GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-2 SECTOR)
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Dated: 29.06.2021

MINUTES OF THE 36th MEETING OF THE EXPERT APPRAISAL COMMITTEE

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 16th -17th June, 2021

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

(i) Opening Remarks by the Chairman: The Chairman made hearty welcome to the Committee members and appreciated the efforts of the Committee. After opening remarks, the Chairman opened the EAC meeting for further deliberations.

(ii) Confirmation of minutes: The EAC, having taken note that final minutes were issued after incorporating comments received from the EAC members on the minutes of its 35th Meeting of the EAC (Industry-2) held during 02nd -03rd June, 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: -

16th June, 2021 (Wednesday)

Agenda No. 36.1

Proposed laying of LPG pipeline in Kandla–Viramgam–Gandhinagar-Sanand Section of Kandla Gorakhpur Pipeline, District Gandhinagar, Gujarat by M/s IHB limited- Consideration of Environment Clearance reg.

The project proponent and their consultant M/s. Anacon laboratories Pvt. Ltd. Nagpur, 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 Kandla – Viramgam – Gandhinagar - Sanand section of Kandla Gorakhpur Pipeline by M/s IHB LIMITED.

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

The ToR has been issued by Ministry vide letter No. Vide Letter No. IA-J-11011/256/2019-IA-II (I) dated 28/09/2019 and amended ToR dtd. on 24/10/2020. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 05.01.2021 at 11 AM at Survey No.539, Near Ramdevpir Temple, Village-Chhdavada, Tehsil - Bhachau, District – Kutch, Gujarat chaired by Residential Additional District Collector & Additional District Magistrate, Kutch and on 24.02.2021 at 11:30 AM at Survey No. 1358, Village – Khakhrechi, Near IOCL Repeater Station (RCP-3), Tehsil – Maliya, District – Morbi, Gujarat chaired by District Collector & District Magistrate. The main issues raised during the public hearing are related to CSR activities, employment to local public, obstruction to farmer's crop fields etc. It was informed that no litigation is pending against the proposal.

The details of products and capacity are as under:

S. No	Product Details	Proposed Quantity	Total Quantity
1.	LPG Transportation Pipeline	5.10 MMTPA(design capacity)	5.10 MTPA

Total Land Area for proposed pipeline to be acquired is 298 KM (i.e. 298000 m). The industry will develop greenbelt in an area of 33 % around IPS/Pumping Station will be developed with suitable width along the periphery of area. The total plantation area will be 3.86 Ha @1200 nos. of sapling thus total sapling 4632 nos. will be planted. The estimated project cost is Rs. 1400 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 4125 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 55 Lakhs per annum. During construction phase approximately 300 persons will be required to execute the work of laying of pipeline whereas 60 persons will be requiring for operation maintenance and security. Industry proposes to

allocate Rs. 7 Crores @ of 0.5 % towards Corporate Environment Responsibility.

The proposed pipeline stretch is passing through Wild Ass Sanctuary (WLS) area of 80976 sq. m. (8.09760 Ha.) in Kutch and Morbi District whereas, pipeline passing through Eco-sensitive zone is 111850.56 sq. m. (11.1851 Ha) in Morbi and Surendranagar District. The proposed pipeline stretch passing through 1.7998 Ha. of forest land.
1 Total Protected Forest: 0.0493 Ha.
2. Total Social Forest: 1.7505 Ha.

Status of Forest and Wildlife Clearances

Office of Nodal Offier	Proposal No.	Submitted on	Status
Wildlife Clearance			
Wildlife Warden, Gandhinagar	FP/GJ/Pipeline/4850/2020	31.01.2020	Considered in NBWL, formal approval awaited.
Forest Clearance			
Nodal Officer, Gandhinagar	FP/GJ/Pipeline/43270/2019	09.12.2019	Stage-I Clearance Granted. Final clearance awaited
Nodal Officer, Gandhinagar	FP/GJ/Pipeline/44599/2020	17.02.2020	Clearance Granted.

The route of proposed LPG Pipeline passing through different categories of CRZ falling in Kutch district which is based on maps prepared by Institute of Remote Sensing, Anna University, Chennai. Total length of pipeline is 2492 M area is passing through the CRZ area.

CRZ clearance has been obtained by Gujarat Coastal Zone Management Authority dated 9th April, 2021 for proposed Kandla- Viramgam Section and Pipavav Dahej Section of Proposed Kandla Gorakhpur pipeline.

River/ water bodies

Sl. No.	Name of water body	Pipeline Crossing Chainage (km)	Crossing Length (m)	Perennial/ Non-Perennial	Name of village at Crossing	Crossing Direction	Distance
1	Sang River	6.365	13.66	Non-Perennial	Mithi Rohar	Across pipeli	Pipeline is passi

2	Kankavati River	146.728	212.35	Non-Perennial	Ghanad	ne route	ng beneath the water body at 2.5 m depth.
3	Godra Nadi	155.722	60.21	Non-Perennial	Jasmatpur		
4	Saran River	161.658	82.31	Non-Perennial	Satapar		
5	Phulku River	171.103	55.51	Non-Perennial	Wawdi		
6	Chandra Bhaga River	179.069	125.43	Non-Perennial	Vasadava		

Ambient air quality monitoring was carried out at 24 locations during 1st December 2019 to 29th February, 2020 and the baseline data indicates the ranges of concentrations as: PM10 (45.5-84 µg/m^3), PM2.5 (18.8 -32.7 µg/m^3), SO2 (7.4 -20.4 µg/m^3) and NO2 (17.1 -38.6 µg/m^3).

