. 741.67 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 7.56 Cr and the recurring cost (operation and maintenance) will be about Rs. 27.0 lakhs per annum. Total employment will be 435 persons as direct & indirect (Construction & Operation Phase). Industry proposes to allocate Rs. 7.0 Cr. @ 1.0% of Total Project Cost (Rs. 741.67 Cr.) towards Corporate Environment Responsibility.

There are No national parks, wildlife sanctuaries, biosphere reserves, Tiger / Elephant reserves, Wildlife Corridors etc., within 10 km distance from the project site. River Bhima is flowing at a distance of 3.4 km towards South direction.

Ambient air quality monitoring was carried out at ten locations during October to December, 2020 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (42.1 to 59.1 µg/m<sup>3</sup>), PM<sub>2.5</sub> (14.6 to 25.1 µg/m<sup>3</sup>), SO<sub>2</sub> (6.3 to 14.5 µg/m<sup>3</sup>) and NO<sub>x</sub> (11.9 to 19.5 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.45 µg/m<sup>3</sup>, 0.06 µg/m<sup>3</sup>, 1.8 µg/m<sup>3</sup> and 2.8 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 10,116 m<sup>3</sup>/day of which fresh water requirement of 2000 m<sup>3</sup>/day will be met from Bhima River. (Water drawl permission application to water resources department dated 16.02.2021). Distillery effluent of 1795 m<sup>3</sup>/day\* quantity will be treated through 2000 CMD Condensate treatment Plant. The plant will be based on Zero Liquid discharge system. (\*Conc. Spent wash 444 CMD will be through Multi effect evaporator (MEE) followed by Incineration boiler.)

Sugar effluent 1000 CMD will be treated through 2000 CMD ETP. Excess condensate from Sugar will be treated in 2400 CMD CPU.

Power requirement will be 17.5 MW and will be met from own cogeneration power plant (41 MW and 8 MW). Proposed integrated unit will have five D.G. sets of capacities 1250 kVAx4 and 625 kVA x1. All 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 210 TPH bagasse boiler will be installed for sugar and Co-generation unit and 60 TPH multi feed incineration boiler will be installed for proposed Distillery. Electrostatic precipitator with 87 m stack will be installed for sugar and Cogeneration boiler and 86 m Stack with Bag Filter will be provided with proposed distillery boiler, for controlling of particulate emission within statutory limit of 115 mg/Nm<sup>3</sup> for the proposed boilers.

#### **Details of process emissions generation and its management:**

<b>Project Activity</b>	<b>Anticipated pollutant</b>	<b>Management</b>
Process emissions	CO <sub>2</sub> and Negligible VOCs	CO <sub>2</sub> shall not be release in the air. CO <sub>2</sub> will be either Bottling/ dry ice.
Stack, Fugitive emissions, material handling.	PM <sub>10</sub> , PM <sub>2.5</sub> , NO <sub>x</sub> , SO <sub>2</sub> , CO <sub>2</sub>	Sugar and Cogeneration unit: Electrostatic precipitator with 87 m stack Distillery unit: Bag Filter with 86 m stack

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

<b>Sr.No.</b>	<b>Type of waste</b>	<b>Quantity</b>	<b>Final Disposal</b>
1.	Sugar press mud	400 TPD	Press mud will be sold to the farmer as manure.
2.	Bagasse Ash from cogeneration boiler and incineration boiler	38 TPD	It is rich in potash hence, it will sold to farmer as manure.
3.	Bagasse ash generated from incineration boiler	6.5 TPD	
4.	Concentrated Spent wash ash	66.6 TPD	
5.	Coal Ash	75.6 TPD	Send it to brick manufacturers
6.	Yeast sludge	25 TPD	Partly recirculated and remaining can be used as a manure in greenbelt development or mix with press mud and reused in greenbelt

			development
7.	ETP Sludge CPU Sludge	40 TPD 80 TPD	Partly recirculate and remaining will be mix with press mud for use as manure.
8.	Spent oil (5.1)	1.7 TPA	Authorized recycler

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

- 15 % of the total plant area will be reserved for parking.
- PP shall allocate at least Rs. 50 Lakhs for Occupational Health Safety.
- PP shall utilize fresh water 2.5 KL/KL ethanol.
- Entire project shall be ZLD and no single drop of water shall be discharged outside of plant premises.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- PP shall install the (210 TPH) incineration boiler with ESP as Air pollution control system and bag filter with 60 TPH boiler.
- PP shall install CO<sub>2</sub> bottling plant within premises.
- PP shall utilize 10% of the total power requirement from solar power.
- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- The PP proposed a budget allocation of Rs. 7.0 Crores towards CER and it shall be used for green belt development in nearby villages, 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.
- Employment shall be provided as per State Government Policy.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.

PP has submitted the desired information as sought above.

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

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

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

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iii). Total fresh water requirement shall not exceed 2.5 KL/KL and will be met from Bhima River. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Company to construct a storage pond of 60 days

capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

- (iv). The spent wash/other concentrates shall be treated by concentration followed by incineration. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash. PP shall install the (210 TPH) incineration boiler with ESP as Air pollution control system and bag filter with 60 TPH boiler. PP shall utilize 10% of the total power requirement from solar power.
- (v). PP shall install CO<sub>2</sub> bottling plant within premises.
- (vi). 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.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (ix). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (x). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xii). PP proposed to allocate Rs. 7.0 Crores towards CER and it shall be used for green belt development in nearby villages, 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. Employment shall be provided as per State Government Policy.

- (xiii). There shall be 15% space of total project area 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.
- (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. 44.3**

**Proposed Grain based 250 KLPD of 1G Ethanol plant along with rice husk/coal based 6 MW Captive Power plant by M/s. Devsristi Bio Fuels Private Limited located at Sy. no. 210/A/2, 210/A, 210/AA, 210/E, 212/A, 215/A, Hindupur Village, Krishna Mandal, Naryanpet District, Telangana - Consideration of Environment Clearance.**

#### **[IA/TG/IND2/236661/2021, J-11011/450/2021-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 Grain based 250 KLPD of 1G Ethanol plant along with rice husk/coal based 6 MW Captive Power plant by M/s. Devsristi Bio Fuels Private Limited located at Sy. no. 210/A/2, 210/A, 210/AA, 210/E, 212/A, 215/A, Hindupur Village, Krishna Mandal, Naryanpet District, Telangana.

As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> 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<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

<b>S.No.</b>	<b>Product</b>	<b>Proposed Quantity</b>
1	Fuel Ethanol	250 KLD
By product		
1	Distillers Drained Grain Soluble	97 TPD
2	CO <sub>2</sub>	189 TPD

Total area of the proposed project is 26.08 Acres, in which 7.20 acres (27.60%) are allocated for process plant & machinery. 2.45 Acres (9.40%) for raw material, fuel storage & product storage. 1.84 acres (7.05 %) for roads & amenities. 8.94 acres (34.27 %) for green belt development. 1.74 Acres (6.67 %) for water storage reservoir & 3.91 Acres (15.0 %) area allocated for parking. The estimated project cost is Rs. 250 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 14.55 Cr and the Recurring cost (operation and maintenance) will be about Rs. 2.89 Cr per annum. Total Employment will be 172 (102 Regular & 70 Contract) persons as direct & 300 persons indirect employment from the project. Industry proposes to allocate Rs. 6.25 Cr @ 2.5 % towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Krishna is flowing at a distance of 1.05 Km in South direction.

Ambient air quality monitoring was carried out at 4 locations in the and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (50.8 - 60.3 µg/m<sup>3</sup>), PM<sub>2.5</sub> (17.3 - 20.3 µg/m<sup>3</sup>), SO<sub>2</sub> (14.5 - 15.8 µg/m<sup>3</sup>) and NO<sub>2</sub> (16.6 - 21.1 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 60.7 µg/m<sup>3</sup>, 17.0 µg/m<sup>3</sup> and 22.9 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, Sox and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total water requirement of the proposed project will be 1315 KLPD (1000 KLPD process, 260 KLPD power turbine CT make-up water & Domestic, greenbelt 55 KLPD) which will be source from River Krishna. The proposed unit will be based on "Zero Effluent Discharge". Fresh water requirement for various plant activities including ethanol plant

operations, domestic and others is 1315 KLPD. Wastewater generated in the form of process condensate, spent lees, CT blow down will be treated in ETP/CPU of capacity 1500 KLPD and recycled again within process. Spent wash (1553 TPD) generated from distillation process will be taken through Centrifuge Decanters for separation of Suspended Solids separated as Wet Cake (241TPD) & will then be treated in Multi Effect Evaporator followed by DWGS dryer to finally obtain DDGS (Cattle feed-97 TPD). Treated water from STP will be used for greenbelt development and miscellaneous purpose. Hence, no discharge will be done outside plant premises.

The total power required for the project site is 6.0 MW it will be sourced form in house captive plant with boiler of 55 TPH capacity. The fuel used for boiler is India Coal/Rice Husk (Indian Coal @3800 kcal/kg GCV) 0.8 LMT or Rice Husk @3200 kcal/kg GCV) 1.0 LMT). 10% of total power requirement of the project will be met through solar energy. For emergency purpose 2X1000 KV DG sets are proposed.

### **Details of process emissions generation and its management:**

The fugitive dust (PM) emissions occur from road, raw material unloading and loading, vehicle movement leading the re-suspension of settled dust, etc. Following mitigation measures are recommended for its control.

- The raw material and product shall be brought in and dispatched by road in covered trucks.
- Efficient pollution control equipment's like ESP will be installed.
- Boiler ash will be transferred in closed conveyors to the end users to avoid any spillage.
- Better housekeeping by regular steaming of all fermentation equipment.
- Use of efficient bio-cides to control bacterial contamination.
- Use of dust suppressants namely liquid polymer emulsion, agglomeration chemicals (lignosulphonates, polyacrylamides), cementitious products like lime and calcium sulphate, Petroleum based emulsions, Chloride salts (Mg and Ca).
- Use of scaffolding sheets /nets, wind fencing for dust control.
- Stabilized concreted earthworks with stone, soil, geotextiles, vegetation, compacting.
- Keep proper shape of stockpiles (avoid steep slopes and faces).

### **Stack Emissions:**

- Online stack monitoring system will be provided to keep a check on emissions and implement proper measures in case of any failure or violation of prescribed standards.
- Regular cleaning, inspection and maintenance of air pollution control equipment will be carried out.



- Workers will be trained regarding emergency actions to be taken during equipment failure.
- The whole distillery unit will be provided with facility of inter locking so that any failure of equipment or APCE will result in instant shut down of the complete process.
- Air Treatment Technology, incorporating ESP will manage aerial emission prior to discharge to the atmosphere via a stack. The stack will be designed to be of sufficient height to aid dispersion to the point where emissions will not impact on any receptors.

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

The type waste generation from proposed project solid waste, Hazardous waste and Municipal waste the following methods will be followed for of disposal waste. Fly Ash generated will be used within the project as much as possible or nearby low-lying areas. The fly ash from coal will be sent to local brick manufactures & cement plants.

- Maximum re-cycling and utilization of generated solid waste shall be done as per the guidelines.
- Unit will prepare Hazardous waste disposal plan, as per applicable statutory conditions under the Hazardous Wastes Act, 2016 and same will be implemented.
- EMC will keep a record of quantity of solid and hazardous waste generated and their proper disposal.
- Separate designated storage area shall be provided with sign boards/labels for storage of hazardous waste.
- The concerned person will prepare a site manual on the total program and activities of solid/hazardous waste management.
- Regular training of employees engaged in solid waste management works.
- The project proponent will explore possibilities of in-house brick manufacturing unit for utilization of fly ash.
- Waste oil will be stored in covered HDPE drums in a designated area and will be given to authorized dealers.
- Construction debris will be reused within plant site to the maximum extent as possible and recyclables will be given to authorized recyclers.
- Canteen waste will be used in composting /vermiculture.
- The lead acid battery or dry battery, E-Waste will be given to authorized recycler

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

During 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.
- 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.
- PP shall meet 10% (0.6 MW CPP capacity) of the total power requirement from solar power within the plant.
- Entire project shall be ZLD and no single drop of water shall be discharged outside of plant premises.
- PP shall install ESP with the boiler.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- PP shall allocate at least Rs. 50 Lakhs per year for Occupational Health Safety.
- PP shall use only 15% of coal along with rice husk.
- The PP proposed a budget of Rs. 6.5 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. Further, the works under CER Plan shall be implemented in consultation with District Collector and School Head Master.

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 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of 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 River Krishna. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). 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. PP shall use only 15% of coal along with rice husk. PP shall meet 10% (0.6 MW CPP capacity) of the total power requirement from solar power within the plant.

- (vi). CO<sub>2</sub> 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 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. 6.5 Crores 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 and School Head Master.
- (xiv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

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

#### **Agenda No. 45.4**

**Expansion of Molasses based Distillery from 30 KLPD to 100 KLPD by M/s. Vitthal Corporation Limited located at Vitthalrao Shinde Nagar, Village: Mhaisgaon, Tal.: Madha, Dist.: Solapur, Maharashtra - Consideration of Environment Clearance.**

#### **[IA/MH/IND2/237847/2019, J- 11011/704/2008- IA II (I)]**

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

The proposal is for environmental clearance to the project for Expansion of Molasses based Distillery from 30 KLPD to 100 KLPD by M/s. Vitthal Corporation Limited located at Vitthalrao Shinde Nagar, Village: Mhaisgaon, Tal.: Madha, Dist.: Solapur, Maharashtra.

