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

Dated: 04.04.2022

MINUTES OF THE 02nd MEETING OF THE EXPERT APPRAISAL COMMITTEE

(INDUSTRY-2 SECTOR PROJECTS)
HELD ON 29th-30th March, 2022

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

- (i) Opening Remarks by the Chairman: The Chairman made hearty welcome to the Committee members and appreciated the efforts of the Committee. After opening remarks, the Chairman opened the EAC meeting for further deliberations.
- (ii) Confirmation of minutes: The EAC, having taken note that final minutes were issued after incorporating comments received from the EAC members on the minutes of its 01st Meeting of the EAC (Industry-2) held during 15th-16th March, 2022 conducted through Video Conferencing (VC), confirmed the same.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

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

29th March, 2022 (Tuesday)

Agenda No. 2.1

Proposed New 120 KLPD Molasses based distillery unit by M/s. Sugar Grid Limited located at Gat number 1727, Post Pingali Bk., Taluka Maan, Dist. Satara, Maharashtra - Consideration of Environment Clearance.

[IA/MH/IND2/138065/2020, J-11011/18/2020-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 Proposed New 120 KLPD Molasses based distillery unit by M/s. Sugar Grid Limited located at Gat number 1727, Post Pingali Bk., Taluka Maan, Dist. Satara, 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 ToR has been issued by Ministry vide letter No. IA-J-11011/18/2020-IA-II(I) dated 20.02.2020. Public Hearing for the proposed project has been conducted by MPCB, on 17.03.2021 at Project site, Pingali Bk., Satara and chaired by Additional District Magistrate, Satara. The main issues raised during the public hearing are related to concerns with wastewater generation and its management. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

Sr. No	Product Details	Proposed Quantity
1.	Rectified spirit OR ENA OR Ethanol	120 KLPD
2.	Fusel oil (by-product)	480 L/day
3.	Spentwash powder (by-product)	44.71 TPD

Existing Total plot area of the unit is 27.69 Ha out of which built up area of sugar 1.57 Ha and proposed distillery unit is 1.06 Ha built up. Area required for proposed distillery will be made available from existing available land which is already acquired by the project proponent. Industry will develop greenbelt in an area of 45.5 % i.e. 1,26,298 m² (12.62 Ha.) out of total allocated area of the project. The estimated project cost is Rs. 13,149.29 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 5318 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 2267.96 lakhs per annum. The project will generate employment for 85-90 persons of which 35-40 will be skilled and remaining semiskilled. Industry proposes to allocate Rs. 194 lakhs (1.5% of capital cost for Greenfield project) towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. There is a reserve forest at a distance of 102 m towards east of the project. Nearest water body is Pingali-Dahiwadi small scale reservoir is approx. 3.2 in North and River Manganga is approx. 7 km in East from proposed site.

Ambient air quality monitoring was carried out at 8 locations during October 2019 to January 2020 (winter season) and the baseline data indicates the ranges of concentrations as: PM10 (44.30 to 65.20 $\mu g/m^3$.), PM2.5 (19.80 to 30.77 $\mu g/m^3$), SO2 (10.51 to 21.44 $\mu g/m^3$) and NO2 (14.30 to 27.12 $\mu g/m^3$). AAQ modeling study for point source emissions indicates that the maximum rise in GLCs after the proposed project would be 1.41 $\mu g/m^3$ and 6.67 $\mu g/m^3$ with respect to PM10 and SO₂. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement for proposed distillery is 480 m³/day which will be met from Pingali-Dahiwadi small scale reservoir through pipeline and with permission from irrigation department. The proposed distillery unit will be based on Zero Liquid discharge (ZLD) process. 960 m³/day raw spentwash will be generated from distillery process, which will be treated in two modes. Multi-effect evaporation (MEE) followed by incineration for 360 m³/day spent wash and Biomethanation followed by MEE followed by agitated thin film dryer (ATFD) for 600 m³/day of spent wash. For spent lees, condensate and other effluent: Condensate polishing unit (CPU) consist of two stage biological treatment followed by tertiary treatment. Domestic wastewater (sewage) will be treated in STP.

Power requirement for proposed distillery will be 3.6 MW it will be met from in house STG of 4.0 MW capacity. DG sets of sugar unit will be used as standby during power failure. Stack will be provided as per CPCB norms to the DG sets. The distillery will require maximum 40 TPH steam, which will be fulfilled from two new boilers i.e. 15 TPH Incineration boiler and 28 TPH Conventional boiler. Electrostatic precipitator with a stack of height 70 m will be installed for controlling the particulate emissions within the statutory of limit of 115 mg/Nm³ for the proposed boilers.

Details of process emissions generation and its management:

The carbon dioxide emissions from fermentation process will be separated. PP will use a CO_2 scrubber for removal of the gas from alcohol stream. Separated CO_2 will be either bottled or converted into dry ice or other suitable chemicals. The project proponent is exploring option of BOOT basis for the same.

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

Solid waste generation and disposal: Distillery unit

S.	Waste	Quantity (TPA)	Disposal	Remark
No.				
1.	Yeast sludge (Dry)	30-35	Used as soil conditioner	Organic
2.	Ash	10,927 max from	Given to brick	
		incineration	manufacturers	Inorganic

		boiler		
		13,550 max from		
		conventional		
		boiler		
3.	CPU sludge (dry)	45-48	Used as soil	Organic/
			conditioner	Inorganic
4.	Spent oil from DG	3.4 KL	given to	-
	set		authorized	
			recycler	

During deliberations EAC desired the following additional information from PP:

- Latest detailed baseline data for 15 days shall be submitted.
- 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.
- Greenbelt shall be developed as per the slope of the project site and species to be grown along with place shall be submitted.
- Justification for Bio-chemical Oxygen Demand (BOD) in ground water shall be given.
- Revised CER break up shall be submitted where 50% of the amount shall be utilized for up-gradation of schools and 50% for energy conservation measures.
- Brick manufacturing unit shall be installed within premises.
- Revised GLC shall be submitted based on collected latest baseline data for 15 days.
- Revised rainwater storage and harvesting calculations.
- Drainage pattern of the area shall be clarified as nala is passing through the project site.
- Revised plant layout shall be submitted with clear demarcation of nala.
- Commitment that no forest land is involved in the proposed project.
- Forest NOC is not translated properly and discrepancy is found in the same. This shall be rectified.
- Revised water balance showing clearly recycling quantity and fresh water usage.