Water consumption will be Max. 20 m^3/day during construction period, and during operations it will be approx. 2.5 m^3/day at each Station. Water will be sourced from Tanker for domestic purposes and tree plantation depending upon the requirements. During construction phase the domestic waste water generated from the construction camp will be discharged through soak pit/septic tank. Similarly, the domestic waste generated from the IPS/Pumping Stations will also be sent to septic tank/ soak pit. The waste water generated during the hydrostatic testing of equipment & pipeline is temporary & one-time activity. The same water will be reused for multiple tests in other sections. The residual hydro testing waste water at the end of test will be non-toxic & disposed off suitably.

Required power shall be drawn from nearest local power source of the state Electricity Boards. DG sets will be kept as standby at stations. The total standby DG sets capacity will range from 25 KVA to 320 KVA, as per requirement at each station.

Details of process emissions generation and its management:

Dust generation from transportation of construction material by road, grading, excavating activities, civil works and movement of vehicle cause reversible impact as these activities are short term. PM, CO, NOx & SOx generation due to operation of DG sets, Diesel engines of machineries and vehicles.

DG Sets will be provided with adequate stack height. HSD will be utilized in the DG Sets. All equipment will be operated within specified design parameters. (Construction and operational phases for all activities). Vehicle trips will be minimized to the extent possible. Any dry, dusty materials (chemicals, etc.) will be stored in closed containers. Compaction of soil during pipeline laying and other construction activities. Dust masks

should be provided to construction workers, while carrying out operations that make entails potential for dust inhalation.

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

Quantity of wastes generated is expected to be 0.2 kg/per capita/day during construction activities (plastics, waste papers and card board, etc). Around 60 Kg/day solid waste will be generated from construction of pipeline route and Station whereas, around 12 Kg/day solid waste will be generated during operation phase. Thus, the total domestic waste generation will be 72 Kg/day along pipeline route. The generated waste will be properly collected, segregated and reused / disposed off appropriately. On completion of construction works, all temporary structures, surplus materials and wastes will be completely removed and land will be reinstated to near its original state. Dumping of construction waste on agricultural land will be prohibited. Only excavated soil will be generated during construction, which will be reinstated to near original condition after laying the pipeline.

The expected type of Hazardous Waste generated at the time of construction will be used oil, chemical & lube oil barrel, batteries, welding electrodes etc and will be disposed as to SPCB authorized recycler/dealer/TSDF sites. Hazardous wastes generated during operational activities in the form of spent oil from DG sets, equipment & pigging waste etc, will be sold to authorize recyclers and drums will be disposed off as per SPCB/CPCB guidelines.

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

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

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations

to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of Environmental Clearance.

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

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

(i). Environmental Clearance is subject to Forest Clearance (as per Forest Conservation Act, 1980), NBWL clearance (The Wildlife Protection Act, 1972) & CRZ Clearance (as per CRZ Notification 2011/2019). Project proponent shall comply with all the conditions stipulated in all the above clearances/NOC issued and commencement of operations shall be done after issuance of all clearances as mentioned above.

(ii). Project proponent shall implement Conservation Plan for Schedule – I species and all other plans related to various clearances within the stipulated time frame.

(iii). Water consumption will be Max. 20 m^3/day during construction period, and during operations it will be approx. 2.5 m^3/day at each Station which shall be met from tanker supply.

(iv). The project authority shall ensure restoration of the Right of Way to preconstruction level as soon as construction activity completed. To ensure prevention of soil erosion, backfilled areas should be properly compacted.

(v). SCADA system shall be installed with dedicated optical fiber based telecommunication link for safe operation of pipeline and leak detection system.

(vi). Intelligent pigging facilities shall be provided for the entire pipeline system for internal corrosion monitoring. Coating and impressed current cathodic protection system shall be provided to prevent external corrosion.

(vii). All the recommendations mentioned in the risk assessment report shall be implemented and Emergency response plan shall be based on guideline prepared by OISD.

(viii). Requisite Onsite and Offsite Disaster Management Plans shall be prepared and implemented.

(ix). The company shall obtain all requisite clearances for fire safety and shall comply with the stipulation made by the respective authorities.

(x). The construction of pipelines through the water bodies shall be avoided during the rainy season/ breading seasons of aquatic animals.

(xi). The riverbed, embankments and dykes shall be restored adequately after installation of crossings.

(xii). For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

(xiii). Annual safety audit shall be carried out for the initial three years by an independent agency (OISD/PNGRB/DGMS etc.) and report submitted to this Ministry for ensuring the strict compliance of safety regulations on operation and maintenance.

(xiv). Pipeline wall thickness and minimum depth of burial at river crossings and casings at rails, major road crossings shall be in conformity with ANSI/ASME requirements.

(xv). The PP shall follow horizontal drilling technique for laying of pipeline while passing through major rivers.

(xvi). The project authorities shall install SCADA/GPS system with dedicated optical fiber based telecommunication link for safe operation of pipeline and Leak Detection System. Additional sectionalizing valves in the residential areas and sensitive location shall be provided to prevent the leaking of gas going to the atmosphere in the event of pipeline failure.

