

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

Dated: 29.01.2021

**MINUTES OF THE 28th MEETING OF THE EXPERT APPRAISAL
COMMITTEE**

(INDUSTRY-2 SECTOR PROJECTS),

HELD ON 18th – 19th January, 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 offered by the EAC members on the minutes of its 27th Meeting of the EAC (Industry-2) held during 30th - 31st December, 2020 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: -

18th January, 2021 (Monday)

Agenda No. 28.1

Proposed expansion of Sugar Plant from 5000 TCD to 11500 TCD, Co-generation from 27 MW to 34 MW and Distillery from 60 KLD to 150 KLD using multi feed stock of C-Heavy molasses/ B-Heavy molasses and Sugar Syrup with captive power plant from 2.2 MW

to 4.7 MW in distillery by M/s. Jamkhandi Sugars Ltd., (JSL) located at Survey Nos. 66, 72, 73, 74, 78, 79, 80 and 88, Hirepadasalagi Village, Jamkhandi Taluk, Bagalkot District, Karnataka – Consideration of Environmental Clearance regarding.

[IA/KA/IND2/188524/2008, J-11011/300/2007-IA-II(I)]

The Project Proponent and their accredited consultant M/s Samrakshan made a detailed presentation through video conferencing on the salient features of the project and informed that:

The proposal is for Environmental Clearance to the project for Proposed expansion of Sugar Plant from 5000 TCD to 11500 TCD, Co-generation from 27 MW to 34 MW and Distillery from 60 KLD to 150 KLD using multi feed stock of C-Heavy molasses/ B-Heavy molasses and Sugar Syrup with captive power plant from 2.2 MW to 4.7 MW in distillery by M/s. Jamkhandi Sugars Ltd., (JSL) located at Survey Nos. 66, 72, 73, 74, 78, 79, 80 and 88, Hirepadasalagi Village, Jamkhandi Taluk, Bagalkot District, Karnataka.

The project/activities are covered under category A of item 5 (g) 'Distilleries' and 5(j) 'Sugar' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC).

The Standard ToRs has been issued by Ministry vide letter No. J-11011/300/2007-IA-II(I) dated 29.7.2019. Public hearing for the proposed project has been conducted by the Karnataka State Pollution Control Board on 03.11.2020 at plant premises chaired by the Additional Deputy Commissioner, Bagalkot. All the participants supported the expansion project. There were no issues raised during the public hearing. It was informed that no litigation is pending against the proposal.

The Ministry had issued EC earlier vide letter vide no. J-11011/300/2007-IA-II(I) dated 9th April 2009 to the existing Distillery project of 60 KLPD molasses-based distillery and issued EC amendments dated 16.08.2016 and 1.8.2017. SEIAA, Karnataka has issued EC vide letter no. SEIAA 12 IND 2009 dated 29th December 2009 for expansion of the sugar plant from 2500 TCD to 5000 TCD and co-generation plant from 12 MW to 27 MW infavour of M/s. Jamkhandi Sugars Ltd.

The details of existing and proposed products and capacity are as under:

Sl. No.	Product details	Existing quantity	Proposed quantity	Total quantity
1	Sugar cane crushing capacity, TCD	5000	6500	11500
2	Co-generation power plant, MW	27	7	34
3	Distillery KLD with Captive power plant MW	60 2.2	90 2.5	150 4.7

PP reported that the existing land area is 6,04,317.07 m² (149.33 acres) and the proposed expansion activities will be within the existing land area. Industry has already developed greenbelt in an area of 34.26 % i.e., 204872.106m² (50.624 acres) out of total area of the project. The estimated project cost is Rs. 547.16 Crores including existing investment of Rs. 347.77 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 41.74 Crores and the Recurring cost (operation and maintenance) will be about Rs. 59.5 Lakhs per annum. Total Employment will be 608 persons after expansion. Industry proposes to allocate Rs. 50 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. River Krishna is flowing at a distance of 3 km in South-West of the industry.

Ambient air quality monitoring was carried out at 9 locations during December 2019, January 2020, February 2020 and the baseline data indicates the ranges of concentrations as: PM₁₀ (75.9-39.7µg/ m³), PM_{2.5} (36.5- 18.3µg/m³), SO₂ (27.4 - 9.5 µg/ m³) and NO₂ (39.2- 15.5 µg/ m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 5.31 µg/ m³, 0.585 µg/ m³ and 1.312 µg/ m³ with respect to SPM, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is as under;

- a. Sugar & co-gen – 8720 KLD of which fresh water requirement is 900 KLD and the condensate water generation from the sugar cane crushing is 7820 KLD.
- b. Domestic use – 85 KLD fresh water.
- c. Distillery water requirement is as in the table below:

Sl. No.	Particulars	Existing 60 KLD			Proposed expansion 90 KLD		
		C Heavy	B Heavy	Cane syrup	C Heavy	B Heavy	Cane syrup
1	Fresh water	360	360	156	540	540	234
2	Reuse from distillery CPU	580	382	463	865	568	559
3	Total water requirement	940	742	619	1405	1108	793

Fresh water will be met from Krishna River located at about 3 km from the site.

Effluent from the sugar plant is 1030 KLD and from the co-generation plant is 575 KLD. Effluent will be treated through Effluent Treatment Plant comprising of primary treatment in the anaerobic digester followed by two stage extended aeration system and collected in polishing pond and used on land for irrigation.

Waste water generated from the distillery is as in the table below:

Sl. No.	Particulars	Existing 60 KLD			Proposed expansion 90 KLD		
		C Heavy	B Heavy	Sugarcane Syrup	C Heavy	B Heavy	Sugarcane Syrup
1	Raw spent wash	475	264	342	712	395	465
2	Concentrated spent wash	120	85	43	180	101	88
3	Spent lees	83	86	70	124	129	105
4	MEE condensate	429	231	347	643	346	372
5	Boiler blowdown	14	12	14	21	18	24
6	Cooling tower bleed	30	32	25	45	48	44
7	Miscellaneous	10	10	6	10	10	6

The spent wash from the distillery with respect to per KL of alcohol produced is as in the table below:

Sl No	Description	Raw spent wash generation		Conc. Spent wash	
		KLD	KL/KL ethanol	KLD	KL/KL ethanol
1	60 KLD C C Heavy + 90 KLD C Heavy	475 + 712 = 1187	7.9	120 + 180 = 300	2

2	60 KLD B Heavy + 90 KLD B Heavy	264 + 395 = 659	4.39	85 + 101 = 186	1.24
3	60 KLD Cane syrup + 90 KLD Cane syrup	342 + 465 = 807	5.38	43 + 88 = 131	0.87

The spent wash is concentrated in MEE and concentrate is incinerated in incineration boiler. The MEE condensate, spent lees, boiler blow down, washings are treated in three stage RO plant and reused in the process and cooling tower. The distillery plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 35 MW including existing 22.1 MW and will be met from Co-gen and captive power plant. Existing unit has DG sets of 720kVA capacity is used as standby during power failure.

Existing unit has boilers as under;

- Sugar & co-gen plant – exiting 70 TPH and 90 TPH bagasse fired boiler with chimney of 56 m and 90 m height and wet scrubber and ESP as APC equipment respectively. Additionally, 70 TPH bagasse fired boiler with chimney of 56 m height and ESP as APC equipment will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boilers.
- Distillery – Existing distillery has 22 TPH incinerator boiler for burning concentrated spent wash supported with coal. Bag filter with stack of 80 m is installed. Additional 23 TPH incinerator boiler is proposed for expansion. ESP is proposed as control equipment and connected to existing chimney of 80 m height for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boilers.

Details of Process emissions generation and its management:

The CO₂ generated from fermentation in the distillery will be bottled in the CO₂ plant.

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

Sl. No.	Solid Waste	Quantity in MT/month		Disposal
		Existing	After expansion	
1	Bagasse	4500	103500	Used as fuel for captive power generation in boiler.

2	Press mud	6000	13800	Given to farmers to use as manure
3	Yeast Sludge	190	300	
4	Bottom crate ash	104	136	Given to farmers for soil conditioning and filler for brick manufacturer
5	Dry Ash	420	550	
6	ETP Sludge	2	4	Dried Sludge is used as manure for green belt

Hazardous waste Management

Waste category	Hazardous waste generated	Quantity in TPM	Method of handling
5.1	Used Oil	0.9 KLPA	No change in hazardous waste generation post expansion. Disposal to KSPCB authorized agencies will be continued
5.2	Wastes residues containing oil	0.2 MT/A	

The PP has submitted the certified compliance report given by the Ministry's Integrated Regional office at Bangalore vide letter dated 17.11.2020. PP has been advised to take additional measures for collection of roof top rain water also in future and recharge the ground water. It certified that the compliance status of the existing project is satisfactory. The Committee deliberated the compliance status of earlier EC submitted by PP and found in order. It was informed that there is no litigation pending against the project.

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

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The committee directed PP to ensure that waste water generated from Sugar

and distillery complex shall be treated and re-used within the plant and no treated or untreated waste water shall be discharged out from the premises of Sugar and distillery complex. Also ethanol will be used for blending bio-ethanol with petrol under EBP programme for additional proposed capacity. The EAC directed that ash from the incineration boiler shall be handled in a closed system. 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 985 m³/day and it 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.
- (iv). The spent wash/other concentrates shall be incinerated.
- (v). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

- (vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (x). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xii). 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.
- (xiii). 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.
- (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. 28.2

Expansion of Sugarcane crushing capacity from 3500 TCD to 8000 TCD, establishment of 40 MW Co-generation power plant and 135 KLPD Distillery to produce 135 KLPD Rectified Spirit/125 KLPD (Extra Neutral Alcohol)/ 125KLPD (Ethanol) based on "C"/"B" Heavy Molasses/Sugarcane Juice/Syrup/Grains by SGZ and SGA Sugars (JV) Limited located at Turchi, Tal. Tasgaon, Dist. Sangli, Maharashtra - Consideration of Environment Clearance regarding.

[IA/MH/IND2/175572/2020, IA-J-11011/226/2020-IA-II(I)]

The project proponent and their consultant M/s. Dr. Subbarao Environment Center made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for environmental clearance to the project for expansion of Sugarcane crushing capacity from 3500 TCD to 8000 TCD, establishment of 40 MW Co-generation power plant and 135 KLPD Distillery to produce 135 KLPD Rectified Spirit/125 KLPD (Extra Neutral Alcohol)/ 125KLPD (Ethanol) based on "C"/"B" Heavy Molasses/Sugarcane Juice/Syrup/Grains by SGZ and SGA Sugars (JV) Limited Located at Turchi, Tal. Tasgaon, Dist. Sangli, Maharashtra.