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

Agenda No. 2.2

Proposed 250 KLPD Multi-Grain based Distillery unit by M/s. Krishak Bharati Cooperative Limited (KRIBHCO) located at Sr. No. 75, 76 and 77, village Limla, P.O. Hazira, District - Surat, Gujarat - Consideration of Environment Clearance.

[IA/GJ/IND2/256990/2022, J-11011/68/2022-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. 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 250 KLPD Multi-Grain based Distillery unit by M/s. Krishak Bharati Cooperative Limited (KRIBHCO) located at Sr. No. 75, 76 and 77, village Limla, P.O. Hazira, District - Surat, Gujarat.

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

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

The details of products and capacity are as under:

Sr. No.	Particulates	Capacity
1.	Ethanol/ Anhydrous Alcohol	250 KLPD

The land area available for the project is 1,38,100 m². Industry will develop greenbelt in an area of 33 % i.e., 45,608 m² out of total area of the project. The estimated project cost is Rs. 297 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 7.20 Crores and the recurring cost (operation and maintenance) will be about Rs. 76.7 lakhs per annum. Total employment will be 187 persons as direct & indirect (Construction Phase: 70 & Operation Phase: 117). Industry proposes to allocate Rs. 3.0 Cr @ 1.0% of Total Project Cost (Rs. 297 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. Arabian Sea is 10 km from the project site.

Total water requirement is $2781 \text{ m}^3/\text{day}$ of which fresh water requirement is $1016 \text{ m}^3/\text{day}$ will be met from existing allocation to KRIBHCO from Kakrapar reservoir, Ukai Dam. Distillery effluent of 1897

m³/day* quantity will be treated through 2000 CMD Condensate treatment Plant. The plant will be based on Zero Liquid discharge system. (*spent lees of 98 CMD, process Condensate of 1391 CMD and blow down of 408 CMD will be treated in the CPU. Raw stillage of 1601 CMD will be treated through Decanter followed by multi effect evaporator (MEE) followed by Dryer to produce DDGS).

Power requirement will be 6.650 MW. Proposed integrated unit will have a D.G. Set of 1250 kVA. DG sets will be used only as standby during power failures. Stack height of 11 m will be provided as per CPCB norms to the proposed DG sets. Proposed 60 TPH boiler with 8 MW T.G. Set will be installed. Electrostatic precipitator with 69 m stack height will be installed for controlling of particulate emission within statutory limit of 115 mg/Nm³ for the proposed boilers.

Details of process emissions generation and its management:

Project Activity	Anticipated pollutant	Management
Process emissions	CO ₂ and Negligible VOCs	CO2 shall not be released in the air. CO2 will be Bottled
Stack, fugitive emissions, material handling.	PM_{10} , $PM_{2.5}$, NO_X and SO_2 .	Stack with height of 69 m with Electrostatic precipitator as an APC

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

S. No.	Type of waste	Quantity with UOM	Final Disposal	
1.	Spent Oil	2.1 KL/A	Will be given to authorized recycler	
2.	Coal Ash	39 TPD	Will be given to Brick Manufacturing Plant	
3.	CPU Sludge	8.5 TPD	Will be used as a manure	
4.	Bagasse Ash	8 TPD		
5.	DDGS	126 TPD	Is a by-product and will be sold to cattle feed	

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

During deliberations, PP has informed that CRZ boundary is at 300 m from project site and it is a notified industrial area. EAC was satisfied with the explanation regarding CRZ involvement.

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

- Schedule 1 species are present in study area, hence develop habitat specific plantation considering the existence of Schedule 1 species.
- Revised AQ modelling considering bagasse as fuel, air pollution control equipment and its efficiency and water boundary layer in the study area.
- Revised EMP break up.
- Revised CER break up detailing activities in specific schools and villages.
- Mangrove plantation shall be increased in CRZ area.
- KRIBHCO shall intimate the concerned authority regarding usage of fresh water from the permission already granted to fertilizer complex or obtain separate water permission for distillery.

PP has submitted the desired information as sought above and EAC has found the information/commitments satisfactory.

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

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

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any

other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 250 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iv). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project.
- (v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production and will be met from existing allocation to KRIBHCO from Kakrapar reservoir, Ukai Dam. KRIBHCO shall intimate the concerned authority regarding usage of fresh water from the permission already granted to fertilizer complex or obtain separate water permission for distillery. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.

- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. ESP shall be installed with the boiler. Brick manufacturing unit shall be installed within premises/adjoining area in collaboration with brick manufacturers. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power.
- (vii). CO₂ bottling plant shall be installed.
- (viii). PP shall allocate at least Rs. 50 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
 - (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
 - (x). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms. PESO certificate shall be obtained.
 - (xi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Schedule 1 species are present in study area, hence develop habitat specific plantation considering the existence of Schedule 1 species. Mangrove plantation shall be increased in CRZ area.
- (xiv). PP proposed to allocate Rs. 3.0 Crores towards CER which shall be spent as submitted in CER plan for monitorable activities like upgradation of schools with provision of facilities e.g. Class rooms,

playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.