(xvii). The project authorities shall patrol and inspect the pipeline regularly for detection of faults as per OISD/ PNGRB guidelines and continuous monitoring of pipeline operation by adopting non-destructive method(s) of testing as envisaged in the EMP. Pearson survey and continuous potential survey shall be carried out at regular intervals to ensure the adequacy of cathodic protection system.

(xviii). Necessary approvals from Chief Controller of Explosives must be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented.

(xix). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.

(xx). The acoustic chambers/barriers should be provided for individual units wherever feasible in the compressor stations.

(xxi). The workers camp should have arrangement for safe drinking water, hygienic kitchen and sanitation facilities.

Agenda No. 36.2

Expansion of Sugarcane crushing capacity from 2500 TCD to 8000 TCD, establishment of 40 MW Co-generation power plant and 110 KLPD Distillery to produce 110 KLPD Rectified Spirit/110 KLPD (Extra Neutral Alcohol)/105 KLPD(Ethanol) based on "C"/"B" Heavy Molasses/Sugarcane Juice/Syrup/Grains by M/s Yashwant Sugar and Power Private Limited located at Nagewadi, Taluka Khanapur, District Sangli, Maharashtra – Reconsideration of Environment Clearance.

[IA/MH/IND2/199983/2020, IA-J-11011/305/2020-IA-II(I)]

The proposal was earlier placed before the EAC (Ind-2) in its 33rd meeting held during 07th to 08th April, 2021 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

S.No	ADS	Reply of PP	Observation of EAC
1.	Undertaking stating that critically polluted area does not fall within 10 km radius study area.	Undertaking has been submitted.	EAC found the same satisfactory.
2.	Commitment that concentrated spent wash shall be used as fuel in incineration boiler	Commitment in the form of undertaking has been submitted.	EAC found the same satisfactory.

	or dry powder making by ATFD technology and no bio-composting shall be carried out.		
3.	Commitment that ash disposal will be done in brick manufacturing plant proposed within plant premises.	Commitment in the form of undertaking has been submitted.	EAC found the same satisfactory.
4.	Undertaking that no coal shall be used as a fuel and if used then low Sulphur coal shall be used.	Undertaking has been submitted that low sulphur coal will be used in case of short supply of bagasse.	EAC found the same satisfactory.
5.	Assurance that treated effluent of sugar mill shall be used within plant premises only and distillery effluent shall be recycled internally within process itself. As such, no treated effluent shall be discharged outside plant premises.	Commitment in the form of undertaking has been submitted.	EAC found the same satisfactory.
6.	Action plan for greenbelt development @2500 trees per hectares and 5-10 m width with number and name of tree species to be grown.	Detailed action plan for greenbelt development has been submitted @ 2500 trees per hectares.	EAC found the reply in compliance of ADS raised.
7.	Action plan for construction of rainwater collection ponds inside plant premises with details i.e. quantity of rainwater collected, capacity and dimensions of storage pond and their utilization for plant activities.	Rainwater harvesting quantity as 5246.87 m3/annum will be done. A tank size of 100 m x 50 m x 5.5 m shall be made. The collected rainwater will be utilized for greenbelt development/manufacturing process etc. Detailed RWH plan was submitted.	EAC found the reply in compliance of ADS raised.

8.	Revised isopleths to be submitted as per the dominant wind direction and proper direction of plume generated due to incremental concentrations.	Revised isopleths were submitted and presented before EAC.	EAC found the same satisfactory.
9.	Action plan for development of parking area to the tune of 16-18% i.e. more than 15% as already submitted.	Undertaking has been submitted for the same.	EAC desired that 20% of total project area shall be allotted for parking purposes.
10.	Traffic management plan shall be submitted.	Detailed traffic management plan has been submitted.	EAC found the same satisfactory.
11.	OHS (Occupational Health & Safety) budget shall be increased to Rs. 40 Lakhs and activities with allocation of budget shall be submitted.	Undertaking along with detailed breakup of OHS has been submitted.	EAC found it satisfactory.
12.	Proper and detailed risk mitigation plan shall be submitted.	Detailed risk mitigation plan has been submitted.	EAC found the plan satisfactory.

After acceptance of Additional Details Sought Reply submitted by PP on 29th May, 2021, the project was again placed in 36th EAC meeting and following information has been submitted.

The Project Proponent and their accredited consultant Dr. Subbarao Environment Center, made a detailed presentation through video conferencing on the salient features of the project and informed that:

The proposal is for Environmental Clearance to the project Expansion of Sugarcane crushing capacity from 2500 TCD to 8000 TCD, establishment of 40 MW Co-generation power plant and 110 KLPD Distillery to produce 110 KLPD Rectified Spirit/110 KLPD (Extra Neutral Alcohol`)/ 105 KLPD (Ethanol) based on "C"/"B" Heavy Molasses/Sugarcane Juice/Syrup/Grains by M/s. Yashwant Sugar and Power Private Limited located at Nagewadi, Tal. Khanapur, Dist. Sangli Maharashtra.

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

The Standard TORs has been issued by Ministry vide letter No. IA-J-11011/305/2020-IA-II(I); dated 09 Dec. 2020. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 27th Jan., 2021 and chaired by District Magistrate, Sangli. The main issues raised during public hearing were related to water requirement and depletion, air pollution due to coal usage, treatment of spent wash, ash ill-effects and measures to be implemented, treated effluent usage, employment opportunities, industrial effluent treatment and air pollution prevention, odor nuisance. It was informed that no litigation is pending against the project.