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

The Standard ToRs has been issued by Ministry vide letter No. IA-J-11011/226/2020-IA-II(I); dated 02nd October, 2020. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 24th November, 2020 at Sangli, Maharashtra and chaired by the Collector & District Magistrate Sangli. There were no issues raised during the public hearing. The people in the vicinity are in favor of the proposed

expansion and desired that the expansion project should be implemented immediately for the timely crushing of sugarcane in the command area. It was informed that no litigation is pending against the proposal.

Ministry did not issue any EC. At present sugarcane crushing capacity is only 3500 TCD as per EIA Notification there is no requirement of Environment Clearance for sugar industry having sugarcane crushing capacity less than 5000 TCD. Therefore, industry does not require environmental clearance and hence Regional Office, MoEF&CC Monitoring Report is not applicable.

The details of products and capacity are as under:

Sr. No.	Unit	Capacity		
		Existing	Proposed	Total
1.	Sugarcane crushing capacity	3500 TCD	4500 TCD	8000 TCD
2.	Cogeneration Power Plant	--	40 MW	40 MW
3.	Distillery	--	135 KLPD	135 KLPD
	Rectified Spirit or	--	135	135
	Extra Neutral Alcohol or	--	125	125
	Ethanol	--	125	125

Existing land area is 476900 m², no additional land is required for proposed expansion. Industry will develop greenbelt in an area of 33 % i.e., 161200 m² out of total area of the project. The estimated project cost is Rs.350 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.32.20 Crores and the recurring cost (operation and maintenance) will be about Rs.2.65 Crores per annum. Total Employment will be 380 persons as direct & 300 persons indirect after expansion. Industry proposes to allocate Rs. 2.625 Crore (0.75%) towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Krishna River is flowing at a distance of 9 km in South-West direction.

Ambient air quality monitoring was carried out at 9 locations during December 2019 to February 2020 and the baseline data indicates the ranges of concentrations as: PM10 (38.9 – 70.4 µg/m³), PM2.5 (24.3 – 47.4 µg/m³), SO₂ (8.4-24.5 µg/m³) and NO₂ (12.1-29.8 µg/m³). AAQ

modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.06 $\mu\text{g}/\text{m}^3$, 0.04 $\mu\text{g}/\text{m}^3$, 5.14 $\mu\text{g}/\text{m}^3$ and 0.61 $\mu\text{g}/\text{m}^3$ with respect to PM_{10} , $\text{PM}_{2.5}$, SO_2 , and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 1241 m^3/day of which fresh water requirement of 290 m^3/day will be met from Krishna River. Effluent of 1258 m^3/day (Sugar & Co-generation effluents 458 m^3/day , Spray pond Overflow 800 m^3/day) quantity is generated from the sugar and cogeneration unit. This effluent shall be treated in existing sugar ETP after up gradation of the ETP. Treated effluent will be used for irrigation/gardening. Spent wash generated from proposed 135 KLPD distillery shall be 216 m^3/day and The proposed 135 KLPD distillery spent wash shall be treated using concentration and drying to form potash rich manure.

The spent wash generated is restricted to less than 2 KL/ KL of alcohol produced for the proposed 135 KLPD Distillery. Other effluents like spentless 270 m^3/day , DM plant wastewater generation-10 KLD, fermenter washing waste-30 KLD, boiler blow-down wastewater-15 KLD and cooling tower wastewater – 90 KLD. All the effluents except concentrated spentwash shall be treated in CPU and treated effluent shall be recycled in process. The plant will be based on Zero Liquid discharge system for distillery effluents.

Power requirement after expansion will be 15000 kVA and will be met from its own proposed 40 MW co-generation power plant. It is proposed to install 2x500 kVA DG Set. Stack height of 6 m above roof level is provided as per CPCB norms for the DG sets. Existing unit has two bagasse fired boilers, one boiler of 50 TPH, one boiler of 40 TPH. After the proposed expansion the existing boilers shall be abandoned and 200 TPH of bagasse fired boiler for sugar unit and 50 TPH boiler for distillery unit will be installed. ESP with a stack of height of 82 m shall be provided for both the boilers.

Details of Process emissions generation and its management:

SO_2 and CO_2 gases shall be scrubbed. CO_2 gas shall be recovered.

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

Pressmud generated will be around 320 MT/D which shall be sold as manure. Fly ash generated will be 664.56 MT/M Ash generated shall be sold to to brick manufacturer/ Mixed with pressmud and sold as manure. The total quantity of ETP sludge generated shall be 300 MT/A, which shall be sold as manure. Hazardous waste is spent oil of 1.01 MT/Annum shall be utilized in-house for the lubrication of bullock carts.

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 desired additional information regarding revised plant layout, water budget for sugar and distillery unit, disposal of ash by installation of brick manufacturing unit, utilization of entire effluent within sugar and distillery premises, STP installation for domestic waste water treatment and odor control measures. PP has submitted the required information to the Ministry in compliance to information desired. 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 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). As proposed, total water requirement is 1241 m³/day of which fresh water requirement of 290 m³/day will be met from Krishna 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.
- (iv). Spent wash shall be treated using concentration and drying to form potash rich manure.
- (v). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (x). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to

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

- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xii). 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.
- (xiii). 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.
- (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. 28.3

Expansion of distillery from 60 KPLD RS/ENA/Ethanol to 120 KLPD Ethanol or 60 KLPD RS/ENA + 60 KLPD Ethanol with multi feed stock (C Heavy Molasses/B-Heavy Molasses/Cane Juice syrup) and co-generation plant from 2 MW to 4 MW by M/s Gem Sugars Limited located at Sy. Nos. 125 to 134, 325 to 328 Kundargi Village, Bilagi Taluk, Bagalkot District, Karnataka - Consideration of Environment Clearance regarding.

[IA/KA/IND2/188125/2020, J-11011/93/2012-IA II(I)]

The Project Proponent and their accredited consultant M/s Samrakshan made a detailed presentation through video conferencing on the salient features of the project and informed that:

The proposal is for Environmental Clearance to the project for Expansion of distillery from 60 KPLD RS/ENA/Ethanol to 120 KLPD Ethanol or 60 KLPD RS/ENA + 60 KLPD Ethanol with multi feed stock (C Heavy Molasses/B-Heavy Molasses/Cane Juice syrup) and co-generation plant from 2 MW to 4 MW by M/s Gem Sugars Limited located at Sy. Nos. 125 to 134, 325 to 328 Kundargi Village, Bilagi Taluk, Bagalkot District, Karnataka.

The project/activities are covered under category A of item 5 (g) 'Distilleries' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC).

The proposal has been submitted under the Ministry's EIA Notification, 2006 amendments vide Notification no. S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750(E) dated 17th February 2020. Accordingly, the proposal is appraised as category 'B2' project and public hearing is exempted. It was informed that there is no litigation pending against the project.

The Ministry had issued EC earlier vide letter No. F. No. J-11011/93/2012-IA II(I) dated 14.02.2015 to the existing molasses-based Distillery Plant (60 KLPD) along with Captive Power Plant (2 MW) in the existing Sugar Plant 6500 TCD, Co-generation plant 22.5 MW in favour of M/s. Gem Sugars Limited.

The details of existing and proposed products and capacity as under:

SI No	Products manufactured	Existing production	Proposed expansion	Scenario after expansion
1	Sugar	6500 TCD of sugar cane crushing	Nil	6500 TCD of sugar cane crushing
2	Co-generation	22.5 MW	Nil	22.5 MW
3	Distillery (Any one scenario at a time)			
3.1	Ethanol using C Heavy Molasses	60 KLPD	60 KLPD	120 KLPD
3.2	Ethanol using B Heavy Molasses/Syrup or juice	0	120 KLPD	120 KLPD
3.3	RS/ENA	60 KLPD	0	60 KLPD
4	Captive Co-Generation of distillery	2 MW	4 MW	4 MW

PP reported that the existing land area is 979946.28 m² out of which distillery land is 53418.5 m² and no additional land will be used for proposed expansion. The proposed activities will be within the existing land area. Industry proposes to develop greenbelt in an area of 33% i.e. 323382.18 m² out of total area of the project within 6 months. The estimated project cost is Rs. 191.32 crores including existing investment Rs. 106.32 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 31.632 crores and the recurring cost (operation and maintenance) will be Rs. 3.37 crores per annum. Total employment will be 124 persons as direct & 26 persons indirect after expansion.

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. River Ghataprabha is flowing at a distance of 5.3 km in South West to South direction.

Baseline ambient air quality monitoring is not carried out since the project is to be appraised as B2 category as per the Notification of MoEF & CC no. 345 (E) dated 17th January 2019. However, ambient air quality monitoring is carried out by the industry as per the conditions of the Consent issued by KSPCB. The monitoring data during September 2020 indicate PM₁₀ (80 µg/m³), PM_{2.5} (25 µg/m³), SO₂ (5.2 µg/m³) and NO_x (22.02 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.6 µg/m³, 1.38 µg/m³ and 1.44 µg/m³ with respect to PM₁₀, SO₂ and NO_x respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is in the table below and fresh water will be met from Ghataprabha River.

Sl. No.	Particulars	Distillery capacity 120 KLD		
		C Heavy	B Heavy	Cane syrup
1	Fresh water (KLD)	948	724	652
2	Reuse from distillery CPU (KLD)	926	566	742
3	Total water requirement (KLD)	1874	1290	1394

Effluent of 960 m³/day spent wash & 1062 m³/day other effluents (condensate, spent lees, cooling tower blowdown, lab washings & RO reject) is generated. Spent wash is concentrated in MEE and concentrated spent wash of 324 KLD is used as fuel for incineration Boiler. Condensate and other utility effluents are treated in CPU and 3 stage RO process and is used in process and cooling tower makeup. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 3400 kW including existing 1800 kW and will be met from Captive power plant. Existing unit has 2 DG sets of 1450 kVA & 160 kVA capacity are used as standby during power failure, there is no additional DG set proposed in expansion proposal. Stack of height 30 m AGL is provided as per CPCB norms to the existing DG sets. Existing unit has 22 TPH incinerator boiler for using concentrated spent wash & Coal. Additionally, one 22 TPH incinerator boiler will be installed. Bag Filter and a stack of height of 70 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boilers.

Details of Process emissions generation and its management:

CO₂ from fermentation will be bottled.

