GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-3 SECTOR)

Dated: 17.12.2020

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MINUTES OF THE 2nd EXPERT APPRAISAL COMMITTEE (INDUSTRY-3) MEETING HELD DURING 8-9 DECEMBER 2020

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

Time: 10:00 AM onwards

DAY 1: 8th December, 2020 (Tuesday)

(i) Opening Remarks by the Chairman

The Chairman made hearty welcome to the Committee members and opened the EAC meeting for further deliberations.

(ii) Confirmation of the Minutes of the 1st Meeting of the EAC (Industry-3) held during November 17-19, 2020 at MoEFCC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (industry-3) members on the minutes of its **1st Meeting of the EAC (Industry-3) held during November 17-19, 2020** conducted through Video Conferencing (VC), and as such no request has been received for any modifications in the minutes of the project/activities, 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:-

Consideration of Environmental Clearance

Agenda No. 2.1

Production of Phenol Formaldehyde Resin or Urea Formaldehyde Resin [700 MT], Melamine Formaldehyde Resin [500 MT], located at Survey No. 1763, Village: Vadasma, Taluka& District: Mehsana, (Gujarat) by M/s Holzwood Industries Pvt. Ltd. - Consideration of Environment Clearance
[IA/GJ/IND2/111532/2019, IA-J-11011/230/2019-IA II (I)]

The Project Proponent and the accredited M/s T.R Associates, 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 for production of Phenol Formaldehyde Resin or Urea Formaldehyde Resin (700 MT/Month) and Melamine Formaldehyde Resin (500 MT/Month) at Survey No. 1763, Village: Vadasma, Taluka & District: Mehsana, Gujarat by M/s Holzwood Industries Pvt. Ltd.

The details of products and capacity as under:

S. No.	Name of Product	Capacity per Month	CAS No.
1.	Phenol Formaldehyde Resin	700 MT	9003-35-4
2.	Urea Formaldehyde Resin		9011-05-6
3.	Melamine Formaldehyde Resin	500 MT	82115-62-6
	Total	1200 MT	

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

The ToR has been issued by Ministry vide letter no. IA-J-11011/230/2019-IA II (I) dated 26th August, 2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 5th October 2020. No any major issues raised during public hearing. Majority of question were regarding the employment generation as well as fire and safety provision in the industry, mode of disposal of waste water in the rainy season, regarding the air environment and about peacock conservation.

Total land area is 24,518 m^2; no additional land will be used for proposed project. Industry has greenbelt in an area of 33 % i.e, 8090 m^2 out of total area (24518 m^2) of the project. The estimated project cost is Rs. 245.55 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 46.25 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 90.48 lakh per annum. Total Employment will be 12 persons as direct. Industry proposes to allocate 4.9 Lakhs towards Corporate Environment Responsibility. There is no Sanctuary within 10 km distance from the project site.

Ambient air quality monitoring was carried out at 8 locations during October 2019 - December 2019 and the baseline data indicates the ranges of concentrations as: PM_{10} (66.58 µg/m^3 to 84.32 µg/m^3), $PM_{2.5}$ (35.44 µg/m^3 to 51.24 µg/m^3), SO_2 (9.5 µg/m^3 to 20.78 µg/m^3) and NO_2 (24.69 µg/m^3 to 36.96 µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.03 µg/m^3, 0.005 µg/m^3 and 0.0001 µg/m^3 with respect to PM_{10}, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is estimated to be 31.2 Kl/day, which includes fresh water requirement of 25.5 Kl/day proposed to be met from Bore Well.Effluent of 7.94 KL/day quantity will be treated through Effluent Treatment Plant and reused. There will be no

discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 450 KVA and will be met from Uttar Gujarat Vij Corporation limited (UGVCL). Industry propose one Steam boiler of 3 TPH (fuel: Briquettes (4.5 MT/day)) &D. G. Set of 450 KVA (fuel: LDO (40 Liter/hr).

Deliberations in the EAC

The EAC has made a detailed deliberation on the proposal. **The EAC has been informed that the project proponent proposed to extract ground water for utilization in the unit and their application has been rejected by the CGWA stating the water scarcity in the area. The Committee has noted that the PP and their consultant deliberately hide the information and after pointing out the same by the EAC member, the PP has accepted the same and now proposed for utilization of tanker water supply.**The Committee was of the considered view that even tanker water supply would lead to illegal ground water extraction and PP needs to obtain surface water or water from the authorized dealers.

The Committee has also deliberated on various technical and environmental data deficiencies in the proposal and desired for following additional information/input, as under:

(i) The EAC has been informed that the project proponent proposed to extract ground water for utilization in the unit and their application has been rejected by the CGWA stating the water scarcity in the area. The Committee has noted that the PP and their consultant deliberately hide the information and after pointing out the same by the EAC member. Further, PP reported to the CGWA it is an existing Unit, however PP has applied for EC as a greenfield project, EAC suggested that PP needs to revise the complete EIA/EMP Report along with Form-2.

(ii) Revised Form -2 with complete details of the project.

(iii) Details of existing project, along with copy of CTE/CTO.

(iv) Detailed process flow diagram.

(v) Details of National Park/ESA within 10 km of project area.

(vi) Details of Schedule –I species in in the study area, anticipated impact of the project and its conservation plan.

(vii) Revised water balance and source of water along with permission from the concerned regulatory authority.

(viii) Detailed green belt alongwith species and budget needs to be submitted.

(ix) Public hearing issues, action plan/activities based on public hearing and socio-economic status of the study area.

The proposal was accordingly **returned** in its present form for submission of revised Report.

Agenda No. 2.2

Expansion of Resins and Adhesive Manufacturing unit by M/s Shivam Chemical Industries, located at Plot No. C1B/2501/1, Phase: IIIGIDC Notified Industrial Area, GIDC Vapi,Tal.: Pardi, Dist.: Valsad Gujarat - Consideration of Environmental Clearance

[IA/GJ/IND3/181708/2019, No IA-J-11011/296/2020-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Eco Chem Sales & Services (ECSS) - Surat, 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 of Expansion of Resins and Adhesive Manufacturing unit at Plot No.C1B/2501/1, Phase: III Notified Industrial Area, GIDC-Vapi, Ta: Pardi, Dist.- Valsad, Gujarat by M/s. Shivam Chemical Industries.

The details of products and capacity as under:

S. No.	Product/s	CAS Number	MT/Month			End Use of Product
			Existing	Proposed (Changes)	Total	
1.	Napthol AS	90-15-3	1.0	-1.0	00	The proposed products are especially used in Ink and Paper Coating Medium as per requirement.
2.	Napthol AS BO	1919-91-1	2.0	-2.0	00	
3.	Napthol AS BS	135-65-9	0.5	-0.5	00	
4.	Napthol AS E	92-78-4	1.0	-1.0	00	
5.	Napthol AS D	135-61-5	0.5	-0.5	00	
6.	Napthol AS OL	135-62-6	0.5	-0.5	00	
7.	Ketonic Resin	25054-06-2	00	100.0	100.0	
8.	Polyurethene Resin Or Polyamide Resin	67700-43-0 Or 63428-84-2	00	125.0	125.0	
Total			**5.5**	**219.5**	**225.0**	

The project/activities are covered under category B of item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to applicability of general condition (located within 5 km of CPA), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The project proposal was earlier considered by the State Expert Appraisal Committee (Gujarat) in its 502nd SEAC Meeting held during 02/05/2019 and recommended Terms of References (ToRs) for the Project. The ToR has been issued by SEIAA (Gujarat) vide letter No. SEIAA/GUJ/ToR/5(f)/941/2019; dated 19th June 2019. Public Hearing is exempted as the project site is located in Notified Industrial Area of GIDC Vapi, Gujarat. It is informed that no litigation is pending against the proposed project.

PP reported that M/s Shivam Chemical Industries was started in year of 2000 as a small scale unit. Hence, it was not covered under the provisions of the EIA Notification, 2006. The unit was started with valid CC&A from GPCB.