EC has not been obtained because at present sugarcane crushing capacity is only 2500 TCD. As per EIA Notification, 2006 there is no requirement of Environment Clearance for sugar industry having sugarcane crushing capacity less than 5000 TCD.

The details of products and capacity as under:

Sr. No.	Unit	Capacity			
		Existing	Proposed	Total	
1.	Sugarcane crushing capacity	2500 TCD	5500 TCD	8000 TCD	
2.	Cogeneration Power Plant	--	40 MW	40 MW	
3.	Distillery	--	110 KLPD	110 KLPD	
	Rectified Spirit or	--	110	110	Only one product at a time
	Extra Neutral Alcohol or	--	110	110	
	Ethanol	--	105	105	

Existing land area is 365500 m^2, no additional land is required for proposed expansion. Industry will develop greenbelt in an area of 35.16% i.e., 128500 m^2 out of total area of the project. The estimated project cost is Rs. 350 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 34.40 Crores and the recurring cost (operation and maintenance) will be about Rs. 2.75 Crores per annum. Total Employment will be 250 persons as direct & 110 persons indirect after expansion. Industry proposes to allocate Rs. 2.625 Crore (0.75%) towards Corporate Environment Responsibility.

As informed, there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Yerala River is flowing at a distance of 5.1 km in North-West direction.

Ambient air quality monitoring was carried out at 8 locations during December 2019 to February 2020 and the baseline data indicates the ranges of concentrations as: PM10 (39.7 – 72.5µg/m3), PM2.5 (21.3 – 42.5µg/m3), SO2 (8.4-30.4µg/m3) and NOx (12.0-31.2µg/m3). AAQ

modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be0.16 µg/m3, 0.10 µg/m3, 2.20 µg/m3 and 0.90 µg/m3 with respect to PM10, PM2.5, SO2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Initially the net water requirement will be 5520 m^3/day, after the production starts the net water requirement will be zero as the entire condensate generated shall be treated and recycled as process water. The domestic water requirements of the distillery unit will be 100 m^3/day. Total net water requirement is 5620 m^3/day initially and after the commissioning of the project fresh water requirement will be 0 m^3/day. Effluent of 988 m3/day (Sugar & Co-generation effluents 423m3/day, Spray pond Overflow 565 m3/day) quantity is generated from the sugar unit. This effluent quantity of 988 m^3/day shall be treated in upgraded sugar ETP. Treated effluent will be recycled for process water in Sugar and Distillery Units and gardening purpose. Spent wash generated from proposed 110 KLPD distilleries shall be 176 m^3/day and the proposed 110 KLPD distillery spent wash shall be treated using concentration and drying to form potash rich manure. The spent wash generated is restricted to less than 2 KL/ KL of alcohol produced for the proposed 110 KLPD Distillery. Other effluents like condensates from MEE 704 m3/day , spent less 220 m3/day, DM plant wastewater 5 KLD, fermenter washings 30 KLD, boiler blow-down wastewater-10 KLD and cooling tower wastewater– 40KLD shall be treated in CPU and treated effluent shall be recycled in process. The plant will be based on Zero Liquid discharge system for distillery effluents.

Power requirement after expansion will be 14500 KVA and will be met from its own proposed 40 MW co-generation power plant. It is proposed to install 2*500 KVA DG Set, Stack height of 6 m above roof level is provided as per CPCB norms for the DG sets. Existing unit has two bagasse fired boilers, 2*17.5 TPH. After the proposed expansion the existing boilers shall be abandoned and 200 TPH of bagasse fired boiler for sugar unit and 30 TPH boiler for distillery unit will be installed. ESP with a stack of height of 80 m shall be provided for both the boilers.

Details of Process emissions generation and its management:

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

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

- Press mud generated will be around 320 MT/D which shall be sold as manure.
- Fly ash generated will be 482.4 MT/M.
- Ash generated shall be used for brick manufacturing in factory premises.
- The total quantity of ETP sludge generated shall be 300 MT/A, which shall be sold as manure.

- Hazardous waste is spent oil of 1.01 MT/Annum shall be utilized in-house for the lubrication of bullock carts.

As per EIA Notification there is no requirement of Environment Clearance for sugar industry having sugarcane crushing capacity less than 5000 TCD. At present sugarcane crushing capacity is only 2500 TCD. Therefore, industries do not require environmental clearance and hence Regional Office, MoEF&CC Monitoring Report is not applicable. However, the certified compliance report of CTO (air and water) from Regional Office, MPCB is submitted.

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

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. 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). Initially the net water requirement will be 5520 m^3/day, after the production starts the net water requirement will be zero as the entire condensate generated shall be treated and recycled as process water. The domestic water requirements of the distillery unit will be 100 m^3/day and sourced from Bhagyanagar Lake. 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. Ground water monitoring shall be done regularly and report is to be submitted to concerned authorities regularly. Rainwater storage ponds shall be constructed and utilized within plant activities as committed.

(iv). The spent wash/other concentrates shall be dried by ATFD technology to form dried powder. Ash shall be utilized within plant premises in proposed brick manufacturing plant as committed.