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

SI. No.	Details of the solid waste	Quantity in MT/Month	Mode of Collection	Mode of Disposal
1	Sludge (Yeast)	39-45	Mechanically removed and dried and transported	Taken by the farmers and used as Bio manure
2	Fly Ash (Bag filter)	450-480	Collected from ash silo and transported by tractors & trucks	Rich in Bio- potash and used as farm land manure. Bottom Ash is sent
3	Bottom Ash	120		

				to brick manufacturing unit
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Hazardous waste Management

Waste category	Hazardous waste generated	Quantity		Method of handling
		Existing	After Expansion	
5.1	Used Oil	0.04 KL/A	0.08 KL/A	Stored in secure manner and handed over to KSPCB authorized recyclers
5.2	Waste residues containing oil	10.02 MT/A	12.0 MT/A	Stored in secure manner and handed over to KSPCB authorized incinerator / co-processing in cement kiln

Certified compliance report has been issued by RO, MoEF&CC Bangalore vide File No. EP/12.1/2014-15/18/KAR/1635 Karnataka dated 05.03.2020. Status of compliance is 'Satisfactory'.

The Committee noted that the instant proposal has been submitted under provisions of para 7 (ii) of the EIA Notification, 2006, therefore the Committee deliberated the compliance status of earlier EC submitted by PP and found 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 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 compliance report to be satisfactory, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The committee directed PP to ensure that waste water generated from Sugar and distillery complex shall be treated and re-used

within the plant and no treated or untreated waste water shall be left out from the premises of Sugar and distillery complex. Ethanol produced will be used for blending bio-ethanol with petrol under EBP programme for additional proposed capacity. Coal and ash from the incineration boiler shall be handled in a closed system. The committee directed PP to develop at least 33% of the entire area including sugar and distillery as green belt within 6 months. PP has submitted the undertaking in compliance of the above. 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 948 m³/day and it will be met from Ghataprabha 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.
- (iv). The spent wash/other concentrates shall be incinerated.
- (v). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

- (vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (x). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xii). 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.
- (xiii). 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.
- (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. 28.4

Proposed 320 KLPD Molasses/Grain Based Distillery, 6 KLPD Malt Spirits Plant & 15 MW Co-Generation Power Plant by M/s Oasis Ethanol Industries Private Limited located at Village Jatwar, Block Shahzadpur, Tehsil Naraingarh, District Ambala, Haryana - Consideration of Environment Clearance regarding.

[IA/HR/IND2/73520/2018, IA-J-11011/99/2018-IA-II(I)]

The project proponent and their consultant M/s. J.M. EnviroNet 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 project for proposed 320 KLPD Molasses/Grain Based Distillery, 6 KLPD Malt Spirits Plant & 15 MW Co-Generation Power Plant by M/s Oasis Ethanol Industries Private Limited located at Village Jatwar, Block Shahzadpur, Tehsil Naraingarh, District Ambala, Haryana.

All Molasses based distilleries >100 KLPD & Non-Molasses based distilleries >200 KLD are listed at S.N. '5(g)' Distilleries 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 for the project was granted by Ministry vide letter No. IA-J-11011/99/2018-IA-II(I) dated 16th April, 2018. Public Hearing for the proposed project has been conducted by Haryana State Pollution Control Board on 11th January, 2019 at Project site, Ambala and chaired by Deputy Commissioner, Ambala. The main issues raised during public hearing are related to Employment, Odour problems, Environmental Impacts Air & water pollution, benefits to local people, development of

nearby villages, plantation, transportation facilities, medical facilities. It was informed that no litigation is pending against the proposal.

The details of products and capacity are as under:

S. No.	Units	Capacity	Products
1.	Molasses/Grain based Distillery	320 KLPD	Ethanol/ENA/RS/Industrial Alcohol
2.	Malt Spirits Plant	6 KLPD	Malt Spirit
3.	Co-generation Power Plant	15 MW	Power

Total land area of 10.117 ha (101170 m²) is required for the proposed project which is already under the possession of company. Industry will develop greenbelt in an area of 33% i.e. 3.33 Hectares out of total area of the project. The estimated project cost is Rs. 542 Crores for proposed project. Total capital cost earmarked towards environmental pollution control measures is Rs. 85 Crores and the Recurring cost (operation and maintenance) will be about Rs. 8.0 Crores per annum. No. of working days will be 350 days/annum. Total Employment during operation phase will be 270 persons (220 permanents and 50 temporary). Industry proposes to allocate Rs. 8.42 Crores i.e. maximum percentage of total project cost as per Office Memorandum dated 1st May, 2018 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 are 5 water bodies in buffer zone i.e. Dangri Nadi flowing at a distance of 0.5 km in West direction, Bali Nadi flowing at a distance of 0.8 km in SE direction, Dhanana River flowing at a distance of 3.5 km in SE direction, Amri Nadi flowing at a distance of 5.0 km in SSE direction & Choa Nala River flowing at a distance of 5.2 km in WNW direction.

Ambient air quality monitoring was carried out at 8 locations during Summer Season (March to May, 2018) and the baseline data indicates the ranges of concentrations as: PM₁₀ (60.9 to 91.3 µg/m³), PM_{2.5} (29.6 to 51.0 µg/m³), SO₂ (5.7 to 18.1 µg/m³) and NO₂ (13.7 to 30.6 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.27 µg/m³, 0.66 µg/m³, 1.71 µg/m³, 2.06 µg/m³ with respect to PM_{2.5}, PM₁₀, SO₂ and NO₂. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement for the proposed project will be 2627 KLPD (1008 KLPD for distillery @3.15 KL/KL + 375 KLPD for Utilities + 634 KLPD for Co-gen power plant + 160 KLPD Malt Plant + 400 KLPD Bottling Plant & 50 KLPD for domestic & others) during Grain based operation or 2619 KLPD (1619 KLPD for distillery with Utilities + 390 KLPD for Co-gen power plant + 160 KLPD Malt Plant + 400 KLPD Bottling Plant & 50 KLPD for domestic & others) during Molasses based operation which will be met from Groundwater. Effluent of 2691 KLPD (during molasses based operation) or 2180 KLPD (during grain based operation) quantity will be treated through Condensate Treatment Plant (Based on Anaerobic, aerobic treatment, filters, UV, UF & RO) of capacity 3000 KLPD. The plant will be based on Zero Liquid discharge system.

Total power requirement will be 11 MW which will be met from proposed 15 MW co-generation power plant. D.G. Set of 2x1500 kVA capacity will be used as standby during power failure. Stack height will be provided as per CPCB norms to the proposed DG sets. The company has proposed 2 x 65 TPH boilers (Conc. spent wash & Biomass fired Boiler) during Molasses based operation & 90 TPH boilers (Biomass & 15% coal will be used as auxiliary fuel fired boiler) during Grain based operation. ESPs with stack heights of 70 m, 70 m & 65 m respectively will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for the boilers.

Details of Process emissions generation and its management:

Source	Emissions	Management
Boilers	Particulate matter & gaseous emission	<ul style="list-style-type: none"> • ESP will be installed. • Adequate stack height will be provided. • Necessary temperature profile will be maintained.
Fermentation	Carbon dioxide	Carbon dioxide generated will be collected and sold.

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

- During Molasses based operation, concentrated spent wash (761 TPD) will be burnt as fuel in slop fired boiler by mixing with Biomass.
- Solid waste from the Grain & Malt based operation generally comprises of fibers and proteins in the form of DDGS (116 TPD), which will be ideally used as Cattle Feed.
- Ash (98 TPD) from the boiler will be given to brick manufacturing unit.
- ETP sludge (70 TPA) will be dewatered using filter press and will be used as manure.

- Used oil & grease (600 Liter per annum) generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

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 EAC desired additional information regarding greenbelt development, plan for disposal of ash, spent wash storage lagoon storage capacity, employment to local people, provision for parking yard, major activities to be carried out for social benefit of people, monitoring CO₂ & H₂S emissions and the proposed distillery shall manufacture ethanol. PP submitted the desired information to the Ministry in compliance of same. 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 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). As proposed, total water requirement for the proposed project will be 2627 KLPD (1008 KLPD for distillery @3.15 KL/KL + 375 KLPD for Utilities + 634 KLPD for Co-gen power plant + 160 KLPD Malt Plant + 400 KLPD Bottling Plant & 50 KLPD for domestic & others) during Grain based operation or 2619 KLPD (1619 KLPD for distillery with Utilities + 390 KLPD for Co-gen power plant + 160 KLPD Malt Plant + 400 KLPD Bottling Plant & 50 KLPD for domestic & others) during Molasses based operation which will be met 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.
- (iv). The spent wash/other concentrates shall be incinerated in molasses based operation and dried to form DDGS in grain/malt based operation.
- (v). Potash rich ash should be packed in 25 kg/50 kg bags and then supplied to nearby fertilizer manufacturers /brick manufacturers.
- (vi). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vii). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (viii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

- (ix). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (x). Process organic residue and spent carbon, if any, shall be sent to Cement 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 to 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, 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. 28.5

Proposed Development Drilling wells and Testing of Hydrocarbons by M/s Oilmax Energy Private Limited located at Charaideo Block in Charaideo District, Assam - Amendment in Environment Clearance regarding.

[IA/AS/IND2/180156/2020, IA-J-11011/571/2017-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter IA-J-11011/571/2017-IA II(I) dated 4th November, 2019 for the project Proposed Development Drilling wells and Testing of Hydrocarbons located at Charaideo Block in Charaideo District, Assam in favour of M/s Oilmax Energy Private Limited.

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

S.No	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons
1.	Para 3 of EC	"The project involves development of three wells already drilled by	"The project involves development drilling (on shore) of 3 new development Oil	Although, the plan is to initially complete workover on existing wells (drilled by ONGC

S.No	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons
		ONGC Ltd followed by production of oil & gas from the Block, installation of Early Production System (EPS), laying of pipelines, etc."	and Gas wells in the Block by the project proponent (Oilmax Energy Private Limited) in addition to development of existing three (3) wells already drilled by M/s ONGC Ltd, installation of Early Production System (EPS), laying of pipelines, etc."	in the past) to expedite production, Based on the workover results from the existing wells, company may drill more new wells in a back to back drilling campaign to maximize hydrocarbon exploitation.

The Expert Appraisal Committee, after detailed deliberations **recommended the** amendments in EC, as proposed by the project proponent, with all other terms and conditions remain unchanged.

Para 3 of EC shall be read as, "The project involves development drilling (on shore) of 3 new development Oil and Gas wells in the Block by the project proponent (M/s Oilmax Energy Private Limited) in addition to development of existing three (3) wells already drilled by M/s ONGC Ltd, installation of Early Production System (EPS), laying of pipelines, etc."

Agenda No. 28.6

Proposed Grain/Molasses/Sugar cane Juice/Sugar Syrup based Distillery Plant (200 KLPD) & Co-generation Power Plant (5 MW) by M/s Nahar Industrial Enterprises Limited located at village Salana Jeon Singh Wala, Tehsil Amloh, District Fatehgarh Sahib, Punjab - Amendment and Extension in Environment Clearance regarding.