As per the provisions of "EIA Notification No. S.O. 1533 (E)" dated 14.09.2006 as amended on 13.06.2019 all Molasses based Distilleries with capacity equal to or less than 100 KLPD are to be considered at State Level. However, as the project site is located within 5 Km of Great Indian Bustard (GIB) Wildlife Sanctuary, "General Conditions" are applicable to the project and to be appraised at Centre Level by Expert Appraisal Committee of MoEFCC as Category 'A'.

The Standard ToR has been issued vide letter No. IA- J-11011/704/2008- IA II(I) dated 12<sup>th</sup> March, 2019 for Expansion of Molasses based Distillery from 30 KLPD to 100 KLPD. Public Hearing for the proposed project has been conducted by the Maharashtra Pollution Control Board on 05.03.2021 at Project Site of Vitthal Corporation Ltd., Solapur and chaired by Additional District Magistrate, Solapur. No any specific issues were raised during the Public Hearing. Only concerns were raised w.r.t. employment generation, green belt, Project Cost, CSR activities,

Spentwash treatment etc. It was informed that no litigation is pending against the project.

Ministry has issued EC earlier vide letter no. J-11011/704/2008-IA II (I) dated 04<sup>th</sup> February, 2009 to the existing 30 KLPD Molasses based Distillery Unit in favor of M/s. Vitthal Sugar Manufacturing Ltd. (VSML).

Details of Certified compliance report submitted by RO, MoEF&CC: Visit of RO, MoEFCC, Nagpur conducted on 10.02.2021 and RO report received on 01.07.2021. Action taken report towards Non-complied/Partly Complied conditions observed by RO; MoEFCC submitted on 14.10.2021. ATR is found satisfactory by the EAC and recommended the proposal.

**The details of products and capacity are as under:**

Industrial Unit	Product	Unit	Quantity		
			Existing	Expansion	Total
<b>Distillery</b>	RS/ Extra Neutral Alcohol (ENA)/ Ethanol	KLPD	30	70	100
	<b>By-products</b>				
	CO <sub>2</sub>	MT/M	22	54	76
	Fusel Oil	MT/M	0.06	0.13	0.19

Existing land area is 5,98,800 M<sup>2</sup>. No additional land area will be acquired for expansion project. Industry has already developed Green Belt in an area of 36,939 M<sup>2</sup> (6% of total plot area). Moreover, additional Green Belt area of 1,69,411 M<sup>2</sup> (28% of total plot area) will be developed under expansion. The total Green Belt would be 2,06,341 M<sup>2</sup> (34%) out of total plot area. The estimated project cost is Rs. 249.13 Crores including existing investment of Rs. 146.77 Crores. Total capital cost earmarked towards environmental pollution control measures under distillery is Rs. 52.60 Crores and the Recurring cost (operation and maintenance) will be about Rs. 3.85 Crores per annum. Total Employment will be 502 persons as direct. Industry proposes to allocate Rs. 200 Lakh @ of 2 % towards Corporate Environmental Responsibility.

There are no National Parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 Km Study Area. Sina River is flowing at 3.70 Km from North West of project site. The ESZ for the GIB is finalized vide Notification S.O. 654 (E) dated 11.02.2020. The existing Sugar and Distillery area with Gat Nos. 501 & 600/2 are listed in notified ESZ of GIB. But Distillery expansion area on Gat No. 589 is not listed in the notified ESZ (located outside of the ESZ). PP has submitted NBWL application for Wildlife Clearance (Proposal No. : FP/MH/IND/5874/2021 dated 27.04.2021).

Ambient air quality monitoring was carried out at 8 locations during Jan 2019 to 31 March 2019 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (57.96 –68.56µg/m<sup>3</sup>), PM<sub>2.5</sub> (19.80µg/m<sup>3</sup> – 22.58µg/m<sup>3</sup>), SO<sub>2</sub> (19.52µg/m<sup>3</sup>- 30.50µg/m<sup>3</sup>), NO<sub>x</sub> (24.67µg/m<sup>3</sup>-34.70µg/m<sup>3</sup>), CO (0.075 mg/m<sup>3</sup>-0.85 mg/m<sup>3</sup>) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs would be 1.30 µg/m<sup>3</sup> for PM<sub>10</sub> (towards South West Side), 0.33 µg/m<sup>3</sup> for PM<sub>2.5</sub> (towards South -West side), 9.13 µg/m<sup>3</sup> for SO<sub>2</sub> µg/m<sup>3</sup> (towards South -West side) and 0.882 µg/m<sup>3</sup> NO<sub>x</sub> (towards South -West side). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement after expansion of Distillery project will be 1649 CMD. Out of which, 327 CMD will be fresh water taken from Ridhore Kolhapur type water bank on Sina river. The total raw spent wash to the tune of 800 M<sup>3</sup>/Day will be generated. Here, raw spent wash from Proposed 70 KLPD distillery @ 560 M<sup>3</sup>/Day shall be primarily conc. in Multi Effect Evaporator (MEE) and incinerated in 30 TPH incineration boiler. While raw spent wash from existing 30 KLPD distillery @ 240 M<sup>3</sup>/Day shall be treated in Bio-methanation plant followed concentration in MEE and then will be incinerated in boiler. The distillery will be operated for 330 days.

Power requirement for distillery after expansion will be 1.13 MW will be met from own co-gen plant. After Expansion no DG set will be installed. Existing unit has 2 No. of DG sets having capacity of 320 KVA & 160 KVA with 3 M & 2.5 M stack height. Existing unit has 25 TPH & 50 TPH Bagasse based boilers under Sugar Factory & Co-gen Plant. A new incineration boiler of 30 TPH capacity would be installed. Bagasse (133 MT/D)/Coal (85 MT/D) & Spent wash 200 MT/D would be used as fuel. ESP with a stack of height of 62 M installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm<sup>3</sup> for the boiler.

#### **Details of process emissions generation and its management:**

The CO<sub>2</sub> generation shall take place in fermenters of the distillery. CO<sub>2</sub> to the tune of 76 MT/Day shall be released from 100 KLPD distillery plant. CO<sub>2</sub> shall be compressed, bottled and supplied to manufacturers of beverages.

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

##### **Details of Solid Waste Generation & its Management:**

No.	Industrial Unit	Type	Quantity (MT/M)		Disposal
			Existing	After Expansion	
1	Distillery	Boiler Ash	--	1380	For Brick Making.

		Yeast Sludge	180	540	Burnt in Incineration Boiler
		CPU Sludge	3	21	

Details of Hazardous Waste Generation & its Management: No any hazardous waste will be generated from distillery unit.

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

- PP shall increase the CER budget three times over the already presented CER budget of Rs. 2.0 Crore. Accordingly, EAC stated that to make provision of Rs. 6.0 Crore in addition to the already proposed funds of Rs. 2.0 Crore. Total CER budget allocated in two activities are as follows:
  - (i) The proposed budget of Rs. 2.0 Crores towards CER and it shall be used for ground water supply systems through deep tube well for nearby villagers with consultation of District Collector before commissioning of the project.
  - (ii) The additional proposed budget of Rs. 6.0 Crores towards CER shall be used for Solar Photovoltaic Power Generation Systems for study area at certain location like Z.P., Schools, Gram Panchayat Buildings, PHC Buildings, Panchayat Samitee Office and similar other places with consultation of 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 EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

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



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

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

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

- (i). The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, as per the Ministry's OM dated 8<sup>th</sup> August, 2019. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken. PP shall also strictly follow the conditions mentioned in existing NBWL clearance.
- (ii). The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (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 327 CMD and will be met from Ridhore Kolhapur type water bank on Sina 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.
- (vi). The spent wash/other concentrates shall be treated by concentration followed by incineration.
- (vii). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (x). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below  
(a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiv). The proposed budget of Rs. 2.0 Crores towards CER shall be used for ground water supply systems through deep tube well for nearby villagers with consultation of District Collector before commissioning of the project. The additional proposed budget of Rs. 6.0 Crores towards CER shall be used for Solar Photovoltaic Power Generation Systems for study area at certain location like Z.P., Schools, Gram

Panchayat Buildings, PHC Buildings, Panchayat Samitee Office and similar other places with consultation of District Collector before commissioning of the project.

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

#### **Agenda No. 45.5**

**Proposed 60 KLPD Grain based Distillery by M/s. K B D Industries LLP located at Survey No. 104 and 105, Terlapadu Village, Madhira Mandal, Khammam District, Telangana - Consideration of Environment Clearance.**

**[IA/TG/IND2/237939/2021, J-11011/474/2021-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 by M/s. K B D Industries LLP located at Survey No. 104 and 105, Terlapadu Village, Madhira Mandal, Khammam District, Telangana.

As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> 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<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

<b>Sr. No.</b>	<b>Particulates</b>	<b>Capacity</b>
<b>Products</b>		
1.	Ethanol	60 KLPD
2.	Captive power plant	1.8 MW
<b>By Products</b>		
3.	DDGS	42 TPD
4.	CO <sub>2</sub>	35 TPD

The land area available for the project is 40460 m<sup>2</sup>. Industry will develop greenbelt in an area of 33 % i.e., 13400 m<sup>2</sup> out of total area of the project. The estimated project cost is Rs 81.75 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 2.25 Cr. and the recurring cost (operation and maintenance) will be about Rs. 28.5 lakhs per annum. Total employment will be 150 persons as direct & indirect. Industry proposes to allocate Rs. 1.6 Cr. @ 2.0% of Total Project Cost (Rs.81.75Cr.) towards Corporate Environment Responsibility.

There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger / Elephant Reserves, Wildlife Corridors etc., within 10 km distance from the project site. River Kattaleru is flowing at a distance of 0.2 km in south direction.

AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.216 µg/m<sup>3</sup>, 0.144 µg/m<sup>3</sup>, 10.7 µg/m<sup>3</sup> and 8.9 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 792 m<sup>3</sup>/day of which fresh water requirement of 442 m<sup>3</sup>/day will be met from Kattaleru River & borewell. (Water drawl permission from CGWB and Irrigation Department is obtained vide letter No.Proc No. CE(I)/KMM/water Allocation/2021-22/578 dated 06.11.2021, Letter No. 6458/GP/TSiPASS/Khm/2021 dtd. 30.09.2021). Distillery effluent excluding raw stillage of 262 m<sup>3</sup>/day\* quantity will be treated through 300 m<sup>3</sup>/day condensate treatment plant. The plant will be based on Zero Liquid Discharge (ZLD) system. (215 m<sup>3</sup>/day \* The raw stillage generated will be sent to decanter followed by MEE followed by dryer).

Power requirement will be 1.8 MW and will be met from own captive power generation (18 TPH boiler which will run T.G set of 1.8 MW capacity). Proposed unit will have 400 kVA x 1 No. DG sets will be used only as stand by during power failures. Stack height >11 m will be provided as per CPCB norms to the proposed DG sets. Proposed 18 TPH boiler will be installed with 1.8 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/Nm<sup>3</sup> for the proposed boiler.

#### **Details of process emissions generation and its management:**

<b>Project Activity</b>	<b>Anticipated pollutant</b>	<b>Management</b>
Process emissions	CO <sub>2</sub> and Negligible VOCs	CO <sub>2</sub> shall not be release in the air. CO <sub>2</sub> will be scrubbed for Bottling.
Stack, Fugitive emissions, material handling.	PM <sub>10</sub> , PM <sub>2.5</sub> , NO <sub>x</sub> , SO <sub>2</sub> , CO <sub>2</sub>	Distillery unit: Electrostatic precipitator with 45 m stack

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

<b>Sr. No.</b>	<b>Type of waste</b>	<b>Quantity</b>	<b>Final Disposal</b>
1.	DDGS	42 TPD	DDGS is the by-product and will be sold to cattle/poultry feed.
2.	Coal Ash	15.1 TPD	Coal ash will be sold to brick manufacturers.
3.	CPU Sludge	10 TPD	CPU sludge will be used as manure
4.	Spent oil (5.1)	0.6 KL/Annum	Quantity of Spent oil will be negligible and shall be sent to authorized recycler

As per OM dated 16<sup>th</sup> 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:

- 15% of the total plant area will be reserved for parking.
- PP shall allocate at least Rs. 50 Lakhs for Occupational Health Safety.

- PP shall utilize fresh water @4.0 KL/KL of ethanol production.
- Entire project shall be ZLD and no single drop of water shall be discharged outside of plant premises.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- PP shall meet 10% (80 KW) of the total power requirement from solar power.
- The proposed budget of CER is Rs. 1.6 Crores and shall be used for green belt development nearby villages, 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.
- Employment shall be provided as per State Government Policy.

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 16<sup>th</sup> 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). 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 Kattaleru River and no ground water shall be utilized. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). 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% (80 KW) of the total power requirement from solar power.
- (vi). CO<sub>2</sub> 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 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. 1.6 Crores towards CER and shall be used for green belt development nearby villages, 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. Employment shall be provided as per State Government Policy.
- (xiv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes.
- (xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.