- (xv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (xvi). Storage of raw materials shall be either 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. 2.3

Proposed 45 KLPD Multi-Grain based Distillery unit by M/s. Tushar Distilleries Pvt. Ltd. located at Survey No. 8, Kochari Village, Taluka Hukeri, District Belagavi, Karnataka - Consideration of Environment Clearance.

[IA/KA/IND2/260626/2022, J-11011/95/2022-IA-II(I)]

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

The proposal is for environmental clearance to the project for Proposed 45 KLPD Multi-Grain based Distillery unit by M/s. Tushar Distilleries Pvt. Ltd. located at Survey No. 8, Kochari Village, Taluka Hukeri, District Belagavi, Karnataka.

As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provision in the EIA Notification, 2006-(Schedule 5 (ga), Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for

Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

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

The details of products and capacity are as under:

Sr. No.	Particulates	Capacity
1.	Ethanol	45 KLPD

The land area available for the project is 51,900.00 m². Industry will develop greenbelt in an area of 33 % i.e., 17,127.00 m² out of total area of the project. The estimated project cost is Rs. 55.22 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 5.48 Cr and the recurring cost (operation and maintenance) will be about Rs. 23.5 lakhs per annum. Total employment will be 117 persons as direct & indirect (Construction Phase: 70 & Operation Phase: 117). Industry proposes to allocate Rs 1.10 Cr. @ 2.0% of Total Project Cost (Rs. 55.22 Cr) towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Hiranyakesi River is 2.1 km towards SW direction.

Total water requirement is 396 m³/day of which fresh water requirement is 200 m³/day will be met from Hiranyakesi River. Distillery effluent of 196.7 m³/day* quantity will be treated through 200 CMD Condensate treatment Plant. The plant will be based on Zero Liquid discharge system. (* spent lees of 81 CMD, process Condensate of 84.75 CMD and blow down of 31 CMD will be treated in the CPU. Raw stillage of 104.0 CMD will be treated through Decanter followed by multi effect evaporator (MEE) followed by Dryer to produce DDGS).

Power requirement will be 1.17 MW/Hr. and will be met on own Turbine. Proposed integrated unit will have a D.G. Set of 500 kVA. DG sets will be used only as standby during power failures. Stack height of 10 m will be provided as per CPCB norms to the proposed DG sets. Proposed 15 TPH boiler with 1.5 MW T.G. Set will be installed. Electrostatic precipitator with 40 m stack height will be installed for boiler for controlling of particulate emission within statutory limit of 115 mg/Nm³ for the proposed boilers.

Details of process emissions generation and its management:

Project Activity	Anticipated pollutant	Management
Process emissions	CO ₂ and Negligible VOCs	CO_2 shall not be release in the air. CO_2 will be bottled.
Stack, fugitive emissions, material handling.	PM_{10} , $PM_{2.5}$, NO_X and SO_2 .	Stack with height of 40 m with Electrostatic precipitator as an APC

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

S. No.	Type of waste	Quantity with UOM	Final Disposal
1.	Spent Oil	0.375 KL/A	Will be given to authorized recycler
2.	Coal Ash	8.45 TPD	Will be given to Brief
3.	Rice Husk Ash	22.5 TPD	Will be given to Brick Manufacturing Plant
4.	CPU Sludge	0.45 TPD	Will be used as a manure
5.	DDGS	30 TPD	Is a by-product and will be sold as a cattle feed

As per the Notification S.O. 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 45 KLPD will be used for manufacturing fuel ethanol only.

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

- Revised CER break up including activities like facilities of treated water, tankers to specific villages.
- Greenbelt plan shall be revised and species specific to area shall be proposed in consultation with forest department.
- Revised stack details.
- Rain water harvesting and storage tank dimensions shall be revised.
- Company shall obtain surface water permission before start of construction activities.
- Approach road to plant site shall be paved.
- Steam and power balance.

PP has submitted the desired information as sought above and EAC has found the information/commitments satisfactory.

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

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

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

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

- (i). As per the Notification S.O. 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 45 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the

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

- (iii). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (iv). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project.
- (v). Total Fresh water requirement shall not exceed 4 KL/KL of ethanol production and will be met from Hiranyakesi River. Company shall obtain surface water permission before start of construction activities. No ground water recharge shall be permitted within the premises. Industry shall construct a storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
- (vi). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. ESP shall be installed with the boiler. Brick manufacturing unit shall be installed within premises/adjoining area. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. PP shall meet 10% of the total power requirement from solar power.
- (vii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (viii). PP shall allocate at least Rs. 25 Lakhs/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
 - (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
 - (x). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms. PESO certificate shall be obtained.
 - (xi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xix). PP proposed to allocate Rs. 1.10 Crores towards CER which shall be spent as submitted in CER plan for monitorable activities like upgradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Approach road to plant site shall be paved under CER. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (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 with facilities like rest rooms etc.
- (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. 2.4

Establishment of 120 KLD (2x60 KLD) grain-based distillery and 2.5 MW captive power plant by M/s. Indo Nuclear Energy Private Limited located at Plot # 27, 28 Umariha village, Majhgawan tehsil, Satna district, Madhya Pradesh - Consideration of Environment Clearance.

[IA/MP/IND2/260011/2022, J-11011/85/2022-IA-II(I)]

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

The proposal is for environmental clearance to the project for Establishment of 120 KLD (2x60 KLD) grain-based distillery and 2.5 MW captive power plant by M/s. Indo Nuclear Energy Private Limited located at Plot # 27, 28 Umariha village, Majhgawan tehsil, Satna district, Madhya Pradesh.