[IA/PB/IND2/190977/2021, J-11011/74/2012-IA II(I)]

The proposal is for Amendment & Extension in Environmental Clearance for Proposed Grain/Molasses/ Sugar cane Juice/ Sugar Syrup based Distillery Plant (200 KLPD) & Co-generation Power Plant (5 MW) at Village Salana Jeon Singh Wala, Tehsil Amloh, District Fatehgarh Sahib (Punjab)

by Nahar Industrial Enterprises Ltd.

Environmental Clearance for proposed Grain/Molasses based Distillery Plant (200 KLPD) & 5 MW Co-Generation Power Plant at village Salana Jeon Singh Wala, Tehsil Amlah, District Fatehgarh Sahib, Punjab by M/s Nahar Industrial Enterprises Ltd. was granted by MoEFCC, New Delhi vide letter no. J-11011/74/2012-IA-II(I) dated 19th May, 2014.

Company could not implement EC within validity period due to commercial issues and now as an initiative to contribute for Ethanol Blending Petrol (EBP) Programme by Government of India, company intends to implement EC for production of ethanol, thus seeking extension in Environment Clearance for 3 years i.e., till 18th May, 2024.

Requirement of major raw material i.e. Molasses/ Sugar cane Juice/ Sugar Syrup will be sourced from own existing sugar factory having 4000 TCD capacity and the same is adjacent to the proposed distillery.

After the National Policy on Biofuels, 2018 which supported ethanol blending programme by encouraging adoption of B heavy Molasses/Sugar cane Juice/Sugar Syrup/Sugar in addition to C heavy in molasses-based distilleries came into existence, the company along with molasses intends to use sugarcane juice/ sugar syrup as raw material to manufacture ethanol and for this, amendment in EC will also be required w.r.t. addition of sugarcane juice/ sugar syrup as raw material with existing grain/ molasses. Thus, the company is proposing amendment in EC as well in addition to EC validity extension for 3 years i.e. 18th May, 2024.

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

Para of EC issued by MOEFCC	Details as per EC	To be revised/read as	Justification/reasons
Para 2 of EC	Grains/Molasses based 200 KLPD distillery plant & 5 MW co-generation power plant	Grains/Molasses/ <u>Sugarcane Juice/Sugar Syrup</u> based 200 KLPD distillery plant & 5 MW co-generation power plant.	The National Policy on Biofuels, 2018, supported Ethanol Blended Petrol (EBP) Programme by encouraging adoption of B-heavy Molasses/Sugar cane Juice/Sugar Syrup/Sugar in addition to C heavy in molasses-based

			distilleries. Accordingly, the proposed project is requested to be considered as Grains/Molasses/Sugarcane Juice/ Sugar Syrup based 200 KLPD distillery plant.
Para 2 of EC	The plant will run for 50 days on molasses based and for 280 days on grain based.	The plant will run for <u>170 days on molasses/ sugarcane juice/Sugar Syrup based</u> and <u>180 days on grain based.</u>	As stated earlier, the company now intends to use sugarcane juice/ Sugar Syrup as one of the materials for the production of Anhydrous Alcohol (Ethanol), so the number of days of operation of the industry for different raw materials are requested to be changed.
Para 3 of EC S. No. 1 of Table	Name of the products: - Extra Neutral Alcohol (ENA) Quantity - 200 KLPD	Name of the products: - <u>Ethanol (Anhydrous Alcohol)/</u> Extra Neutral Alcohol (ENA) Quantity - 200 KLPD	Company intends to supply Ethanol in order to contribute for Ethanol Blending Petrol (EBP) Programme by Government of India. Therefore, we request MoEFCC to add Anhydrous Alcohol (Ethanol) as one of the products along with existing list of products. Total capacity of distillery remains unchanged.
Para 4 of EC	Raw materials to be used are: Grains-2.5 MT/KL of Alcohol, Molasses-4 MT/KL of Alcohol along with process chemicals	Raw materials to be used are: Grains-2.5 MT/KL of Alcohol, Molasses-4 MT/KL of Alcohol, Cane Juice/ Sugar Syrup 2.67 MT/KL of Alcohol along with process chemicals	As stated above, the company intends to use sugarcane juice/ Sugar Syrup as one of the raw materials for the production of Ethanol, so cane juice/ Sugar Syrup from crushing of sugarcane to be allowed as raw material along with

			the existing list of raw materials.
Para 6 of EC	The total fresh water requirement for Grain based distillery will be 2165 m ³ /day whereas total fresh water requirement for Molasses based distillery will be 1800 m ³ /day.	The total fresh water requirement for Grain based distillery will be 1404 m ³ /day, for Molasses based distillery will be 1297 m ³ /day and for sugarcane juice/ Sugar Syrup based operation will be 817 m ³ /day.	The industry will be using canal water for meeting the fresh water requirements. Permission from state govt. regarding this has already been received by the industry. Due to the up-gradation in the technology, the industry has reduced the fresh water consumption for their proposed industrial operations.
Para 6 of EC	Effluent will be treated in the ETP and then used for Irrigation purpose.	Effluent will be treated in the ETP and then <u>recycled within the process & Utilities.</u>	Treated effluent after Digester-Evaporator-Dryer-CPU will not be used in irrigation. It will be 100% recycled and reused within the process & Utilities.

The Expert Appraisal Committee desired additional information regarding usage of treated waste water of sugar mill in proposed distillery as fresh water in order to reduce fresh water requirement of distillery. PP has submitted the desired information and agreed to utilize more than 50% treated effluent in crushing season from sugar mill.

The Expert Appraisal Committee (EAC), after detailed deliberations **recommended** the amendments in EC as given below and **validity of existing EC will be extended for 3 years i.e. till 18th May, 2024**, as proposed by the project proponent, with all other terms and conditions remain unchanged.

- Project will be, "Proposed Grain/Molasses/ Sugar cane Juice/ Sugar Syrup based Distillery Plant (200 KLPD) & Co-generation Power Plant (5 MW) at Village Salana Jeon Singh Wala, Tehsil Amloh, District Fatehgarh Sahib, Punjab.
- Para 2 of EC shall be read as, "Grains/Molasses/Sugarcane Juice/Sugar Syrup based 200 KLPD distillery plant & 5 MW co-generation power plant."
- Para 2 of EC shall be read as," The plant will run for 170 days on molasses/ sugarcane juice/Sugar Syrup based and 180 days on grain based."

- Para 3 of EC S. No. 1 of Table shall be read as, " Name of the products: -Ethanol (Anhydrous Alcohol)/ Extra Neutral Alcohol (ENA) Quantity - 200 KLPD"
- Para 4 of EC shall be read as, " Raw materials to be used are: Grains- 2.5 MT/KL of Alcohol, Molasses-4 MT/KL of Alcohol, Cane Juice/ Sugar Syrup 2.67 MT/KL of Alcohol along with process chemicals"
- Para 6 of EC shall be read as, " The total fresh water requirement for Grain based distillery will be 1404 m³/day, for Molasses based distillery will be 1297 m³/day and for sugarcane juice/ Sugar Syrup based operation will be 817 m³/day."
- Para 6 of EC shall be read as, " Effluent will be treated in the ETP and then recycled within the process & Utilities."

19th January, 2021 (Tuesday)

Agenda No. 28.7

Expansion in Grain Based Distillery (140 KLPD to 160 KLPD) by modernization in fermentation technology by M/s Globus Spirits Limited located at Village Shyampur, Tehsil Behror, District Alwar, Rajasthan - Consideration of Environment Clearance regarding.

[IA/RJ/IND3/190697/2020, J-11011/237/2015-IA II(I)]

The project proponent and their consultant M/s. J.M. EnviroNet 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 project for expansion in Grain Based Distillery (140 KLPD to 160 KLPD) by modernization in fermentation technology by M/s Globus Spirits Limited located at Village Shyampur, Tehsil Behror, District Alwar, Rajasthan.

As per EIA Notification dated 14th Sep, 2006 and as amended on 13th June, 2019, the project falls under Category "B", Project or Activity '5(g)' Distilleries but since the General Condition i.e. the Interstate boundary of Rajasthan and Haryana lies at an approx. distance of 4.8 km in SW direction from plant site thus this project will be considered as Category "A" and will be appraised at Central level in MoEFCC, New Delhi.

Public Hearing is exempted in para 7(ii) of EIA Notification, 2006. It was informed that no litigation is pending against the proposal.

Ministry had issued EC earlier vide letter no. J-11011/237/2015- IA II (I) dated 15th November, 2018 as amended on 24th June, 2020 to the

existing 140 KLPD Grain based Distillery along with 3.8 MW Co-Generation Power Plant in favor of Globus Spirits Limited.

The details of products and capacity are as under:

S. No.	Unit	Product	Existing	Additional	Total after expansion
1.	Distillery	ENA/RS	140 KLPD	20 KLPD	160 KLPD
2.	Co-generation power plant	Power	3.8 MW	-	3.8 MW
3	IMFL /CL Bottling Plant	IMFL/CL Bottles	40,000 cases per day	-	40,000 cases per da
4	By-product - CO ₂ (119 TPD) & DDGS (71 TPD)				
<i>Number of working days – 360 days/ annum</i>					

Existing land area is 7.276 ha (72760 m²). The proposed expansion will be done within the existing plant premises so no additional land is required. Industry has already developed greenbelt in an area of 33% i.e., 2.4 ha (24000 m²) out of total area of the project. The expansion will be done by process optimization i.e., modernization in fermentation technology of the existing plant so no major equipment will be installed. The estimated project cost of the expansion is Rs. 0.5 Crores which is required for installation of automatic dosing pump including pipeline. Total existing capital cost earmarked towards environmental pollution control measures is Rs. 77.46 Crores and the Recurring cost is Rs. 2.5 Crores per annum. No. of working days will be 360 days/annum. Total Employment is 382 persons (Permanent 140 & temporary 242) during operation phase after expansion.

There are no national parks, wildlife sanctuaries, biosphere reserves, Tiger/ Elephant Reserves, wildlife corridors etc., within 10 km distance from the plant site. River/ waterbody i.e., Sota River (~1.2 km in SE direction) & Sahibi River (~5.0 km in South direction) are flowing within 10 km radius which are seasonal.

Total fresh water requirement is 552 m³/day (402 KLPD Distillery + 135 KLPD Bottling Plant + 15 Domestic) which will be met from Ground water. No additional fresh water is required for the proposed expansion. Effluent of 791 KLPD quantity after expansion will be treated through state of art ETP (Anaerobic, aerobic & Filters system). The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be same as existing i.e. 3.2 MW and will be met from existing 3.8 Co-generation Power Plant. Existing unit has 2 DG sets of capacity 600 and 320 KVA which is used as standby during power failure. Stack has been provided as per CPCB norms to the

existing DG set. Existing DG sets of 600 and 320 kVA will be replaced by a single DG set of 1000 kVA capacity. Existing unit has 2 nos. boiler of 25 TPH & 14 TPH capacity each which is Rice husk (biomass)/ coal fired. ESP & multi cyclone with stack heights of 45 m & 38 m respectively has been installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for the boilers.