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

#### **Agenda No. 45.6**

**Expansion of molasses based distillery unit from 60 to 90 KLPD by M/s. Krantiagrani Dr. GD Bapu Lad SSK Sahakari Sakhar Karkhana Ltd. Located at Gat no. 2955, village Kundal, Taluka Palus, District Sangli, Maharashtra - Consideration of Environment Clearance.**

**[IA/MH/IND2/237787/2019, J-11011/117/2016- IA II(I)]**

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

The proposal is for environmental clearance to the project for Expansion of molasses based distillery unit from 60 to 90 KLPD by M/s. Krantiagrani Dr. GD Bapu Lad SSK Sahakari Sakhar Karkhana Ltd. Located at Gat no. 2955, village Kundal, Taluka Palus, District Sangli, Maharashtra.

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

The Standard ToR has been issued vide letter No. J-11011/117/2016- IA II(I) dated 26<sup>th</sup> August, 2019. Public Hearing for the proposed project has been conducted by the Maharashtra Pollution Control Board on 14.01.2021 at Project Site of M/s. Krantiagrani Dr. G. D. Bapu Lad Sahakari Sakhar Karkhana Ltd., Sangli and chaired by District Magistrate, Sangli. The main issues raised during the public hearing are related to concerns with particulate air pollution and wastewater treatment. It was informed that no litigation is pending against the project.

Ministry had issued EC earlier vide letter no. F. No. J-11011/ 117/ 2016- IA-II (I) ; dated 20<sup>th</sup> July 2017 to the existing 60 KLPD distillery in favour of M/s. Krantiagrani Dr. GD Bapu Lad SSK Sahakari Sakhar Karkhana Ltd.

Details of Certified compliance report submitted by RO, MoEF&CC, Nagpur through a letter vide F. No. EC -529/RON/2017-NGP/8213 dated

01.07.2021. Action taken report towards Non- complied/Partly Complied conditions observed by RO; MoEFCC submitted by PP on 30.10.2021. ATR is found satisfactory by the EAC and recommended the proposal.

**The details of products and capacity are as under:**

<b>S. No</b>	<b>Product Details</b>	<b>Existing Quantity (KLPD)</b>	<b>Proposed Quantity (KLPD)</b>	<b>Total Quantity (KLPD)</b>
1	Rectified spirit or ENA or Fuel alcohol & impure spirit (approx. 5 to 6%)	60	30	90
2	Fusel oil (by-product)	480 L/day	240 L/day	720 L/day

The existing distillery occupies 14.23 acres. Proposed expansion is mainly through modification of existing set up and will not require any additional land. Industry has already developed greenbelt in an area of 33 % i.e., 41 acres out of total area of the project. Existing area (entire industry including sugar unit) is 126.4 Acres. The estimated project cost is Rs 424.75 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 136.25 lakhs and the Recurring cost (operation and maintenance) will be about Rs 433.60 lakhs per annum. No new direct employment opportunities. Since the project is expansion of existing unit and present manpower is adequate even after expansion. The industry proposes to allocate Rs. 8.50 lakhs of 2.0 % towards Corporate Social Responsibility.

The Yashwantrao Chavan Sagareshwar Wildlife Sanctuary 1.7 km towards west of site. ESZ of Yashvantrao Chavan Sagareshwar Wildlife Sanctuary has been notified vide Ministry Notification dated 15<sup>th</sup> May, 2017. The Eco-sensitive Zone is spread over an area of 3.68 square kilometres with an extent up to 100 metres from the boundary of Yashvantrao Chavan Sagareshwar Wildlife Sanctuary.

Ambient air quality monitoring was carried out at 8 locations during 10<sup>th</sup> Oct 2019 to 15<sup>th</sup> January 2020 and the baseline data indicates the ranges of concentrations as: PM10 (56.40 to 71.20  $\mu\text{g}/\text{m}^3$ ), PM2.5 (26.22 to 36.50  $\mu\text{g}/\text{m}^3$ ), SO2 (17.60 to 25.80  $\mu\text{g}/\text{m}^3$ ) and NO2 (22.40 to 34.20  $\mu\text{g}/\text{m}^3$ ). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.67  $\mu\text{g}/\text{m}^3$ , 3.19  $\mu\text{g}/\text{m}^3$  with respect to PM10, and Sox. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 681  $\text{m}^3/\text{day}$  distillery will be met from Krishna River through canal with permission from irrigation department. Effluent 720  $\text{m}^3/\text{day}$  (raw spentwash from distillery) will be concentrated through

multi-effect evaporation (up to ~144 m<sup>3</sup>/day) followed by incineration. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 2.0 MW during season it will be met from in house STG of 2.0 MW capacity. Existing incineration boiler of 22 TPH with pressure 45 kg/cm<sup>2</sup> and ESP as Air pollution control device. The same will be used after suitable augmentation.

#### **Details of process emissions generation and its management:**

CO<sub>2</sub> emissions from the fermentation process will be around 66.6 TPD. CO<sub>2</sub> Scrubber unit is provided from the same

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

##### **Solid waste generation and disposal: Distillery unit**

<b>Sl. No.</b>	<b>Waste</b>	<b>Quantity</b>	<b>Disposal</b>	<b>Remark</b>
1.	Yeast sludge (Dry)	27-30 TPA	Used as soil conditioner	Organic
2.	Ash from Spent wash & Coal	58.90 TPD	Given to brick manufacturers	Inorganic
3.	CPU sludge (dry)	40-45 TPA	Used as soil conditioner	Organic/Inorganic

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

- PP shall utilize fresh water @4.0 KL/KL ethanol.
- Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- 33% of the total project area shall be developed with greenbelt within the plant premises including 5-10 m width greenbelt peripherally.
- 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.
- PP shall allocate at least Rs. 50 Lakhs for Occupational Health Safety.
- The proposed budget allocation of Rs. 40.0 Lakhs towards CER and it shall be used for installation of solar power and improving infrastructure of schools for villagers free of cost.

PP has submitted the desired information as sought above.

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

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

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

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

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

- (ii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iii). Total fresh water requirement shall not exceed @ 4.0 KL/KL and will be met from Krishna River through canal. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Company to construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (iv). The spent wash/other concentrates shall be treated by concentration followed by incineration. 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.
- (v). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vi). 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.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (ix). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (x). The company shall undertake waste minimization measures as below  
(a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in

consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

- (xii). The proposed budget of Rs. 40.0 Lakhs towards CER shall be used for installation of solar power and improving infrastructure of schools for villagers free of cost.
- (xiii). There shall be 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.
- (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. 45.7**

**Expansion of grain based Distillery from 200 KLPD to 300 KLPD by installing a new 100 KLPD Fuel Ethanol Plant by M/s. Svaksha Distillery Limited located at Mouza - Dakshin Simla, JL No : 355, Police Station - Kharagpur, District - Paschim Medinipur, West Bengal - Consideration of Environment Clearance.**

#### **[IA/WB/IND2/58535/2015, J-11011/259/2015 – IA II (I)]**

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

The proposal is for environmental clearance to the project for Expansion of grain based Distillery from 200 KLPD to 300 KLPD by installing a new 100 KLPD Fuel Ethanol Plant by M/s. Svaksha Distillery Limited located at Mouza - Dakshin Simla, JL No : 355, Police Station - Kharagpur, District - Paschim Medinipur, West Bengal.

As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> 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<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

Ministry has issued the Environmental Clearance earlier vide letter F. No. J-11011/259/2015-IA II (I) dated 22<sup>nd</sup> February, 2017 to the existing project of 200 KLPD grain based distillery and 10 MW of cogeneration of power in favour of M/s. Svaksha Distillery Ltd.

**The details of products and capacity are as under:**

S. No.	Item	Unit	Existing Capacity	Proposed Additional Capacity	Total
1.	ENA/RS/ Impure spirit/ Country spirit/ Denatured spirit/ Fuel Ethanol (Absolute ethanol)	KL	200	100 (Fuel Ethanol Only)	300
2.	By-products				
	CO2	MT	140	70	210
	Fusel Oil	MT	2	1	3
	DDGS	MT	106	53	159

The promoters of the project are already having 11.26 hectares of land at Mouza - Dakshin Simla, JL No: 355, Police Station - Kharagpur, District - Paschim Medinipur (West Bengal). Out of the total land area of 11.26 hectares, the promoters have dedicated 7.72 hectares for the existing and proposed distillery plant and balance 3.54 hectares will be used for other industrial purposes. Industry has already developed green belt in an area of 2.55 hectares which is more than 33 % of total land area. The estimated project cost is Rs. 50 crores for the proposed project. Total capital cost earmarked towards environmental pollution control measures is Rs. 6.00 crores and recurring cost (operation and maintenance) will be about Rs. 1.50 crores. Total employment generation will be 100 persons as direct and indirect employment due to the proposed expansion. Industry proposes to allocate Rs. 50.00 Lakhs 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.

Total water requirements after the proposed expansion will be 1672 m<sup>3</sup>/day. All the fresh water requirements for the existing as well as proposed project will be met from ground water. The industry has already got the permission from Water Resources Investigation and Development Department, West Bengal for the extraction of ground water @ 1750 m<sup>3</sup>/day. The industry will generate a total of 598 m<sup>3</sup>/day of condensates including spent lees from the proposed expansion. Out of this, 340 m<sup>3</sup>/day will be directly used in the process for slurry preparation. Remaining condensates @ 258 m<sup>3</sup>/day will be treated in condensate polishing unit and reused for cooling tower makeup water. Effluent from misc. streams will be 84 m<sup>3</sup>/day which will be treated in ETP and reused for water of green belt within the industrial premises.

Total power requirements after the proposed expansion will be around 9000 KVA and will be met from inhouse cogeneration power plant. Existing unit has 2x1000 KVA D G sets to be used as standby during power failure. Stack height to the D G sets has been provided as per norms. Existing unit has 1 x 75 TPH biomass/coal fired boiler. No additional boiler will be installed during the proposed expansion.

#### **Details of process emissions generation and its management:**

The industry will install dryers for the handling of DWGS for controlling process odors from the factory.

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

During deliberation it was informed to EAC that PP has not submitted CCR. In this regard PP has informed that plant will be commissioned in January 2022. Therefore CCR has not been obtained. Also, PP informed that 200 KLPD capacity has not been achieved yet. EAC noted the information and recommended the proposal for grant of EC.

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

- PP shall utilize fresh water @4.0 KL/KL of ethanol production.
- Entire project shall be ZLD and no single drop of water shall be discharged outside of plant premises.
- PP shall not utilize coal as fuel.
- 15% of the total plant area (distillery 300 KLPD) will be reserved for parking.
- PP shall meet 10% of the total power requirement from solar power.
- PP shall install ESP for boilers proposed in 200 & 100 KLPD distillery.



- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- PP shall allocate at least Rs. 50 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.
- The proposed budget of CER for not yet operational distillery 200 KLPD is Rs. 1.5 crore in addition to the existing CER as mentioned in EC granted. For proposed distillery 100 KLPD, CER will be Rs. 0.5 crores. CER shall be utilized primarily for installation of solar light in adjoining villages. Whereas CER budget mentioned in exiting EC shall be utilized in activities as committed before.

PP has submitted partial information/commitment 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 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 100 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of 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. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (v). 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 not utilize coal as fuel. PP shall install ESP for boilers proposed in 200 & 100 KLPD distilleries. PP shall meet 10% of the total power requirement from solar power.
- (vi). CO<sub>2</sub> 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 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). The proposed budget of CER for not yet operational distillery 200 KLPD is Rs. 1.5 crore in addition to the existing CER cost as mentioned in EC granted. For proposed distillery 100 KLPD CER will be Rs. 0.5 crores. CER shall be utilized primarily for installation of solar light in adjoining villages ,whereas CER budget mentioned in exiting EC shall be utilized in activities as committed before.
- (xiv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. 15% of the total plant area (distillery 300 KLPD) will be reserved for parking.
- (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. 42.8**

**Expansion of Molasses based distillery from 30 KLPD to multi feed (Cane Juice, B heavy molasses & C molasses) based 110 KLPD distillery unit at village Nivruttinagar (Dhalewadi), Post Shirol, Taluka District Pune by M/s. Shri Vighnagar Sahakari Sakhar Karkhana Limited - Reconsideration of Environment Clearance.**

**[IA/MH/IND2/229251/2003, J-11011/1/2004-IA II]**

The proposal was earlier placed before the EAC (Ind-2) in its 43<sup>rd</sup> meeting held during 08<sup>th</sup> – 09<sup>th</sup> November, 2021 wherein EAC deferred the proposal and desired certain requisite information/inputs.

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

<b>S. No</b>	<b>ADS</b>	<b>Reply of PP</b>	<b>Observation of EAC</b>
1.	PP shall provide justification for the non/partial compliances observed and do the necessary action required for the rectification of the same.	<p>➤ With reference to Certified EC compliance report from Regional Officer, MoEF&amp;CC, Nagpur vide F. No: 5-3/2005(ENV)/8420 Dated 9<sup>th</sup> August, 2021 we have not complied with two Environment clearance conditions namely</p> <ol style="list-style-type: none"> <li>1. Newspaper advertisement after obtaining Environment Clearance.</li> <li>2. Submission of six-monthly compliance report.</li> </ol> <p>➤ We undertake that we will submit six monthly compliances</p>	EAC deliberated the issue and found it satisfactory.