Existing land area is 1088 m^2, no additional land is required for proposed expansion. Industry will develop greenbelt in an area of 40.07 % i.e.436 m^2 (Existing 78 m^2 + Proposed 358 m^2) out of total area of the project. The estimated project cost is Rs. 235.0 Lakhs including existing investment of Rs. 142.0 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 8.0 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 13.0 Lakhs/annum. Total Employment will be 15 direct & 5 indirect. Industry proposes to allocate 1.86 Lakhs towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, wildlife corridors etc. within 10 km distance from the project site. River Daman Ganga is flowing at a distance of 4.7 km in South West direction.

Ambient air quality monitoring was carried out at 8 locations during March 2019 to May 2019 and the baseline data indicates the ranges of concentrations as: PM_{10} (60.3 – 86.1 µg/m^3), $PM_{2.5}$ (32.0 – 48.9µg/m^3), SO_2 (9.3 – 20.3µg/m^3) and NOx (15.0- 25.4µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.76 µg/m^3 and 2.16 µg/m^3 with respect to SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 15.8 KLD (Existing: 12.5 KLD + Proposed 3.3 KLD), which will be met from GIDC Water Supply.Presently, unit is generating total 7 KLD of industrial effluent, which is treated in existing primary followed by tertiary ETP and finally treated effluent discharge into CETP Vapi through underground effluent drainage line. After proposed expansion, there will be generation of 7 KLD of industrial effluent, which will be treated in existing primary followed by tertiary ETP and finally treated effluent discharged into CETP Vapi through underground effluent drainage line. There will be no discharge of any additional effluent into CETP

Power requirement for the proposed project will be 28 kVA and will be met from Dakshin Gujarat Vij Co. Ltd. (DGVCL). 01 D.G. sets of 100 kVA capacity will be used as standby during power failure. Stack (height 11 m) will be provided as per CPCB norms to the proposed D.G. sets.

Existing unit has 0.3 TPH Natural gas fired Steam boiler. Existing boiler will be utilized for proposed expansion; operating hours will be increased. Additionally, 6 lakhs kcal/Thermic Fluid Heater will be installed. Stack of height of 11 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3 for the proposed boiler.

Presently, there is a generation of HCl/Cl2 pollutant from the reaction. To scrub HCl/Cl2, the unit has provided two stage water followed by alkali scrubber with 11 meters height of chimney. After proposed expansion, there will be no process gas emission.

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

S. No.	Type of Waste	Source	Quantity, TPA			Disposal
			Existing	Proposed	Total	
1.	ETP Waste **(Sch:I/35.3)**	ETP	2.4	00	**2.4**	Collection, Storage, Transportation, Disposal at TSDF, Vapi
2.	Used Oil **(Sch:I/5.1)**	Machineries	0.01	00	**0.01**	Collection, Storage, Transportation, Sell to Registered re-processers
3.	Discarded Containers **(Sch:I/33.1)**	Empty container of RM	0.5	00	**0.5**	Collection, Storage, decontamination & sold to authorized recycler
4	Sludge from Wet Scrubber **(Sch:I/37.1)**	From scrubber	30.0	-30.0	**00**	At existing, it is dispose off into ETP. After expansion, it will be discontinued.

Deliberations in the EAC:

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

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

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the activities/action plan and found to be addressing the issues in the study area. The Committee has also deliberated the activities/action plan and it's mitigation plan with respect to critically polluted area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. 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 noted that the Industry proposed Rs. 1.50 lakhs towards Conservation Plan for Schedule-I species. The Committee has suggested the PP to initiate greenbelt development for abatement of pollution.

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 SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24th October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25th October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.

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

(iii). Treated effluent of 7 cum/day proposed to be discharged to CETP Vapi through pipeline after treatment shall conform to the standards prescribed under the Environment (Protection) Act, 1986. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iv). 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.

(v). The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.

(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). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(x). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.

(xi). Total fresh water requirement shall not exceed 15.8 cum/day proposed to be met from GIDC water supply. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.

(xii). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

(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 highpressure hoses for equipment clearing to reduce wastewater generation.

(xiv). The green belt of at least 5-10 m width shall be developed in nearly 40% 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. PP shall start plantation immediately, as committed.

(xv). As proposed, Industry shall allocate Rs. 1.5 lakhs towards Conservation Plan for Schedule-I species in consultation with State Forest/Wildlife Department.

(xvi). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit.

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

Agenda No. 2.3

Expansion in manufacturing of Metallic Stearate (Wet Process), Metallic and Non Metallic Stearate (Dry Process) and Calcium Phosphate, located atPlot No.: C1-1901/19, 1901/20, Phase III, Notified Industrial Area, GIDC Vapi –396195 Tal.: Pardi, Dist.: Valsad, Gujarat by M/s Harihar Organics Pvt. Ltd.- Consideration of Environmental Clearance

IA/GJ/IND3/181725/2019, File No. IA-J-11011/297/2020-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Eco Chem Sales & Services (ECSS), 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 Expansion of Metallic Stearate (Wet Process), Metallic and Non Metallic Stearate (Dry Process) and Calcium Phosphate (9 TPM to 325 TPM) Manufacturing at Plot No: C1-1901/19, 1901/20, Phase III, Notified Industrial Area, GIDC Vapi. Pin Code: 396195, Tal: Pardi, Dist.: Valsad, Gujarat by M/s. Harihar Organics Pvt. Ltd.

The details of products and capacity as under:

S. No.	Product	CAS Number	Capacity, (TPM)			End Use of Product
			Existing	Proposed	Total	
1.	Metallic Stearates **(Wet Process)**	300-92-5/ 6865-35-6/ 1592-23-0/ 557-04-0/ 557-05-1	9.0	16.0	**25.0**	Paints,Varnishes,Greases/Lubricants,OilDrilling,Cosmetics,Fluxes,Buildings, PrintingInks, Defoamers, Tarpaulins, etc.

2.	Metallic and Non-Metallic Stearates **(Dry Process)**	300-92-5/ 6865-35-6/ 1592-23-0/ 557-04-0/ 557-05-1/ 822-16-2/ 593-29-3/ 2223-93-0	00	200.0	**200.0**	
3.	Calcium Phosphate **(Dry Process)**	7758-23-8/ 7758-87-4/ 7757-93-9	00	100.0	**100.0**	
	Total		**9.0**	**316.0**	**325.0**	

The project/activities are covered under category B of item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to applicability of general condition (located within 5 km of CPA), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The project proposal was earlier considered by the State Expert Appraisal Committee (Gujarat) in its 505th (A) meeting held during 09.05.2019 and recommended Terms of References (ToRs) for the Project. The ToR has been issued by SEIAA Gujarat vide letter No. SEIAA/GUJ/TOR/5(f)/968/2019 dated 25th June 2019. Public Hearing is exempted as proposed expansion is located in Notified Industrial Area of GIDC Vapi. PP reported that the unit has started before year of 2006 with valid CTE & CTO from GPCB as a small-scale unit. It is informed that no Litigation is pending against the proposed expansion project.

Existing land area is 1565.84 m^2, no additional land will be used for proposed expansion. Industry has already developed 375 m^2 and 252 m^2 will develop greenbelt in an area of 40.04 % *i.e.*627 m^2 out of total area of the project. The estimated project cost is Rs. 156.83 Lakhs including existing investment of Rs. 73.83 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 5 Lakhs and the Recurring cost (operation and maintenance) will be about Rs 12.25 Lakhs per annum. Total Employment will be 20 persons as direct &10 persons indirect after expansion. Industry proposes to allocate Rs. 1.66 Lakhs towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Kolak is flowing at a distance of 3.80 km in North direction.

Ambient air quality monitoring was carried out at 8 locations during December 2018 to February 2019 and the baseline data indicates the ranges of concentrations as: PM_{10} (59.8–86.1 µg/m^3), $PM_{2.5}$ (30.5 – 48.9 µg/m^3), SO_2 (8.5 – 17.7 µg/m^3) and NO_2 (14.6 – 22.5 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental

GLCs after the proposed project would be 0.24µg/m^3, 0.01µg/m^3 and 0.92µg/m^3 with respect to PM_{10}, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards. (NAAQS).