Details of Process emissions generation and its management:

- Adequate APCEs (ESP & multi - cyclone) have been installed to maintain the emission levels within the stipulated standards.
- CO₂ (119 TPD) generated during the fermentation process is being/will be collected by utilizing CO₂ scrubbers and sold to authorized vendors.
- Online Stack Monitoring system has been installed with the existing stack and data transmitted to CPCB/SPCB servers.

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 (71 TPD), which is being / will be ideally used as Cattle Feed.
- Ash (47 TPD) generated from the boiler is being / will be supplied to brick/cement manufacturers.
- Used oil & grease (200 litres/annum) generated from plant machinery / Gear boxes & D.G. Set is being / will be partly used in oiling & greasing as lubrication of external parts of machinery & partly is being / will be sold to the CPCB authorized recycler.

Certified EC compliance Report has been obtained by Regional Office, MoEFCC, Lucknow vide file no. IV/ENV/IND-162/939/2017/410 dated 26.11.2019. Inspection was conducted on 06.11.2019.

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 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). As proposed, total fresh water requirement is 552 m³/day (402 KLPD Distillery + 135 KLPD Bottling Plant + 15 Domestic) which will be met from Ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises.
- (iv). The spent wash shall be concentrated and dried to form DDGS to be used as cattle feed.

- (v). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.
- (vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (x). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xii). 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.

- (xiii). 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.
- (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. 28.8

Onshore Oil & Gas development drilling and production in Borhat-Titlagarh area, Dibrugarh, Sibsagar and Charaideo Districts under Sapkainth, Borhat, Moran Extension and Doomduma PMLs by M/s Oil India Limited - Consideration of Environment Clearance regarding.

[IA/AS/IND3/185398/2008, J-11011/186/2016-IA-II(I)]

The project proponent and their consultant M/s. ERM India 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 project for onshore Oil & Gas development drilling and production in Borhat-Titlagarh area, Dibrugarh, Sibsagar and Charaideo Districts under Sapkainth, Borhat, Moran Extension and Doomduma PMLs by M/s Oil India Limited.

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 ToRs has been issued by Ministry vide letter No. J-11011/186/2016-IA-II(I); dated 25th October, 2016. As per notification issued by MoEFCC vide S.O. 221(E). dated 18th January, 2021, period from 1st April. 2020 to 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of ToR granted. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 26th June, 2019 and 6th September, 2019 respectively for Charaideo and Dibrugarh districts and chaired by the Additional Deputy Commissioner and Circle Officer respectively. Circle officer was deputed by Deputy Commissioner, Dibrugarh district as Sr. Level ACS Officer was involved in NRC related works exigency. The main issues raised during the public hearing are related to environmental pollution, developmental activities, employment, infrastructure development for schools, public health. It was informed that no litigation is pending against the proposal.

Ministry had issued EC earlier vide letter no. J-11011/423/2008-IA-II(I); dated 6th July, 2011 to the existing project Exploratory Drilling for Oil and Gas (2 wells) at Borhat PEL, Titlagarh area in District Sivsagar, Assam M/s Oil India Limited in favour of M/s Oil India Ltd.

The details of products and capacity are as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1.	Wells and production installation	2 wells	75 wells and 4 production installations	77 wells and 4 production installations

2530000 m² land will be used for proposed project. Oil India Ltd. will develop greenbelt at the proposed production installations having total area of 70000 m². The estimated project cost is Rs. 3500 Crore. Recurring cost for greenbelt plan, wildlife conservation plan and environmental control measures will be a total of INR 1.87 Crores per annum. Oil India Ltd. will earmark INR 1.44 Crores as part of PH Action Plan in Charaideo district and INR 1.33 Crores in Dibrugarh district in line with the comments and suggestions made by the local public during Public Hearings. 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 1.44 Crores as part of PH Action Plan in Charaideo district

and INR 1.33 Crores in Dibrugarh district in line with the comments and suggestions made by the local public during Public Hearings. 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.

PP informed that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km of the well locations or production installations. Disang River is flowing through the middle of the block from east to west direction.

Ambient air quality monitoring was carried out at 8 locations during 4.10.2017 to 31.12.2017 and the baseline data indicates the ranges of concentrations as: PM₁₀ (78 - 85.38 µg/m³), PM_{2.5} (41.54 - 45.46 µg/m³), SO₂ (5.77 - 6.38 µg/m³) and NO₂ (19.51 - 21.73 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 12.67 µg/m³, 0.45 µg/m³, 0.06 µg/m³ and 0.052 µg/m³ with respect to NO_x, SO₂, PM₁₀ and HC. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 50 m³/day of which fresh water requirement of 39 m³/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.

Details of Certified compliance report submitted by RO, MoEF&CC: Certified compliance by Shillong Regional Office vide letter No. RO-NE/E/IA/AS/MI/60/1800-1801 dated 05th October, 2020.

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 EAC advised PP to submit undertaking that no drilling wells fall in ESZ boundary. In compliance of this, PP has submitted undertaking stating that there is no drilling well or production facility falling within 10 km ESZ boundary of Dehing Patkai Wildlife Sanctuary. 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 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). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (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. Mobile ETP along with RO plant shall be installed to treat the waste water.
- (iv). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (v). The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- (vi). Approach road shall be made pucca to minimize generation of suspended dust.
- (vii). 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.
- (viii). Total fresh water requirement shall not exceed 39 m³/day will be met from groundwater. Prior permission shall be obtained from the concerned regulatory authority. Mobile ETP coupled with RO shall be installed to reuse the treated water in drilling system. Size of the waste shall be equal to the hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.
- (ix). 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.
- (x). 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 30th August, 2005.

- (xi). 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.
- (xii). 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.
- (xiii). The project proponent shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xiv). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xv). 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.
- (xvi). 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.
- (xvii). No lead acid batteries shall be utilized in the project/site.

- (xviii). 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.
- (xix). Oil content in the drill cuttings shall be monitored and report & shall sent to the Ministry's Regional Office.
- (xx). 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. 28.9

Onshore Oil & Gas development drilling and production by M/s Oil India Limited located in Khagorijan Oil & Gas Field in Dibrugarh & Tinsukia District under Tinsukia PML, Tinsukia Extension PML and Chabua PML District: Dibrugarh, Assam – Re-consideration of Environment Clearance regarding.

[IA/AS/IND2/72322/2018, IA-J-11011/35/2018-IA-II(I)]

The proposal was earlier placed before the EAC (Ind-3) in its meeting held during 17-19 November, 2020 wherein EAC deferred the proposal and desired for certain requisite information/inputs. Information desired by the EAC and response submitted by the project proponent is as under:

S.No	ADS	Reply of PP	Observation of EAC
1.	Details of court cases along with current status.	PP reported that is no court case against the instant proposal. Details of the court cases and enquires in the view of Baghjan Well No#5 blown out incident along with current status has been submitted.	EAC looked into the details of the cases and remarked that whether the cases are pertaining to the instant proposal or not they have to be considered as the PP is same.

2.	Detailed safety and Emergency contingency plan	Detailed safety and Emergency contingency plan has been submitted	EAC found the report satisfactory.
3.	Status of recommendations from the Standing Committee of NBWL.	NBWL clearance proposal No. FP/AS/MIN/5492/2020 is under process. OIL shall drill only after obtaining the NBWL clearance or finalization of ESZ of Bherjan-Borjan-Padumoni (BBP) WLS, whichever is earlier.	EAC deliberated the issue and found the reply addressing the concerns of the Committee.
4.	Details on the assessment of Biodiversity of the area, as suggested by the Hon'ble Supreme court of India	PP reported that Biodiversity has no relation with the proposed Oil & Gas operation in Khagorijan EC block. PP informed that the study suggested by the Hon'ble Supreme court of India is for drilling ERD wells beneath the Dibru-Saikhowa National Park(DSNP) which are yet to be started. OIL is in the process of conducting the required Bio-Diversity study through Assam Bio-Diversity Board as per the order of the supreme court.	EAC deliberated the issue and found the reply addressing the concerns of the Committee
5.	Soil and ground water quality assessment to understand the impact of drilling activities in the region, if any	Soil and ground water quality assessment report has been submitted.	EAC found the report satisfactory
6.	Details of impact of Baghjan blow out in the study area.	PP reported that impact in terms of deposition of condensate on vegetation and soil, visible damage due to	EAC deliberated the issue and found the reply addressing the concerns of the Committee

		<p>fire, damage to vegetation etc. were not observed in the Khagorijan Block (study area) because of Baghjan Well#5 Blowout.</p> <p>However, OIL has engaged a NABET accredited consultant to carry out Environment Impact Assessment study of Baghjan area that may arise because of Baghjan Well#5. The scope of this study would be to assess the probable impact on the surroundings based on site observations, environmental parameter monitoring and stakeholder consultations. It is assumed that this study would result in the identification of potential environmental impacts, ecological and community health related issues and recommend remedial/mitigation measures. It is informed that the study is under progress and will be completed very soon. The study of the preliminary report has been submitted</p>	
7.	<p>Damage assessment of the blow out, action plan for remediation.</p>	<p>PP has engaged a NABET accredited consultant to carry out Environment Impact Assessment study of Baghjan area that may arise because of Baghjan Well#5. It is</p>	<p>EAC deliberated the issue and found the reply to be addressing the concerns of the Committee. However, suggested that the</p>

		informed that the study is under progress and will be completed very soon	agency such as NEERI, Engineers India Ltd or some another PSU may be engaged for this purpose for better assessment.
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The project proponent and their consultant M/s. ERM India 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 project for Onshore Oil & Gas development drilling and production by M/s Oil India Limited located in Khagorijan Oil & Gas Field in Dibrugarh & Tinsukia District under Tinsukia PML, Tinsukia Extension PML and Chabua PML District: Dibrugarh, Assam.

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 ToRs has been issued by Ministry vide letter No. J-11011/35/2018-IA II (I); dated 11th March, 2018. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 5th September, 2019 and 12th March, 2020 respectively for Dibrugarh and Tinsukia districts. Public Hearing was presided over by Additional Deputy Commissioner. The main issues raised during the public hearing are related to environmental pollution, protection of ecologically sensitive areas, developmental activities, employment, infrastructure development for schools, public health.

The details of products and capacity as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1.	Wells and production installations	0 wells	54 wells and 2 production installations	54 wells and 2 production installations

Total land will be used for proposed project is 1760000 m². Oil India Ltd. will develop greenbelt at the two proposed production installations having a total area of 35000 m². The estimated project cost is Rs.1988.62 crore. Recurring cost for greenbelt plan, wildlife conservation plan and environmental control measures will be a total of INR 1.32 crores per annum. Total Employment will be 60 persons as direct & 120 persons indirect. 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 comply with the conditions.