		<p>regularly &amp; comply with Environment clearance conditions after obtaining Environment clearance of proposed Distillery expansion. Affidavit mentioning same has been submitted.</p> <p>➤ Detailed justification along with action plan for non/partial compliance has been submitted.</p>	
2.	<p>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. Detail of dimensions of the storage tank shall be provided.</p>	<p>➤ Industry has existing water storage tank &amp; spray pond which will be used for roof top rain water harvesting.</p> <p>➤ The available roof area is 35 315 68 m<sup>2</sup> and annual rainfall of 900 mm, the total rainwater harvesting potential is approx 27 016 50 m<sup>3</sup> /year.</p> <p>➤ The harvested water will be stored in existing water storage tank Spray pond having water storage capacity 18 860 m<sup>3</sup>.</p> <p>➤ The industry will utilize the harvested rainwater 100 m<sup>3</sup> /Day as a process water for distillery.</p>	EAC deliberated the issue and found it satisfactory.
3.	<p>Proposed CER amount shall be doubled as a punitive measure for negligence of PP of not complying with the conditions imposed in the existing ECs since 15 years.</p>	<p>➤ Noted.</p> <p>➤ As per EC application proposed expansion project cost for distillery unit is Rs. 63.10 Cr and as per circular issued by Ministry of Environment, Forest and Climate Change (MoEFCC) dated May</p>	EAC deliberated the issue and found it satisfactory.

		<p>01, 2018 and subsequent circular of June 22, 2018 for Brown field project 1 % of the total expansion cost should be allocated against CER activity hence 1 % of 51.6179 Cr becomes Rs. 0.5161 Cr. Approx.</p> <ul style="list-style-type: none"> <li>➤ As per ADS project proponent to double the CER expenditure i.e about Rs. 1.0322 Cr.</li> <li>➤ These will be spent within first 5 years.</li> <li>➤ Year wise costing sheet has been submitted.</li> </ul>	
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The Project Proponent and the accredited Consultant M/s AmplEnviron Pvt. Ltd made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project proposed expansion of Molasses based distillery from 30 KLPD to multi feed (Cane Juice, B heavy molasses & C molasses) based 110 KLPD distillery unit at village Nivruttinagar (Dhalewadi), Post Shirol, Taluka District Pune by M/s. Shri Vighnahar Sahakari Sakhar Karkhana Limited.

The project/activities are covered under category A of item 5 (g) 'Distilleries' of the Schedule to the EIA, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC). The proposal has been submitted under the Ministry's EIA Notification, 2006 amendments vide Notification no. S.O. 345(E) dated 17<sup>th</sup> January 2019 & extension of notification S.O. 750(E) dated 17<sup>th</sup> February 2020, S.O 980(E) dated 2<sup>nd</sup> March, 2021. Accordingly, the proposal has been appraised as category 'B2' project.

The project proposal is exempted from obtaining ToR & conducting Public Hearing as per EIA notification, 2006 amendment vide S.O 980(E) dated 2<sup>nd</sup> March, 2021. It was informed that no litigation is pending against the project.

Ministry had issued EC earlier vide letter No. J-11011/1/2004-IA-II (I) dated 27.12.2004 from MoEF&CC, New Delhi for 30 KLPD distillery and obtained Environment Clearance for 18 MW cogeneration unit vide letter

No. ENV(NOC)2005/564/CR.78/D.I dated 20.10.2005 from Government of Maharashtra.

Certified Compliance report has been issued by IRO, vide File No. File No:5-3/2005(ENV)/8420 dated 09.08.2020 Site visit of RO was carried out on 06.07.2021. Action plan against RO MoEF&CC certified EC compliance report is submitted vide letter No. VGN/DIST/1609/2021-22 on 18.08.2021. ATR is found satisfactory by the EAC and recommended the proposal.

**The details of products and capacity are as under:**

Sr. no.	Description	Unit	Quantity		
			Existing Capacity	Proposed Capacity	Total
<b>1.</b>	<b>Sugar Unit</b>	TCD	<b>5000</b>	<b>--</b>	<b>5000</b>
<b>2</b>	<b>Co-generation Power</b>	MW	<b>18</b>	<b>--</b>	<b>18</b>
<b>3.</b>	<b>Distillery Unit</b>	KLPD	<b>30</b>	<b>80</b>	<b>110</b>
	Rectified Spirit	KLPD	28.5	00	28.5
	Impure Spirit	KLPD	1.5	00	1.5
	OR				
	Extra Neutral Alcohol	KLPD	28.2	00	28.2
	Impure Spirit	KLPD	1.8	00	1.8
	OR				
	Ethanol	KLPD	28.5	76	104.5
	Impure Spirit	KLPD	1.5	4.0	5.5

Existing land area is 501400.00 m<sup>2</sup> (123.54 acre) & proposed expansion is in existing plot area no additional land will be used for proposed expansion. Industry has already developed / will develop greenbelt in an area of 33 % i.e., 162201.00 m<sup>2</sup> (40.06 acre) out of net plot area of the project. The estimated project cost is Rs 63.10 Crore including existing investment of Rs 11.4821 crores. Total capital cost earmarked towards environmental pollution control measures for existing & proposed unit is Rs 30.405 Crores and the Recurring cost (operation and maintenance) will be about Rs 0.68 Crores per annum. Total Employment for proposed expansion unit will be 50 persons as direct & 500-1000 persons indirect after expansion. Industry proposes to allocate Rs 0.5161 crores @ 1 % towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body Kukadi is flowing at a distance of 1.62 Km in North direction & yedgaon dam at a distance of 3.89 Km in ENE direction.

Ambient air quality monitoring was carried out at eight locations during December 2020 to February 2021 and the baseline data indicates the

ranges of concentrations as: PM<sub>10</sub> 60.12 to 86.27 µg/m<sup>3</sup>, PM<sub>2.5</sub> (26.85 to 46.08 µg/m<sup>3</sup>), SO<sub>2</sub> (8.16 to 12.86 µg/m<sup>3</sup>) and NO<sub>2</sub> (16.37 to 23.89 µg/m<sup>3</sup>). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.234 µg/m<sup>3</sup>, 5.134 µg/m<sup>3</sup> and 3.748 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards.

Total water requirement is max 2242 m<sup>3</sup>/day of which fresh water requirement of max 244.5 m<sup>3</sup>/day will be met from (Yedgaon reservoir) Kukadi Irrigation Division No.1, Naryangaon. Effluent of quantity 1699 m<sup>3</sup>/d (Raw Spent wash – max 880 + Process Condensate – max 819) spent wash will be concentration in MEE followed by incineration boiler and Process condensate will be treated in Condensate Polishing Unit. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 2.25 MW including existing 0.5 MW and will be met from power generation from existing 18 MW Cogeneration unit connected to existing sugar unit boiler & proposed 2.25 MW TG Set connected to proposed 30 TPH Incinerator boiler. Existing unit has not DG set, additionally 1 No of 380 kVA DG sets are used as standby during power failure. Stack (height 5m.) will be provided as per CPCB norms to the proposed DG sets. Existing distillery unit not has boiler as steam requirement is met from 2 No of 35 TPH boiler of sugar unit 5000 TCD. Additionally for 30 TPH Concentrated spent wash & bagasse fired incineration boiler will be installed. Electrostatic precipitator (ESP) with a stack of height of 72 m will be installed proposed 30 TPH incineration boiler for controlling the particulate emissions within the statutory limit of 150 mg/Nm<sup>3</sup> for the proposed boilers

#### **Details of process emissions generation and its management:**

<b>Sr. No</b>	<b>Source</b>	<b>Fuel</b>	<b>Pollutant</b>	<b>Control Equipment</b>
<b>Existing</b>				
1	2 No of 35 TPH boiler	Bagasse	PM, SO <sub>2</sub> , NO <sub>x</sub>	60 m stack height and wet scrubber as APC Equipment is provided
2	1 No of 70 TPH boiler	Bagasse & Coal	PM, SO <sub>2</sub> , NO <sub>x</sub>	76 m stack height and ESP as APC Equipment is provided
2	Fermentation Unit	--	CO <sub>2</sub>	CO <sub>2</sub> Recovery Unit
<b>Proposed</b>				
1	30 TPH Incineration Boiler	CSW & Bagasse (Coal)	PM, SO <sub>2</sub> & NO <sub>x</sub>	72 m stack height and ESP as APC Equipment shall be provided
2	D. G. Sets 1 Nos of 380	HSD	PM & SO <sub>2</sub>	5m Stack Height is provided



Sr. No	Source	Fuel	Pollutant	Control Equipment
	kVA			
3	Fermentation Unit	--	CO2	CO2 Recovery Unit

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

**Solid Waste Management**

Sr. No.	Waste		Quantity MT/Day			Mode of collection & Treatment	Mode of Disposal
			Existing (30 KLPD)	Proposed (80 KLPD)	Total (110 KLPD)		
1	Yeast sludge (Optional)	C	0.4	0.3	0.7	Sludge	After mixing with press mud given
		B heavy	-	0.3	0.3	Drying	
		Cane	-	0.15	0.15	Beds	
3	CPU sludge (MT/D)		0.04	0.8	0.84	Sludge Drying	After mixing with press
4	Incinerator Boiler Ash (MT/D)		19	36.96	55.96	Will be sold to farmers as manure	Will be sold to farmers as potash rich manure
	Other Solid Wastes						
1.	Paper waste		0.2 MT/M			Manually collected and stored in a designated	
2.	Plastic waste		0.2 MT/M				
3.	Municipal Solid waste						
	Non-		8.6 Kg/D			Manually collected and	
	Bio-degradable		12.9 kg/D			Used in Composting	

**Hazardous Waste Management**

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

						utilized as lubricant for bullock carts.
2.	20.3	Distillation residue (MT/M)	2	5	7	Mixed with press mud & convert to manure

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 80 KLPD will be for manufacturing of fuel ethanol only.

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

- PP shall meet 10% of the total power requirement from solar power.
- 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.
- The budget of CER is Rs. 1.03 Crores 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 Magistrate.

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 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 80 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 244.5 m<sup>3</sup>/day and will be met from (Yedgaon reservoir) Kukadi Irrigation Divison No.1, Naryangaon. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

- (v). The spent wash/other concentrates shall be treated by concentration followed by incineration. PP shall meet 10% of the total power requirement from solar power.
- (vi). CO<sub>2</sub> 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). PP proposed to allocate CER budget of Rs. 1.03 Crores 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 Magistrate.
- (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. 45.9**

**Proposed Fuel Ethanol plant having proposed production capacity of 220 KLPD of grain-based Fuel Ethanol and 8 MW of power cogeneration, to be installed by M/s. Indus Biofuels and Spirits Pvt. Ltd located at village Bherpura and Sultanpur, Tehsil and District Patiala, Punjab - Consideration of Environment Clearance.**

**[IA/PB/IND2/225540/2021, IA-J-11011/327/2021-IA-II(I)]**

The proposal was earlier placed before the EAC (Ind-2) in its 40<sup>th</sup> meeting held during 14<sup>th</sup> – 16<sup>th</sup> September, 2021 wherein EAC deferred the proposal.

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

<b>S. No</b>	<b>ADS</b>	<b>Reply of PP</b>	<b>Observation of EAC</b>
1.	EAC informed that the proposal shall be considered only after obtaining document from competent authority related with conversion of land use to industrial purpose.	PP has submitted Change of Land Use (CLU) document for Indus Biofuels and Spirits Pvt. Ltd., Village Bherpura and Sultanpur, Tehsil & District Patiala on an area of 17.138 acres.	EAC deliberated the issue and found it satisfactory.

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

The proposal is for environmental clearance to the project for Proposed Fuel Ethanol plant having proposed production capacity of 220 KLPD of grain-based Fuel Ethanol and 8 MW of power cogeneration, to be installed by M/s. Indus Biofuels and Spirits Pvt. Ltd located at village Bherpura and Sultanpur, Tehsil and District Patiala, Punjab.

As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> 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<sup>th</sup> June, 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

S. No.	Item	Unit	Total
1.	Fuel Ethanol	KL	220
2.	By-products		
	CO <sub>2</sub>	MT	320
	Fusel Oil	MT	4.0
	DDGS	MT	200

The land area available for the project is 69345 m<sup>2</sup>. Industry will develop greenbelt in an area of 33 % i.e., 22900 m<sup>2</sup> out of total area of the project. The estimated project cost is Rs. 142.60 crores for the proposed project. Total capital cost earmarked towards environmental pollution control measures is Rs. 18.00 crores and recurring cost (operation and maintenance) will be about Rs. 2.90 crores. Total employment generation will be 300 persons as direct and indirect employment due to the proposed expansion. Industry proposes to allocate Rs. 1.125 crores towards corporate environment responsibility.

There are no national parks, wildlife sanctuaries, biosphere reserves, Tiger/Elephant reserves, Wildlife corridors etc. within 10 km distance from the project site.

Total water requirements for the proposed project will be 990 m<sup>3</sup>/day. All the fresh water requirements for the existing as well as proposed project will be met from canal water. The industry has already got the in-principal approval from Irrigation Department, Punjab for the supply of canal water @ 1000 m<sup>3</sup>/day. The industry will generate a total of 1237 m<sup>3</sup>/day of condensates including spent lees from the proposed

expansion. Out of this, 745 m<sup>3</sup>/day will be directly used in the process for slurry preparation. Remaining condensates @ 492 m<sup>3</sup>/day will be treated in condensate polishing unit and reused for cooling tower makeup water. Effluent from misc. streams will be 134 m<sup>3</sup>/day which will be treated in ETP and reused for water of green belt within the industrial premises.

