GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-2 SECTOR)
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Dated: 25.02.2021

MINUTES OF THE 30th MEETING OF THE EXPERT APPRAISAL COMMITTEE

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 17th February, 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 informed by the EAC members on the minutes of its 29th Meeting of the EAC (Industry-2) held during 03rd February, 2021 conducted through Video Conferencing (VC), confirmed the same.

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

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

17th February, 2021 (Wednesday)

Agenda No. 30.1

Environmental & CRZ Clearance for Integrated Project consisting of Poly Vinyl Chloride (PVC) Plant, Polymer Modified Bitumen

(PMB) Plant, Gas Storage Terminal, LPG Bottling Plant, Gas Based Captive Power Plant, Sea Water Desalination Plant (RO process) for captive consumption by M/s Veritas Polychem Pvt. Ltd. located at Gat No. 49, 50, 51, 52, 53, 54, 56, 57, 61, 63, 66, 75-A & adjacent reclaimed land, Dighi Port Area Nanavali Shrivardhan Raigad, Maharashtra - Consideration of Environment & CRZ clearance regarding.

[IA/MH/IND2/195998/2019, IA-J-11011/225/2019-IA-II(I)]

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

The proposal is for Environmental Clearance & CRZ clearance to the project for Integrated Project consisting of Poly Vinyl Chloride (PVC) Plant, Polymer Modified Bitumen (PMB) Plant, Gas Storage Terminal, LPG Bottling Plant, Gas Based Captive Power Plant, Sea Water Desalination Plant (RO process) for captive consumption by M/s Veritas Polychem Pvt. Ltd. located at Gat No. 49, 50, 51, 52, 53, 54, 56, 57, 61, 63, 66, 75-A & adjacent reclaimed land, Dighi Port Area Nanavali Shrivardhan Raigad, Maharashtra.

All products are listed at S.N. 5(e) Petrochemical Based processing (processes other than cracking & reformation and not covered under the complexes) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and requires appraisal at Central Level by Expert Appraisal Committee (EAC).

The Terms of References (ToRs) has been issued by Ministry vide letter No. IA-J-11011/225/2019-IA-II(I) dated 13th August, 2019.

Public hearing for the proposed project has been conducted by Maharashtra Pollution Control board on 29th September 2020 for Raigad District and chaired by the Additional District Magistrate, Raigad. The main issues for Public hearing are related to, impacts of proposed project on fishing, concerns over Safety, Air/Water & Noise pollution, Local Employment, sticking to commitments made during PH etc. It was informed that no litigation is pending against the proposal.

The details of products and capacity are as under:

Sr. No.	Plant / Activity	Capacity/ Quantity
1	Unloading of chemicals and liquified gases viz. VCM, LPG, Propylene and Bitumen.	Bringing chemicals by sea route through bulk carriers, conveying by pipelines to plant site.
2	PVC Plant	200,000 MTPA
3	PMB Plant	360,000 MTPA

4	Mounded bullets	32 Nos each of capacity 2500 m^3 (8 for VCM, 12 for LPG 12 for Propylene)
5	LPG Bottling Plant	60,000 MTPA
6	LPG Bulk Filling Station	300,000 MTPA
7	Captive gas-based power plant	4 x 4.5 = 18 MW
8	Water Desalination Plant (RO process)	3200 m^3/day fresh water generation capacity
9	Raw water intake pipeline for sourcing sea water for SWRO plant and disposal pipeline for reject from SWRO plant to diffuser for marine outfall	(1) Intake pipeline of capacity 11,000 cmd, dia- 400 mm length ~ 175 m from coast at 3.8m depth (Latitude 18°17'6.94" N Longitude 72°57'11.52"E) (2) Outfall pipeline of capacity 8,000 cmd TDS 52,587 ppm, dia-size 350 mm and length ~ 280 m from coast to diffuser at 5m water depth (Latitude 18°17'13.65" N Longitude 72°57'0.239"E)

Total plot area is 59.277 acres (2,39885.72 sq.m) at Nanavali Village, Dighi port area, District Raigad, Maharashtra- 402402. Industry will develop Green belt in an area of 20.025 acres (81038.2 sq.m) (33.78%) out of total area of the project. The estimated proposed project cost is Rs. 2274.35 Crores. Total capital cost earmarked towards environmental pollution measures is Rs. 13.03 Crores & the Recurring cost (operation & maintenance) will be about Rs. 1.39 Crores per annum. Total employment will be 1000 persons as direct (467 employees and 533 contract) & ~5000 persons indirect for proposed project. Industry proposes to allocate Rs. 10 Crores towards Corporate Environment Responsibility.

Phansad Wildlife sanctuary is located at 6 km to North of project site. ESZ of Phansad WLS is Notified vide S.O 1603 (E) dated 17th May, 2017 and site is well outside the notified ESZ. Nearest village within ESZ is about 5.5 km North of site. Rajpuri creek is at 100 m distance outside plot passes along east to west. Arabian sea is at west side of the project site.

Ambient air quality monitoring was carried out at 9 locations during December 2018 to February 2019 and baseline data indicates that ranges of concentrations of PM_{10} (70.5 to 50.6 µg/m^3), $PM_{2.5}$ (26.1 to 18.7 µg/m^3), SO_2 (14.6 to 8.7µg/m^3), NOx (27 to 16.1µg/m3.AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.14 µg/m^3, 0.10 µg/m^3 & 2.74 µg/m^3 with respect to PM_{10}, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total freshwater requirement is 4356 m^3/day will be made available partially by Sea Water Reverse Osmosis (SWRO) Desalination Plant (3.2

MLD capacity) and recycle of Treated effluent (cooling and back to process) and treated sewage (for flushing and gardening). Rainwater will be harvested to lower sea water intake quantity.

Trade Effluent of 2211 m^3/day will be treated through ETP. Treated effluent will be fully recycled back within facility for cooling, washing (1155 m^3/day) and balance back to process after treatment in DM plant. No effluent will be discharged outside facility. SWRO reject (7298 m^3/day) will be disposed to Arabian sea using specially designed diffuser system. Domestic sewage of 56 m^3/day will be treated in STP and re-used for flushing and green belt maintenance in the site.

Power requirement for proposed project will be 13880 KVA and will be met from 4 LNG based Gas Engines/Gas Turbines 4 x 4.5 MW=18 MW for captive consumption. Each Gas engine will be equipped with WHRB of 3.5 TPH. 1 no. of 315 KVA DG set will be used as standby during power failure. Stack height (6 m) will be provided as per CPCB norms to the proposed DG sets.