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

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

The details of products and capacity are as under:

Description	Quantity
Grain based distillery to produce Ethanol	120 KLD
Distillery captive power plant	2.5 MW

Total land area of the project site is 101100 m^2 . The proposed Greenbelt area of 33 % i.e., 33300 m^2 out of total land area of the project. The estimated project cost is ₹ 186 crores Cr. Total capital cost earmarked towards environmental pollution control measures is ₹ 32.15 Cr. and the

recurring cost (operation and maintenance) will be ₹ 1.39 Cr. per annum. Total employment will be 70 persons during operational phase. Industry proposes to allocate ₹ 1.86 Crores @ 1% of total project cost towards Corporate Environment Responsibility.

There are no national parks, wild life sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. within 10 km distance from the project site. However, Kailashpur RF is at a distance of 1 Km South, Madhopur PF is at a distance of 0.86 Km North from the project site. Badha nala is at a distance of 6.8 km from the project site in the north flowing from North West.

Total water requirement is 1370 m³/day of which fresh water requirement of 642 m³/day; where in for process 486 KLD fresh water is required, i.e. 4.05 Kl/Kl Ethanol.

- Permission is accorded from Chief Engineer, Ganga, Kachan, Rewa (M.P), REWA, dated: 10.01.2022 to draw 600 KLD water from Patna Dam far-side 2 kms away by creating a step dam.
- Permission is also accorded to M/s Indo Nuclear Energy, dated 28/02/2022, to withdraw 0.18 mm³ (493 KLD) of water from the catchment area of Patna Naala.

Water requirement to the industry

S. No.	Particulars	Quantity- KLD
I	Fresh water	642
1	Process (slurry preparation)	486 (4.05 KL/ KL Ethanol)
2	Fresh water for DM plant	118
3	Laboratory Washings	12
4	CO ₂ Scrubber	26
	Total	642
II	Reuse/Recycle water - Reuse from CPU to process, cooling tower,	728
	Total (I + II)	1370
Dom	estic	10
Gree	n belt	10

Effluent thick slop 720 m³/day from distillation section will be subjected to decantation to separate the fibrous mass called DWGS and the thin slop. The concentrated slop from MEE and the DWGS together forms the wet cake which will be eventually dried to concentrate the solids to 90%

and the resultant DDGS (10% moisture) is to be sold as feed for cattle.

All other Lean effluents of 775 m³/day (MEE condensate, spent lees, cooling tower bleed off, lab washings & RO reject, boiler blow down, scrubber rejects, drier condensate & thin slop) will be treated in CPU and the treated water reused in the process and for cooling tower, thereby following the ZLD system.

Wastewater generation

SI. No.	Effluent	Quantity- KLD
1	Thick slop from distillation section	720
Lean efflu	uent	
2	Spent Lees from Distillation	144
3	Condensate from MEE	384
4	Cooling tower bleed off	42
5	Boiler blow down	48
6	CO2 Scrubber	25
7	Lab washings	10
8	Drier condensate	96
9	DM rejects	26
10	CPU rejects	47

CPU comprises two Stage RO process proposed and the RO treated water used as cooling tower make-up water and in the Fermentation plant. The proposed project is a ZLD plant.

Power requirement for the proposed project will be 1830 kW per day or 2287.5 kVA will be met from 2.5 MW Captive power plant. DG set of 500 kVA capacity, to be used as standby during power failure. Stack of height 3 m ARL will be provided as per CPCB norms to the DG set. Project will be provided with 20 TPH boiler with Electrostatic Precipitator as APCE with a stack of height of 34 m AGL for controlling the particulate emissions within the statutory limit of 115 mg/Nm³.

Details of process emissions generation and its management:

51 KLD of CO₂ will be generated from fermentation, this will be scrubbed, recovered and bottled.

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

Solid waste management

S. No.	Solid waste	Quantity TPD	Mode of Disposal
1	Boiler ash	5.0	Sold to brick manufacturer or given to farmers
2	ETP sludge	0.5	Used as manure for gardening
3	Yeast sludge	10	Given to farmers for use for bio manure preparation
4	DDGS	76	Dried and disposed as cattle feed

Hazardous waste management

Waste category	Hazardous waste generated	Proposed Quantity	Proposed Method of handling
5.1	Used Oil	0.2 KI/A	Stored in secure manner and dispose to MPPCB authorized recyclers
5.2	Oil-soaked cotton waste	0.15 TPA	Oil-soaked cotton waste is burnt in boilers

As per Notification S.O 2339(E), dated 16th June, 2021, PP has submitted self-certification in the form of notarized affidavit declaring that the proposed capacity of 120 KLD (2x60 KLD) will be used for manufacturing fuel ethanol only.

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

- Revised CER break-up including specific villages and schools.
- Drain is passing through proposed project site, PP shall develop RCC drain and greenbelt around the drain. If the drain passing through site is natural then obtain permission from concerned department before starting construction activities. Also, course of drain shall not be changed.

PP has submitted the desired information as sought above and EAC has found the information/commitments satisfactory.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given

undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

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

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

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

- (i). As per Notification S.O 2339(E), dated 16th June, 2021, project falls in category B2 and the proposed capacity of 120 KLD (2x60 KLD) shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (ii). Drain is passing through proposed project site, PP shall develop RCC drain and greenbelt around the drain. If the drain passing through site is natural then obtain permission from concerned department before starting construction activities. Also, course of drain shall not be changed.
- (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). EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project.
- (vi). Total Fresh water requirement shall not exceed @4.0 KL/KL and will be met from surface water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. 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.
- (vii). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed. ESP shall be installed with the boiler. PP shall use biomass like rice husk/bagasse as fuel for the proposed boiler. Low sulphur coal with maximum sulphur content of 0.5% shall only be used. Ash shall be stored in silos. Brick manufacturing unit shall be installed within premises. PP shall meet 10% of the total power requirement from solar power.
- (viii). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (ix). 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.
- (x). 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.
- (xi). 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.
- (xii). 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.