Power requirements for the proposed expansion will be 6000 KVA and will be met from inhouse cogeneration power plant. The industry will purchase 1 x 1000 KVA D G set to be used as standby during power failure. Stack height to the D G sets has been provided as per PB norms. The industry will install a biomass/coal fired boiler of 60 TPH capacity. Electrostatic precipitator will be installed as pollution control system to achieve the statutory limit of 50 mg/Nm<sup>3</sup> for the proposed boiler.

### **Details of process emissions generation and its management:**

The industry will install dryers for the handling of DWGS for controlling process odors from the factory.

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed capacity of 220 KLPD will be for manufacturing of fuel ethanol only.

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 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 220 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 990 m<sup>3</sup>/day and will be met from canal water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises.
- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed.
- (vi). CO<sub>2</sub> 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). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall be completed within time as proposed.
- (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. 45.10**

### **Expansion of integrated Sugar and Distillery unit under EBP Scheme by M/s. Shree Renuka Sugars Limited located at survey No. 377, Burlatti Village, Athani Taluk, Belagavi District, Karnataka - Amendment in Environmental Clearance.**

**[IA/KA/IND2/239643/2021, J-11011/980/2007-IA II (I)]**

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter No. J-11011/980/2007-IA II (I) dated 08.10.2021 for the project expansion of Sugar plant from 10000 TCD to 15000 TCD and Distillery capacity to enhance the production of Ethanol from 300 KLPD to 900 KLPD located at No. 377, Burlatti Village, Athani Taluk, Belagavi District, Karnataka State in favour of M/s. Shree Renuka Sugars Limited.

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

Sl. No.	Para of EC issued by MoEF & CC	Details as per the EC	To be revised/read as	Justification/reasons
1.	EC Specific Condition point no. (V), page 11 of 15 the EC vide letter no. J-11011/980/2007-IA II (I) dated 08.10.2021 issued by MoEF & CC.	The spent wash /other concentrates shall be treated by concentration followed by incineration. No bio-composting shall be allowed for existing and proposed/	The spent wash/ other concentrates shall be treated by concentration followed by incineration. 23.5 % of total spent wash after bio-methanation and	The press mud from sugar plant has very good organic and plant nutritional value. It requires to be properly treated and disposed. The best way is to convert press mud to organic manure using concentrated distillery spent wash preceded with bio-digestor

		expansion project	concentrated should be used for organic manure preparation using press mud, yeast sludge and ash from incineration boiler	and MEE. SRSL is an integrated sugar and distillery complex, it has advantage in organic manure preparation and to give it to the cane suppliers/farmers. Use of organic manure reduces the ill effect due to use of chemical fertilizer and it enriches the soil fertility. As per the earlier EC/CFO the industry has already established composting facility by investing Rs. 1090 Lakhs towards making the compost yard of 24 acres impervious by geo-synthetic lining, RCC and has procured allied facilities for organic manure preparation as per CPCB guidelines.
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During deliberations, EAC directed PP that spent wash shall not be stored for more than 5 days.

The Expert Appraisal Committee, after detailed deliberations **recommended** for amendment in the EC vide letter No. J-11011/980/2007-IA II (I) dated 08.10.2021 with all other terms and conditions remain unchanged.

**Agenda No. 45.11**

**Proposal for Laying of Natural Gas transportation pipeline including spur line for Haridwar-Rishikesh-Dehradun pipeline section for approx. length 66.07km with 8" Dia with associated facilities along the pipeline route i.e. SV/DT/RT Stations, Haridwar, Uttarakhand by M/s GAIL INDIA LIMITED – Consideration of Environment Clearance.**

**[IA/UK/IND2/111429/2019, IA-J-11011/244/2019-IA-II(I)]**

The project proponent and their consultant M/s. Mantec Consultants Pvt. Ltd, made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for Environmental Clearance to the proposed 'laying of 8" dia x 50 Kms (approx.) long natural gas transportation pipeline for Haridwar-Rishikesh-Dehradun Pipeline section' by M/s GAIL India Limited.

All Oil & gas transportation pipe line (crude and refinery/ petrochemical products), passing through national parks /sanctuaries/coral reefs /ecologically sensitive areas including LNG Terminal are listed at S.N. 6(a) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The ToR has been issued by Ministry vide letter No. Vide Letter No. IA-J-11011/244/2019-IA-II(I) dated 30 Aug 2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 01.09.2020 presided by Additional District Officer. The main issues raised during the public hearing are related to provision of Gas connections to locals, arrangement of redressal of complaint and compensation for the damages from the project. It was informed that no litigation is pending against the proposal.

**The details of products and capacity are as under:**

The proposed Haridwar –Rishikesh- Dehradun pipeline project is economical transportation of Natural gas with the proposed flow capacity of 1.2 MMSCMD.

Industry will develop greenbelt in an area of 33 % i.e., 2741 m<sup>2</sup> out of total area of the SV-2, SV-3 and RT Stations. The estimated project cost is Rs 218 Crore. Total capital cost earmarked towards environmental

pollution control measures is Rs. 0.25 Crore and the Recurring cost (operation and maintenance) will be about 0.055 Crore per annum. Total Employment will be 250 during construction and 7 during operation. Industry proposes to allocated 3.27 Crore towards Corporate Environment Responsibility.

The proposed pipeline stretch passes through the Rajaji National Park between Ch. 17.095 km to Ch. 25.476 km. additionally; the proposed route passes through Barkot Reserved Forest (4.772km), Thand Reserved Forest (0.155 km) and Lachchiwala Reserved Forest (5.311 km) along the route. The major water bodies along the route are Ganga River Song River, Motichur Rao River, Jakhan Rao River and Tawa River. PP has informed that stage I FC has been obtained from IRO, Dehradun vide letter sated 16.08.0219 for the proposed project.

Ambient air quality monitoring was carried out at 8 locations during October 2020 to December 2020 and the baseline data indicates the ranges of concentrations as:  $PM_{10}$  (44 - 79  $\mu g/m^3$ ),  $PM_{2.5}$  (26 - 47  $\mu g/m^3$ ),  $SO_2$  (5-19  $\mu g/m^3$ ),  $CO$  (0. 43 - 0.94  $\mu g/m^3$ ) and  $NO_2$  (14.0 - 30 $\mu g/m^3$ ). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Fresh water requirement during construction and Operation will be 8.25 KLD and 1 KLD respectively for the proposed project which will be met through bore well and tanker supply. No effluent will be generated due to the project' operation. Only for the domestic purpose, provision of the STP followed by the soak pit is kept for the treatment of grey water.

Power requirement met through UPCL (Uttrakhand). GEG set will be installed and are used as standby during power failure.

#### **Details of process emissions generation and its management:**

There will be no process emission as the pipeline will be laid down underground. Green belt will developed within stations, and air pollution control measures will be taken for the Effective control of gaseous emissions within permissible limits.

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

The municipal solid waste that will be generated during construction will be 75Kg/day and during operation will be about 2.1Kg/day. The municipal solid waste will be kept in the dustbins and collected by the municipal corporation. No hazardous waste will be generated.

During the deliberations it has been informed to EAC that the proposed pipeline passes through Haridwar and Dehradun districts of Rajaji

National Park whereas Public Hearing has been conducted in Dehradun only. In this regard PP has initially informed that PH has been conducted as per suggestion of SPCB. Then afterwards PP has informed that proposed pipeline does not pass through Rajaji National park in Haridwar district and PH has been conducted in Dehradun only. PP has also informed that stage – I Forest clearance for the project has been obtained. Further, EAC has noted that the following issues have been raised in PH:

- Pits have not been re-filled which were dug during the construction of pipeline.
- Request to distribute gas for the villages that pipeline passes through.
- Request from sugarcane farmers to construct roads

In this regard EAC sought the undertaking of the following commitments regarding PH:

- Any kind of damage done during the construction shall be restored to original condition.
- After consultation with DM , roads shall be constructed for sugar cane farmers based on the area needed for transportation.
- PP shall abide to all safety rules applicable as per MoPNG norms.
- W.r.t noise pollution; forest area noise pollution levels shall be applicable.
- PP shall increase the PH budget from proposed Rs. 3.27 crores to Rs. 4.00 Crores and shall completely be utilized for construction of roads as desired by the farmers for transportation of their crops.
- PP shall provide gas for the villages that pipeline passes through.

PP agreed to the above conditions. However, undertaking has not been submitted as per directions of EAC.

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

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

proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area.

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

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

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

- (i). Environmental Clearance is subject to Forest Clearance (as per Forest Conservation Act, 1980), NBWL clearance (The Wildlife Protection Act, 1972) & CRZ Clearance (as per CRZ Notification 2011/2019). Project proponent shall comply with all the conditions stipulated in all the above clearances/NOC issued and commencement of operations shall be done after issuance of all clearances as applicable.
- (ii). Project proponent shall implement Conservation Plan for Schedule –I species and all other plans related to various clearances within the stipulated time frame.
- (iii). PP shall allocate to Rs. 4.00 Crores to the resolve the issues raised in the Public Hearing and shall completely be utilized for construction of roads as desired by the farmers for transportation of their crops. PP shall provide gas for the villages that pipeline passes through.
- (iv). The project authority shall ensure restoration of the Right of Way to preconstruction level as soon as construction activity completed. To ensure prevention of soil erosion, backfilled areas should be properly compacted.

- (v). Fresh water requirement for proposed project during construction and Operation will be 8.25 KLD and 1 KLD respectively for the proposed project which will be met through bore well and tanker supply. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time.
- (vi). SCADA system shall be installed with dedicated optical fiber based telecommunication link for safe operation of pipeline and leak detection system.
- (vii). Intelligent pigging facilities shall be provided for the entire pipeline system for internal corrosion monitoring. Coating and impressed current cathodic protection system shall be provided to prevent external corrosion.
- (viii). All the recommendations mentioned in the risk assessment report shall be implemented and Emergency response plan shall be based on guideline prepared by OISD.
- (ix). Requisite Onsite and Offsite Disaster Management Plans shall be prepared and implemented.
- (x). The company shall obtain all requisite clearances for fire safety and shall comply with the stipulation made by the respective authorities.
- (xi). The construction of pipelines through the water bodies shall be avoided during the rainy season/ breeding seasons of aquatic animals.
- (xii). The riverbed, embankments and dykes shall be restored adequately after installation of crossings.
- (xiii). For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xiv). Annual safety audit shall be carried out for the initial three years by an independent agency (OISD/PNGRB/DGMS etc.) and report submitted to this Ministry for ensuring the strict compliance of safety regulations on operation and maintenance.
- (xv). The construction of pipeline particularly at the river and stream crossing shall be done during dry seasons to avoid disturbance of breeding seasons and soil erosion. The riverbed, embankments and / dykes shall be restored adequately after installation of crossings.



- (xvi). Pipeline wall thickness and minimum depth of burial at river crossings and casings at rails, major road crossings shall be in conformity with ANSI/ASME requirements.
- (xvii). The PP shall follow horizontal drilling technique for laying of pipeline while passing through major rivers.
- (xviii). The project authorities shall install SCADA/GPS system with dedicated optical fiber based telecommunication link for safe operation of pipeline and Leak Detection System. Additional sectionalizing valves in the residential areas and sensitive location shall be provided to prevent the leaking of gas going to the atmosphere in the event of pipeline failure.
- (xix). The project authorities shall patrol and inspect the pipeline regularly for detection of faults as per OISD/ PNGRB guidelines and continuous monitoring of pipeline operation by adopting non-destructive method(s) of testing as envisaged in the EMP. Pearson survey and continuous potential survey shall be carried out at regular intervals to ensure the adequacy of cathodic protection system.
- (xx). Necessary approvals from Chief Controller of Explosives must be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented.
- (xxi). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.
- (xxii). The acoustic chambers/barriers should be provided for individual units wherever feasible in the compressor stations.
- (xxiii). The workers camp should have arrangement for safe drinking water, hygienic kitchen and sanitation facilities

#### **Agenda No. 45.12**

#### **Proposal for On shore Oil & Gas development drilling and production in Tengakhat-Kathaloni-Dikom area,Dibrugarh Aassam**

**by M/s OIL INDIA LIMITED- Consideration of Environment Clearance.**

**[IA/AS/IND2/212735/2007, J-11011/1257/2007- IA II (I)]**

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

The proposal is for environmental clearance to the project Onshore Oil & Gas development drilling and production in Tengakhat-Kathaloni-Dikom area by M/s. Oil India Ltd.

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

The ToR has been issued by Ministry vide letter No. IA-J11011/1257/2007 - IA II (I) dated 14 January 2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 5<sup>th</sup> September 2019 in Dibrugarh district presided by Additional District Commissioner, Dibrugarh. The main issues raised during the public hearing are related to control of pollution, CSR activities in the area, safety of locals from oil vehicles, development projects in the area etc. It was informed that no litigation is pending against the proposal.

Ministry had issued EC earlier vide letter no. J-11011/1257/2007-IA-II(I); dated 1st November 2011 to the Drilling of Development Well (17 nos) and Exploratory Well (14 nos) at Tengakhat-Kathaloni-Dikom Area, District Dibrugarh, Assam by M/s Oil India Limited. Certified compliance report has been issued by IRO, Guwahati vide letter No. RO-NE/E/IA/AS/MI/57/1106-1108 dated 9<sup>th</sup> September 2021. Certified compliance report has been by Integrated Regional Office (IRO) Guwahati vide letter No. RO-NE/E/IA/AS/MI/57/1106-1108 dated 9<sup>th</sup> September 2021. IRO, report remarked the status to be partially complied.