Total water requirement is 18 KLD of which fresh water requirement of 18 m^3/day will be met from GIDC Water Supply Department, Vapi. Effluent (Industrial) of 10 KLD quantity will be treated through existing ETP and finally treated effluent will be disposed off into CETP Vapi for further treatment.

Power requirement after expansion will be 150 kVA including existing 100 kVA and will be met from Dakshin Gujarat Veej Co. Ltd. Existing unit has 0.4 TPH Natural gas fired Steam boiler and Natural gas fired 1 Lakh K Cal/h capacity of Hot air generator for Tray dryer. Existing boiler will be utilized for proposed expansion by only increased the operating hours and fuel consumption. Additionally, 3 Lakh K Cal/h capacity of Natural gas fired Thermopack and 3 Lakh K Cal/h capacity of Natural gas fired Hot air generator for SFD will be installed. 11 m stack height is being/will be provided.

Details of Process emissions generation and its management:

Presently, there is one number of Micro Pulveriser having inbuilt Bag Filter. After proposed expansion, there will be installation of one Air Classifying Mill having capacity of 600 kg/h and one Spin Flash Dryer having capacity of 400 kg/h having in built Cyclone Separator and Bag Filter. 11 meters height of vent will be provided.

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

S. No	Type	Source	Quantity, TPA			Disposal
			Existing	Proposed	Total	
1.	Discarded Containers (**Sch:I/33.1**)	Raw Materials	0.3	14.7	**15.0**	Recycled for packing of finished product or sell to Actual/ Authorized Recycler
2	ETP Waste (**Sch:I/35.3**)	Treatment of Waste Water	0.180	0.06	**0.240**	Dispose off into TSDF, Vapi or SEPPL Kutch
3.	Used Oil (**Sch:I/5.1**)	Gearbox of Reactors	0.01	0.0	**0.01**	Sell to Actual/ Authorized Recycler

Deliberations in the EAC:

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

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and

belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has deliberated on the activities/action plan and found to be addressing the issues in the study area. The Committee has also deliberated the activities/action plan and it's mitigation plan with respect to critically polluted area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. 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 noted that the Industry proposed Rs. 1.50 lakhs towards Conservation Plan for Schedule-I species. The Committee noted that the existing unit is in operation before the EIA Notification, 2006 and not requiring prior EC for operations.

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 SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24th October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25th October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.

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

(iii). Treated effluent of 10 cum/day proposed to be discharged to CETP Vapi after treatment shall conform to the standards prescribed under the Environment (Protection) Act, 1986. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iv). 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.

(v). The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.

(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). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(x). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.

(xi). Total fresh water requirement shall not exceed 18 cum/day proposed to be met from GIDC water supply. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.

(xii). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within

the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

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

(xiv). The green belt of at least 5-10 m width shall be developed in nearly 40% 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.

(xv). As proposed, Industry shall allocate Rs. 1.5 lakhs towards Conservation Plan for Schedule-I species in consultation with State Forest/Wildlife Department.

(xvi). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit.

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

Agenda No. 2.4

Establish API manufacturing unit by Mylandlife Sciences Pvt. Ltd., Unit-I, located at Sy. No: 290, Village Dondapadu, Mandal Chinthalapalem, District Suryapet, Telangana - Consideration of Environment Clearance
[IA/TG/IND2/175679/2020, IA-J-11011/299/2020-IA-II(I)]

The Project Proponent and their accredited Consultant M/s. Rightsource Industrial Solutions Pvt. Ltd. has submitted the salient features of the project.

The proposal is for environmental clearance to the project for Establishing API manufacturing unit by M/s Mylandlife Sciences Pvt. Ltd., Unit-I, located at Sy. No: 290, Village Dondapadu, Mandal Chinthalapalem, District Suryapet, Telangana.

The project/activities are covered under Category ‘B2’of item 5 (f) ‘Synthetic, Organic Chemicals Industry‘of the Environment Impact Assessment (EIA) Notification, 2006, as amendment on 27-03-2020. Due to applicability of general condition (interstate boundary

within 5 km), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Deliberations in the EAC:

The EAC has deliberated on the proposal. The Committee noted that the land has not been converted for Industrial purpose, and even the process has not been initiated by the project proponent. The Committee is of the opinion that possession of land in the name of Unit and its conversion from agricultural to industrial purpose is most essential document for appraising the proposal for grant of environmental clearance as per the provisions of the EIA Notification, 2006, as the EC is site specific. The EAC has advised the PP to first submit the land conversion document and the instant proposal be considered immediately.

*The **proposal was accordingly returned in present form** for the needful by the project proponent.*

Agenda No. 2.5

Establish API manufacturing unit by M/s Mylandlife Sciences Pvt. Ltd. Unit-II located at Sy. No:290, Village Dondapadu, Mandal Chinthalapalem, District Suryapet, Telangana, - Consideration of Environment Clearance
[IA/TG/IND2/175689/2020, J-11011/175/2016-IA-II(I)]

The Project Proponent and their accredited Consultant M/s. Rightsource Industrial Solutions Pvt. Ltd. has submitted the salient features of the project.

The proposal is for environmental clearance to the project for API manufacturing unit by M/s Mylandlife Sciences Pvt. Ltd. Unit-II located at Sy. No:290, Village Dondapadu, Mandal Chinthalapalem, District Suryapet, Telangana.

The project/activities are covered under Category 'B2'of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the Environment Impact Assessment (EIA) Notification, 2006, as amendment on 27-03-2020. Due to applicability of general condition (interstate boundary within 5 km), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Deliberations in the EAC:

The EAC has deliberated on the proposal. The Committee noted that the land has not been converted for Industrial purpose, and even the process has not been initiated by the project proponent. The Committee is of the opinion that possession of land in the name of Unit and its conversion from agricultural to industrial purpose is most essential document for appraising the proposal for grant of environmental clearance as per the provisions of the EIA Notification, 2006, as the EC is site specific. The EAC has advised the PP to first submit the land conversion document and the instant proposal be considered immediately.

*The **proposal was accordingly returned in present form** for the needful by the project proponent.*

Agenda No. 2.6

Installation of 2nd Catalytic Iso-Dewaxing unit of capacity 270 TMTPA by M/s Haldia Refinery of Indian Oil Corporation Limited at East Medinipur, West Bengal- Consideration of Environmental Clearance.

[IA/WB/IND3/182392/2017, J-11011/175/2016-IA-II(I)]

The Project Proponent and their accredited Consultant Mantec Consultants Pvt. Ltd., has 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 for Installation of 2nd Catalytic Iso-Dewaxing unit by M/s Haldia Refinery of Indian Oil Corporation Limited at East Medinipur, West Bengal.

The details of products and capacity as under:

Augmentation of API Group-II & III Lube Base Oil (LBO) production with the capacity of 270 TMTPA. Proposed CDWU-II facilities comprise the following-

S. No.	Facility	Capacity
1	Catalytic Dewaxing Unit – II	270 TMTPA
2	New Offsite, Auxiliary Facilities & Unit interconnecting piping & System	-

Product streams:-

- Lube Base Oils (API Grade II LOBS, 70N) – 70N Cases
- Lube Base Oils (API Grade II LOBS, 70N) – 4 cSt Cases
- Lube Base Oils (API Grade II LOBS, 70N) – 6 cSt Cases
- Lube Base Oils (API Grade II LOBS, 70N) – 8 cSt Cases
- Lube Base Oils (API Grade III LOBS, 4 cSt / Light LOBS)
- Lube Base Oils (API Grade III LOBS, 6 cSt / MiddleLOBS)
- Lube Base Oils (API Grade III LOBS, 8 cSt / Heavy LOBS)

By products:

The major by-products include:

- Stabilized Naphtha (C5-149° C)
- Light Distillate, HSD (149-371° C) – DFC1&2-70N
- Light Distillate, HSD (149-371° C) – DFC1-4CST

- Light Distillate, HSD (149-366° C) – DFC2-4CST
- Light Distillate, HSD (149-371° C) – DFC1&2-6CST
- Light Distillate, HSD (149-335° C) – DFC1-8CST
- Light Distillate, HSD (149-371° C) – DFC2-8CST

Additional by-products include:-

- Product Stripper Off Gas
- Sour Water Degasser Off Gas
- Sour Water
- Vacuum System Off Gas
- Vacuum System Slop Oil

Also included are product specifications for the following:-
- Transformer Oil
- Light White Oil
- Medium White Oil

The project/activity is covered under category "A" of items 4(a) "Petroleum Refining Industry" of the Schedule the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.