- (xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv). 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.
- (xx). PP proposed to allocate Rs. 1.86 Crores towards CER which shall be spent as submitted in CER plan for monitorable activities like upgradation of schools with provision of facilities e.g. Class rooms, playground, Laboratory, Library, Computer class, toilets, Drinking Water Facilities, solar light/solar power support for uninterrupted power supply etc. Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
- (xv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc.
- (xvi). Storage of raw materials shall be either 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. 2.5

Expansion of Sugar plant from 5000 TCD to 10000 TCD by M/s. Deshbhakt Ratnappa Kumbhar Panchganga Sahakari Sakhar Karkhana Ltd. (D.B.R.K. Panchganga S.S.K. Ltd.) leased unit of M/s. Shree Renuka Sugars Limited (SRSL) 22 located at Ganganagar, Ichalkaranji, Hatkanangale Taluk Kolhapur District, Maharashtra - Amendment of Environment Clearance.

[IA/MH/IND2/252268/2022, J-11011/116/2017-IA-II(I)]

The proposal was earlier considered by the Expert Appraisal Committee (Industry-2) in the Ministry in its 50th meeting held on 10th-11th February, 2022 and was recommended that "Treated effluent shall be reused in the process/utilities and for gardening/greenbelt development/horticulture within its own premises on 19.62 Hectares of land and to give the balance treated effluent to farmers nearby industry on their request duly following manifestation indicating the name of the farmers, extent of land and quantity of water supplied" with following conditions:

- To adhere to the standards of treated effluent quality to be maintained as per consent issued by Maharashtra Pollution Control Board.
- To ensure that the soil quality shall not be affected in the irrigation land where treated effluent is discharged.
- To provide online monitoring systems at the disposal point and connect to CPCB and SPCB servers.

Accordingly, file was processed for consideration of project. However, it was observed that if the treated effluent is discharged outside of the premises, it may not be practically possible to keep a check on discharge of untreated as well as treated effluent. Therefore, Ministry has decided to place this proposal again before the EAC to review the decision.

The proposal was again placed in the EAC in its 02nd meeting held on 29-30th March, 2022 in the Ministry wherein the project proponent and their consultant M/s. Samrakshan, presented the case.

During deliberations, PP has been suggested to install innovative technologies for reducing the treated water quantity and 50% recycle

shall be carried out after installation of ZLD technologies. Also, remaining 50% may be disposed within premises in greenbelt development etc.

For supply of treated water outside premises, PP shall conduct a study by Government recognized organizations like NEERI, IIT, CSIR etc. for analysis of impacts on environmental components i.e. soil, ground water, land and environmental settings for supplying to farmers for irrigation purposes. Also, include current level of utilisation of treated water and potential of utilisation of treated water. This study report shall be submitted to the Ministry within four months' time.

PP agreed for exploring options of ZLD technologies and usage of treated water within the premises.

The amendment in EC condition shall be revised as follows:

SI.	Para of EC	Details as per the EC	To be revised/ read
No	issued by MoEF		as
-	& CC		
1.	EC B. Sector Specific Condition point no. (ii), page 10 of 14 in the EC vide letter no. J- 11011/116/2017 -IA II (I) dated 30 th March 2021	As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/green belt development/horticulture and not to send outside/used for farming.	be reused in the process/utilities and for gardening/greenbelt development/horticultu re within its own premises.

After detailed deliberations, EAC **recommended** the amendments in EC as mentioned above, with all other terms and conditions remain unchanged.

30th March, 2022 (Wednesday)

Agenda No. 2.6

Establishment of Natural Gas Distribution pipeline network with associated facilities from Ambadi Naka at Bhiwadi Taluka, Thane District to Village Virar, Taluka Vasai, District Palghar of Maharashtra State (i.e. Called Virar Spur line) including Spur lines at Nala Sopara, Vasai, Kharpada, Sativali covering total length approx. 58.345 km with Diameters 6"/8"/12" at Maharashtra, Palghar by M/s. Gujarat Gas Limited - Consideration of Environment Clearance.

[IA/MH/IND2/90520/2019, J-11011/46/2019-IA-II(I)]

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

The proposal is for environmental clearance to the project Establishment of Natural Gas Distribution pipeline network with associated facilities from Ambadi Naka at Bhiwadi Taluka, Thane District to Village Virar, Taluka Vasai, District Palghar of Maharashtra State (i.e. Called Virar Spur line) including Spur lines at Nala Sopara, Vasai, Kharpada, Sativali covering total length approx. 58.345 km with Diameters 6"/8"/12" at Maharashtra, Palghar by M/s. Gujarat Gas Limited.

All Oil and Gas transportation pipeline project are listed at S.N 6(a) project or activity 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-J-11011/46/2019-IA-II(I); dated 23.03.2019. Public Hearing for the proposed project has been conducted by the Maharashtra Pollution Control Board on 27.01.2022 at Aangan Marriage Hall, Satpadi Road, Tembhade, Palghar (E), Dist-Palghar and chaired by Additional District Collector. The main issues raised during the public hearing were related to the land Compensation etc., pipeline survey number, villages & any mangrove area along the pipeline. It was informed that no litigation is pending against the project.

The details of products and capacity are as under:

This is Natural Gas Transportation through MDPE pipeline for length 27 km having flowing capacity of natural gas 0.093 MMSCMD.

Proposed pipeline project will not have any land acquisition on permanent bases, but proposed pipeline route is along the existing road RoW under PWD authority and land will be used temporarily limited up to laying of pipeline on the basis Right of Use. After laying of pipeline the land will be reinstated to near its original condition and return to PWD authority. Proposed project will not have any storage terminal & Station. It will have only transportation of Natural gas through pipeline & establishment of City Gas Distribution network.