PP reported that the Dibru Saikhowa National Park (DSNP) is located at the north eastern corner of Khagorijan Field. However, no wells located within notified ESZ of DSNP. Padumoni section of Bherjan-Borajan-Padumoni WLS within the Khagorijan Field boundary. Few wells are within ESZ of Bherjan-Borjan Podumoni Wild Life Sanctuary. Brahmaputra River is flowing from the northern part of the block from NE to SW direction.

PP reported that application for NBWL clearance submitted for 18 Nos of well falling within in 10 KM of ESZ of Bherjan, Borjan and Podumoni (BBP) Wildlife Sanctuary. However, Eco-Sensitive Zone proposed by the State Govt. of Assam for Borjan, Bherjan and Podumoni (BBP) ESZ boundary is present within the boundary of the Wildlife Sanctuary, around each of the three distinct entities namely Bherjan, Borjan and Podumoni (BBP). OIL's proposed drilling locations are located outside of the State Govt. of Assam's proposed Borjan, Bherjan and Podumoni ESZ boundary. PP reported that OIL will drill the locations only after finalisation of the ESZ of Bherjan, Borjan and Podumoni (BBP) WLS or obtaining Wildlife Clearance from Standing Committee of NBWL whichever is earlier.

Ambient air quality monitoring was carried out at 8 locations during 4.10.2017 to 31.12.2017 and the baseline data indicates the ranges of concentrations as: PM10 (60.50 and 89.25 $\mu\text{g}/\text{m}^3$), PM2.5 (32.13 and 47.92 $\mu\text{g}/\text{m}^3$), SO₂ (5.50 - 6.14 $\mu\text{g}/\text{m}^3$) and NO₂ (16.57 - 24.19 $\mu\text{g}/\text{m}^3$). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 12.35 $\mu\text{g}/\text{m}^3$, 0.44 $\mu\text{g}/\text{m}^3$, 0.06 $\mu\text{g}/\text{m}^3$ and 0.08 $\mu\text{g}/\text{m}^3$ with respect to NO_x, SO₂, PM10 and HC. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 50 m³ /day of which fresh water requirement of 39 m³ /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.

PP informed that there is no Court case against the instant proposal/study area under reference and but various other proposals of M/s Oil India Limited in the nearby area is under litigation at various authorities as under:

SI No	Case No. & Parties	Court/ Tribunal	Fact and Relief Sought	Current Status
1	PIL No. 35/2020, Mrinmoy Khataniar Vs. The Union of India and 13 Ors	Hon'ble Gauhati High Court	The Petitioners have filed the Public Interest Litigation of the environmental clearance dated 11.05.2020 granted to OIL by Union Ministry of Environment, Forest and Climate Change for Extension Drilling and testing of Hydrocarbons at 7 (seven) locations under the Dibru-Saikhowa National Park.	As directed by Court, OIL has filed Addl. Affidavit. The Court has fixed the matter on 28.01.2021.
2	PIL No. 39/2020, Gautam Uzir Vs The Union of India and 5 Ors	Hon'ble Gauhati High Court	The Public Interest Litigation has been filed by one Senior Advocate of Gauhati High Court as Petitioner-in-Person.	The Court has fixed the matter on 05.02.2021.

3	O.A. no. 43/2020/EZ ,Bonani Kakkar Vs OIL & Ors	Hon'ble National Green Tribunal, Kolkata (Eastern Zone Bench)	An application has been filed before the Hon'ble NGT by an environmentalist i.e. Bonani Kakkar.	The Tribunal has deferred the hearing as the committee could not submit the final Report and fixed the next dated for hearing on 12.01.2021.
4	O.A. No. 44/2020/EZ ,Wildlife and Environment Conservation Organisation Vs. Union of India &Ors	Hon'ble National Green Tribunal, Kolkata (Eastern Zone Bench)	An application has been filed before the Honble NGT by a Non-Governmental Organisation (NGO). i.e. Wildlife & Environment Conservation Organisation against the OIL.	The Tribunal has deferred the hearing as the committee could not submit the final Report and fixed the next dated for hearing on 12.01.2021.
5	O.A. no. 41/2020/EZ, Sayyan Banerjee Vs. OIL &Ors	Hon'ble National Green Tribunal, Kolkata (Eastern Zone Bench)	An Application has been filed before the Hon'ble NGT by Sri Sayyan Banerjee pertaining to blowout at the Baghjan Oil Well no. 5.	The case is now listed on 12.01.2021. (Case tagged along with O.A. No. 43/2020/EZ, O.A. No. 44/2020/EZ, O.A. 50/2020/EZ)
6	O.A. 50/2020/EZ, SoneswarNarah & Ors vs. OIL &Ors	Hon'ble National Green Tribunal, Kolkata (Eastern Zone Bench)	An Application has been filed before the Hon'ble NGT by Soneswar Narah and others pertaining to blowout at the Baghjan Oil Well no. 5.	The case is now listed on 12.01.2021. (Case tagged along with O.A. No. 41/2020/EZ, O.A. No. 43/2020/EZ, O.A. No. 44/2020/EZ)
7	Appeal No. 04/2020/EZ,(I.A. No. 34/2020) Bimal Gogoi & Anr. Vs. Union of India & Ors.	Hon'ble National Green Tribunal, Kolkata (Eastern	An Appeal has been filed by the Appellant i.e. Sri Bimal Gogoi before the Hon'ble NGT to challenge the	Court has fixed the next dated for hearing on 02.02.2021.

		Zone Bench)	Environmental Clearance (EC) dated 11.05.2020 granted by Ministry of Environment, Forest & Climate Change in favour of OIL for drilling seven wells for Hydrocarbon exploration under the Dibru-Sikhowa National Park.	
8	W.P. no. (Civil) 835/2020, Rituraj Phukan Vs. Union of India & ors.	Hon'ble Supreme Court of India	PIL was filed before the Hon'ble Supreme Court by the Petitioner i.e. Rituraj Phukan	The Hon'ble Supreme Court <i>vide</i> its order dated 16.09.2020 issued notice and tag this Writ Petition with W.P. (Civil) no. 625/2020.

The EAC desired that PP shall not drill wells within 10 km radius from the boundary of Bherjan-Borjan Podumoni Wild Life Sanctuary without prior permission. The PP has submitted an undertaking regarding the same.

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

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

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

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

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

- (i). The 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 8th 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.
- (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). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.

- (v). 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. Mobile ETP along with RO plant shall be installed to treat the waste water.
- (vi). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (vii). The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- (viii). Approach road shall be made pucca to minimize generation of suspended dust.
- (ix). 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.
- (x). Total fresh water requirement shall not exceed 39 m³/day will be met from groundwater. Prior permission shall be obtained from the concerned regulatory authority. Mobile ETP coupled with RO shall be installed to reuse the treated water in drilling system. Size of the waste shall be equal to the hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.
- (xi). 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.
- (xii). 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 30th August, 2005.
- (xiii). 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.

- (xiv). 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.
- (xv). The project proponent shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xvi). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xvii). 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.
- (xviii). 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.
- (xix). No lead acid batteries shall be utilized in the project/site.
- (xx). 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.
- (xxi). Oil content in the drill cuttings shall be monitored and report & shall sent to the Ministry's Regional Office.
- (xxii). 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. 28.10

Expansion of Coal Tar Distillation Plant from 300000 to 500000 TPA and setting up of Carbon Black plant of capacity 300000 TPA by M/s Epsilon Carbon Private Limited (ECPL) located at Musinayakahalli, Taluka Sandur, District Ballari, Karnataka - (Bifurcation) Amendment in Environment Clearance regarding.

[IA/KA/IND2/189626/2020, J-11011/500/2017-IA II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated F. No. J-11011/500/2017-IA-II (I) dated 10.01.2020 for the project Expansion of Coal Tar Distillation Plant from 300000 to 500000 TPA and setting up of Carbon Black plant of capacity 300000 TPA located at Musinayakahalli, Taluka Sandur, District Ballari, Karnataka in favour of M/s. Epsilon Carbon Private Limited (ECPL).

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

S. No.	Para of ToR/EC issued by MoEF&CC	Details as per the ToR/EC	To be revised/ read as		Justification/ reason
			Parent Company (Epsilon Carbon Private Limited, ECPL)	New Company-1 (Epsilon Advanced Materials Private Limited, EAMPL)	
1	2	The Ministry of Environment, Forest and Climate	The Ministry of Environment , Forest and Climate	The Ministry of Environment, Forest and Climate Change has	PP now intend to split the existing EC.

		Change has considered the proposal for environmental clearance to the project for expansion of Coal Tar Distillation Plant from 300000 to 500000 TPA and setting up of Carbon Black Plant of capacity 300000 TPA by M/s. Epsilon Carbon Private Limited (ECPL) in a total area of 673870 sqm at Musinayakahalli, Taluka Sandur, District Ballari (Karnataka)	Change has considered the proposal for environmental clearance to the project for Coal Tar Distillation Plant for 500000 TPA and Carbon Black Plant of capacity of 300000 TPA and Captive Power Plant of 54 MWh by M/s. Epsilon Carbon Private Limited (ECPL) in a total area of 525058sqm at Musinayakahalli, Taluka Sandur, District Ballari (Karnataka)	considered the proposal for environmental clearance to the project for Advanced Graphite Unit of 50000 TPA by M/s. Epsilon Advanced Materials Private Limited (EAMPL) in a total area of 148812sqm at Musinayakahalli, Taluka Sandur, District Ballari (Karnataka)	
2	3	Product List – As per Table 1	Product List – As per Table 1	Product List – As per Table 1	PP now intend to split the existing EC.
3	4	Total land area is 673870 sqm (Existing – 140200 sqm and additional – 533670 sqm). Industry has already developed / will develop greenbelt in	Total land area is 5,25,058 sqm. Industry has already developed / will develop greenbelt in an area of 34% i.e. 183770 sqm out of total	Total land area is 1,48,812sqm. Industry has already developed / will develop greenbelt in an area of 34% i.e. 52084 sqm out of total area of the project. The	PP now intend to split the existing EC.