PP has informed that the Ministry has earlier issued ECs vide letter no. J-11011 / 34 / 88-IA dated 16.03.1986 J-11011/39/96- IA II (I) dated 18.12.1996, J-11011/99/96-IA II(I) dated 01.10.1997, J-11011/28/2000-IA.II dated 21.08.2000, J-11011/5/2002-IA II (I) dated 01.05.2002, J-13011/ 14/2006-IA.II(T) dated 05.01.2007, J-11011/422/2006-1A II(I) dated 06.03.2007, J-11011/299/2013-IA II (I) dated 04.03.2016, J-11011/175/2016-IA-II(I) dated 28.11.2017 to M/s Indian Oil Corporation Limited, located at Haldia Refinery, Haldia (West Bengal).

The Certified compliance report submitted by the Ministry's Eastern Regional office at Bhubaneswar vide letter dated 15.09.2020. The Committee deliberated the compliance status of earlier EC submitted by PP and found in order. It was informed that there is no litigation pending against the project.

PP reported that the existing land area is 5300 m^2. Plantation will be done as per Central Pollution Control Board (CPCB) Norms & in consultation with the DFO/DM. Tree plantation has been organized in the past in consultation with Haldia Development Authority(HDA) and Haldia Municipality in and around Haldia region.

PP reported that in all previous year's tree plantation in nearby region of the Haldia Refinery has been done and so far Haldia Refinery has planted 68000 trees around the Haldia region of which 6000 trees were planted in year 2019. The EAC advised the project proponent that the green belt and plantation shall be in project mode and shall be completed within 6 months and a compliance report needs to be submitted to RO MoEFCC.

The Public hearing of proposed proposal was conducted on 12.10.2020 by West Bengal Pollution Control Board, which was presided over by Additional District Magistrate. Main issue raised in the Public Hearing was, proposal for reduction of SO_2 emission, treatment facilities for liquid effluent generated and any possibility of effluent leakage from the refinery etc..

The proposed estimated project cost will be Rs.967.00 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.26 Lakhs and the Recurring cost (operation and maintenance) is approx. Rs.3 Lakhs per annum. Total Employment will be for 22 numbers for the proposed CDWU-II Project which includes Production, Maintenance and Technical services persons. PP earmarked Rs. 614 lakhs towards Corporate Environment Responsibility activities.

There is no National Park, Sanctuary, Elephant / Tiger Reserve, migratory routes and wildlife corridor within 10 km radius around the Haldia Refinery. The area does not contain any type of forest.

Various Environmental factors existing in the study area which are liable to be affected by the activities have been assessed both quantitatively and qualitatively. Baseline environmental data generation of study area was carried out during the period from 1st March to 31st May 2020.

Parameters	No. of Sites	Description	Permissible Level
Air Quality	8	PM_{10} - 45.60 μg/m^3 and 122.0μg/m^3 $PM_{2.5}$ - 27.36μg/m^3 to 73.20 μg/m^3 SO_2 – 4.0.0 μg/m^3 to 26.0 μg/m^3 NO_2 –14.0 μg/m^3 to 36.33μg/m CO – 0.34μg/m^3 to 1.86μg/m^3	100 μg/ m^3 60 μg/ m^3 80 μg/ m^3 80 μg/ m^3 2 mg/ m^3
Ground Water Quality	8	pH - 7.34 to 7.74 Hardness - 268 to 512 mg/l TDS - 599 to 830 mg/l.	6.5-8.5 200-600 mg/l 500-2000 mg/l
Surface Water Quality	8	pH - 7.26 to 7.72 Hardness - 190 to 522 mg/l. TDS - 301 to 144 mg/l BOD - 4 to 6 mg/l. COD - 8 to14 mg/l.	---
Soil Quality	8	pH - 6.48 to 7.62 Nitrogen - 13.5 to 15.8mg/100gm Organic Matter - 1.84% - 2.84%.	---
Noise Level	8	Noise Level (Day) - 46.8-72.5 Leq dB (A) Noise Level (Night) - 37.8-56.4 Leq dB(A)	75 Leq dB (A) 70 Leq dB (A)

The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS) except PM10 & PM2.5.

M/s IOCL will develop various management activities for the Environmental Management Program which will meet all statutory requirements and help to improve quality of environment. In order to improve the aesthetic look of the area and enhance the land use as well as to compensate for any loss in ecology during construction, adequate plantation program around Haldia Refinery have been planned and will be adopted. A detailed monitoring plan for different environmental parameters will be carried out as per direction of State Pollution Control Board. A dedicated Health Safety & Environment department exists in Haldia Refinery to look after implementation of environment management plan.

PP reported that additional 408 KLD raw water shall be required which will be supplied from Haldia Development Authority. Power requirement of 1.3 MW, which will be met from State Grid.

Deliberations in the 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 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 satisfactory for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards except PM10 & PM2.5. The committee deliberated the action plan for the reduction of particulate matter in the area. The committee recommended to prepare action plan for plantation and budget allocation for issue raised during the PH and green belt development. The Committee has found the information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee.

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 earlier EIA/EMP report and updated in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iii). 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.

(iv). The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18th March, 2008 and G.S.R.595(E) dated 21st August, 2009 as amended from time to time, shall be followed.

(v). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. For emission control and management, use of FG/NG in heater as fuel, adequate stack height, use of Low NOX burners in heater & boiler, continuous stack monitoring, Sulphur recovery plant, etc. shall be installed/ensured.

(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). Process safety and risk assessment studies shall be carried out using advanced models in repeated intervals, and the mitigating measures shall be undertaken/implemented accordingly.

(viii). The storage of toxic/hazardous raw material/products shall follow all the safety norms and best practices to avoid any leakage/explosion/emissions. 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). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(x). Total additional fresh water requirement shall not exceed 408 KLD proposed to be met from Haldia Development Authority. Necessary permission in this regard shall be obtained from the concerned regulatory authorities, and renewed from time to time.

(xi). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

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

(xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.The greenbelt shall be developed/planted within in 6 months and a compliance report needs to be submitted to RO MoEFCC.

(xiv). The activities and the action plan proposed by the project proponent to address the public hearing and socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit.

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

Agenda No. 2.7

Proposal to establish manufacturing of Formaldehyde (37%) – 100 TPD Phenolic Formaldehyde Resin – 20 TPD and Melamine Formaldehyde Resin– 20 TPD by M/s Leo Synthetic Co. located at survey no. 541 and 542 of village - Elikatta, Mandal- Farooq Nagar, District – Ranga Reddy, Telangana - Consideration of Environment Clearance

[IA/TG/IND2/74645/2018, IA-J-11011/146/2018-IA-II(I)]

The Project Proponent and their accredited Consultant M/s Vison Labs, gave a detailed presentation on the salient features of the project through video conferencing (VC) and informed as:

The proposal is for Environmental Clearance to the project for establish manufacturing of Formaldehyde (37%) – 100 TPD Phenolic Formaldehyde Resin – 20 TPD and Melamine Formaldehyde Resin– 20 TPD by M/s Leo Synthetic Co. located at survey no. 541 and 542 of village - Elikatta, Mandal- Farooq Nagar, District – Ranga Reddy, Telangana.

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

The details of products and capacity as under:

S.No.	Names of the proposed products	Capacity in TPD
1	Formaldehyde (37%)	100
2	Phenolic Formaldehyde resin	20
3	Melamine Formaldehyde resin	20

The ToR has been issued by Ministry vide letter No. IA-J-11011/146/2018-IA-II(I) dated 01.06.2018. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 3rd December, 2019 which was presided over by the Revenue Divisional Officer. The main issues raised during the public hearing are related to air, water pollution and employment. It was informed that no litigation is pending against the proposal.