Proposed project will have two (02) No's of boilers with capacity 20 TPH and 5 TPH (hot water generator) respectively using LNG as fuel. Stack height of 30 m for each boiler will be provided.

Emissions from Fuel Burning

Source	**Capacity**	**Type of Fuel**	**Quantity**	**Expected emission***	**APC**
Gas Engine 4 Nos with WHRB	4.5 MW/ 3.5 TPH (each)	Natural Gas	936 Nm^3/hr (each)	NOx, SO_2, PM	Low NOx Burners (< 50 ppm NOx)+ stack ht 30m
Boiler 1	20 TPH steam		1428 Nm^3/hr	NOx, SO_2, PM	Stack ht 30m
Boiler 2	5 TPH steam		357 Nm^3/hr	NOx, SO_2, PM	Stack ht 30m
DG Set (*)	315 kVA	Diesel	64 Ltr/hr	NOx, SO_2, PM	As per EP Act
Incinerator (*)	For gaseous vents from PVC plant	Natural Gas	80 kg/hr	CO, HCl , SO_2 TPM, NOx	2 chamber Sec chamber at 1000 deg C + with res time 2 sec Scrubber (2 stage) Stack ht 45m

Flare (*)	For HC discharges from other plants	LPG (as pilot)	650 Nm^3/hr	CO, CO_2 and SO_2, NOx	Steam + CCTV camera + stack ht 90m

Details of process emissions generation and its management:

Area	Gas Composition	Control measure
From Secondary Condenser	Mixture of Air, N_2, CO_2 and Uncondensed VCM	• All process streams from PVC plant likely to contain VCM will be taken to Incinerator. • Incinerator will be double chamber with residence time in secondary chamber of 2 seconds. LNG will be used as subsidiary fuel in secondary chamber. • Off gases will be rapidly quenched to prevent formation of dioxins and furans • Off gases will be passed through Bag filter followed by scrubber to control emissions and will be discharged to atmosphere through 45m high chimney.
From Rupture Disc - Out of Control reaction	VCM	
From PVC Reactors (*)	As routine emission <5ppm per reactor.	
From Dryer Exhaust	Mixture of air and PVC particles (50mg/M^3)	Mixture of air and PVC goes to the wet scrubber and recovered. Process vent will be 5 ft above building in which it is housed
LPG Bottling	LPG	Gas detectors, routine surveillance, Leak Detection & Rectification (LDAR)
PMB Plant	Bitumen fumes, SO2, NOx, CO, Hydrocarbon, VOC, Particulate matter	Wet scrubber. Process vent will be 5 ft above building in which it is housed
Common - Flare	Process gases	Flare (90m high) LPG Pilot flame. CCTV surveillance system with steam injection

Fuel requirement

Fuel require for	Capacity	Type of Fuel	Quantity	Expected emission*
Gas Engine 1/Gas turbine 1	4.5 MW	Natural Gas	936 Nm3/hr	NOx, SO2, PM

Gas Engine 2 /Gas turbine 2	4.5 MW		936 Nm3/hr	NOx, SO2, PM
Gas Engine 3/Gas turbine3	4.5 MW		936 Nm3/hr	NOx, SO2, PM
Gas Engine 4 /Gas turbine4*	4.5 MW		936 Nm3/hr	NOx, SO2, PM
Boiler 1	20 TPH steam		1428 Nm3/hr	NOx, SO2, PM
Boiler 2	5 TPH steam		357 Nm3/hr	NOx, SO2, PM
DG Set (Emergency)	315 kVA	Diesel	64 Ltr/hr	NOx, SO2, PM
Incinerator	For gaseous vents from PVC plant	Natural Gas	---	CO, HCl and Cl2, VCM, TPM NOx
Flare	For gaseous discharges from other plants	LPG (as pilot)	--	CO, CO2 and SO2, NOx

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

Solid waste generation & it's disposal

Particulars	**Quantity in TPA**	**Method of Disposal**
STP Sludge	100	Used as manure.
Insulation waste	2	CHWTSDF
Garbage	10	Biodegradable garbage will be composted, used as manure.
Canteen Waste	10	Composting and used as manure.

Hazardous waste generation & it's disposal.

Description	**Category as per HW rules 2016**	**Total Quantity (per year)**	**Method of Disposal**
Spent and lube oils	5.1	10 Ton	Sale to authorized recyclers
Sludge and Filter	3.3	5 Ton	CHWTSDF /

contaminated with oil			
Discarded Containers and Barrels	33.1	5 Ton	Sale to scrap dealers after decontamination / detoxification
Chemical Sludge from (PVC) Wastewater Treatment Plant	35.3	127 Ton	CHWTSDF / Sale to downstream PVC users.
Filter and filter material which have organic liquid in them, for example mineral oils, synthetic oil and organic chlorine compounds	35.1	2 Ton	CHWTSDF /
E waste	-	4 Kg.	Sale to authorized recyclers
Lead acid batteries	-	10 Nos.	Will be exchanged with the dealer on purchase of new batteries

EAC desired additional information regarding green area coverage, measures to reduce carbon footprint, measures for health and safety of workers in PVC plant, budget for social and economic up-liftment of society to be spend on schools in 10 km radius of the (study) area & up-gradation of fishermen's lives through economic up-liftment. Around 80% employment is to be given to the local people. PP has submitted the commitments/additional information desired as above. EAC also desired that 3D modelling for process safety shall be conducted for the plant and has to be submitted within three (03) months on which review will be conducted with regards to safety aspect.

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 Committee noted that as per the extant rules of the Ministry, the projects involving Environmental & CRZ clearance needs to be examined as per the CRZ Notification, 2011/2019. The Committee has taken cognizance of the recommendations of the MCZMA for CRZ clearance.

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 & CRZ Clearance subject to clearance by the CRZ division of the ministry.

The environmental clearance & CRZ 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 & CRZ clearance and subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

(i). The project proponent shall comply with all the conditions stipulated in the MCZMA/CRZ recommendations and NOC issued for the same. Also, submit the Marine Conservation Plan within three (03) months to the Ministry.

(ii). 3D modelling, consequence analysis (study) and safety plan for the proposed project shall be submitted within three (03) months to the Ministry for further deliberations and review by EAC-Ind-II.