(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. Budget of Rs. Forty (40) lakhs shall be invested for OHS management.

(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. Greenbelt development shall be 2500 trees per hectares as committed by PP.

(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. Out of the total project area, 20% shall be allotted solely for parking purposes.

(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. 36.3

Proposed Project of Poly Vinyl Chloride (PVC) Paste Resin Plant of 70,000 TPA Plant by M/s Chemplast Sanmar Limited located at Cuddalore, Tamilnadu – Reconsideration of Environment Clearance reg.

[IA/TN/IND2/156565/2020, IA-J-11011/132/2020-IA-II(I)]

The proposal was earlier considered by the EAC (Ind-2) in its 27th meeting held during 28th to 29th December, 2020 wherein EAC deferred the proposal and desired certain requisite information/inputs. Information desired by the EAC and responses submitted by the project proponent is as under:

S.No	ADS	Reply of PP	Remarks of EAC
1.	Details of the NGT issues if any w.r.t the existing project and for the proposed project.	No NGT related issues for existing and proposed project.	EAC found the explanation satisfactory
2.	3D modelling and consequence analysis study and safety plan for the existing and proposed projects.	3D modelling, consequence analysis study and safety plan report for the existing and proposed projects has been submitted.	EAC found the report satisfactory
3.	Revised water balance reducing consumption of fresh water.	As suggested by honorable committee members, fresh water will not be used for greenbelt development. Recycled water of 40 KLD from ETP and 20 KLD from STP will be used for greenbelt development. Revised water balance (including water required by CCVL to produce steam for CSL) has been submitted.	EAC found the explanation satisfactory
4.	Uppanar river is in vicinity of 50m from the project	CRZ Maps and report prepared by approved agency of MoEF&CC namely Institute of Remote	EAC informed that

	site. It is a water body connected to the sea. So applicability of CRZ rules 2011 may be clarified.	Sensing (IRS), Chennai have been submitted. As per the map, 1.8 Acres of project land is coming in No Development Zone (NDZ). Accordingly, CSL has revised its site layout map such that no project related activities will be carried out in the afore-mentioned NDZ and it shall be left in its natural state. Therefore, CRZ clearance is not applicable.	Ministry shall take a decision on this regard.

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

The proposal is for environmental clearance to the project Poly Vinyl Chloride (PVC) Paste Resin Plant of 70,000 TPA at RS No. 70 Part, 71 Part, 74 Part, 75 Part, SIPCOT Industrial Complex Phase-II, Semmankuppam village, Cuddalore Taluka & Cuddalore district, Tamil Nadu by M/s. Chemplast Sanmar Limited.

The details of products and capacity as under:

S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Mode of Transport / Transmission of Product
1	Poly Vinyl Chloride Resin	70,000	TPA	Road

The Standard ToR has been issued by Ministry vide letter No. J-11011/132/2020- IA-II(I); dated 24th July 2020. Public Hearing for the project is exempted as the industry is located in Notified Industrial Area SIPCOT Industrial Complex Phase-II. It was also reported by the PP that there is no litigation pending against the proposal.

The project/activities are covered under category B of item 5(e) 'Petrochemical based processing (processes other than cracking &

reformation and not covered under the complexes)' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to applicability of general conditions (location of the project site in SPA), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The land area available for the project is 48543 m^2. Industry will develop greenbelt in an area of 33% i.e. 16428 m^2, out of total area of the project. The estimated project cost is Rs. 450 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 10.50 crore and the Recurring cost (operation and maintenance) will be about Rs. 1.90 crore per annum. Total Employment will be 450 persons as direct & 820 persons indirect during operation phase. Industry proposes to allocate Rs. One crore fifty lakhs (Rs. 1.50 crores) 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. Uppanar river is flowing at a distance of 0.06 km in East direction

Ambient air quality monitoring was carried out at 8 locations during March, 2018 to May, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (43 µg/m3 to 60 µg/m3), PM2.5 (12 µg/m3 to 23 µg/m3), SO2 (8.69 µg/m3 to 9.21 µg/m3) and NO2 (18.38 µg/m3 20.06 µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 4.79 µg/m3, 0.01 µg/m3 and 1.29 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 1486 m^3/day of which fresh water requirement of 1148 m^3/day will be supplied from M/s Chemplast Cuddalore Vinyls Ltd. (CCVL). Effluent of 320 KLD (300 KLD industrial + 20 KLD domestic) quantity will be treated through ETP & STP. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 7 MW and it will be met from Tamil Nadu Electricity Board (TANGEDCO). 3 DG sets will be used as standby during power failure. Stack (height 30 m) will be provided as per CPCB norms to the proposed DG sets.

No boiler will be installed as steam will be provided by group company M/s Chemplast Cuddalore Vinyls Ltd situated adjacent to the proposed project site.