Total land area is 4875.5 sqm will be used for proposed project. Industry will develop greenbelt in an area of 2165.5 sqm. Green belt development will cover 44.4% of the total project area covering all along the periphery and along the approach roads. A capital cost provision of Rs.1,80,000/-has been kept for development of greenbelt.

The proposed project cost is about Rs.250 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs.29.8 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 3.3 Lakhs per annum. Total Employment will be 20 persons. The CER amount of Rs.5.4 lacs will be spent for various development activities in the nearby villages. The amount will be spent for up-gradation of educational and medical facilities, sanitary facilities, drinking water facilities, road development and plantation works, etc.It is reported that no national parks, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. lies within 10 km distance.

Ambient air quality monitoring was carried out at 8 locations during October 2018 to December 2018 and submitted baseline data indicates that ranges of concentrations of PM10 (24.4 - 64.7 µg/ m^3), PM2.5 (12.5 - 32.5µg/ m^3), SO2 (4.0-12.4 µg/ m^3), NOx (7.5 - 23.6 µg/ m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be PM10, PM2.5, SO2 & NOx would be 0.2µg/m3, 0.1µg/m^3, 0.7µg/m^3&0.5µg/m^3 respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NQQS).

The total water requirement is 83 KLD of which fresh water requirement is 80 KLD and will be met from local suppliers. Plant will be based on Zero Liquid Discharge System.Power requirement will be 200 KW and will be met from TSPDCL. Unit will install 200 kVA DG set Stack will be provided as per CPCB norms to the proposed DG sets.1 TPD Coal/ Fuel briquette fired boiler is proposed with stack of height 30 mtrs, Bag Houses will be installed to the control the emissions from the boiler (within statutory limit of 115 mg/ Nm^3). PP will utilize Coal / White Coal Fuel.

Details of Process emissions generation and its management: To control the emission through stack attached to the boiler as well as other sources, adequate Pollution control equipment like bag filter will be installed, Fugitive dust emission will be controlled through Scrubber for process emission, Regular water sprinkling will be attended, Regular monitoring.

Two stage water scrubbers followed by stage acidic scrubber will be installed to the stack attached to reaction vessel to recover methanol and Process stack with Adequate Stack height.

Details of Solid waste & Hazardous waste generation and its management: Solid / hazardous waste generated due to proposed production activity will be stored separately in Hazardous Waste storage area within the industry premises. It will have nonpercolating RCC floor and covered roof. Regular monitoring of soil will be done as per Environmental Monitoring Plan. The greenbelt development will significantly help to protect the soil from erosion and contamination by preventing the airborne dust to travel to longer distances from the source.

The generated Hazardous waste will be stored in designated storage area on site-secured closed area that offers protection from sun & rain fall, spreading of leach ate, mixing of wastes etc. with the display board. Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will be sent to the CPCB authorized recycler/ Sent to Authorized vendor. Waste will be properly packed &labelled and will be transported through dedicated vehicle. Hazardous waste will not be stored for a period more than 90 days. Records of the same will be maintained. In case of Fuel/Material Spill and leakage control/action plan for prevention of contamination of land will be follow. Regular training will be given to employees engaged in solid waste management works.

Deliberations in the EAC:

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

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be

rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/hazardous raw material shall be bare minimum in quantity and inventory.

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). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

(iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iv). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(v). 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.

(vi). 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.

(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). Total fresh water requirement shall not exceed 80KLD, proposed to be met from local suppliers. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(ix). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

(x). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(xi). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

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

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

(xiv). The activities and the action plan proposed by the project proponent to address the public hearing and socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit.

(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 ZLD, 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.2.8

Expansion of Sugar Mill (7000 TCD to 12,000 TCD) and Co-generation Power Plant of 33 MW to 37 MW at Hoshiyarpur, Punjab by M/s A B Sugars Ltd. - Consideration of Environmental Clearance

[IA/PB/IND3/183665/2017, J-11011/764/2007-IA II (I)]

The Project Proponent and the accredited Consultant M/s PerfactEnviro Solutions Pvt Ltd 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 for Expansion of Sugar Mill from 7000 TCD to 12000 TCD and Cogeneration Power plant from 33 MW to 37 MW at Village-Randhawa, Tehsil – Dasuya, District- Hoshiarpur, Punjab by M/s A.B. Sugars Limited.

The details of products and capacity as under:

A. SUGAR

S. No	PRODUCT	Existing Qty. (Tonnes/day)	Proposed Qty. (Tonnes/day)	After Expansion (Tonnes/day)
1	L Quality Sugar (31)	77	55	132
2	M Quality Sugar (31)	616	440	1056
3	S Quality Sugar (31)	77	55	132
	Total	**770**	**550**	**1320**

B. CO- GENERATION POWER PLANT

PRODUCT	Existing (MW)	Proposed (MW)	After Expansion (MW)
Export Power	23	-	23
Captive Power	10	4	14
Total Power Generation	**33**	**4**	**37**

The project/activities are covered under category B of item 5(j) 'Sugar industry' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to non-existence of SEIAA/SEAC Punjab, the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The TOR (Terms of Reference) had been granted to the project by SEIAA/SEAC Punjab vide TOR letter number., SEIAA/2018/452 dated 09.04.2018. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 28.09.2018. The main issues raised during the public hearing are related to odour problems, employment opportunities and traffic issues on the existing road. It is informed that no litigation is pending against the proposal.

The existing project has been granted environmental clearance vide letter no J-11011/764/2007-IA.II(I) dated 03.06.2010 by MoEF&CC for the capacity of 7000 TCD and cogeneration power plant of 33 MW. The unit has valid consent to operate from Punjab Pollution Control Board (PPCB) vide consent order no. R14HSPCTOW1408673 valid up to 19.09.2022 and is fully compliant and committed. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 28.09.2018. The main issues raised during the public hearing are related to odour problems, employment opportunities and traffic issues on the existing road. Certified compliance report has been granted to the project on 15th June 2020 vide letter no 5-122/2008-RO(North Zone)/247-279 by RO, MoEF&CC.

The project is for expansion of an existing Sugar Mill on the same plot area i.e., 6,87,966 sqm or 170 acres (Sugar Mill area-59 acre). A Distillery Unit of 24 acres is present within the 170 acre land for which separate Environmental Clearance have been taken and due considerations were taken care while carrying out baseline study and assessing impact.

Industry has already developed greenbelt in an area of 32.3 % i.e., 55 acres out of the total area of 170 acres for the project. The green area after expansion will be 36.4% i.e. 62 acres out of the total area of 170 acres. Moreover, 4 acres nearby land has been recently purchased by M/s AB Sugars Ltd and this land shall be utilised for green belt development.

The estimated cost of expansion project is Rs. 170 crores and the total project including existing investment of Rs. 208 crore shall be Rs. 378 crores. Unit shall spend a total of Rs 656 lakhs towards capital expenses earmarked towards environmental pollution control measures and the Recurring cost towards protection of environment (operation and maintenance) will be about Rs 72 lakhs per annum.Existing unit employs 217 workers and after expansion, the total manpower will be 250. The Industry proposes to allocate 127 lakhs for the expansion part towards social activities like improvement in infrastructure of schools; medical checkup for locals etc.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. However, the Drain Near Rice Mill is the nearest waterbody flowing at a distance of 0.77 km South direction.

Ambient air quality monitoring was carried out at 8 locations during October 2017 - December 2017 and again collected between 15th March 2018 - 15th April 2018. The baseline data

indicates the ranges of concentrations as: PM_{10} (61-120.9 µg/m^3), $PM_{2.5}$ (28.1-51.8 µg/m^3), SO_2 (6.2-13.8 µg/m^3) and NO_2 (15.8-33.3 µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.605 µg/m^3, 0.514 µg/m^3 and 2.57 µg/m^3 with respect to PM_{10}, SO_2 and NO_2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS)

In the Existing phase, the total water requirement is 6166 m^3/day out of which 859 m^3/day is the freshwater demand. After Expansion, total water requirement after expansion will be 7729 m^3/day, out of which fresh water requirement of 608 m^3/day will be met from Bore well.