(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). Total freshwater requirement is 4356 m^3/day will be made available partially by Sea Water Reverse Osmosis (SWRO) Desalination Plant (3.2 MLD capacity) and recycle of Treated effluent (cooling and back to process) and treated sewage (for flushing and gardening). Necessary permission in this regard shall be obtained from the concerned regulatory authority. The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.

(v). Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.

(vi). Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.

(vii). Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.

(viii). Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.

(ix). Regular VOC monitoring shall be done at vulnerable points.

(x). The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.

(xi). Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.

(xii). The company shall undertake waste minimization measures as below:

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

(xiii). The green belt of 10-meter width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in

downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

(xiv). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall be completed within time as proposed. Rs.5.0 Crores would be spent in providing infrastructure in all schools within the radius of 10 kms of plant site and Rs.5.0 Crores would be provided for the motorized boats to local fishermen cooperative societies to increase fish catching and to improve their livelihood.

(xv). The project proponent shall ensure 80% of the employment to the local people, as per the applicable law. The project proponent shall set up a skill development centre/provide skill development training to village people.

(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.

(xvii). 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.

(xviii). 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. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.

(xix). PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. Complete noise management plan and hearing conservation plan should be prepared before the start of the plant operation. 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.

(xx). The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012 as amended time to time shall be followed.

(xxi). Recommendations of mitigation measures from possible accident shall be implemented based on advanced risk Assessment studies conducted for worst case scenarios using latest techniques.

Agenda No. 30.2

Proposed expansion of Distillery from existing 70 KPLD RS/ENA/Ethanol to 140 KLPD Ethanol and captive power plant from 1.5 MW to 4.5 MW with multi feed stock (B-Heavy molasses/C-Heavy molasses) by M/s. Siddapur Distilleries Limited located at survey Nos. 49/2B/1 & 2, 57/2D & 2E, 58/1B, 58/1A/3, 66/4D, 85/2, 87, 93/2/3, 95/1 & 107/2, 90/1, 90/2, 90/3 & 90/4 of Siddapur Village, Jamkhandi Taluk, Bagalkot District, Karnataka - Consideration of Environment Clearance regarding.

[IA/KA/IND3/190586/2020, J-11011/10/2017-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 Proposed Expansion of Distillery from existing 70 KPLD RS/ENA/Ethanol to 140 KLPD Ethanol and captive power plant from 1.5 MW to 4.5 MW with multi feed stock (B-Heavy molasses/C-Heavy molasses) by M/s. Siddapur Distilleries Limited located at survey Nos. 49/2B/1 & 2, 57/2D & 2E, 58/1B, 58/1A/3, 66/4D, 85/2, 87, 93/2/3, 95/1 & 107/2, 90/1, 90/2, 90/3 & 90/4 of Siddapur Village, Jamkhandi Taluk, Bagalkot District, Karnataka.

All Distillery projects are listed at S. No. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and captive power is listed at sl. No. 1(d). Hence, appraised at Central Level by Expert Appraisal Committee (EAC). As per MoEF&CC vide Notification no. S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750 (E) dated 17th February 2020 the proposal is to be appraised as B2 category.

Public Hearing for the proposed project is not conducted as the proposal is appraised as per category B2 projects in line with Notification issued by MoEF&CC vide. S. O. 345(E) dated 17th January 2019. It was informed that no litigation is pending against the proposal.

Ministry had issued EC earlier vide letter No. F.No. J-11011/274/2003-IA II dated 01.07.2004 to the distillery plant of 60 KLPD. The distillery capacity was later increased from 60 KLD to 70 KLD by change in the process technology i.e., by adopting "Fed Batch Process", for this expansion prior EC expansion was obtained vide letter No. F.No. J-11011/10/2017-IA II (I) dated 09.07.2018 and issued amendment dated 23.9.2020 in favor of M/s. Siddapur Distilleries Limited.

The details of products and capacity as under:

Sl. No.	Products manufactured	Existing production	Proposed expansion	Scenario after expansion
1	Distillery			
	RS/ ENA/ Ethanol	70 KLD RS /ENA / Ethanol Raw material is B/C - Heavy molasses	Plant capacity 70 KLD, Ethanol output 60 KLD	Expansion of 70 KLD distillery to manufacture 140 KLD distillery to manufacture A. 70 KLD Ethanol from existing plant + 60 KLD Ethanol from new plant OR B. 70 KLD RS/ENA + 60 KLD Ethanol Raw material is B/C – Heavy molasses
2	Captive power attached to distillery	1.5 MW	3 MW	4.5 MW.
3	Biogas based power plant	2 MW	-	2 MW
4	MEE Plant	500 KLD	300 KLD	800 KLD
5	Boiler	18 TPH conventional boiler	18 TPH conventional boiler will be upgraded to 25 TPH Incineration boiler	25 TPH Incineration boiler
6	Waste heat recovery boiler	-	12 TPH	12 TPH

Existing land area is 3,07,561 m^2 (76 acres) proposed expansion will be within the existing industry premises. Industry has already developed greenbelt in an area of 32.89 % i.e., 1,01,171 m^2 out of total area of the project. The estimated project cost is Rs. 96.96 Crores including existing investment Rs. 38 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 32.9 Crores and the recurring cost (operation and maintenance) will be Rs. 1.395 Crores per annum. Total employment will be 205 persons, out of this the direct

employment is 170 persons & indirect is 35 persons after expansion. Industry proposes to allocate Rs. 15 Lakhs towards Corporate Environment Responsibility.

There are no national parks, wild life sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. within 10 km distance from the project site. River Krishna is flowing at a distance of 22 km in North East 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 November 2020 indicate PM_{10} (76.22 µg/m^3), $PM_{2.5}$ (35.06 µg/m^3), SO_2 (4.71 µg/m^3) and NOx (9.65 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.11 µg/m^3, 0.529 µg/m^3 and 3.63 µg/m^3 with respect to SPM, SO_2 and NOx 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 Krishna River.