**The details of products and capacity are as under:**

<b>S. No</b>	<b>Product Details</b>	<b>Existing Quantity</b>	<b>Proposed Quantity</b>	<b>Total Quantity</b>
1.	Wells and production installations	31 wells	167 wells and 7 production installations	198 wells and 7 production installations

The total land required for the project will be 5500000 m<sup>2</sup>. M/s Oil India Ltd. will develop greenbelt at the proposed production installations having total area of 122500 m<sup>2</sup>.

The estimated project cost is Rs. 5655 crore. Capital cost of EMP would be INR 2.11 crores and recurring cost for EMP would be approximately INR 0.394 crores per annum Oil India Ltd. will earmark INR 2.60 crores as part of PH Action Plan in for Dibrugarh district in line with the comments and suggestions made by the local public during Public Hearing. Additionally, Oil India Ltd. will comply with the conditions mentioned by EAC in this regard.

Total Employment will be 60 persons as direct & 120 persons indirect after expansion for each drill site construction and drilling. As per MoEF&CC Notification no. F. No. 22-65/2017-IA.III dated 30th September, 2020 instead of allocation of funds under CER the EAC will prescribe specific conditions in physical terms to address the concerns raised during the Public Consultation while recommending the proposal. Oil India Ltd. will earmark INR 2.60 crores as part of PH Action Plan in Dibrugarh district in line with the comments and suggestions made by the local public during Public Hearing. Additionally, Oil India Ltd. will comply with the conditions mentioned by EAC in this regard. OIL proposes to allocate funds for CSR activity as per CSR Act and Rules, Govt. of India.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves etc. within 10 km of the well locations or production installations.

Ambient air quality monitoring was carried out at 8 locations during 05.10.2017 to 31.12.2017 and the baseline data indicates the ranges of average concentrations as: PM<sub>10</sub> (59.21 - 81.38 µg/m<sup>3</sup>), PM<sub>2.5</sub> (29.88-43.50 µg/m<sup>3</sup>), SO<sub>2</sub> (5.44-6.14 µg/m<sup>3</sup>) and NO<sub>2</sub> (17.72-21.73 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 16.71 µg/m<sup>3</sup>, 0.64 µg/m<sup>3</sup>, 0.009 µg/m<sup>3</sup> and 0.12 µg/m<sup>3</sup> with respect to NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub> and HC. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 50 m<sup>3</sup>/day of which fresh water requirement of 39 m<sup>3</sup>/day will be met from groundwater. Effluent of 21.8 KLD quantity will be treated through ETP and Septic tank. The project will be based on Zero Liquid discharge system.

Power requirement will be met through two Diesel Generator Sets of 1250 kVA each. Another 1250 kVA DG set will be kept as standby. Stack height of 7 m will be provided as per CPCB norms to the proposed DG sets.

#### **Details of Process emissions generation and its management:**

The operation of DG sets, movement of vehicles and machineries during construction and drilling, flaring of natural gas will result in the generation of air pollutants, if gas reserves are encountered during drilling operations. Stacks will be used with DG sets and flare system as

per CPCB norms.

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

Drill cuttings and spent drilling mud will be disposed to HDPE lined pit within the drill site. The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste handling contractors. Recyclable wastes will be periodically sold to local waste recyclers. Hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.

During the deliberations it has been informed to EAC that the baseline data is older than three years which is contravention to the extant rules. In this regard, EAC opined that if there is no major change in local conditions in the area the same baseline data submitted may be allowed. Further, PP shall submit an undertaking that there is no change in the conditions of the proposed area w.r.t baseline data. EAC has also directed PP to submit the ATR for all the non/partial compliances observed in the CCR and submit a time bound action plan to rectify the same. Further, EAC suggested that PP shall spend Rs. 5.00 crore towards CER and shall be spent on installation of solar power in the nearby villages. EAC has also noted that PP has not taken any credible action to resolve issues raised in Public Hearing even though PH was conducted couple of years ago. In this regard, EAC directed PP shall resolve all the issues rose in PH as per the proposed plan within one year.

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

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

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

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

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

- (i). PP shall submit the ATR for all the non/partial compliances observed in CCR and shall submit a time bound action plan to rectify the same. PP shall resolve all the issues rose in PH as per the proposed plan within one year.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (iv). The project proponent will treat and reuse the treated water within the drilling site location including at processing location and no waste or treated water shall be discharged outside the premises under any condition. Mobile ETP coupled with RO and mobile STP shall be installed to treat the waste water and sewage waste respectively.
- (v). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using appropriate technology.
- (vi). The project proponent also to ensure trapping/storing of the CO<sub>2</sub> generated, if any, during the process and handling.
- (vii). Approach road shall be made pucca to minimize generation of suspended dust.

- (viii). The project proponent shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- (ix). Total fresh water requirement shall be 39 KLPD which will be met from ground water. Extraction of ground water shall not be done without obtaining prior permission of CGWA/concerned authority.
- (x). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.
- (xi). Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30<sup>th</sup> August, 2005.
- (xii). Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xiii). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xiv). The project proponent shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xv). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xvi). On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full

abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations.

- (xvii). PP shall allocate Rs. 5.00 Crores towards CER and it shall be spent on installation of solar power in the nearby villages.
- (xviii). No lead acid batteries shall be utilized in the project/site.
- (xix). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xx). Oil content in the drill cuttings shall be monitored if oil-based mud is used and report shall be sent to the Ministry's Regional Office.
- (xxi). The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

#### **Agenda No. 45.13**

**Onshore exploratory and Development drilling wells and production in Dibrugarh & Sibsagar districts under Dibrugarh, Dibrugarh Extn., Hugrijan, Naharkatiya, Sapkaint, Dumduma, Dholiya and Moran, Moran, Dibrugarh Assam by M/s OIL INDIA LIMITED- Consideration of Environment Clearance.**

**[IA/AS/IND2/187643/2007, J-11011/1254/2007 - IA II (I)]**

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

The proposal is for environmental clearance to the project Onshore exploratory and Development drilling wells and production in Dibrugarh & Sibsagar districts under Dibrugarh, Dibrugarh Extn., Hugrijan, Naharkatiya, Sapkaint, Dumduma, Dholiya and Moran, Moran, Dibrugarh, Assam by M/s. Oil India Ltd.

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

ToR has been issued by vide letter No. IA-J11011/323/2017 - IA II (I)

dated 29 September 2017. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 6<sup>th</sup> September 2019 in Dibrugarh district presided by circle officer, Dibrugarh. The main issues raised during the public hearing are related to local infrastructure development in the area, employment for locals, road repair, river erosion control, sericulture and horticulture development, pollution control measures etc

Ministry had issued EC earlier vide letter no. J-11011/1254/2007-IA-II(I); dated 1st November 2011 to the Drilling of Development Well (2 nos) and Exploratory Well (3 nos) at Khowang-Shalmari Area, District Dibrugarh, Assam by M/s Oil India Limited. Certified compliance report has been by Integrated Regional Office (IRO) Guwahati vide letter No. RO-NE/E/IA/AS/MI/61/1069-1071 dated 3<sup>rd</sup> September 2021. IRO report remarked the status of the project as partially complied.

**The details of products and capacity are as under:**

<b>S. No</b>	<b>Product Details</b>	<b>Existing Quantity</b>	<b>Proposed Quantity</b>	<b>Total Quantity</b>
1.	Wells and production installations	5 wells	68 wells and 9 production installations	73 wells and 9 production installations

The total land required for the project will be 2670000 m<sup>2</sup>. M/s Oil India Ltd. will develop greenbelt at the proposed production installations having total area of 157500 m<sup>2</sup>.

The estimated project cost is Rs. 2751.40 crores. Capital cost of EMP would be INR 0.78 crores and recurring cost for EMP would be approximately INR 0.216 crores per annum. Oil India Ltd. will earmark INR 1.55 crores as part of PH Action Plan in for Dibrugarh district in line with the comments and suggestions made by the local public during Public Hearing. Additionally, Oil India Ltd. will comply with the conditions mentioned by EAC in this regard.

Total Employment will be 60 persons as direct & 120 persons indirect after expansion for each drill site construction and drilling. As per MoEF&CC Notification no. F. No. 22-65/2017-IA.III dated 30th September, 2020 instead of allocation of funds under CER the EAC will prescribe specific conditions in physical terms to address the concerns raised during the Public Consultation while recommending the proposal. Oil India Ltd. will earmark INR 1.55 crores as part of PH Action Plan in Dibrugarh district in line with the comments and suggestions made by the local public during Public Hearing. Additionally, Oil India Ltd. will comply with the conditions mentioned by EAC in this regard. OIL



proposes to allocate funds for CSR activity as per CSR Act and Rules, Govt. of India

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves etc. within 10 km of the well locations or production installations.

Ambient air quality monitoring was carried out at 8 locations during 05.10.2017 to 31.12.2017 and the baseline data indicates the ranges of average concentrations as: PM<sub>10</sub> (55.08-85.38 µg/m<sup>3</sup>), PM<sub>2.5</sub> (29.46-45.38 µg/m<sup>3</sup>), SO<sub>2</sub> (5.77-6.35 µg/m<sup>3</sup>) and NO<sub>2</sub> (17.35-21.73 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 16.12 µg/m<sup>3</sup>, 0.1118 µg/m<sup>3</sup>, 0.08 µg/m<sup>3</sup> and 0.11 µg/m<sup>3</sup> with respect to NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub> and HC. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 50 m<sup>3</sup>/day of which fresh water requirement of 39 m<sup>3</sup>/day will be met from groundwater. Effluent of 21.8 KLD quantity will be treated through ETP and Septic tank. The project will be based on Zero Liquid discharge system.

Power requirement will be met through two Diesel Generator Sets of 1250 kVA each. Another 1250 kVA DG set will be kept as standby. Stack height of 7 m will be provided as per CPCB norms to the proposed DG sets.

#### **Details of Process emissions generation and its management:**

The operation of DG sets, movement of vehicles and machineries during construction and drilling, flaring of natural gas will result in the generation of air pollutants, if gas reserves are encountered during drilling operations. Stacks will be used with DG sets and flare system as per CPCB norms

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

Drill cuttings and spent drilling mud will be disposed to HDPE lined pit within the drill site. The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste handling contractors. Recyclable wastes will be periodically sold to local waste recyclers. Hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.

During the deliberations it has been informed to EAC that the baseline data is older than three years which is contravention to the extant rules. In this regard, EAC opined that if there is no major change in local conditions in the area the same baseline data submitted may be allowed. Further, PP shall submit an undertaking that there is no change in the conditions of the proposed area w.r.t baseline data. It was also informed

to EAC that the Public Hearing is presided by Circle Officer which was below the rank of ADM and is in contravention to the extant rules. In this regard PP has informed that ADM was absent for the meeting at the last minute due to protests going on for NRC and sent his representative to attend the meeting. EAC agreed with the justification. EAC has also directed PP to submit the ATR for all the non/partial compliances observed in the CCR and submit a time bound action plan to rectify the same. Further, EAC suggested that PP shall spend Rs. 5.00 crore towards CER and shall be spent on installation of solar power in the nearby villages. EAC has also noted PP has not taken any credible action to resolve issues rose in Public Hearing even though PH was conducted couple of years ago. In this regard, EAC directed PP shall resolve all the issues rose in PH as per the proposed plan within one year.

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

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

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

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

applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

- (i). PP shall submit the ATR for all the non/partial compliances observed in CCR and shall submit a time bound action plan to rectify the same. PP shall resolve all the issues rose in PH as per the proposed plan within one year.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (iv). The project proponent will treat and reuse the treated water within the drilling site location including at processing location and no waste or treated water shall be discharged outside the premises under any condition. Mobile ETP coupled with RO and mobile STP shall be installed to treat the waste water and sewage waste respectively.
- (v). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using appropriate technology.
- (vi). The project proponent also to ensure trapping/storing of the CO<sub>2</sub> generated, if any, during the process and handling.
- (vii). Approach road shall be made pucca to minimize generation of suspended dust.
- (viii). The project proponent shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- (ix). Total fresh water requirement shall be 39 KLPD which will be met from ground water. Extraction of ground water shall not be done without obtaining prior permission of CGWA/concerned authority.
- (x). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.
- (xi). Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for

hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30<sup>th</sup> August, 2005.

- (xii). Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xiii). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xiv). The project proponent shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H<sub>2</sub>S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xv). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xvi). On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations.
- (xvii). PP shall allocate Rs. 5.00 Crores towards CER and it shall be spent on installation of solar power in the nearby villages.
- (xviii). No lead acid batteries shall be utilized in the project/site.
- (xix). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xx). Oil content in the drill cuttings shall be monitored if oil-based mud is used and report shall be sent to the Ministry's Regional Office.

- (xxi). The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

#### **Agenda No. 45.14**

#### **Expansion from 120 KLPD to 400 KLPD Wanaparthi District Telangana by M/s NSL KRISHNAVENI SUGARS LIMITED- Consideration of Environment Clearance.**

#### **[IA/TG/IND2/237976/2007, J.11011/193/2007-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 proposed production Expansion capacity of Distillery plant from 120 KLPD to 400 KLPD by Establishment of new 280 KLPD grain based Ethanol plant with 6 MW co-generation power plant to be installed in the existing plant premise of at Ramakrishnapur Village, Kothakota Mandal, Wanaparthi District, Telangana by M/s NSL Krishnaveni Sugars 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 16<sup>th</sup> 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 16<sup>th</sup> June 2021. It was informed that no litigation is pending against the project.