In Existing unit, 2034 KLD industrial wastewater will be treated through existing 3500 KLD ETP Capacity. The unit is complying zero liquid discharge (ZLD) norms After expansion, total effluent of 1114 KLD quantity will be treated through 3500 KLD ETP Capacity and the plant shall remain ZLD unit.

Power requirement after expansion will be 13,500 KW including existing 9,000 KW and will be met from In House Co-Generation Power Plant. For Power backup 1x500 kVA and 1x725 kVA Existing (Fuel-HSD) are used as standby during power failure. Stack (height-6 m above the shed height) has been provided as per CPCB norms to the DG sets.

Existing unit has 80 TPH, 32 x 2nos TPH & 120 TPH bagasse-based boilers and no additional boilers shall be proposed.

Details of Process emissions generation and its management is given below.

S. No.	Existing Air pollution sources	Type of fuel	Fuel Qty.	Pollution control measures	Chimney height AGL	MOC
1	80 TPH boiler	Bagasse	37 TPH	Wet Scrubber	Height - 50 Mts stack AGL Dia – 2.0 m	MS
2	2 x 32 TPH boiler	Bagasse	30 TPH	Wet Scrubber	Height - 50 Mts stack AGL Dia – 2.0 m	MS
3	120 TPH Boiler	Bagasse	47 TPH	ESP	Height - 65 Mts stack AGL Dia – 2.5 m	MS
4	500 kVA-Standby DG SET	HSD	100 l/hr	-	6 Mts stack AGL	MS
5	725 kVA-Standby DG SET	HSD	150 l/hr	-	6 Mts stack AGL	MS

Details of Solid waste/ Hazardous waste generation and its management is given below:-

Solid Waste Management:

Category	Type of Waste	Colour of Bins	Disposal Method	(Existing) Total Waste (kg/day)	Additional Proposed waste (kg/day)	(After Expansion) Total Waste (kg/day)
Bio-Degradable	Organic Waste (Includes Food & Kitchen Waste, Leaves etc.)	Green	To solid waste disposal site	24	4	28
Non-Biodegradable	Recyclable Waste (Includes Poly-bags, Plastic, wood, paper, glass, containers etc.)	Blue	Approved Recycler	10	2	12
	Total			**34 kg/day**	**6 kg/day**	**40 kg/day**

Process waste

Process Waste	Existing (Tonnes/day)	Additional Proposed (Tonnes/day)	Total after expansion (Tonnes/day)	Disposal Method
Bagasse	1960	1400	3360	Used as fuel in Boiler for producing Steam.
Ash Content	29	21	50	Ash is being given to the contractor for disposal at the farmer's field. Same shall be followed after expansion.
Molasses	315	225	540	Used in existing Distillery for Alcohol Production present in the premises.
Press Mud/Filter Cake	294	210	504	It shall be sold out to the farmers and brick manufacturers. It shall not be kept in the premises.

Hazardous Waste

Name of Process	Name of Process Waste	Existing Quantity	Additional Proposed Quantity	Total Quantity after Expansion	Disposal Method

Industrial operations using mineral/ synthetic oil as lubricant in hydraulic systems (Schedule I)	Used/spent oil	15 litre/month	-	15 litre/month	It shall be disposed in leak proof container & disposed to authorized common collection centre provided the oil meets the standards as per schedule -5 Part A rule
Purification and treatment of exhaust air, water and waste water from the processes in this schedule and CETPs (Schedule I)	Chemical sludge from wastewater treatment	1100 kg/day	-	1100 kg/day	Horticulture Development

Boiler Ash is being given to the contractor for disposal at the farmer's field. Same shall be done after expansion.No major emissions are envisaged; The Process emissions are controlled by providing closed circuit for production.To avoid odour of Press mud, shall directly send to the brick manufacturers & farmers without storing in the premises.The spent wash from the distillery will be taken into a multiple effect evaporator and it will be converted into a high calorific slurry which will be used in the boiler as fuel. Therefore, there will be no odour problem from the project.

Deliberations in the 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 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 report is satisfactory 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 and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and found to be addressing the issues in the study area. The Committee has also deliberated the certified compliance report of earlier EC conditions and

found in order. The Committee was of the considered view that the PP should have submitted integrated project of Sugar and Distillery for appraisal. The Committee suggested that ZLD shall be achieved in letter and spirit and no treated effluent shall be discharged to the project area or for horticulture development, in turn, it shall be utilized in the Distillery unit. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee.

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

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

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

(i). 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 EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities in the sugar unit and in the Distillery unit. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture in the project area.

(iii). Total fresh water requirement shall not exceed 608 cum/day proposed to be met from bore well/ground water source. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.

(iv). 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.

(v). 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 highpressure hoses for equipment clearing to reduce wastewater generation.

(vi). 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.

(vii). The activities and the action plan proposed by the project proponent to address the public hearing and socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit.

(viii). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

(ix). 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.

(x). Project Proponent shall reduce the quantity of effluents generation in the unit and PP shall install the effective wastewater treatment system. Adequate system shall be in place for controlling the odour and mitigation measures to protect the contamination of ground/surface water.

(xi). 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.

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

Agenda No. 2.9

Environmental Clearance for Proposed Resin Manufacturing plant at Focal Point, Derabassi District Mohali, Punjab by M/S. SBL Specialty Coatings Private Limited - Consideration of Environment Clearance

[IA/PB/IND2/163284/2020, IA-J-11011/157/2020-IA-II(I)]

The Project Proponent and the 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 of Resin Manufacturing plant located at Plot No. A2, Focal Point, Derabassi, District Mohali Punjab by M/s. SBL Specialty Coatings Private Limited.

The details of products and capacity as under:

S. No.	Product	Existing Quantity	Proposed Quantity	Total Quantity
1.	Clear, Metallic and pearl Lacquer	10 KL/Day	0	10 KL/Day
2	Acrylic, Alkyd, Polyester and Specialty Resin	0	12 Tonnes/Day	12 Tonnes/Day

The project/activities are covered under category B of item 5(H) 'Integrated Paint industry' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to applicability of general condition (location of the project within 5 km of Interstate Boundary of Haryana), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The ToR has been issued by Ministry vide letter No.J 11011/157/2020-IA-II (I) dated 30th July 2020. Public hearing is exempted as the project site is located in the notified Industrial area. It is informed that no litigation is pending against the proposal.

The land area available for the project is 13022.2 m^2.Industry will develop greenbelt in an area of 33 % i.e., 4327.7 m^2 out of total area of the project.The estimated project cost is Rs 4.50 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs 27.51 lacs and the Recurring cost (operation and maintenance) will be about Rs 7.55 lacs per annum.Total Employment will be 58 persons as direct & 13 persons indirect after expansion. Industry proposes to allocate Rs 4.5 lacs towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Ghaghar River and Nalla River is flowing at a distance of 1.2 and 2.53 km respectively in NW direction.

Ambient air quality monitoring was carried out at 8 locations during Mid November 2019 to Mid February 2020 and the baseline data indicates the ranges of average concentrations as: PM10 (85 to 107 µg/m3), PM2.5(26 to 32 µg/m3), SO2 (10.5 to 16.9 µg/m3) and NO2 (21.4 to 27 µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.016 µg/m3, 0.016 µg/m3 and 1.45 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations of PM_{10} are not within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 46 m^3/day of which fresh water requirement of 34 m^3/day will be met from PSIEC. Effluent of 12 KLD quantity will be treated through RO & MEE and recycled. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 200 KVA and will be met from Punjab State power

distribution corporation limited (PSPDCL). Existing unit has one DG sets of 250 KVA capacity, additionally one DG sets with capacity of 125 KVA are used as standby during power failure. Stack height 15 meter will be provided as per CPCB norms to the proposed DG sets.

Existing unit has No boiler. Additionally, Thermic fluid heater will be installed with a stack of height of 15 m will be installed.