Sl. No.	Particulars	Requirement in KLD
1	Fresh water	503
2	Recycled water	850
3	Total water requirement	1353

Effluent of 802 KLD raw spent wash, 162 KLD concentrated spent wash & 922 KLD other effluents (condensate, spent lees, cooling tower blow down & boiler blowdown) is generated. Spent wash is primarily treated in Bio digester and concentrated spent wash of 162 KLD is used as fuel for incineration Boiler. Spent lees is treated by physico – chemical treatment and recycled for molasses dilution and cooling tower make up. Condensate from MEE is treated in stripper column and re-used for cooling tower make up/molasses dilution. Biogas is used as supplementary fuel in incineration boiler and for captive power generation. Boiler blow down and cooling tower bleed is used in ash quenching and dust suppression. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 4.86 MW will be met from Captive power plant. Existing unit has DG set of 1000 kVA capacity. It is used as standby during power failure, there is no additional DG set proposed in expansion proposal. Existing unit has 18 TPH conventional boiler for bagasse/slop/biogas. ESP with stack 50 m height is installed, for proposed expansion 18 TPH conventional boiler will be upgraded to 25 TPH Incineration boiler and connected to existing chimney 50 m

height. Additionally, 12 TPH waste heat recovery boiler is proposed for expansion and connected to chimney of 30 m height for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3 for the proposed boilers.

Details of Process emissions generation and its management:

During fermentation CO2 will be released. In 140 KLD plant about 60 TPD (w/w) of CO2 is expected. CO2 bottling plant of capacity 30 TPD is in operation within the plant premises, the capacity will be enhanced to 60 TPD.

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

SI. No.	Details of the solid waste	Quantity in MT/day	Mode of Collection	Mode of Disposal
1	Sludge (Yeast)	40-42	Mechanically removed and dried and transported	Mixed with the Press Mud & converted into organic manure.
2	Fly Ash	26	Collected from ash silo and transported by tractors & trucks	Rich in Bio- potash and used as farm land manure or mixed with the compost.
3	Bottom Ash	5.4		

Hazardous waste management

Waste category	Hazardous waste generated	Quantity		Method of handling
		Existing	After Expansion	
5.1	Used Oil	0. 300 KL/A	New DG sets are not proposed in the expansion program	Used oil and waste residues containing oil will be collected in leak proof containers and disposed through KSPCB authorized reprocessors/ Incinerators.
5.2	Waste residues containing oil	0.100 MT/A		

Details of Certified Compliance Report (CCR): CCR submitted by RO, MoEF&CC, Bangalore for the project vide File No. EP/12.1/04/2018-19/KAR/1127 Karnataka dated 27.01.2021. Status of compliance is 'Satisfactory'.

EAC during the deliberation, desired revised Water Balance Plan for manufacturing of ethanol only and assurance that bio-composting will not be practiced after three (03) years from the date of issue of last EC

(Amendment) i.e. dt. 23.09.2020. PP submitted the revised water balance and for bio-composting, company has committed that it will not practice bio-composting after three (03) years of grant of the Amended EC dt.23.09.2020.

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 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 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 for the proposed project will be 503 KLPD which 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. Ash/manure shall be packed in 25 kg bags and transported via covered trolleys.

(v). CO_2 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. Fire fighting 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 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. 30.3

Expansion of the grain-based distillery unit from 125 KLPD to 200 KLPD and expansion of cogeneration power plant from 3 MW to 9 MW by M/s Pioneer Industries Ltd. located at A-2(P), A-3 and A-4, Industrial Growth Center, Village Ranipur Pathankot, Punjab - Consideration of Environment Clearance regarding.

[IA/PB/IND2/28674/2010, J-11011/38/2010-IA.II(I)]

This proposal is re-considered in the 30th EAC meeting held on 17th February, 2021 regarding grant of Environmental Clearance.

The proposal was earlier placed before the EAC (Industry-II) in its 14th meeting held during 20th to 22nd November, 2019 where the EAC, during deliberations noted that the project details mentioned in the EIA report

were not consistent with that presented during the meeting. The Committee also took serious note on the quality of the EIA/EMP report prepared by the consultant and underrated the consultant. The EAC, after detailed deliberations decided to return the proposal in its present form and have asked for clarification/inputs in respect of the following: -

(i). EIA report to be revised as per the terms of reference granted for the project, and shall conform to Appendix III of the EIA Notification, 2006.

(ii). The Committee noted that there are various deficiencies in Form 2 (viz. S. no. 6, 15, etc.) uploaded by the PP and accordingly Revised Form 2 shall be submitted incorporating all the information related to the project.

(iii). Action Taken Report on non-compliance points in the existing EC conditions to be forwarded by the Regional Office of the Ministry.

(iv). Revised layout plan with 33% green belt area.

(v). Issues raised during public hearing, response by the project proponent, action plan with budgetary allocation and its time lines needs to be submitted.

(vi). Revised water balance with details of total water and fresh water requirement, and permission from CGWA.

(vii). Effluent treatment mechanism with plan for Zero Liquid Discharge.
(viii). Detailed Plan for Corporate Environmental Responsibility and its implementable schedule with budgetary provisions needs to be resubmitted.

(ix). The onsite emergency plan is not satisfactory as per MSIHC Rules, layout plan of the plant need to be revised.

(x). Consent to Operate for the present Industrial operations needs to be submitted.

The proposal was again considered in the 18th meeting held during 13th-15th April, 2020.The EAC during deliberations noted that the project requires appraisal at the State level as per the Ministry's Notification dated 13th June, 2019, the project/activity as category B. Further, the area is classified as water scarcity area and continuity of ground water supply to the industry is in question and the matter regarding ground water extraction in such area is subjudice in the Hon'ble NGT. The Committee has also noted that there is drastic variation in the existing land area, water balance as stated in the EIA report/presented earlier and now. The Committee has also deferred on the additional points submitted by the project proponent. The Committee after detailed deliberations, again deferred the proposal and insisted for requisite information/clarification with respect to the following:

(i)Categorization of the project (category A/B) and justification for submitting the proposal at the central level.

(ii) Ministry to take necessary Action against the Consultant [M/s Enviro Infra Solutions Pvt. Ltd.] for misguiding the project proponent regarding categorization of the project, if so.

(iii) Revised water balance and zero liquid discharge scheme.

(iv) Alternate water source, if any, and commitment/MoU.

(v) Recalibration of incremental GLCs due to the proposed project.

(vi) Justification for changes in the existing land area details.

(vii) Justification for drastic changes in water balance presented now and earlier. The proposal was there for deferred for the needful. However, if the project falls under Category B, it requires appraisal at the State level.