Ministry had issued EC earlier vide letter No. F.No.J.11011/193/2007-IA II (I) dated 17/09/2007 to the existing project for 7500 TCD sugar, 40 MW cogen power plant and 120 KLPD distillery plant in favour of M/s. NSL Krishnaveni Sugars Limited.

Certified compliance report on existing Environmental clearance was issued by IRO, Hyderabad vide letter No. ENV/IRO-HYD/CCR-17/A/2021/62 DATE 09/09/2021.

**The details of products and capacity are as under:**

S. NO.	UNIT	PRODUCT/ BY PRODUCT	EXISTING CAPACITY	EXPANSION CAPACITY	AFTER EXPANSION CAPACITY
1.	Distillery (Molasses/ Grains based )	Rectified Spirit / ENA / Ethanol /	120 KLPD	--	120 KLPD
2.	Distillery (Grains based )	Fuel ethanol	--	280 KLPD	280 KLPD
3.	Power	Electricity	3 MW	6.0 MW	9.0 MW
4	Sugar	Sugar	600 TPD	--	600 TPD
5.	Co-generation power plant	Electricity	28 MW	--	28 MW
<b>By product</b>					
1.	Distillery	CO <sub>2</sub>	53.2 TPD	140.0 TPD	193.2 TPD
2.	Distillery	DDGS (Distillery Dried Grains Soluble)	71.2 TPD	140.0 TPD	211.2 TPD

The total land available with existing plant is 121.46 Ha (300.13 acres). Entire land is in possession of the management. Number of operational days of plant will be 350 per annum. Total greenbelt after expansion 99 acres (33%) of the total area.

The estimated project cost for expansion project is Rs 330 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 50.0 Crores and the Recurring cost (operation and maintenance) will be about Rs 2.0 Crores per annum. Total Employment generation from the expansion project will be 150 persons as direct & indirect. Industry proposes to allocate Rs. 2.55 Crores @ 0.77 % towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Krishna River Mahanandi is flowing at a distance of 7.9 Km. in SW direction & Okachetti vagu is flowing at distance of 2.9 Kms in W direction.

Total water requirement is 3845.5 m<sup>3</sup> /day of which fresh water requirement of 2189.5 m<sup>3</sup> /day. The water drawl permission has been obtained from irrigation department Govt of Telangana for 0.084 TMC which is valid up to 19-01-2025. Existing permission is sufficient & no separate permission will be required. Effluent of 2090 m<sup>3</sup> /day quantity will be treated through MEE and Condensate Polishing Unit. The plant will be based on Zero Liquid discharge system.

The Power requirement after expansion will be 14,300 KVA including existing 9200 KVA and will be met from existing and Telangana State Southern Power Distribution Company Limited (TSSPDCL) Govt. of Telangana. Existing unit has 2 Nos of DG sets of 500 KVA & 160 KVA of Capacity, additionally 1000 KVA DG sets are used as standby during power failure. Existing unit has 110 & 25 TPH Bagasse, Coal and spent solids Fired Boilers. Additionally 50 TPH Biomass/Coal fired Boiler will be installed. ESP with a stack of height of 78 m. will be installed for controlling the particulate emissions within the statutory limit of 50 mg/NM<sup>3</sup> for the proposed boiler.

#### **Details of process emissions generation and its management:**

- ESP with a stack height of 77 meters will be installed for controlling the particulate emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO<sub>2</sub> generated (180 TPD) during the fermentation process will be collected by utilizing CO<sub>2</sub> scrubbers and sold to authorized vendors

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

S.NO.	SOLID WASTE	TOTAL QUANTITY (TPD)	DISPOSAL
1.	DDGS	140	Will be sold as cattle feed / fish feed /poultry feed
2.	Boiler ash	48.6	Ash generated will be given farmers
	when 100% biomass is used		

As per OM dated 16<sup>th</sup> June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 280 KLPD will be for manufacturing of fuel ethanol only.

During the deliberations EAC made following observations on CCR for the existing EC letter No.J.11011/193/2007-IA II (I) dated 17/09/2007:

- PP has developed only 60 acres of green belt area against 120 acres that was imposed in EC.
- PP has spent only Rs. 18.5 crores out of Rs. 60 Crores sanctioned towards the environment protection measures.

In this regard EAC directed that PP shall not initiate the expansion until the sanctioned amount towards environment protection measures for the existing EC is completely utilized. In this regard, PP shall submit a confirmation letter from SPCB w.r.t EMP funds. Further, EAC opined that green belt condition may be carry forwarded in the proposed expansion.

After deliberations EAC sought the following commitments from PP:

- Industry shall develop green belt area of 120 acres.
- Proposed fresh water requirement shall not exceed 4kL fresh water consumed /kL production of Ethanol.
- At least 15% of the total plant area will be reserved for parking along with the facilities of toilets, drinking water facility and restrooms.
- 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.
- Integrated industry shall adhere to ZLD and no form of composting shall be done.
- CO<sub>2</sub> generated from the process shall be bottled and it shall be utilized/sold to authorized vendors.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Fund for occupational health and safety will be increased to Rs. 50 Lakhs per annum
- Industry shall construct rain water storage facility of capacity from which it can meet at least 60 days fresh water requirement.
- Solar plant of at least 500 KW power will be installed within the plant premises.
- Proposed funds towards CER shall be increased to Rs. 4.00 crores and it shall be spent on development of infrastructure in public schools nearby. All the activities to be completed before commissioning of the project.
- Industry shall meet 10% of the total power requirement from solar power.

PP has submitted the desired information as sought above and EAC found it in order.

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 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed additional capacity of 280 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). PP shall not initiate the proposed expansion until the allocated funds of Rs. 60 crores towards EMP have been completely utilized as part of condition stipulated EC letter No.J.11011/193/2007-IA II (I) dated 17/09/2007. Further, PP shall obtain confirmation letter from SPCB before expansion for the same.
- (iii). Integrated industry shall adhere to ZLD and no form of composting shall be done. Industry shall meet 10% of the total power requirement from solar power.
- (iv). 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.
- (v). 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.

- (vi). 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.
- (vii). Total fresh water requirement shall be 2190 KLPD which 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 rain water storage facility of capacity from which it can meet at least 60 days fresh water requirement.
- (viii). 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.
- (ix). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (x). PP shall allocate Rs. 50 Lakhs for OHS per annum. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xi). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (xii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (xiii). 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.
- (xiv). The company shall undertake waste minimization measures as below  
(a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of 5 -10 mm width shall be developed in 120 acres 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.

- (xvi). PP shall allocate Rs. 4.00 Crores towards CER and it shall be spent on development of infrastructure in public schools nearby. All the proposed activities under CER shall be completed before commencement of operation of the plant.
- (xvii). There shall be at least 15% 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.
- (xviii). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xix). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xx). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

#### **Agenda No. 45.15**

#### **PROPOSED 300 KLD GRAIN BASED DISTILLERY & 6 MW COGENERATION Plant Unit-2 Madhubani Bihar by M/s VENUSBIDHAN AGROTECH PRIVATE LIMITED- Consideration of Environment Clearance.**

#### **[[IA/BR/IND2/238076/2021, J-11011/473/2021-IA-II(I)]**

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

The proposal is for environmental clearance to the the project 300 KLD Grain Based Distillery and 6 MW Cogeneration Plant (as per EBP) at Plot No. 6 (F2), Industrial Area, Lohat, Madhubani Sugar Mill, Pandaul, Dist. Madhubani in the State of Bihar by M/s Venusbidhan Agrotech Pvt. Ltd. (UNIT-2).

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 16<sup>th</sup> 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 16<sup>th</sup> June 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

S. No.	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1	Ethanol	0	300 KLD	300 KLD
2	Power Cogeneration	0	6 MW	6 MW
3	DDGS	0	125 TPD	125 TPD

Total land area is 12.14 Ha. (30 Acres / 121400 m<sup>2</sup>) which will be used for proposed Grain Based Distillery Project. Industry will develop greenbelt in an area of 33 % i.e., 4.0 Ha. (40000 m<sup>2</sup>) out of total area of the project.

The estimated project cost is Rs 275 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 11.0 Crores (1100 Lakhs) and the Recurring cost (operation and maintenance) will be about Rs 4.0 Crores (400 Lakhs) per annum. Total Employment will be 100 persons as direct & 50 persons indirect. Industry proposes to allocate Rs. 4.12 Crores of total project cost towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Kamla is flowing at a distance of 11 Km. in East direction.

Total water requirement is 4003 m<sup>3</sup>/day of which fresh water requirement of 1176 m<sup>3</sup>/day will be met from proposed 2 nos. Borewells. Effluent of 2827 m<sup>3</sup>/day quantity will be treated through MEE and Condensate Polishing Unit followed by ACF & PSF. The plant will be based on Zero Liquid discharge system.

The Unit's own Power cogeneration will be 6 MW generation is envisaged from 6 MW back pressure turbine which will be used for meeting captive power requirement of 5.5 MW. DG sets will be used as standby during power failure. 70 TPH Rice Husk/Coal fired boiler will be installed. ESP with a stack of height of 65 m. will be installed for controlling the particulate emissions within the statutory limit of 50 mg/NM<sup>3</sup> for the proposed boiler.

**Details of process emissions generation and its management:**

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

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

Boiler Ash (90 TPD) & ETP Sludge (150 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 and brick manufacturers. ETP Sludge will be reused as bio-compost for green belt development.

As per OM dated 16<sup>th</sup> 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:

- Proposed fresh water requirement shall not exceed 4kL fresh water consumed /kL production of Ethanol.
- At least 15% of the total plant area will be reserved for parking and the parking shall be paved to mitigate air pollution.
- Industry shall construct rain water storage facility of capacity from which it can meet at least 60 days fresh water requirement.
- CO<sub>2</sub> generated from the process shall be bottled and it shall be utilized/sold to authorized vendors.
- Biomass shall be used as fuel in the boiler.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Industry shall meet 10% of the total power requirement from solar power.
- Fund for occupational health and safety will be increased to Rs. 50 Lakhs per annum.
- Proposed funds towards CER shall be increased to Rs. 4.20 crores and it shall be spent on development of infrastructure in public schools nearby. All the activities to be completed before commissioning of the project.

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 16<sup>th</sup> 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). Biomass shall be used as fuel in the boiler. Industry shall meet 10% of the total power requirement from solar power.

- (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 1176 KLPD which will be sourced from proposed bore wells. 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 rain water storage facility of capacity from which it can meet at least 60 days fresh water requirement.
- (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). CO<sub>2</sub> plant will be installed to capture CO<sub>2</sub> 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. 4.20 Crores for improving infrastructure and sanitation facilities in the public schools nearby. All the activities to be completed before commissioning of the project.
- (xv). 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.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xviii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

#### **Agenda No. 45.16**

**Proposed 45 KLPD Molasses / Cane Juice based Distillery Plant with 1.5 MW captive co-generation power plant at Survey/ Block No. 4/3,7/2/2, 7/3 Village- Kukarmunda, Taluka -Kukarmunda, District-Tapi Gujarat by M/s SHREE GOVARDHAN SUGAR INDUSTRIES- Consideration of Environment Clearance.**

**[IA/GJ/IND2/235755/2021, J-11011/246/2021-IA-II(I)]**

The Project Proponent and the accredited consultant M/s. En-vision Enviro Technologies 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 45 KLPD Molasses/Cane Juice Based Distillery Plant along with 1.5 MW Captive Cogeneration Power Plant at Survey/ Block No. 4/3, 7/2/2, 7/3 Village Kukarmunda, Taluka: Kukarmunda, District Tapi, Pin code – 394 380, Gujarat.

All Molasses based distilleries < 100 KLD are listed at S.N 5(g) of Environmental Impact Assessment(EIA) Notification under category 'B' and are appraised at State Level by Expert Appraisal Committee (SEAC). Due to applicability of General Condition i.e Inter-State boundaries of Gujarat-Maharashtra located within 5 km, the project is 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-11011/246/2021-IA-II(I); dated 14<sup>th</sup> July, 2021. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 29<sup>th</sup> September 2021 at the project site presided by District Magistrate, Tapi district. The main issues raised during the public hearing are related to employment, air pollution and waste management.

**The details of products and capacity are as under:**

S. No.	Name of Products	Production Quantity (KLPD)
1	Rectified Spirit (RS) Or	45.00
	Ethanol	42.75
2	Head Spirit (Impure Spirit)	1.35
3	Fusel Oil	0.09
4	CO <sub>2</sub> gas	25 TPD
5	Cogeneration Power Plant	1.5 MW

Proposed land area is 23,684 m<sup>2</sup>. Industry will develop greenbelt in an area of 33 % i.e. 7,820 m<sup>2</sup> out of total area of the project.

The estimated project cost is Rs. 55 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 6.16 Crore and the Recurring cost (operation and maintenance) will be about Rs. 6.00 Cr. per annum. Total Employment will be 120 persons as direct & indirect. Industry proposes to allocate Rs 110 Lakhs towards Corporate Environmental Responsibility.

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

from the project site. Tapi river is flowing at a distance of 0.27 km in South direction.