Close loop storage & transfer of the solvent with dedicated tank in load cell, pumps & flow meter to maintain the minimal atmospheric exposure of the solvent in environment. Hence, the loss is also minimized

Details of Solid waste/ Hazardous waste generation and its management

S. No.	Type of Waste	Hazardous Waste Category	Quantity per day			Source	Method of Collection	Treatment / Disposal
			Existing	Proposed	Total			
1	Filter cloth, Bag Paper bags	21.1	3.43 Tonne/Annum	2.25 Tonne/Annum	5.68 Tonne/Annum	Through Process	disposal in HDPE Bags and stored in the marked bins at waste storage area	Authorized TSDF
2	Cotton Rags	5.2	6.68 Tonne/Annum	2.25 Tonne/Annum	8.93 Tonne/Annum	Through Process		
3	Drums & Cans	33.1	23.38 Tonne/Annum	129.6 Tonne/Annum	152.98 Tonne/Annum	Through Process		
4	Spent oil	5.1	0.1 KL/Annum	0.02 KL/Annum	0.12 Kl/annum	From DG and Thermopack	In Drums	Authorised person

Deliberations in the EAC:

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

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of

data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the activities/action plan proposed and found to be addressing the socio-economic issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory.

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). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iii). 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.

(iv). The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.

(v). 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.

(vi). 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.

(vii). 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.

(viii). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(ix). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.

(x). Total fresh water requirement shall not exceed 34 cum/day proposed to be met from Punjab Small Industries and Export Corporation Ltd (PSIEC) water supply. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.

(xi). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

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

(xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as

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

(xiv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit.

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

Agenda No. 2.10

Modernization of Gujarat Refinery from 13.7 to 18 MMTPA with Lube & Petro chemical Integration (LuPech), LAB Revamp and N-Butanol Project at Koyali, District Vadodara – (Gujarat) by M/s Indian Oil Corporation Limited - Consideration of Environment Clearance

[IA/GJ/IND2/134702/2018, IA-J-11011/93/2018-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. ABC Techno Lab India Pvt Ltd, made a detailed presentation on the salient features of the project through video conferencing and informed that:

The proposal is for environmental clearanceto the project for Expansion cum Modernization of Gujarat Refinery from 13.7 to 18 MMTPA with Lube & Petro chemical Integration (LuPech), LAB Revamp and N-Butanol Project by M/s Indian Oil Corporation Limited located at Koyali, District Vadodara (Gujarat).

The details of products and capacity as under:

S. No.	Product Details	Existing Quantity as per EC (TMT/Year)	Proposed Quantity (TMT/Year)	Quantity after Modernization (TMT/Year)
1	Liquefied Petroleum Gas (LPG)	1045	-231	814
2	Propylene	0	+80	80
3	PolyPropylene	402	+60	462
4	Naphtha Export	0	+665	665
5	Linear Alkyl Benzene (LAB)	162	0	162
6	Food Grade Hexane (FGH)	14	-10	4
7	Motor Spirit (MS)	4727	-1388	3339

8	Reformate	0	0	0
9	Kerosene	0	0	0
10	Mineral Turpentine Oil (MTO)	120	-120	0
11	Aviation Turbine Fuel (ATF)	650	+9	659
12	Pipeline Competent Kerosene (PCK)	140	+8	148
13	Linear Alkyl Benzene Feed Stock (LABFS) Nirma	0	+61	61
14	High Speed Diesel(HSD)	8013	+261	8274
15	Lube Oil Base Stock (LOBS)	0	+238	238
16	Sulphur	200	-21	179
17	Bitumen	480	-205	275
18	Fuel Oil / Light Diesel Oil (FO/LDO)	408	+589	997
19	Coke	993	-310	683
20	Heavy Alkyl Benzene (HAB)	8	0	8
21	Normal Butanol (N-Butanol)	90	0	90
22	Iso Butanol	2.6	0	2.6
	Total	17454.6	-314	17140.6

The project/activities are covered under category A of item 4 (a) 'Petroleum refining industry' and 5(c) 'Petro-chemical complexes' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The proposal has been submitted under para 7(ii) of the EIA Notification, 2006 requesting exemption from fresh ToR, PH and EIA report.

The Ministry had issued EC earlier vide letter no. IA J-11011/93/2018-IA-II(I); dated 14th July 2020 to the existing project "Expansion/modernization of Gujarat refinery from 13.7 to 18 MMTPA by M/s Indian Oil Corporation Limited at Koyali, District Vadodara (Gujarat)"in favour of M/s.Indian Oil corporation Limited. The project proponent proposed for further modernization of the plant.

Existing land area is 3743000 m^2; additional 324000 m2 land will be used for proposed expansion.Industry will develop greenbelt in an area of 40 % i.e. 129600 m^2 out of total area of the project (40000 m^2 will be at refinery site and rest 89600 m^2 at Dumad land owned by IOCL which is 15 km away from Gujarat Refinery Project).The estimated project cost (for the current project) is Rs 19,353 Crore including existing investment (pre-project activities) of Rs 1184 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 300.7 crore and the Recurring cost (operation and maintenance) will be about Rs 2.68 crore per annum.

Total Employment will be 259 persons as direct & 1036 persons indirect after expansion. Industry proposes to allocate Rs 48.38 Crores towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Mahi River is flowing at a distance of 4.2 km in North West direction.

Total water requirement is 54696 m^3/day (Additional) of which fresh water requirement of 45456 m3/day (Additional) will be met from Existing wells at Mahi river and MoU done with Vadodara municipal corporation (VMC) for using treated Municipal waste water.

Effluent of 9240 m^3/day (Additional) quantity will be treated through new Effluent Treatment Plant (ETP) of capacity 385 m^3/hr with ZLD.The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 240 MW Including existing 125 MW and will be met from Existing captive power plants and Grid power infrastructure/State power distribution corporation limited (SPDCL). It is proposed to install, DG Shed for PRU, Octamax& Cooling Tower Package - 415V, 1750 kVA; DG Shed MS Block & Utility Block-1 No. 415V, 1750 kVA for MS Block & 2 Nos. 6.6kV 2.5 MVA for Utility Block; DG Shed for PPU-415V, 2250 kVA; DG Shed for Sulfur Block and ETP Package- 415V, 1750 kVA; DG Shed for LOBS Unit-415V, 1000 kVA. DG sets are used as standby during power failure. Stack (height 30 m) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 355 TPH Fuel oil/Fuel gas/ RLNG fired boiler. Additionally 3x150 TPH - Fuel gas fired boiler will be installed. Multi cyclone separator/ bag filter with a stack of height of 60 m 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.

ID	UNITS	Description	Stack Ht (m)	Stack Diameter (m)	Exit Velocity (m/s)	Exit Temperature (K)	Emission_ Rate of SOX, (g/s)	Emission_ Rate of NOX, (g/s)	Emission_ Rate of PM (g/s)	Emission_ Rate of CO (g/s)	Emission_ Rate of HC (g/s)	Type of Fuel
LUPECH	AU-V Revamp	Crude Charge Heater	60	3.5	10.6	413	1.1	5.3	-	2.1	-	FUEL GAS
	New	Vacuum	60	3	10.6	413	0.7	3.6	-	1.4	-	

	VDU	Charge Heater										
	MS BLOCK	1808-F-001 Charge heater	60	1.5	4.6	437	0.03	0.15	-	-	-	FUEL GAS
		1808-F-002 Naphtha splitter Reboiler	60	1.5	4.6	437	0.09	0.5	-	-	-	FUEL GAS
		1810-F-001 Stabilizer reboiler heater (Non-UOP HEATER)	60	1.25	-	465	0.05	0.4	-	-	-	FUEL GAS
		1810-F-002 DeisohexanizerReboiler Heater	60	2	-	433.15	0.13	0.9	-	-	-	FUEL GAS
	GHDS Revamp	Second Stage HDS Heater Stack (1804-F-002)	60	1.1		438	0.002	0.012	-	0.005	-	FUEL GAS
	FCC	Flue Gas Stack	60	3.3	15	335	94	11.9	5.5	11.1	Nil	NA
	SRU	Incinerator Vent Stack	85	6		573	11.8	1.5	-	1.4		FUEL GAS
	HCU Revamp	First Stage Fractionator Heater	60	2.1		473	0.41	2.07	-	-		FUEL GAS
	CDW	Reactor Feed Furnace	60	1.2		473	0.14	0.72	-	-		FUEL GAS
	CDW	Vacuum Column Feed Furnace	60	1.2		473	0.15	0.77	-	-		FUEL GAS
	O & U	Steam Boiler (150 TPH)	60	2.6		440	2.2	11	-	4.4		FUEL GAS
		Steam Boiler (150 TPH)	60	2.6		440	2.2	11	-	4.4		