Proposed pipeline route will not have any station facilities and permanent land acquisition. In addition the proposed pipeline will be layed maximum to avoiding cutting of trees. However, in unavoidable situation forest authority will be informed and necessary tree plantation /compensation to forest authority will be given. 10 trees will be planted on cutting of 1 tree as per the guideline of forest division.

The estimated Total Capital cost is $\ref{thmspace}$ 64.12 Crores which includes Environmental Pollution Control Measures cost of $\ref{thmspace}$ 0.64 Crores and total project cost of $\ref{thmspace}$ 64.76 Crores. Total Employment will be 60 persons.

Proposed pipeline route passes through Tungareshwar Wild life sanctuary as follow:

S. No.	Particulars	ESZ Length & Area	WLS Length & Area	Remarks
1	Virar Spur line passes through Tungareshwar ESZ & WLS sanctuary of	Length:3/3 80 km Area: 0.304 ha	Length: 0.496 km Area: 0.0446 ha [Ch.26.18 to Ch.25.81=0.367 Km Ch.22.60 to Ch.22.47=0.129 km Total=0.496 km]	Nala Sopara, Vasai, Kharpada & Sativali Spur line are out of ESZ & WLS sanctuary.

PP has reported that earlier as per Draft Tungareshwar Wild Life Sanctuary(TWLS) notification GGL has already obtained recommendation from the State Board of Wild life vide 05th December 2018 and permission granted by Standing committee of NBWL vide F. No. 6-30/2019 WL dated 25.03.2019 for diversion of 0.0445 ha of forestland for underground laying of natural gas pipeline of 6", 8" and 12" diameter along the existing road in the Ambadi Naka area in Virar city, Nalasopara, Vasai, Kharpada and Sativali District Palghar falling in TWLS and its notional ESZ. GGL has also complied all necessary conditions directed by NBWL and NOC for laying proposed pipeline has been granted by additional Principal Chief Conservator of Forests (Wild Life) West, Mumbai vide F. No. Desk-3/Land/NBWL/CR No. 108/1261 of 2019-20 dated 13.08.2019. Now as per Finalized TWLS notification vide dated 11.09.2019, TWLS boundary has been finalized and final Eco Sensitive Zone (ESZ) boundary has been reduced from buffer 10 km to 100 m-4 km max. As per this latest finalized Notification only Virar Spur line slightly passes through finalized Eco Sensitive Zone of TWLS for length $3.380~\rm km$ (For $0.304~\rm ha$ ESZ area) out of total length approx. $58.345~\rm km$ with Diameters 6''/8''/12'' of Proposed Virar Spur line with its connectivity of Nala Sopara spur line , Vasai spur line, Kharpada spur line, Sativali spur line.

In principle approval for diversion of 0.6818 ha forest land has been granted be Government of Maharashtra with vide Order No.: FLD-12A18/CR-302/F-10, Dated 02.01.2019.

The everyday vehicle movement on existing road passes through WLS is currently present there. However, the proposed pipeline route will not have any permanent impact in this area because it is 1 to 1.2 meter underground buried pipeline along the existing road RoW under PWD department. The impact envisaged only during construction phase of the laying of pipeline in that area which will be limited to only few days and the soil will be reinstated near to its original condition after laying of pipeline. So, no impact on wild life sanctuary is expected in operation phase of pipeline. So, the project will have impact is very marginal, temporary in nature and reversible.

Ambient air quality monitoring was carried out at 9 locations during 01 Mar 2019 to 31 May 2019 and the baseline data indicates the ranges of concentrations as: PM10 (73.3 to $66.2\mu g/m^3$), PM2.5 (29.3 to $26.4\mu g/m^3$), SO₂ (14.6 to $13.2\mu g/m^3$) and NO₂ (18.3 to $17.1~\mu g/m^3$). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Water requirement only during the laying of pipeline/Construction period that is 10 KLD.

No Stationery/permanent DG set required on pipeline during operation phase. Temporary 12 KVA DG set will be required for welding during laying of Steel pipeline.

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

- Solid wastes generated from the temporary campsites and other wastes like plastics, paper, cardboard, etc. will be properly collected, segregated and reused / disposed off appropriately (recycle, reuse, and composting / landfill).
- No hazardous wastes are envisaged from pipeline construction activities.
- During Operation phase of the pipeline pigging operation may generate solid waste which may be safely collected, stored and disposed to approve TSDF vendor.

During deliberations EAC sought the following additional information from PP:

- Justification regarding discrepancy of baseline monitoring dates as there is four set of Period and Dates given in the EIA Report for Monitoring of Baseline Data.
- Sampling and Analysis Methodology adopted for O3 (Ozone), HC (Hydrocarbon), C6H6, Benzene, B(a)p, VOC to be provided as there is contradiction in values reported.
- Consultant has not monitored Ambient Air Quality as per Standard TOR / CPCB specified frequency and has taken only 4 samples per month as clearly reveals from Monitoring Test Report of Ambient Air quality. This is gross violation of the laid down procedures by the QCI-NABET accredited consultant.
- SO2 and NO2 values (ambient air) at Project site station are nearly same reported which are scientifically unrealistic.
- Ozone concentration monitoring values are unrealistic and time of monitoring is also not mentioned.
- As per TOR, Consultant to provide "Present land use based on satellite imagery for the study area of 10 km radius" which is not complied with. Satellite Imagery is not attached which gives better idea about the land use. The map attached at Annexure XIII in EIA report does not clarify which year data have been taken and whether buffer distances from pipelines v/s various features are maintained cannot be ascertained accurately.
- There is non-compliance of ToR and contradictory replies have been submitted when EAC desired the information regarding determination of atmospheric inversion level and assessment of ground level concentration of pollutants. Air quality modelling for proposed project.
- Mobile STP shall be proposed for treatment of domestic waste water.
- Commitment that no noise making equipment shall be used while construction as wildlife sanctuary is present.
- Commitment that no private land is involved in laying of pipeline.
- Commitment that guidelines from MoPNG shall be followed.
- Revised CER cost specifically mentioning activities to be conducted in villages, schools etc.
- Justification regarding photographs shown of noise monitoring.
- In RA-DMP, QRA (Qualitative Risk Analysis) study provided for 10mm, 50mm & 100mm leak Size. PP shall cover QRA study for 5mm leak Size also.