Ambient air quality monitoring was carried out at 8 location during 1<sup>st</sup> December 2020 to 28<sup>th</sup> February 2021 and baseline data indicates that ranges of concentrations of PM<sub>10</sub> (48.0 – 85 µg/m<sup>3</sup>), PM<sub>2.5</sub> (25.0 – 51.0 µg/m<sup>3</sup>), SO<sub>2</sub> (7.0– 16.4 µg/m<sup>3</sup>) and NO<sub>2</sub> (8.4 – 34.4 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 0.69 µg/m<sup>3</sup>, 1.81µg/m<sup>3</sup> and 0.65 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 912 m<sup>3</sup>/day of which fresh water requirement of 326 m<sup>3</sup>/day and will be met from ground water using bore well. Effluent of 257 m<sup>3</sup>/day quantity from blow down of cooling tower & boiler, spent lees, washing and sewage will be treated Condensate Polishing Unit (CPU). Raw spent wash (444 m<sup>3</sup>/day) will be treated in MEE. Condensate from MEE (329 m<sup>3</sup>/day) will be treated in CPU along with other effluent. Concentrated spent wash from MEE (115 m<sup>3</sup>/day) will be utilized in boiler as fuel. The Plant will be based on Zero Liquid discharge system.

Power requirement for proposed project will be 415 kWh will be met from 1.5 MW Co-Generation Power Plant (CPP). 15 TPH Concentrated spent wash fired boiler will be installed. ESP with Wet scrubber with a stack of height of 45 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm<sup>3</sup> for the proposed boiler.

#### **Details of process emissions generation and its management:**

Sr. no.	Specific Source of emission (Name of the Product & Process)	Type of emission	Stack/Vent Height (meter)	Air Pollution Control Measures (APCM)
1	Fermenters	CO <sub>2</sub>	11 m	Water Scrubber

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

Sr. no.	Solid/ Hazardous Wastes	Source of Generation	Category of waste as per Schedule – I HW Rules	Quantity In TPA	Disposal Method /Management
	Solid Waste				
1	CPU/ETP Sludge	CPU - Treatment	-	281.50	Collection, storage and utilize as manure within

		facility			plant premises.
2	Fly Ash	Incineration Boiler	-	3,762	Fly ash collection and storage in pit and sell to brick manufacturer and/or cement plant.
	Hazardous Waste				
1	Used/Spent Oil	Utility	5.1	0.5 KLPA	Collection, storage and reuse as lubricants in the machineries within the premises only or send to authorized re-processors.
2	Discarded containers/ barrels	RM handling	33.1	5	Collection, Storage, Transportation and Disposal by sold out to decontamination facility or send back to suppliers

During deliberations EAC suggested that PP shall submit undertaking for following commitments:

- The integrated project sugar factory and proposed distillery shall conform to Zero Liquid Discharge.
- Proposed fresh water requirement shall not exceed 3kL fresh water consumed /kL production of Ethanol.
- CO<sub>2</sub> generated from the process shall be bottled and it shall be utilized/sold to authorized vendors.
- Industry shall meet 10% of the total power requirement from solar power.
- Industry shall construct rain water storage facility of capacity from which it can meet at least 60 days fresh water requirement.
- Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler.
- Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- Fund for occupational health and safety will be increased to Rs. 50 Lakhs per annum.
- Proposed CER funds shall be increased to Rs.1.375 Crores and it shall be spent on installing solar power and improving infrastructure in public schools of nearby villages. The proposed activities under CER shall be completed before the commencement of operations of the plant.

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). Industry shall meet 10% of the total power requirement from solar power.
- (iii). Electro-Static Precipitator (ESP) with Stack of adequate height will be installed with the proposed boiler. Biomass shall be used in the boiler.
- (iv). 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. The integrated project sugar factory and proposed distillery shall conform to Zero Liquid Discharge.

- (v). Total freshwater requirement shall not exceed 3kL fresh water consumed /kL production of Ethanol which will be sourced from groundwater. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct rain water storage facility of capacity from which it can meet at least 60 days fresh water requirement.
- (vi). Raw spent wash shall be treated in MEE and concentrated spent wash from MEE shall be utilised in the boiler as fuel. Brick manufacturing unit will be installed within the plant premises for utilization of fly ash.
- (vii). CO<sub>2</sub> generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP shall allocate Rs. 50 Lakhs for OHS per annum. 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 other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below  
(a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in

consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

- (xiv). PP proposed to allocate Rs. 1.375 Cores for CER and it shall be spent on installing solar power and improving infrastructure in public schools of nearby villages. All the proposed activities under CER shall be completed before the commencement of operations of the plant.
- (xv). 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.
- (xvi). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xviii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

#### **Agenda No. 45.17**

**Proposed 100 KLPD Grain based Ethanol Plant along with 3.0 MW Cogeneration Power Plant at Plot No. IV/B-4 (P) & IV/B-10 (P), Phase IV, Bokaro Industrial Area, Tehsil Chas, District Bokaro, Jharkhand by M/s EASTERN INDIA CEMENTS PVT. LTD.- Consideration of Environment Clearance.**

**[IA/JH/IND2/239288/2021, J-11011/479/2021-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 100 KLPD Grain based Ethanol plant along with 3.0 MW Co-generation Power Plant at Plot No. IV/B-4 (P) & IV/B-10 (P), Phase IV, Bokaro Industrial Area, Tehsil Chas, District Bokaro, Jharkhand by M/s. Eastern India Cements 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 16<sup>th</sup> 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 16<sup>th</sup> June 2021. It was informed that no litigation is pending against the project.

**The details of products and capacity are as under:**

Unit	Capacity	Product
Grain Based Ethanol Plant	100 KLPD	Product: Ethanol (Bio-fuel) By-product: DDGS & CO <sub>2</sub>
Co-generation Power Plant	3.0 MW	Power

Total project area is 4.85 hectares (48500 m<sup>2</sup>) and the same has been allotted to the company by Bokaro Industrial Area Development Authority (BIADA). Industry will develop greenbelt in an area of 33% i.e., 1.6 ha (16000 m<sup>2</sup>) out of total area of the project.

The estimated project cost is Rs.138 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 6.05 Crores and the Recurring cost (operation and maintenance) will be about Rs. 0.90 Crores / annum. No. of working days will be 350 days/annum. Total Employment will be 100 persons (Permanent 80 & Temporary 20) during operation phase. Industry proposes to allocate Rs. 1.38 Crores (1% of total project cost) towards Corporate Environment Responsibility.

There are no National Parks, Wildlife Sanctuaries, Reserved Forests (RF), Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km radius. Unnamed Protected Forest (~7.0 km in NNE Direction), Unnamed Protected Forest (~5.0 km in NE Direction) lies within 10 km radius. Khanjo Nadi (~4.5 km in West direction), Garga Reservoir (~5.0 km in SSE direction), Damodar River (~5.5 km in NE direction), Garga Nadi (~6.5 km in SSE direction), Chhalchhaliya Nadi (~8.0 km in SSW direction) are the water bodies which lies within 10 km radius.

Total fresh water requirement will be 584 KLPD (557 KLPD Ethanol plant & 27 KLPD Domestic use) which will be sourced from Ground water. Effluent of 454 KLPD will be treated through state of art CPU/Effluent Treatment Plant of 600 KLPD capacity. The plant will be based on Zero Liquid Discharge system.

Power requirement for Ethanol plant will be 2.2 MW, which will be sourced from the 3.0 MW Co-generation Power Plant. Unit will be having D.G. Sets of 1 x 750 KVA which will be used as standby during power failure. Adequate Stack height (6 m) will be provided as per CPCB norms. Boiler of 25 TPH capacity with ESP as Air Pollution Control Equipment will be installed with a stack height of 40 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm<sup>3</sup>.

#### **Details of process emissions generation and its management:**

CO<sub>2</sub> (75 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 (47 TPD), which will be ideally used as Cattle, poultry & fish feed ingredients.
- Ash (25 TPD) from proposed boiler to be transferred in covered vehicles to the nearby brick manufacturers.
- Used oil (0.5 KL/annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

As per OM dated 16<sup>th</sup> 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:

- At least 15% of the total plant area will be reserved for parking and the parking shall be paved to mitigate air pollution.
- Fund for occupational health and safety will be increased to Rs. 50 Lakhs per annum.
- Proposed funds towards CER shall be Rs. 2.00 Crores for improving infrastructure and sanitation facilities in the public schools nearby. All the activities towards CER shall be completed within 2 years.

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 16<sup>th</sup> 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). 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 be 584 KLPD which will be sourced from Ground water. Prior permission shall be obtained from the

concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Company will store rain water in storage tanks and reuse this water in process and plant activities.

- (v). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed.
- (vi). CO<sub>2</sub> plant will be installed to capture CO<sub>2</sub> generated during fermentation process.
- (vii). 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.
- (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. 2.00 Crores for improving infrastructure and sanitation facilities in the public schools nearby. All the activities towards 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 45.18**

**Establish a Grain Based Distillery project of 100 KLD (Ethanol) capacity alongwith 2.5 MW Power Coegenration Project at Tarachandpur, Telmar Road, Bakhtiyarpur, Patna, Bihar by M/s NEWGEN BIOFUEL PVT LTD- Consideration of Environment Clearance**

**[IA/BR/IND2/209542/2021, J-11011/179/2021-IA-II(I)]**

The PP/consultant was not able to attend for the appraisal of proposal due to technical problem. Therefore, EAC has decided to defer the proposal.

**Accordingly, proposal was deferred for the needful.**

#### **Agenda 45.19**

**Proposed 100 KLD Grain based Ethanol plant with ZLD along with 3 MW co-generation power plant under EBP Programme Sri Ganga Nagar, Rajasthan by M/s KARVJYA ETHNOXY PRIVATE LIMITED- Consideration of Environment Clearance**

[IA/RJ/IND2/240172/2021 , IA-J-11011/443/2021-IA-II(I)]

The PP/consultant was not able to attend for the appraisal of proposal due to technical problem. Therefore, EAC has decided to defer the proposal.

**Accordingly, proposal was deferred for the needful.**

#### **Agenda 45.20**

**Expansion of Grain based Distillery from 85 KLPD to 285 KLPD and Co-generation Power Plant from 1.5 to 9 MW by new installation of 200 KLPD Grain based Ethanol Plant at Plot no. 1 & 1A, Industrial area, Phase 111, Sansarpur Terrace, Tehsil Jaswan, Kangra, Himachal Pradesh by M/s PREMIER ALCOBEV PVT. LTD.- Consideration of Environment Clearance**

**[IA/BR/IND2/209542/2021, J-11011/179/2021-IA-II(I)]**

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

**Accordingly, proposal was deferred for the needful.**

45.21 Any other items with the permission of the Chair.

#### **Agenda No. 45.21.1**

**Clarification regarding applicability of EC for production of Bitumen Emulsion, Modified Bitumen and Road Bond from Bitumen - M/s. Hindustan Colas Pvt Ltd.-Re-consideration reg.**

Earlier proposal was deliberated in 36<sup>th</sup> EAC meeting on 16<sup>th</sup> -17<sup>th</sup> June, 2021. The EAC recommendation is as follows:

“After detailed discussion, it was concluded that harmful emission is involved in the process whether it is within prescribed limit or not. Periodic monitoring of the surroundings comprising one (01) kilometer of the radius of the plant is required for mitigation.

Hence it is decided that the project requires Environmental Clearance for the production of Bitumen Emulsions, Modified Bitumen and Road bond from Bitumen and the project proponent shall apply for grant of ToRs followed by conduction of Public Hearing and EC application on PARIVESH portal for such type of proposals”.

Based on the inputs/observation made by EAC IA-Policy division issued a clarification vide dated 24<sup>th</sup> August, 2021.

Subsequently, M/s. Hindustan Colas Pvt., Ltd., had requested to reconsider their case in the Ministry. The request was accepted by competent authority and decided that the matter shall be placed before Expert Appraisal Committee (EAC) industry-II for re-consideration of their recommendations in reference to clarification regarding applicability of EC for the production of Bitumen Emulsions, Modified Bitumen & Road bond from Bitumen.

The proposal was considered by the EAC in its 44<sup>th</sup> meeting held on 22<sup>nd</sup> November, 2021 in the Ministry wherein the project proponent and their consultant made a presentation on the salient features of the project.

After detailed deliberations with the committee members, it was decided to request project proponent to make a detailed presentation again particularly with regard to environmental issues such as generation of effluents, emissions, VOCL, hazardous waste, process safety etc., so that the project could be re-examined particularly with regard to the applicability of the EC.

The proposal was re-considered by the EAC in its 45<sup>th</sup> meeting held on 29<sup>th</sup> - 30<sup>th</sup> November, 2021 in the Ministry wherein the project proponent and their consultant made a detailed presentation as desired by EAC.

Based upon the detailed presentation and having intensive deliberations, following observations were made by the Committee:

- Bitumen is a raw material from the refinery. Bitumen from the refinery undergoes intense scrutiny with respect to environmental issues.
- All unit operations and unit processes in Bitumen Emulsion, modified Bitumen and Road Bond have been examined, with respect to all Environmental issues. Considering liquid effluents, air emissions, VOCL, Safety aspect, etc. and others, the project do not need Environment Clearance. Applicable guidelines of Center Pollution Control Board as well as State Pollution Control Board will remain applicable with respect to Hazardous storage and waste disposal.

In view of the above, the project should be exempted from Environment Clearance.

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**GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE**

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

whom suggestions/ representations, if any, were received while processing the proposal.

- (vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (viii) The environmental statement for each financial year ending 31<sup>st</sup> 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**

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

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