Additional information as desired during 18th meeting held during 13th - 15th April 2020, information submitted by the project proponent is as under:

S.No	ADS	Reply of PP	Observation of EAC
1.	Categorization of the project (Category A/B) and justification for submitting the proposal at the Central Level	The project proposal was listed under category A and was duly considered by Committee during 20th November 2019 and additional information was sought during 18th Meeting of the Expert Appraisal Committee (industries-2 Sector) held during April 13-15, 2020. Hence in continuation of the proceedings, the case was pleaded. In the light of said facts, we request you to consider our case at Centre level and accord approval.	EAC found the reply satisfactory.
2.	Ministry to take necessary action against the consultant [M/s Enviro Infra Solutions Private Limited] for misguiding the Project Proponent regarding categorization of the project, if so.	Reply/ Reason has been submitted as above with a request to drop the proceedings regarding issue.	EAC found the reply satisfactory.

3.	Revised Water balance and Zero Liquid Discharge Scheme	Revised Water balance and Zero Liquid Discharge Scheme is submitted.	EAC deliberated the issue and found the reply addressing the concerns of the Committee.
4.	Alternate Water Source, if any Commitment/ MOU	Company has obtained NOC recommendations from CGWB for 1490 m3/day of ground water extraction; the same has already been uploaded. Industry approached the concerned Surface water authorities. Authorities intended to supply requisite quantity of water once the ongoing project of Shahpur Kandi Hydel canal is operational. Industry has got conducted the Survey for surface water availability, report which has been submitted. The company intends to opt for Surface water on availability.	EAC deliberated the issue and found the reply addressing the concerns of the Committee.
5.	Recalibration of Incremental GLCs due to the proposed project	Recalibration of Incremental GLCs due to the proposed project is submitted.	EAC found the report satisfactory.
6.	Justification for changes in the existing Land Area details	This was due to calculation mistake, which has now been corrected and we apologize for the same and Undertake that the area now given is correct.	EAC found the reply satisfactory.
7.	Justification for Drastic change in water balance presented now and earlier	The industry took the peak load figures of water consumption in cooling towers, that is during peak summer season, which lasts only for three months, that is April to June only, For the rest of the year consumption is much less.	EAC found the reply satisfactory.

		The industry intends to install MEE with the help of Scrubber Exhaust vapors of DDGS Dryer. This will not only save energy but also will save Condensed water for process use and the same has been reflected in Water Balance submitted. The quantity of water will be equivalent to 370 KLPD of Secondary Condensate. The Dissolved solids in Grain Slurry are increased up to 33% which was considered 30% in earlier calculations. This is possible now due to availability of better Enzymes and increased Process Control We also propose VAM at Fermentation, which will reduce the load on cooling towers and thus water evaporation losses.	

Considering the submitted ADS reply as above, proposal was again placed in 27th EAC meeting held during 30th – 31st December, 2020 to reconsider it. After deliberation, EAC returned the proposal in present form as the EIA consultant did not inform regarding valid accreditation as on date. As per EIA Notification 2006, Consultant should have accreditation by QCI/NABET.

After consideration of clarification provided by project proponent, the proposal was again placed in 30th EAC meeting held on 17th February, 2021.

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

The proposal is for environmental clearance for the Expansion of the grain-based distillery unit from 125 KLPD to 200 KLPD and expansion of cogeneration power plant from 3 MW to 9 MW by M/s Pioneer Industries Ltd. located at A-2(P), A-3 and A-4, Industrial Growth Center, Village Ranipur Pathankot, Punjab.

All grain-based distillery projects (≥200 KLPD) are listed at S. No. 5 (g) of the Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and are appraised at Center level by Expert Appraisal Committee (EAC).

The Terms of References (ToRs) has been issued by Ministry vide letter No. J-11011/127/2016-IA II(I) dated 2nd August, 2016.

Public Hearing for the proposed project has been conducted by the Punjab Pollution Control Board on 14th March, 2019 for Pathankot District and chaired by the Additional Deputy Commissioner, Pathankot. The main issues raised during the public hearing are related to employment and control of pollution. It was informed that no litigation is pending against the proposal.

Ministry has issued the Environmental Clearance earlier vide letter no. J-11011/38/2010-IA II(I) dated 7th December, 2012 to the existing project of 125 KLPD grain based distillery and 3 MW of cogeneration of power in favour of M/s Pioneer Industries Ltd.

The details of products and capacity are as under:

S. No.	Item	Unit	Existing Capacity	Proposed Additional Capacity	Total
1.	ENA/RS/ Impure spirit/ Country spirit/ Denatured spirit/ Fuel Ethanol (Absolute ethanol)	KL	125	75	200
2.	By-products				
	CO_2	MT	100	60	160
	Fusel Oil	MT	2.0	1.2	3.2
	DDGS/Conc. rice protein	MT	130	70	200
	Corn Oil (in case of maize used as raw material)	MT	7	3	10

Existing land area is 171739 sq. meters and no additional land area will be used for the proposed expansion. Industry has already developed green belt in an area of 63327 sq. meters which is more than 33 % of total land area. The estimated project cost is Rs. 214.71 Crores including existing investment of Rs. 162.21 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 10.95 Crores and recurring cost (operation and maintenance) will be about Rs. 2.75 Crores. Total employment will be 250 persons as direct and 100 indirect after expansion. Industry proposes to allocate Rs. 1.25 Crores @ 2.4 % towards corporate social 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 Ravi is flowing at a distance of around 4 kms. in North direction.

Ambient air quality monitoring was carried out at 8 locations during January to March, 2019 and the baseline data indicates the range of concentration as PM10 (40 to 71 µg/m^3), PM2.5 (18 to 37 µg/m^3), SO2 (5.4 to 10.2 µg/m^3) and NOx (11.7 to 23.4 µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLC's after the proposed project would be particulate matter (8 µg/m^3), SO2 (3.5 µg/m^3) and NOx (4.3 µg/m^3). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirements after the proposed expansion will be 1165 m^3/day for 9 months of the year and 1460 m^3/day for 3 summer months of the year. The higher water consumption during summer months is due to the higher evaporation rate in the cooling towers. All the fresh water requirements for the proposed 200 KLPD distillery plant will be met from ground water. The industry has already got the permission from CGWA for the extraction of ground water @ 1490 m^3/day. The industry will generate a total of 1650 m^3/day of condensates including spent lees. Out of this, 800 m^3/day will be directly used in the process for slurry preparation. Remaining condensates @ 850 m^3/day will be treated in condensate polishing unit and reused for cooling tower makeup water. Effluent from misc. streams will be 178 m^3/day which will be treated in ETP and reused within the industrial premises. The industry will install dryers for the handling of DWGS for controlling process odours from the factory.