Details of Process emissions generation and its management:

Flue Gas Stacks

S. No.	Stack Attached to	Capacity	No. of working hrs	Type of Fuel used	Fuel consumption in Hr	Stack Height (m) Provided	Stack Height (m) Calculated as per CPCB Norms[1]	No. of Stacks	Pollutants and control measures
1	DG set - 3 nos	2000 KVA each	Emergency operation (Power failure)	HSD	100 lit/hr each	30 (each)	3.34	3	PM, SOx, NOx Adequate stack height

* Operation only during power failure

Process Vents Details:

S. No.	Stack Attached to	No. of Stacks	No. of working hrs	Stack Height (m)	Pollutants Emitted	Air Pollution Control Measures Attached
1	Vent gas absorption system for VCM recovery	1	Continuous	20	VCM	Stack
2	PVC dryer section-1	1	Continuous	28	VCM and particulate matter	Multiple Bag filters with Adequate stack height
3	PVC dryer section-2	1	Continuous	28	VCM and particulate matter	Multiple Bag filters with Adequate stack height

[1] Stack Height is calculated as per $H = 14(Q)^{0.3}$.

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

S. No	Type of waste	Hazardous waste category	Quantity (Tons per Annum)	Source	Treatment/Disposal
1	Used/Spent oil	5.1	10	Process plant	To authorised recyclers
2	ETP sludge	35.3	400	ETP	Disposal at Tamilnadu waste Management Limited (TNWML) facility at Gummudipondi, authorised agency
3	Evaporator	35.3	500	MEE to ZLD	
4	PVC lumps	22.2	20	Process	

During the deliberations, EAC has been informed that the Ministry has received letters from National Fisher Folk Forum, CPI Cuddalore District Council, Sipcot Area Community Environmental Monitoring, Coconut Farmers Association & Sangolikuppam Paruvadha Rajakula Meenava Krama Panchayat. It was also informed they requested:

i. To recommend conduct of Cumulative impact and risk assessment and form a committee to inspect the project site, and conduct detailed comprehensive study to assess the cumulative social and environmental impacts of every single industry in the SIPCOT Cuddalore area.
ii. Until then, they requested to reject the current EIA and delist the proposal.

EAC opined that Ministry may take decision in this regard. Further, EAC directed that Green Belt shall be increased to 40% and monitoring of compliance of EC conditions may be submitted with third party audit every year as the project is located in a Severely Polluted Area.

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

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. 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). No project related activity shall be undertaken in the CRZ-III (NDZ) area without prior permission from the Competent Authority. It shall be left in its natural state.

(ii). Monitoring of compliance of EC conditions shall be submitted with third party audit every year.

(iii). The company/PP shall ensure that there will be no impact on mangroves plantation present in study area.

(iv). 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.

(v). Total water requirement is 1486 m^3/day of which fresh water requirement is 1148 m^3/day and it is proposed to be met from Chemplast Cuddalore Vinyls Limited(CCVL). 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.

(vi). 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.

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

(viii). 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.

(ix). 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.

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

(xi). 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.

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

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

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

(xiv). The green belt of 5-10 m width shall be developed in more than 40% 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.

(xv). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.

(xvi). The project proponent shall ensure 70% 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.

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

(xviii). 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.

(xix). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.

(xx). PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. 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.

(xxi). 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.

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

17th June, 2021 (Thursday)

Agenda No. 36.4

Expansion of Molasses Based Distillery from 75 KLPD to 120 KLPD using molasses/ sugarcane juice/ sugarcane syrup within the existing Sugar Complex plant premises by M/s. Shri Datta Sakhar Karkhana (A unit of M/s Dalmia Bharat Sugar and Industries Limited) located at Village Asurle-Porle, Tehsil Panhala, District Kolhapur, Maharashtra - Consideration of Environment Clearance.

[IA/MH/IND2/208506/2021, J-11011/305/2016-IA II(I)]

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

The proposal is for environmental clearance to the project under the MoEFCC Notification S.O. 980(E) dated 02nd March, 2021 to the project Expansion of Molasses Based Distillery from 75 KLPD to 120 KLPD using molasses/ sugarcane juice/ sugarcane syrup within the existing Sugar Complex plant premises by M/s. Shri Datta Sakhar Karkhana (A unit of Dalmia Bharat Sugar and Industries Limited) located at Village Asurle-Porle, Tehsil Panhala, District Kolhapur, Maharashtra.

All Molasses based distilleries >100 KLPD are listed at S.N. 5(g) under category "A" of Schedule of Environment Impact Assessment (EIA) Notification dated 14th Sep, 2006 and as amended on 13th June, 2019 and are appraised at Central Level by Expert Appraisal Committee (EAC). As per the MoEFCC Notification S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750 (E) dated 17th February 2020 and S.O. 980(E) dated 02nd March, 2021, a special provision in the EIA Notification, 2006 is made, wherein for all applications made for expansion projects of sugar manufacturing or Distilleries, having Environmental Clearance for present industrial operation and intend to produce ethanol for blending with petrol under EBP Program shall be appraised by EAC or SEAC as per the procedure applicable to Category B2 projects specified under EIA Notification, 2006.

Standard ToR and public Hearing conduction is not applicable as the project falls under category B2 as per OM dated 2nd March, 2021. It was informed that no litigation is pending against the project.
Ministry had issued EC earlier vide letter no. J-11011/305/2016-IA II (I) dated 10th August, 2017 to the existing operational project in favor of M/s. Shri Datta Sakhar Karkhana (*A unit of Dalmia Bharat Sugar and Industries Limited*).