EAC observed discrepancy in various data submitted and found that the Impact Assessment has been undertaken based on above incredible data which is contrary at several places. Also, Consultant is not sure about monitoring dates and period, TORs are not complied, CPCB guidelines are not followed for monitoring and AAQ results reported in the EIA report shows Consultant's technical gaps in understanding. In view of above, EAC decided that the Ministry should issue show cause notice against the Accredited Consultant M/s. Green

Circle, Inc. Vadodara for submission of misleading facts and contradictory baseline data.

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

Agenda No. 2.7

Establishment of 110 KLPD Molasses/Cane Syrup Based distillery by M/s. Jagruti Sugar & Allied Industries Limited (JSAIL) located at Achwala village, Talegoan (Bho), Tal. Deoni, Dist. Latur, Maharashtra - Amendment in Environment Clearance

[IA/MH/IND2/257050/2022, J-11011/145/2021-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by Ministry vide letter number IA-J-11011/145/2021-IA-II(I) dated 28th December, 2021 for establishment of 110 KLPD Molasses/Cane Syrup Based distillery by M/s. Jagruti Sugar & Allied Industries Limited (JSAIL) located at Achwala village, Talegoan (Bho), Tal. Deoni, Dist. Latur.

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

Sr. No.	Para of EC issued by MoEF&CC	Details as per EC	To be Revised / Read as	Justification/ reasons
1	Page No 4 Point.13. (1)	PP shall connect the existing sugar factory boiler to proposed ESP for distillery, making sugar factory and proposed distillery an integrated complex.	PP shall continue with wet scrubber for existing sugar factory boiler of 80 TPH and Proposed 30 TPH boiler to be provided with ESP.	It is a fact that the proposed 30 TPH distillery boiler cannot be established near existing 80 TPH sugar factory boiler due to constraints on space availability and
2.	Page No 6 A. Specific Condition, Point No. iv	PP shall connect the existing sugar factory boiler to proposed ESP for distillery, making sugar factory and proposed distillery an integrated complex.		transfer of steam from sugar factory to distillery location (400 M). In July 2021, industry has provided an upgradation in existing Wet Scrubber provided as APC to 80 TPH Sugar Factory Boiler through introduction of 2 nd Venturi Module (by spending Rs.30 Lakhs)

Sr.	Para of EC issued by MoEF&CC	Details as per	To be Revised /	Justification/
No.		EC	Read as	reasons
				which has given positive results in further bringing down the SPM concentrations during ongoing crushing season 2021-22.

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

Agenda No. 2.8

Expansion of Distillery from 100 KLPD to 300 KLPD by M/s Hermes Distillery Pvt Ltd at Gat No. 9615A, 96/5B, 96/5C, 96/3A/2, 98/1B/3, 98/1B14, 98/1B/5, Village Yadrav, Taluka Raibag, District Belagavi (Karnataka)- Amendment in Environment Clearance

[IA/KA/IND2/256555/2022, J-11011/143/2014-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by Ministry vide letter number J-11011/143/2014-IA-II(I) dated 26th February, 2019 for expansion of Distillery from 100 KLPD to 300 KLPD by M/s Hermes Distillery Pvt Ltd at Gat No. 9615A, 96/5B, 96/5C, 96/3A/2, 98/1B/3, 98/1B14, 98/1B/5, Village Yadrav, Taluka Raibag, District Belagavi (Karnataka).

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

Sr N o.	Para of EC issued by MoEF &CC	Details as per the EC	To be Revised / Read as
1	Page	The proposal for environmental	The proposal for environmental
	No. 1	clearance to the project for expansion	clearance to the project for expansion
	Point	of the distillery from the present	of the distillery from the present
	2.0	capacity of 100 KLPD (molasses	capacity of 100 KLPD (molasses
		based) to 300 KLPD (200 KLPD	based) to 300 KLPD (100 KLPD
		Molasses & 100 KLPD Grain based)	Molasses, 100 KLPD Grain & 100

Sr N o.	Para of EC issued by MoEF &CC	Details	as per EC	the		-		Revised ad as	d /	
		by				LPD Mola				y
2.	Page No. 1,	Details of product	are as	under-		etails of p	roduct	are as	under-	
	Point	Product		Capacity		Product			Capacity	
	3.0		Exist	Propo	Tot			Exist	Propo	Tot
		NA alasasa basasa	ing	sed	al	4-1		ing	sed	al
		Molasses based distillery	100 KLP	100 KLPD	20	Molasses b distillery	ased	100 KLP		10
		(RS/ENA/Ethanol	D	KLID	KL	RS/ENA/Et	hanol	D		KL
		/Alcohol)			PD	'Alcohol)				PD
		Grain based		100	10	Grain based	t		100	10
		distillery		KLPD	0	distillery			KLPD	0
					KL					KL
		Cogen Power	13		PD 13	Molasses/ (Grain		100	PD 10
		Cogen Power	MW		M	violasses/ (distillery	Jiaiii		KLPD	0
			10100		W	RS/ENA/Et	hanol		INEI D	KL
		IMFL Bottling	86.4	129.6	21	'Alcohol)				PD
		Plant	KLP	KLPD	6	Cogen Pow	er	13		13
			D		KL			MW		М
					PD				100.0	W
						MFL Bottli	ng	86.4	129.6	21
						Plant		KLP D	KLPD	KL
										PD
3.	Page	Spentwash will be		•	gh	entwash				
	No. 2,	multi effect evapo				ill be trea		•		
	Point	followed by incine	eration	in boile	r.	/aporators	•	-	ollowed	by
	6.0,					cineration				
	Para 2					es from			lery wi	ll be
						cycled in	•		_	
						nick Slop t			•	
						rmation o			OGS to b	e
						sold as Cattle Feed				