Power requirements after expansion will be 5000 KVA including existing requirements of 3000 KVA and will be met from in house cogeneration power plant. Existing unit has 3200 KVA D G sets to be used as standby during power failure. Stack height to the D G sets has been provided as per PB norms. Existing unit has 49 TPH biomass/coal fired boilers. Additional 50 TPH biomass/coal fired boiler will be installed. Electrostatic precipitator will be installed as pollution control system to achieve the statutory limit of 50 mg/Nm^3 for the proposed boiler.

Details of process emissions generation and its management:

- Carbon di-oxide shall be collected and sold to authorized vendors.
- ESP shall be installed as air pollution control equipment to prevent dust emissions from boiler.

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

- Solid wastes in the form of boiler ash would be generated @ 70 MT/day which will be given to brick manufacturing units in covered trucks.
- Hazardous waste will include used/spent oils and lubricants. The used oils will be stored in metallic drums inside a lined and covered room and will be, ultimately, sold to the authorized recyclers.

Details of certified compliance report submitted by RO, MoEF&CC vide letter no. 5-65/2005-RO(NZ)/143 dated 07/08/2019 and 5-65/2005-RO(NZ)/Vol.III/16-17 dated 08.01.2020.

EAC during deliberations desired certain additional information to be submitted i.e. affidavit stating that there are no non-complied points in certified EC compliance report along with Certified EC compliance report, action taken report certified by RO, MOEFCC and commitment for fresh water usage at 6.5 KL/KL of alcohol produced. PP has submitted the desired information as above.

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

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and **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 shall not use for green belt development, no waste or treated water shall be discharged outside the premises.

(iii). Total water requirements after the proposed expansion will be 1165 m^3/day for 9 months of the year and 1460 m^3/day for 3 summer months of the year 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 dried to obtain DDGS to be used as cattle feed. Ash/manure shall be packed in 25 kg bags and transported via covered trolleys.

(v). CO_2 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. Fire fighting 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 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. 30.4

Expansion of Grain based distillery from 120 to 240 KLPD & co-generation power plant from 3.5 MW to 8.0 MW within existing

plant premises by M/s Globus Spirits Limited located at Plot no B7, Industrial Park, Panagarh, Tehsil Ausgram- II, District Purba Bardhaman, West Bengal - Consideration of Environment Clearance regarding.

[IA/WB/IND2/196378/2014, J-11011/337/2013-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 of Grain based distillery from 120 to 240 KLPD & co-generation power plant from 3.5 MW to 8.0 MW within existing plant premises by M/s Globus Spirits Limited located at Plot no B7, Industrial Park, Panagarh, Tehsil Ausgram- II, District Purba Bardhaman, West Bengal.

All Non-Molasses based distilleries >200 KLPD are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification dated 14.9.2006 and as amended on 13.6.2019 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The Terms of References (ToRs) has been issued by Ministry vide letter No. J-11011/155/2017-IA II (I) dated 6th November, 2017. Public Hearing for the expansion project has been conducted by West Bengal Pollution Control Board on 12th November, 2020 for Purba Bardhaman District and chaired by the Additional District Magistrate, Purba Bardhaman. The main issues raised during public hearing were related to employment, odour problems, environmental impacts on air & water pollution, benefits to local people, development of nearby villages, plantation, transportation facilities, and medical facilities. It was informed that no litigation is pending against the proposal.

Ministry had issued EC earlier vide letter no. J-11011/ 337/2013-IA II (I) dated 15th May, 2015 to the existing project 120 KLPD Grain based distillery along with 3.5 MW co-generation power plant in favour of M/s Globus Spirits Limited.

The details of products and capacity are as under:

Products	Existing Capacity	Additional Capacity	Total Capacity after expansion
Rectified Spirit / Extra Neutral Alcohol / Ethanol	120 KLPD	120 KLPD	240 KLPD
Power	3.5 MW	4.5 MW	8.0 MW
IMFL & CL Bottling Plant	5,12,000 Cases per month (IMFL 3,12,000 Cases per month	Nil	5,12,000 Cases per month (IMFL 3,12,000 Cases per month

	+ CL 2,00,000 Cases per month)		+ CL 2,00,000 Cases per month)
By-product – CO2 and DDGS (100 TPD)			

Existing land area is 7.61 ha (18.81 acres). No additional land will be required as proposed expansion will be done within the existing plant premises. Industry has already developed greenbelt in an area of 33% i.e. 2.55 hectares (6.3 acres) out of total area of the project and the same will be maintained and made dense in future. The estimated project cost is Rs. 120 Crores for expansion project. Total capital cost earmarked towards environmental pollution control measures is Rs. 20 Crores and the Recurring cost (operation and maintenance) will be about Rs. 2.0 Crores per annum. No. of working days will be 350 days/annum. Total Employment during operation phase will be 446 persons (220 Regular and 226 contract) after expansion. Industry proposes to allocate Rs. 3.0 Crores @ 2.5% of total project cost towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the plant site. Water bodies in 10 km radius study area are 3 rivers – Kukal Nadi (~4.0 km in SW direction), Damodar River (~7.5 km in SW direction) & Kunur Nadi (~9.5 km in North direction); 3 canals – Panagarh Branch Canal (~0.2 km in North direction), Left Bank Main Canal (~5.5 km in WSW direction), Damodar Main Canal (~7.5 km in SSW direction); and 2 seasonal nalas – Kanakhori Khari, Kukua Khal. There are some Protected Forests (PF) viz., Khandari PF, Baradoba PF, Bilaspur PF, Radhaballabpur PF, Premganj PF, Amarargarh PF, Kuldiha PF, Lakshminarayanpur PF, Pratappur PF, Durgapur PF, Babuisol PF, Dombandhi PF, Ramharipur PF, Suta PF, & Bhalki PF within 10 km radius of project site.