		<p>an area of 33% i.e. 225228 sqm out of total area of the project. The estimated project cost is Rs. 900 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 20 crores and the recurring cost (O&M) will be about Rs. 200 Lacs per annum. Total Employment will be 575 (direct & indirect) persons as direct after expansion.</p>	<p>area of the project. The estimated project cost is Rs. 700 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 37 crores and the recurring cost (O&M) will be about Rs. 1.5crores per annum. Total Employment will be 710 (direct & indirect) persons as direct after expansion.</p>	<p>estimated project cost is Rs. 200 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 8 crores and the recurring cost (O&M) will be about Rs. 50 Lacs per annum. Total Employment will be 265 (direct & indirect) persons as direct after expansion.</p>	
4	6	<p>Total fresh water requirement estimated is 8520 cum/day, which is proposed to be met from JSW Steel water network. Effluent of 825 cum/day will be treated through existing ETP having capacity 120</p>	<p>Total fresh water requirement estimated is 7686 cum/day, which is proposed to be met from JSW Steel water network. Effluent of 820 cum/day will be treated through existing ETP having</p>	<p>Total fresh water requirement estimated is 834 cum/day, which is proposed to be met from ECPL water network. Effluent of 15 cum/day will sent to ECPL for treatment and return back to EAMPL for reuse. The plant will be based on Zero Liquid</p>	<p>PP now intend to split the existing EC.</p>

		<p>cum/day and proposed ETP of 820 cum/day. Domestic effluent shall be treated through existing STP of 25 cum/day and proposed STP of 50 cum/day. The plant will be based on Zero Liquid discharge system. Power requirement after expansion will be 23500 KW including existing 3500 KW and will be met from JSW Network / in-house co-generation power plant based on lean tail gas. Additionally, 1 DG sets are used as standby during power failure. Stack will be provided as per CPCB norms to the proposed DG sets.</p>	<p>capacity 120 cum/day and proposed ETP of 820 cum/day. Domestic effluent shall be treated through existing STP of 25 cum/day and proposed STP of 50 cum/day. The plant will be based on Zero Liquid discharge system. Power requirement after expansion will be 10000 KW including existing 3500 KW and will be met from JSW Network / in-house co-generation power plant based on lean tail gas. Additionally, 1 DG sets are used as standby during power failure. Stack will be provided as per CPCB norms to the proposed DG sets.</p>	<p>discharge system. Power requirement after expansion will be 13500 KW and will be met ECPL Network/ ECPL Co-generation power plant. Additionally, 1 DG sets are used as standby during power failure. Stack will be provided as per CPCB norms to the proposed DG sets.</p>	
5	10	Based on the proposal	Based on the proposal	Based on the proposal	PP now intend to

		<p>submitted by the project proponent and recommendations of the EAC (Industry 2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for expansion of Coal Tar Distillation Plant from 30000 to 50000 TPA and setting up of Carbon Black Plant of capacity 300000 TPA by M/s. Epsilon Carbon Private Limited (ECPL), located at Musinayakahalli, Taluka Sandur, District Ballari Karnataka, under the provision of the EIA Notification, 2006, subject to the compliance of terms and conditions as below:-</p>	<p>submitted by the project proponent and recommendations of the EAC (Industry 2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to project for Coal Tar Distillation Plant for 500000 TPA and Carbon Black Plant of capacity of 300000 TPA and Captive Power Plant of 54 MWh by M/s. Epsilon Carbon Private Limited (ECPL), located at Musinayakahalli, Taluka Sandur, District Ballari (Karnataka), under the provision of the EIA Notification, 2006, subject to the compliance of terms and</p>	<p>submitted by the project proponent and recommendations of the EAC (Industry 2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to project for Advanced Graphite Unit of 50000 TPA by M/s. Epsilon Advanced Materials Private Limited (EAMPL) located at Musinayakahalli, Taluka Sandur, District Ballari (Karnataka), under the provision of the EIA Notification, 2006, subject to the compliance of terms and conditions as below:-</p>	<p>split the existing EC.</p>
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			conditions as below:-		
6	10.e	Crude Coal Tar shall be transported through dedicated pipeline from M/s JSW Coke Oven plant to the project proponent's storage tanks.	Crude Coal Tar shall be transported through dedicated pipeline from M/s JSW Coke Oven plant to the project proponent's storage tanks.	No such pipeline will be required	PP now intend to split the existing EC.
7	10.h	Total fresh water requirement shall not exceed 8520 cum/day, proposed to be met from JSW steel water network. Prior permission in this regard shall be obtained from the concerned regulatory authority before diverting the water from the quantum allotted the M/s JSW steel	Total fresh water requirement shall not exceed 7686 cum/day, proposed to be met from JSW steel water network. Prior permission in this regard shall be obtained from the concerned regulatory authority before diverting the water from the quantum allotted the M/s JSW steel	Total fresh water requirement shall not exceed 834 cum/day, proposed to be met from ECPL water network. Prior permission in this regard shall be obtained from the concerned regulatory authority before diverting the water from the quantum allotted the M/s ECPL	PP now intend to split the existing EC.
8	10.m	Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air	Fly ash should be stored separately as per CPCB guidelines so that it may not	There will be no fly ash generation	PP now intend to split the existing EC.

		quality. Direct exposure of workers to fly ash & dust should be avoided .Brick manufacturing unit shall be set up in the premises for effective utilization of the ash.	adversely affect the air quality. Direct exposure of workers to fly ash & dust should be avoided .Brick manufacturing unit shall be set up in the premises for effective utilization of the ash.		
9	10.q	As committed Rs 10 crore shall be allocated for Corporate Environment Responsibility (CER). The CER funds shall be utilized for meeting the issues suggested during public hearing. The CER plan shall be completed before commissioning of the Expansion project.	As committed Rs 7 crore shall be allocated for Corporate Environment Responsibility (CER). The CER funds shall be utilized for meeting the issues suggested during public hearing. The CER plan shall be completed before commissioning of the Expansion project.	As committed Rs 3 crore shall be allocated for Corporate Environment Responsibility (CER). The CER funds shall be utilized for meeting the issues suggested during public hearing. The CER plan shall be completed before commissioning of the project.	PP now intend to split the existing EC.
Note: All remaining conditions of EC granted on 10.01.2020 would remain same except the above stated EC conditions.					

Production Capacity

S. No.	Products	Production Capacity in MTPA		
		Existing EC (Pre-Bifurcation under Epsilon Carbon Private Limited, ECPL (Parent Company))	Parent Company (Epsilon Carbon Private Limited, ECPL)	New Company-1 (Epsilon Advanced Materials Private Limited, EAMPL)
Coal tar Distillation Section				
	Distillation capacity	500,000 TPA	500,000 TPA	-
1	Coal Tar Pitch	255000	255000	-
2	Zero QI/Impregnated Pitch	16000	16000	-
3	Carbon Black Oil (CBO)	253600	253600	-
4	Anthracene Oil/Heavy Creosote Oil	99000	64000	35000
5	Wash Oil	41500	41500	-
6	Naphthalene	35000	35000	-
7	NSF	33000	33000	-
8	Phenol Oil	14900	14900	-
9	Light Oil	10000	10000	-
10	De-hydrated coal tar	483000	483000	-
11	Phenolics (Phenol, Cresols (ortho, meta, para or mixture thereof), Xylenols)	14900	14900	-
12	Special Graphite/Advanced Graphite	50000	-	50000
By- Product of Coal Tar Distillation Section				
1	Neutral Sodium Phenolate (14%)	25500	25500	-
2	Ammonical water	150	150	-
3	Calcium Carbonate	17340	17340	-
Carbon Black Unit Section				
1	Carbon Black	300000	300000	-
2	Lean Gas/ Tail Gas	270000 Nm ³ /hr.	270000 Nm ³ /hr.	-

Captive Power Plant				
1	CPP*	54 MWH	54 MWH	-

The EAC after detailed deliberations **Returned the proposal in present form**. EAC suggested and the PP agreed to submit two separate proposals as follows:

- Amendment of the earlier EC issued vide F. No. J-11011/500/2017-IA-II (I) dated 10.01.2020 for M/s Epsilon Carbon Private Limited (ECPL) due to proposed changes in the products and
- New application for EC of the New Company (M/s Epsilon Advanced Materials Private Limited (EAMPL) instead of proposing bifurcation of existing EC granted to parent company i.e. M/s Epsilon Carbon Private Limited (ECPL). EAC also exempted the above project from baseline monitoring and conducting of Public Hearing to expedite the process of grant of EC.

Agenda No. 28.11

30 KLPD Molasses based distillery plant along with 1 MW captive power plant by M/s Arihant Sugar Industriess Limited located at Sr. No 37, Jainapur Village & Post, Taluka: Chikodi, District Belagavi, Karnataka - Amendment in Environment Clearance regarding.

[IA/KA/IND2/189231/2020, J-11011/273/2015-IA II(I)]

The Proposal is for amendment in the Environmental Clearance (EC) granted by the Ministry vide letter File No.: J-11011/273/2015 IA-II (I) dated 22.02.2017 for the project Molasses based distillery (30KLPD) at village Jainapur, Tehsil Chikodi, Dist. Belagavi in Karnataka State in favour of M/s. Arihant Sugar Industriess Limited (Earlier EC with name of M/s. Om Sugars Limited)

The Project Proponent has requested for amendment in the EC, with the details are as under;

S r. N o.	Para of EC issue d by MoEF &CC	Details as per the EC	To be Revised / Read as	Justifica tion/ reasons

1	Page No. 1 Para 2The distillery plant will be operated for a maximum of 270 days/ annum	The distillery plant will be operated for 330 Days/ annum.	Industry has participated in 'National Bio-fuel Policy' 2018. Now, it is decided to implement distillery with Spentwash Incineration for making ZLD project with 330 Days of operation. Hence, earlier Spent wash Bio-composting treatment with 270 Days as approved in previous EC is cancelled.																																			
2	Page No. 1 Para 2	<p>In Product & By-product Table</p> <table border="1" data-bbox="443 344 815 958"> <thead> <tr> <th>S.No.</th> <th>Product list</th> <th>Capacity</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Rectified spirit/ENA/Ethanol</td> <td>30 KLPD</td> </tr> <tr> <td>2</td> <td>Co-gen Power Plant</td> <td>1 MW</td> </tr> <tr> <td colspan="3">By product</td> </tr> <tr> <td>3</td> <td>CO₂</td> <td>22.8 TPD</td> </tr> <tr> <td>4</td> <td>Biomanure</td> <td>5400 TPA</td> </tr> <tr> <td>5</td> <td>Biogas</td> <td>430 m³/hr</td> </tr> </tbody> </table>	S.No.		Product list	Capacity	1	Rectified spirit/ENA/Ethanol	30 KLPD	2	Co-gen Power Plant	1 MW	By product			3	CO ₂	22.8 TPD	4	Biomanure	5400 TPA	5	Biogas	430 m ³ /hr	<p>In Product & By-product Table</p> <table border="1" data-bbox="837 344 1209 958"> <thead> <tr> <th>S.No.</th> <th>Product list</th> <th>Capacity</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Rectified spirit/ENA/Ethanol</td> <td>30 KLPD</td> </tr> <tr> <td>2</td> <td>Co-gen Power Plant</td> <td>1 MW</td> </tr> <tr> <td colspan="3">By product</td> </tr> <tr> <td>3</td> <td>CO₂</td> <td>22.8 TPD</td> </tr> </tbody> </table>	S.No.	Product list	Capacity	1	Rectified spirit/ENA/Ethanol	30 KLPD	2	Co-gen Power Plant	1 MW	By product			3	CO ₂
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3	Page No. 2 Para 6	The Steam required for Proposed distillery project will be met from 10 TPH Bagasse fired boiler. ESP will be provided to the proposed Bagasse fired boiler as pollution control measures and will be connected with 30 M stack height.	The Steam required for Proposed distillery project will be met from 14 TPH Spent wash Incineration boiler. ESP will be provided to the proposed Incineration boiler as pollution control measures and will be connected with 45 M stack height.																																				
4	Page No. 2 Para 7Spent wash will be treated Bio-digester followed by Multiple Effect Evaporator (MEE). The concentrated bio-methanated spent wash will be send to bio-composting by utilizing press mud from the sugar plant. Plant is based on the Zero Liquid Discharge Scheme. Yeast Sludge will be bio-composted along with Bio-	Spent wash will be concentrated in Multiple Effect Evaporator (MEE) followed by incineration in spent wash incineration boiler. Plant is based on the Zero Liquid Discharge Scheme. Yeast Sludge will be incinerated in incineration boiler. Boiler ash to be forwarded for Brick making/ used in self																																				