The details of products and capacity are as under:

S. No.	**Unit**	**Product**	**Existing**	**Proposed Additional**	**Total after expansion**	**Remarks**
1.	Distillery	Ethanol/RS / ENA	75 KLPD (Ethanol /ENA/ RS)	45 KLPD (Ethanol)	120 KLPD (Ethanol /ENA/ RS)	Additional increased 45 KLPD capacity will be ethanol (bio fuel) only
2.	Slop Co-generation Power Plant	Power	2.0 MW	Nil	2.0 MW	No change
3.	Sugar Mill	Sugar	9000 TCD	Nil	9000 TCD	No change
4.	Co-generation Power Plant	Power	30 MW	Nil	30 MW	No change

Existing land area is 34.9 hectares (349000 m2). The proposed expansion will be done within the existing plant premises so no additional land is required. Industry has already developed greenbelt in an area of 33% i.e.11.67 ha (116700 m2) out of total area of the project. The estimated project cost is Rs. 27.0 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 10.0 Crores (Bag filter, MEE, CPU and recycling units) and the Recurring cost (operation and maintenance) will be about Rs. 1.0 Crore per annum. No. of working days will be 365 days/annum. Total Employment will be 800 persons (Permanent 489 & temporary 311) during operation phase after expansion. Industry proposes to allocate Rs. 54 Lakhs @2.0 % 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. There are 3 Reserved Forests (RF) and 10 Protected Forests (PF) within 10 km radius. River i.e. Kasari River (1.0 km in SE direction) & Panchganga River (4.0 km in SE direction) are flowing within 10 km radius.

Total fresh water requirement after expansion will be reduced to 1140 KLPD during season and 974 KLPD during off season which will be met from Kasari river. Effluent of 841 KLPD quantity after expansion will be treated through state of art CPU Treatment Plant (Anaerobic, aerobic, Filters & RO system). The plant will be based on Zero Liquid discharge system.

Power requirement for distillery after expansion will be 1.7 MW including existing 1.2 MW and will be met from existing 2.0 MW Co-generation Power Plant & D.G. Sets (for emergency). Existing unit has 4 DG sets of capacity 2x1000 KVA, 500 KVA & 125 KVA which is used as standby during power failure. Stack height (8 m) has been provided as per CPCB norms to the existing DG set. No additional DG set is proposed. Existing unit has 22 TPH boiler in distillery which is concentrated spent wash & coal fired and 120 TPH & 80 TPH boilers are bagasse fired in sugar cogeneration power plant. No additional boiler will be installed. However, 22 TPH boiler will be modified to 26 TPH. For existing 22 TPH boiler, ESP with a stack height of 62 m is already installed for controlling the particulate emissions within the statutory limit.

Details of process emissions generation and its management:

- ESP with stack of adequate height (76m for 120 TPH, 70m for 80 TPH & 62m for 22 TPH) is already installed with the boilers to control the particulate and gaseous emissions as per CPCB guidelines. No new boiler is proposed however the existing 22 TPH boiler will be modified to 26 TPH to meet the steam requirement.
- CO2 generated during the fermentation process sold to vendors.
- Online Continuous Emission Monitoring System has been installed with the existing stack and data transmitted to CPCB/SPCB servers.

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

- Concentrated spent wash (196 TPD) from distillery will be consumed in incineration boiler along with coal as supplementary fuel. Bagasse generated from sugar mill is being/will be used as fuel for power generation in co-generation power plant.
- Press Mud (3500 TPA) generated from sugar mill is/will be given to the farmers as Make-Up Soil conditioner.
- Ash (22 TPD) is being/will be utilized in in-house brick manufacturing facility and balance given to brick manufacturers / cement manufacturing units.
- ETP Sludge is being/will be dried and given to farmers to be used as organic manure.
- Used oil (1 MT/Year) generated from the plant machinery/ gear boxes as hazardous waste is being/will be sold out to the CPCB authorized recycler.

Certified EC compliance Report has been obtained by Regional Office, MoEFCC, Nagpur vide F. No: EC-1265/RON/2021-NGP/7946 dated 17th March, 2021 and site visit was conducted on 22nd February, 2021.

After detailed deliberations, EAC desired certain commitments regarding no discharge of effluent outside plant premises, fresh water usage of three (03) KL/KL for production of alcohol, ash shall be used in brick manufacturing plant inside plant premises. PP has submitted the undertaking for the above points as desired by EAC.

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

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

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

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

(i). 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 after expansion will be reduced to 1140 KLPD during season and 974 KLPD during off season which will be met from Kasari river. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises. Rainwater shall be collected in storage ponds and utilized for plant activities. Ground water monitoring shall be done regularly and report is to be submitted to concerned authorities regularly.

(iv). The spent wash/other concentrates shall be incinerated. Ash shall be utilized within plant premises in brick manufacturing plant.

(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 20% parking space out of total area of plant site which shall be 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.

36.5. Any other items with the permission of the Chair.

Agenda No. 36.5.1

Clarification of applicability of Environmental Clearance for production of the Bitumen Emulsions - 50,000 MTA, Modified Bitumen – 36,000 MTA and Road bond - 1000 MTA the Bitumen Emulsions - 50,000 MTA, Modified Bitumen – 36,000 MTA and Road bond - 1000 MTA from Bitumen by M/s. Hindustan Colas Private Limited located at Malkapuram VPT Industrial Zone in Visakhapatnam, Andhra Pradesh.