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: PM_{10} (61.8 to 92.7 $\mu g/m^3$), $PM_{2.5}$ (28.3 to 50.3 $\mu g/m^3$), SO_2 (5.7 to 17.4 $\mu g/m^3$) & NO_2 (12.8 to 29.3 $\mu g/m^3$). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the expansion project would be 0.384 μg/m3, 0.24 μg/m3, 2.01 μg/m3, 3.11 $\mu g/m^3$ with respect to PM_{10}, $PM_{2.5}$, SO_2 and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

After expansion, total water requirement is 3460 m3/day of which fresh water requirement of 890 m3/day (520 m3/day Distillery process @2.17 KL/KL + 200 m3/day Co-Generation Power Plant + 120 m3/day Bottling Plant + 50 m3/day Domestic & others) will be met from Ground water. After expansion, effluent of 748 m3/day quantity will be treated through Effluent Treatment Plant (Based on Anaerobic, aerobic & filtration system) of capacity 1200 m3/day. The plant is being/will be based on Zero Liquid discharge system.

Total Power requirement after expansion will be 7.0 MW including existing power requirement of 3.0 MW and will be met from 8.0 MW co-generation power plant. Existing unit has 1 DG sets of capacity 1250 kVA, additionally 2 DG sets of capacity 750 kVA & 1250 kVA will be installed and used as standby during power failure. Stack (height 8 m) will be provided as per CPCB norms to the proposed DG set. Existing unit has 35 TPH Coal/rice husk fired boiler. Additionally, 40 TPH Coal/rice husk fired boiler will be installed. ESP with a stack height of 60 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boiler.

Details of process emissions generation and its management:

Source	Emissions	Management
Boiler	Particulate matter, SO_2, NOx	• ESP as air pollution control equipment for existing & proposed boilers. • Adequate stack height (60 m) is being /will be provided. • Necessary temperature profile is being/will be maintained.
Fermentation	Carbon dioxide	Carbon dioxide generated is being/ will be collected by utilizing CO_2 scrubbers and sold to authorized vendors.

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

- Solid waste from the Grain based operations generally comprises of fibres and proteins in the form of DDGS (100 TPD), which are being / will be ideally used as cattle feed. Yeast sludge is being / will be added to the wet cake.
- Ash (120 TPD) from the boiler is being / will be supplied to Cement/brick manufacturers.
- Used oil & grease generated from plant machinery/gear boxes as hazardous waste are being / will be sold out to the CPCB authorized recyclers.

Certified EC compliance report has been obtained by RO, MOEFCC, Bhubaneswar vide letter no. 102-534/EPE/103 dated 19.01.2021 and date of site visit was 27.11.2020.

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 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). Total fresh water requirement for the proposed project will be 890 m^3/day (520 m^3/day Distillery process @2.17 KL/KL + 200 m^3/day Co-generation Power Plant + 120 m^3/day Bottling Plant + 50 m^3/day Domestic & others) 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 dried to obtain DDGS to be used as cattle feed. Ash/manure shall be packed in 25 kg bags and transported via covered trolleys.

(v). CO_2 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. Fire fighting 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 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. 30.5

Additional Exploratory Drilling of 20 wells in KG Offshore (IA, IB & IG, IE and IF) Block in Andhra Pradesh by M/s OIL AND NATURAL GAS CORPORATION LIMITED - Extension in Environment Clearance regarding.

[IA/AP/IND2/196107/2021, J-11011/70/2011-IA- II (I)]

The Proposal is for amendment in the Environmental Clearance (EC) granted by the Ministry vide letter No. J-11011/70/2011-IA II (I) dated 06th March 2014 for Additional Exploratory Drilling of 20 wells located at KG Offshore (IA, IB & IG, IE and IF) Block in Andhra Pradesh in favour of M/s Oil and Natural Gas Corporation Limited (ONGCL).

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

S. No.	EC issued by MoEF&CC	Period of Extension	Justification/ reasons
1.	F. No. J-11011/70/2011-IA II (I) dated 06th March 2014	03 years	EC was obtained for drilling 20 exploratory wells out of which 09 wells were successfully completed. The remaining 11 locations could not be taken up

			as the Geological & Geophysical studies are under progress to analyze the prospectivity of the area. In addition, studies are in progress to understand the subsurface conditions as some identified exploratory locations are of deeper depths with High Pressure and High temperature conditions.

Deliberations in the Expert Appraisal Committee (EAC):

The Expert Appraisal Committee (EAC), after detailed deliberations recommended the amendments in EC as requested by PP to extend the validity for a further period of 03 years i.e. till 05th March, 2024, with all other terms and conditions remain unchanged.

Agenda No. 30.6

Onshore Development and Production of oil & gas from 53 wells in 7 ML blocks by M/s Oil and Natural Gas Corporation Limited located in Jorhat and Golaghat districts, Assam – Reconsideration of Environment Clearance regarding.

[IA/AS/IND2/99149/2019, IA-J-11011/86/2019-IA-II(I)]

This proposal is re-considered in the 30th EAC meeting held on 17th February, 2021 for Environmental Clearance.

The proposal was earlier placed before the EAC (Industry-II) in its 27th meeting held during 30th – 31st December, 2020 wherein EAC deferred the proposal because EAC during deliberations noted that w.r.t Golaghat District, some areas under of East Lakhibari, Golaghat Extn IIA and Golaghat Extn IIA (addl) falls within ESZ of Nambor Wildlife Sanctuary. Also, some parts of East Lakhibari PML, kalyanpur PML, Golaghat Extn IIA (addl) are located within Nambar South Reserved Forest and Rengma Reserved Forest. However, PP has submitted undertaking stating that none of the 53 wells locations under the said proposal fall inside any forest area and 10 kms ESZ of any protected area. PP was not having any concrete evidence to produce or explain whether it attracts clearance related with ESZ.

Subsequently, case was forwarded to ESZ division for their comments/observations on "whether clearance regarding this is required or not". Matter was examined in the Ministry by ESZ division and it was stated that, the final ESZ of Nambor Wildlife Sanctuary, Assam is yet to be notified. In that case, the project proponent needs to adopt the procedure mentioned in the OM of the Ministry vide F. No. 22-43/2018-

IA.III 8th August, 2019 regarding mandatory submission of NBWL clearance application. Accordingly, ADS was issued to PP dated 25th January, 2021 to submit a copy of application submitted to Standing Committee of the National Board for Wildlife (SCNBWL) for NBWL clearance.

Along with it, due to ignorance of the consultant towards the proposal from Wildlife angle and not guiding the project proponent regarding requirement as per OM dated 8th August, 2019 resulting in unavoidable delay in EC process, *Show Cause* notice was also issued to the accredited consultant M/s AECOM India Private Limited on 02nd February, 2021.