The justification/reasons provided by the PP for the amendments sought above are follows:

- HDPL is a stand-alone distillery. Availability of Molasses has now become a big issue as most of the sugar factories have expanded their distilleries for captive ethanol production.
- Looking at the availability of grains in command area, Management decided to implement the remaining 100 KLPD plant capacity (as per EC dated 26.02.2019) for Grain based /Molasses based distillery.

 Therefore, Management decided to implement the remaining 100 KLPD plant capacity (as per EC dated 26.02.2019) for Molasses/ Grain based distillery.

During the deliberations, EAC found the PPs justification to amend feed stock of 100 KLPD capacity molasses based to 100 KLPD capacity molasses based/grain based distillery valid. However, EAC opined that PP shall submit an addendum to EIA/EMP incorporating all necessary changes that will result due to change in feed stock when distillery is operated in 100 KLPD grain based mode.

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

Agenda No. 2.9

Onshore Oil & Gas Development Drilling and Production in Mechaki Area covering Mechaki, Mechaki Extension, Baghjan and Tinsukia Extension PMLs in Tinsukia District of Assam - Amendment in Environment Clearance

[IA/AS/IND2/255785/2022, J-11011/1260/2007-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter No.IA-J-11011/1260/2007-IA-II(I) dated 9th April, 2020 for the project "Onshore Oil & Gas Development Drilling and Production in Mechaki Area covering Mechaki, Mechaki Extension, Baghjan and Tinsukia Extension PMLs in Tinsukia District of Assam" in favour of M/s Oil India Limited.

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

S. N o	Para of EC issue d by MoEF &CC	Details as per the EC	To be revised/read as	Justification/ reasons
1.	Para No. 6	Application for Forest Clearance (FC) has been submitted for two wells (MKD& MKE). It has now proposed to drop the two location from the scope of the present project.	approval for diversion of forestland for MKD and MKE wells has been obtained from	application for ToR for drilling of 18 wells and 4 production installations in Mechaki Block. MoEF&CC issued approved ToR vide No.IA-J-

Based on the proposal Based on the proposal EIA study conducted Para submitted by the project submitted by the for 18 wells and 4 No. 13 and project proponent and production installations proponent recommendation of the recommendation of against the TOR for EAC(Industry-2), in its the EAC(Industry-2), Mechaki Block. meeting held during in its meeting held November 20-22, 2019, during November 20- At the time of EAC, Two of 22, 2019, and after well locations out of 18 Ministry Environment, Forest and **obtaining of In-** wells *viz*. MKD and Climate Change hereby Principle/Stage-I MKE were dropped environmental approval for from the proposal as clearance to the project diversion of forest clearances was for Onshore Oil & Gas forestland for MKD not available at that Drilling **and MKE wells**, the time. Developmental and Production from **16** Ministry wells and setting up 4 Environment, Forest OIL obtained EC for 16 production installations and Climate Change wells and 4 production and laying of gas pipeline hereby accords installations vide letter in an area of 82 ha. In environmental IAno No. the 11011/1260/2007-IA-Mechaki area covering clearance to Mechaki project for Onshore Oil II(I) dated 9th April, Mechaki, Extension, Baghjan and & Gas Developmental 2020. Tinsukia Extension PMLs Drilling and Production Tinsukia, from 18 wells (with Now, District MoEF&CC addition of wells granted Assam In-MKD and MKE) and Principle/Stage-I approval for diversion setting up production of forestland for MKD installations and laying and MKE wells. of gas pipeline in an area of 82 ha. In OIL complied all the Mechaki area covering stipulated conditions of Mechaki the 1st Stage forest Mechaki, Extension, Baghjan clearance and Tinsukia submitted and the Extension **PMLs** in compliance report to Tinsukia, the IRO, MoEF&CC, District Guwahati. Assam IRO office advised OIL the submit **Environment Clearance** of MKD & MKE wells for grant of Final Forest Clearance.

Co-Ordinates of Proposed Wells:

#	Well Name	Latitude	Longitude	Village	District	
1.	MKD	27°43'22.59 6" N	95°38'55.65 6" E	Mechaki RF	Tinsukia	
2.	MKE	27°42'41.60 9" N	95°41'20.93 2" E	Mechaki RF	Tinsukia	

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

GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE

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

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

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

S. No.	Name and Address	Position
1.	Shri S. C. Mann	Chairman
2.	Dr. J. S. Sharma	Member
3.	Prof. Y. V. Rami Reddy	Member
4.	Prof. Dilip Majumdar	Member
5.	Prof. Sanjeev Chaudhari	Member
6.	Dr. Onkar Nath Tiwari	Member
7.	Shri J. S. Kamyotra	Member
8.	Dr. Rahul Rameshrao Mungikar	Member
9.	Dr. V. S. R. K. Prasad (IIPE)	Member
10.	Dr. Sanjay V. Patil (VSI)	Member
11.	Shri Ashok Kr. Pateshwary,	Member
	Director, MoEFCC	Secretary
MoEF	FCC	
12.	Dr. Mahendra Phulwaria	Scientist 'C'
13.	Sh. Kanaka Teja	Research Assistant
14.	Ms. Meetika Gupta	Research Associate