Observations and Recommendation of the EAC in 31st, 33rd & 35th EAC (Industry -2) meeting held on 3rd March, 2021, 07-08th April, 2021 & 07th -08th June, 2021 respectively:

In 31st meeting, EAC deliberated on the proposal and clarified that prior Environmental Clearance is required for the production of Bitumen Emulsions, Modified Bitumen and Road bond from Bitumen. Further, EAC decided that the activity falls under category 4(a) [Petroleum Refining Industry] of Schedule of EIA Notification, 2006.

Subsequently, query was raised by competent authorities in Ministry, where the matter was again discussed during 33rd EAC meeting and members deliberated that PP shall be asked to submit the case in order to understand the environmental impact implications in terms of chemical & physical process that is involved in conversion of bitumen to bitumen emulsions etc.

The proposal was again considered in 35th EAC meeting where PP was asked to represent the above query in the form of presentation. In 35th EAC meeting, PP presented the desired information. After detailed deliberations, EAC found that the data presented is not adequate to take any decision regarding requirement of EC. Therefore, committee desired to provide information regarding:

i. Instrumentation diagram/P & ID diagram clearly showing every stage of process and representing micro details related to process.
ii. Mass balance/Energy balance of the process involved.
iii. Environmental implications consisting of emissions, effluents, solid waste, hazardous waste, other pollutants envisaged from each unit of the process involved.
iv. Mitigation measures as per the environmental impacts identified in form of emissions, effluents, solid & hazardous waste etc.

v. Pollution load due to increase in traffic and transportation of vehicles.

After receiving the above detailed information, the clarification case was again placed in 36th EAC meeting on 17th June, 2021 with above points and detailed presentation was carried out by PP.

EAC informed that the process involves high temperature heating of polymer and release of volatile organic compounds. Harmful organic compounds are being released during transportation, handling, storage of styrene etc. Benzene emissions will also be released which are carcinogenic in nature and harmful from point of view of employees working in the premises. It was suggested that certain tests related to these organic compounds shall be conducted for detecting the levels of harmful organic compounds in employees already working in the premises.

Environmental Implications & Mitigation

Emission to Air & its Management:

Sr. No.	Source	Pollutant	Mitigation measure
1.	Thermic Fluid Heaters (10 Lakh Kcal/hr & 6 Lakh Kcal/Hr)	PM, SO_2 & NOx	1. Flue gas emission levels monitored on periodic basis through MoEF approved laboratory & are within the stipulated limits by APPCB. (**Stack emission report dated 01.02.2021 PM-72.6mg/Nm3, S02-52.4 mg/Nm3, NOx36.8 mg/Nm3**) 2. Adequate stack height (30 mtr) provided as per PCB norms. 3. Cleaner fuel (LDO) used in place of FO.
2.	DG sets-3 Nos (400 KVA, 250 KVA & 125 KVA)	PM, SO_2 & NOx	1. Flue gas emission levels monitored on periodic basis through MoEF approved laboratory & are within the stipulated limits by APPCB. (**Stack emission report dated 01.02.2021 PM-62.4mg/Nm3, S02-30.8 mg/Nm3, NOx–41.6mg/Nm3**) 2. Adequate stack height (12 mtr) provided as per PCB norms. 3. Acoustic Enclosures provided

3.	Bitumen storage & processing tanks	H_2S VOC	1. Emission levels are periodically monitored & well within TLV (**10ppm**) at work place. 2. Vertical storage tanks are installed with minimum height of 10 meters from ground. The ground Level concentration of H2S is very insignificant. 3. VOC is regularly monitored and **report dated 12.06.21 VOC 2.5 ppm.**
4.	HCL storage tank	HCL fumes	1. Acidic fumes through tank vent are scrubbed & neutralised. Work place level concentration is evaluated to be negligible (<5ppm.)
5.	Soap tank	Water vapours	1. Soap solution prepared in closed system. 2. Residual vapours vented through ducts at height outside the building.

Pollution Control Measures (Sensors being installed):

1.VOC volatile organic compounds (VOCs) of Measuring Range 1 to to1000 ppm.

2.Toxic Gas detectors to monitor gas as ppm (toxics) with Series Sensors for:

•Oxygen, O2
•Carbon Monoxide, CO
•Hydrogen Sulfide, H2S
•Chlorine, Cl2
•Sulfur Dioxide, SO2
•Ammonia, NH3

3.Combustible Gas Detector -LEL Detection System to monitor combustible gases (methane and others of Lower Explosive Limit (LEL).

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

Hence it is decided that the project requires Environmental Clearance for the production of Bitumen Emulsions, Modified Bitumen and Road bond from Bitumen and the project proponent shall apply for grant of ToRs

followed by conduction of Public Hearing and EC application on PARIVESH portal for such type of proposals.

Agenda No. 36.5.2

Discussion on Standardization/Optimization of conditions w.r.t. Standard Terms of Reference (ToR).

In 35th EAC meeting, EAC members decided to provide their inputs and same was informed by them through mail. The inputs/modifications/up-gradations were incorporated as per the activities enlisted for Industry –II and circulated for approval. During meeting, all EAC members have approved the suggestions and incorporations done and the final document will be forwarded to IA- Policy Division accordingly.

The meeting ended with thanks to the Chair.

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ANNEXURE

GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE

(i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

(ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.

(iii) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

(iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

(v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

(vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZillaParishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

(vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

(viii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

(ix) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

(x) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

(xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

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

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

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