After issuance of ADS, project proponent has submitted the reply as given below:

S. No.	ADS	Reply of PP	Observation of EAC
1.	You are requested to submit a copy of application submitted to Standing Committee of the National Board for Wildlife (SCNBWL) for NBWL Clearance to take further necessary action.	➢ In order to ascertain the applicability of NBWL Clearance, ONGC approached Divisional Forest Officer (Golaghat), Assam for issuance of clarifications for the locations in the vicinity of the ESZ area of Nambor Doigrung Wildlife Sanctuary. DFO (Golaghat) has issued NOC regarding well locations not falling in ESZ of Nambor Doigrung Wildlife Sanctuary vide letter No. *B/62/0NGC/EC/GIt.*Divn/2021/57 dated 03.02.2021 wherein it was clarified that 23 well locations do not fall in the ESZ area under Golaghat Division. "*DFO Golaghat stated that the submitted 23 (twenty three) nos of GPS coordinates of well locations are located within Golaghat Division. It is also found that the submitted GPS coordinates of these 23 (twenty three) well locations do not fall within 10 km area from the boundary of Nambor Doigrung Wildlife Sanctuary under Golaghat Division. Hence the said locations do not fall in the Eco Sensitive Zone of Nambor Doigrung Wildlife Sanctuary (as there is no final notification of Eco Sensitive Zone around Narnbor*	EAC deliberated the issue and found the reply addressing the concerns of the Committee.

		Doigrung Wildlife Sanctuary till date, hence under this case as per the guideline of MoEF, the ESZ can be go up to 10 km area from the boundaries of Sanctuary). However, going through the submitted KML file it is found that a part of the East Lakhibari ML block falls in Eco Sensitive Zone of Nambor Doigrung Wildlife Sanctuary i.e. within 10 Kms from the boundary of Nambor Doigrung Wildlife Sanctuary". ➢ Remaining 30 well locations (out of total 53 wells) falling in other 4 ML blocks are considerably far away from ESZ area of Nambor Doigrung Wildlife Sanctuary. ➢ This is in line with our undertaking submitted earlier that none of the 53 well locations under the said proposal fall inside any forest area and 10 KMs ESZ of any protected area.	

Considering the same, the proposal was again placed in 30th EAC meeting on 17th February, 2021 for consideration.

The project proponent and their consultant M/s. AECOM Indian Private Limited 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 Development and Production of oil & gas from 53 wells in 7 ML blocks by M/s Oil and Natural Gas Corporation Limited located in Jorhat and Golaghat districts, 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 ToR for the project was granted by Ministry vide letter No. IA-J-11011/86/2019-IA-II(I) dated 14th April, 2019. Public Hearing for the proposed project was conducted by the Assam Pollution Control Board on 30th September 2020, at Borbali ME School field, Sarupathar, Golaghat and on 20th October 2020 at Borholla, Jorhat respectively. Public Hearing was chaired by the Additional Deputy Commissioner Golaghat and Jorhat respectively. Major issues raised during public hearings included queries on CSR activities like installation of Solar lights, repair of roads and

provision of drinking water, which are already a part of CSR activities of ONGC. ONGC has provided estimated budget and an expected timeline for completion of the activities in response to issues raised in the Public hearing. It was informed that no litigation is pending against the proposal.

The details of products and capacity are as under:

S.No	Product Details	Existing Quantity	Proposed Quantity	Total quantity (Estimated)
1	Development & production well	None	1.76 MMt	1.76 MMt

Total land area of the seven PML blocks is 231.2 sq. km. The estimated project cost is Rs. 1325 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 15 lakh and the Recurring cost (operation and maintenance) will be about Rs. 12 lakh per annum. Total Employment will be 30 persons as direct & 30 persons indirect. Total budget of Rs. 1.7 Crore is kept to address the issues raised during the public hearing. The company shall implement this budget in comprehensive (village-wise) development plan in 130 villages as submitted in Ministry.

PP has reported that there are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, etc. within 10 km distance from the project site. However, some areas under of East Lakhibari, Golaghat Extn IIA and Golaghat Extn IIA (addl) falls within ESZ of Nambor Wildlife Sanctuary. Also, some parts of East Lakhibari PML, kalyanpur PML, Golaghat Extn IIA (addl) are located within Nambar South Reserved Forest and Rengma Reserved Forest. Dhansiri River flows on the western side of the East Lakhibari PML and Kalyanpur PML block boundaries. The river flows on both the eastern and western sides of the Golaghat Extn IIA PML and Golaghat Extn IIA (addl) PML; and the river flows in a highly meandering course within the block along the eastern boundary.

Ambient air quality monitoring was carried out at 8 locations during October 2019 to January 2020 and the baseline data indicates the ranges of concentrations as: PM10 (72.60– 78.00µg/m3), PM2.5 (37.58 – 40.20 µg/m3), SO2 (10.32 – 20.48 µg/m3) and NO2 (17.10- 34.90µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.56 µg/m3, 0.75µg/m3 and 16.0 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 25 m^3/day of which fresh water requirement of 15m^3/day will be met through Tankers. The plant will be based on Zero

Liquid discharge system. Effluent of 20 m^3/day quantity will be treated through installation of Effluent Treatment Plant.

The power requirement during the site preparation and construction phase would be met by 3 Nos. of DG Sets. The power requirement for drilling will be met by using the four Diesel Generator Sets of 750 kVA, 3 working and 1 standby. Stack of 7.7 m will be provided as per CPCB norms to the proposed DG sets. Multi cyclone separator/ bag filter with a stack will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3 for the proposed boilers.

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 through approved waste handling contractors. Recyclable wastes will be periodically sold to authorized local waste recyclers. Hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.

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 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). As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land. 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 CO_2 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 15m^3/day will be met through Tankers. 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 H_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S 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 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.

The meeting ended with thanks to the Chair.

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ANNEXURE

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 Ashok Agarwal	Member
3.	Dr. Y.V. Rami Reddy	Member
4.	Ms. Saloni Goel	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.	Shri Dinabandhu Gouda, CPCB	Member
10.	Shri Sanjay Bist	Member
11.	Sh. Ashok Kr. Pateshwary, Director, MoEFCC	Member Secretary
MoEFCC		
12.	Dr. Harendra Kharkwal	Scientist 'E' (CRZ)
13.	Dr. Mahendra Phulwaria	Scientist 'C'
14.	Sh. Kanaka Teja	Research Assistant
15.	Ms. Meetika Gupta	Research Associate

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