		methanated evaporated spent wash. Boiler ash and sludge from the ETP will be used as manure.	ash briquettes manufacturing and sludge from the ETP will be used as manure.
5	Page No 3, Specific Condition 'i'	ESP shall be provided to the bagasse fired boiler to control particulate emissions within permissible limit.	ESP shall be provided to the spent wash incineration boiler to control particulate emissions within permissible limit.
6	Page No 3, Specific Condition 'iii'The spent wash from molasses based distillery shall be treated through Bio digester followed by Multiple Effect Evaporator (MEE). The concentrated bio-methanated spent wash will be sent to bio-composting by utilizing the press mud from sugar plant.	The spent wash from molasses based distillery shall be concentrated in Multiple Effect Evaporator (MEE). The concentrated spent wash will be sent for incineration in incineration boiler.

The EAC during deliberations directed the PP to use coal as fuel only for startup of boiler during monsoon season and incineration boiler shall be operated with concentrated spent wash and bagasse as fuel. The Expert Appraisal Committee (EAC), after detailed deliberations **recommended** the amendments in EC as proposed by the project proponent, with all other terms and conditions remain unchanged.

- Para 2 of EC shall be read as, "The distillery plant will be operated for 330 Days/ annum."
- Para 2 of EC shall be modified as,

In Product & By-product Table

S.No.	Product list	Capacity
1	Rectified spirit/ENA/Ethanol	30 KLPD
2	Co-gen Power Plant	1 MW
By product		
3	CO ₂	22.8 TPD

- Para 6 of EC shall be read as," The Steam required for proposed distillery project will be met from 14 TPH Spent Wash Incineration boiler. ESP will be provided to the proposed Incineration boiler as

pollution control measures and will be connected with 45 M stack height.”

- Para 7 of EC shall be read as,“ Spent wash will be concentrated in Multiple Effect Evaporator (MEE) followed by incineration in spent wash incineration boiler. Plant is based on the Zero Liquid Discharge Scheme. Yeast Sludge will be incinerated in incineration boiler. Boiler ash to be forwarded for Brick making/ used in self ash briquettes manufacturing and sludge from the ETP will be used as manure.”
- Specific Condition ‘i’ of EC shall be read as,“ ESP shall be provided to the spent wash incineration boiler to control particulate emissions within permissible limit.”
- Specific Condition ‘iii’ of EC shall be read as,“The spent wash from molasses based distillery shall be concentrated in Multiple Effect Evaporator (MEE). The concentrated spent wash will be sent for incineration in incineration boiler.”

Agenda No. 28.12

Drilling of one infill development well in offshore block cauvery basin by M/s Hindustan Oil Exploration Company Ltd located at offshore Block PY-1, Cauvery Basin, Off the Coast of Tamil Nadu - Amendment in Environment Clearance regarding.

[IA/TN/IND2/190126/2020, J-11011/233/2012-IA II(I)]

The Proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter J-11011/233/2012- IA II (I) dated 07th June, 2013 for the project Drilling of One Infill Development Well located at in Offshore Block PY-1, Cauvery Basin, Off the Coast of Tamil Nadu in favour of M/s Hindustan Oil Exploration Company Ltd. As per notification issued by MoEFCC vide S.O 221(E). dated 18th January, 2021, period from 1st April. 2020 to 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of EC granted.

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

S.no	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification / reason s
1	Environmental Clearance issued earlier via F. No. J-11011/233/2012-	Drilling of One Infill Development Well located at in Offshore	Request for extension of the validity of the EC	Due to decline in production from existing three wells on account of natural depletion; it is

	IA II (I) ; dated 07th June 2013	Block PY-1, Cauvery Basin, Off the Coast of Tamil Nadu	<p>proposed to drill one additional infill producer well from the existing offshore platform. This drilling program shall offset the loss of gas production.</p> <p>However, it had taken considerable time period to assess the hydrocarbon reservoir potential in the seabed and to estimate the commercial viability.</p> <p>Lower gas market price prevailed in the economy had accounted for delaying the project.</p> <p>The company has also waited to improve its financial stability for funding the project.</p>
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The Expert Appraisal Committee (EAC), after detailed deliberations **recommended** the amendments in EC as given below and **validity of existing EC will be extended for 3 years i.e. till 06th June, 2023**, as proposed by the project proponent, with all other terms and conditions remain unchanged.

Agenda No. 28.13 Any other Items with permission of the Chair

Installation of Diesel Hydro Treatment Unit (DHT) and associated facilities to produce 100% BS-IV HSD (capacity 2.6 MMTPA of DHT) by M/s. Bharat Petroleum Corporation Ltd. located at Village Anik, Mahul, Tehsil Kurla, District Mumbai, Maharashtra - Amendment in Environmental Clearance regarding.

[IA/MH/IND2/131676/2019, J-11011/21/2015-IA II (I)]

The proposal was examined by the Expert Appraisal Committee (18th EAC-Industry-2) in the Ministry in its meeting held on 13th to 15th April, 2020.

The EAC during deliberations noted that the environmental clearances issued in favour of M/s Bharat Petroleum Corporation Limited's Mumbai Refinery required CRZ clearance also. The same has been pointed by the EAC in its earlier meetings. However, the project proponent has neither mentioned anything regarding CRZ clearance nor presented before the Committee. The Committee noted that the present proposal for amendment also require CRZ clearance. The Committee has desired that the Ministry may examine the issues on CRZ and seek the comments of CRZ Division for further necessary action on the matter. The proposal was accordingly **deferred** for the needful.

Ministry has been examined the matter and based on recommendations of MCZMA, CRZ Division and undertaking of M/s BPCL dated 8.12.2020, and as per the CRZ division's observation, as they have no issue if the proposed modernization of the Kerosene Hydro Testing Unit (KHT) Integrated with Diesel Hydrotreater is considered for clearance from CRZ perspective. Accordingly, this case has been referred in EAC Ind-2 meeting held on 18th- 19th January, 2021 for amendment in environmental clearance dated 13th August, 2015.

The project proponent made a detailed presentation through Video Conferencing (VC) on (19th January, 2021) the salient features of the project.

The proposal is for amendment in the Environmental Clearance (EC) granted by the Ministry vide letter F. No. J-11011/21/2013-IA II (I) dated: 13/08/2015 for installation of Diesel Hydro Treatment Unit (DHT) and associated facilities to produce 100% BS-IV HSD (capacity 2.6 MMTPA of DHT) located at Village Anik, Mahul, Tehsil Kurla, District Mumbai, Maharashtra in favour of M/s. Bharat Petroleum Corporation Ltd.

The Project Proponent has requested for amendment in the EC, with the details are as under;

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons
1.	Subject & para 2.0:	Installation of DHT unit and associated facilities to produce 100% BS-	Installation of Kerosene Hydrotreater Unit (KHT) & Integration with Existing Diesel Hydrotreater Unit	To reduce Sulphur content in Kerosene from existing 2000 ppm to < 10 ppm is highly recommended to improve fuel quality

		IV HSD (capacity 2.6 MMTPA of DHT)	(DHT) along with revamp of DHT Unit to produce BS VI grade Fuel (Capacity 2.83 MMTPA of DHT)	in terms of Sulphur content and thus, improving overall environmental status
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BPCL Mumbai Refinery produces Kerosene and ATF with Sulphur upto 2000 PPM and 2500 PPM respectively. Kerosene is used for ATF production and also to blend and maximize HSD. The proposed amendment in Environmental Clearance is required to reduce Sulphur content in Kerosene from existing 2000 ppm to < 10 ppm.

As per Govt. Auto Fuel Policy, BPCL need to supply BS VI grade HSD to nation w.e.f 01st April, 2020. Hence, it is necessary to produce kerosene with sulphur content less than 10 PPM in order to facilitate it's blending with HSD in future.

It was suggested by Centre for Higher Technology (CHT) that sulfur of 10 ppm should be targeted for any new facility coming up for kerosene desulfurization. In line with this mandate, and to upgrade Kerosene streams to BS VI grade HSD, BPCL Mumbai Refinery is modifying existing DHT unit & integrating KHT unit along with other associated facilities.

Salient Features of the Project:

- There is no expansion in the capacity of the Refinery, and there will be no increase in total refinery production or change in product mix.
- MPCB has granted Consent to Establish (CTE) for the project with a condition for amendment of DHT unit's EC granted earlier.
- MCZMA has recommended the proposal to MOEF&CC from CRZ point of view
- No additional furnace or stack is envisaged.
- No requirement of additional water & fuel w.r.t prevailing Consent received from Maharashtra Pollution Control Board (MPCB),
- Total Hazardous waste generation will be well within Consent limit received from Maharashtra Pollution Control Board (MPCB).
- No additional effluent generation.

The Expert Appraisal Committee (EAC), after detailed deliberations **recommended** the amendments in EC as proposed by the project proponent, with all other terms and conditions remain unchanged.

Subject & para 2.0 shall be read as, "Installation of Kerosene Hydrotreater Unit (KHT) & Integration with Existing Diesel Hydrotreater Unit (DHT) along with revamp of DHT Unit to produce BS VI grade Fuel (Capacity 2.83 MMTPA of DHT)".

The meeting ended with thanks to the Chair.

GENERAL CONDITIONS

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

representations, if any, were received while processing the proposal.

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

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

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