		Steam Boiler (150 TPH)	60	2.6		440	2.2	11	-	4.4		
Oxo Project	NBA	Incinerator Stack	60	0.2								FUEL GAS
		LP Flare Stack	Min 60	0.2		73						FUEL GAS

Details of Solid waste/ Hazardous waste generation and its management (For the Modernization project)

Item	Quantity Per Annum after Modernization	Unit	Mode of Transport	Mode of Disposal
Oily sludge (From tank Bottom+ from CETP)	17380	MT	Used in premises	Bioremediation after Oil Recovery
Spent Catalyst	660	MT	Trucks	Authorized recyclers/ TSDF
Empty drums/ carboys	3300	Number	Tractor Trolleys	Authorized recyclers

Deliberations in the 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 PFR 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 PFR 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 Form/PFR report is in compliance of the Notification issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has noted that the proposal has been submitted as per para 7 (ii) of the EIA Notification, 2006. The Committee noted that the PP proposed for modernization of the Gujarat Refinery thereby achieving expansion in the unit. The Committee was of the considered view that increase in production of the Refinery under

modernization shall be encouraged considering its national importance. The Committee has also deliberated on the activities/ action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following safety norms and best practices.

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 earlier EIA/EMP report and updated in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iii). 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.

(iv). The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18th March, 2008 and G.S.R.595(E) dated 21st August, 2009 as amended from time to time, shall be followed.

(v). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. For emission control and management, use of FG/NG in heater as fuel, adequate stack height, use of Low NOX burners in heater & boiler, continuous stack monitoring, Sulphur recovery plant, etc. shall be installed/ensured.

(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). Process safety and risk assessment studies shall be carried out using advanced models in repeated intervals, and the mitigating measures shall be undertaken/implemented accordingly.

(viii). The storage of toxic/hazardous raw material/products shall follow all the safety norms and best practices to avoid any leakage/explosion/emissions. 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). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(x). Total additional fresh water requirement shall not exceed 45456 cum/day proposed to be met from wells at Mahi river and from treated Municipal waste water. Necessary permission in this regard shall be obtained from the concerned regulatory authorities, and renewed from time to time.

(xi). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

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

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

(xiv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule

presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit.

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

Agenda No. 2.11

Expansion and Modification of Bulk Drugs, Active Pharmaceutical Ingredients (APIs) manufacturing industry with R&D facility by M/s Shilpa Medicare Limited (Unit-I), located at Plot no. 1A, 1A"P", 1B, 2, 2A, 2B, 3A to 3E, 4A, 4B, 4C, 5A & 5B, 20,Deosugur Industrial Area, Deosugur, Taluk& District Raichur, Karnataka - Consideration of Environmental Clearance.
[IA/KA/IND2/176362/2020, IA-J-11011/300/2020-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Samrakshan, 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 expansion and modification of Bulk Drugs, Active Pharmaceutical Ingredients (APIs) manufacturing industry with R&D facility by M/s Shilpa Medicare Limited –Unit-I, located at Plot no. 1A, 1A"P", 1B, 2, 2A, 2B, 3A to 3E, 4A, 4B, 4C, 5A & 5B, 20, Deosugur Industrial Area, Deosugur, Taluk & District Raichur, Karnataka.

The project/activities are covered under Category 'B2'of item 5 (f) 'Synthetic, Organic Chemicals Industry'of the Environment Impact Assessment (EIA) Notification, 2006, as amendment on 27-03-2020. Due to applicability of general condition (interstate boundary within 5 km), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The details of products and capacity are as under:

Sl. no.	**Bulk drugs & APIs**	**Existing quantity**	**Proposed quantity**	**Total quantity**
		TPA		
APPROVED PRODUCTS RETAINED WITH SAME / INCREASE / DECREASE IN PRODUCTION CAPACITY				
1	Acebrophylline	36	-33	3
2	AmbroxolHCl	72	53	125
3	Nifedipine	12	18	30
4	Phenyl ephrineHCl	18	54	72
5	Ursodeoxycholic acid	108	-36	72
6	BendamustineHCl	0.06	0	0.06

7	Gemcitabine HCl	3	0	3
8	IrinotecanHCltrihydrate	0.12	0.38	0.5
9	Oxaliplatin	0.06	0	0.06
10	Temozolomide	1.2	1.2	2.4
11	Thalidomide	0.6	0.6	1.2
TOTAL		***251.04***	***58.18***	***309.22***
APPROVED PRODUCTS DROPPED				
1	BuflomedilHCl	12	0	-
2	Sildenafil citrate	12		
3	TiclopidineHCl	24		
4	Anastrozole	0.06		
5	Bicalutamide	2.4		
6	Bortezomib	0.012		
7	Capecitabine	12		
8	Carboplatin	0.6		
9	Cisplatin	0.6		
10	Docetaxeltrihydrate	0.6		
11	EpirubicinHCl	0.24		
12	Gefitinib	0.12		
13	Imatinibmesylate	1.2		
14	Lenalidomide	0.012		
15	Letrozole	0.06		
16	Paclitaxel	0.12		
17	Pemetrexed	0.12		
18	TopotecanHCl	0.06		
19	Zoledronic acid	0.06		
TOTAL		***66.264***		
PROPOSED NEW PRODUCTS				
12	Citicoline	0	30	30
13	FingolimodHCl		0.01	0.01
14	Macitentan		0.2	0.2
15	Palmidrol		100	100
16	Pirfenidone		5.25	5.25
17	Praziquantel		10	10
18	Cyclophosphamide		2	2
19	Dasatinib cyclamate		1.2	1.2
20	MelphalanHCl		0.06	0.06
21	Nilotinib amine HCl		2	2
22	Palbociclib		0.12	0.12
Total, proposed new products			**150.84**	**150.84**
23	Custom synthesis, proposed		3	3
Total (with custom synthesis), after expansion & modification			**463.06**	**463.06**

2) BY-PRODUCTS

Sl. No.	*By-product*	*Quantity generated, TPA*
1	Potassium acetate	171.24
2	Caustic potash lye	205
3	Caustic soda lye	171.36
4	Silver chloride	0.1
5	Palladium carbon	2
	TOTAL	**549.7**

3) THE LIST OF FINAL PRODCUTS AND ITS CORRESPONDING INTERMEDIATES

Sl. No.	*Product*	*Capacity TPA*	*Stage*	*Intermediate*	*Quantity, TPA*
1	Acebrophylline	3	I	Ambroxol	2.40
2	AmbroxolHCl	125	I	Ambroxol Base	130.80
3	Nifedipine	30	I	Methyl-3-aminobut-2-enoate	12.38
			II	Methyl 2-(2-nitrobenzylidene)-3-oxobutanoate	25.09
4	Phenyl ephrineHCl	72	I	Bromo-metahydroxyacetophenone	48.38
			II	DL-Phenyl ephirineHcl	67.68
5	Ursodeoxycholic acid	72	I	Cholic acid methyl ester	171.53
			II	3a, 7a-diacetyl,12a-hydroxy-methyl cholanate	171.36
			III	3a, 7a-diacetyl-12-keto-methyl cholanate	150.85
			IV	3a, 7a-dihydroxy-5b-Cholanic acid	150.85
			V	3a, hydroxy-7-keto-Cholanic acid	95.99
6	BendamustineHCl	0.06	I	N-methyl-2,4-dinitroaniline	0.90
			II	N-methyl-4-nitrobenzene-1,2-diamine	0.70
			III	Isopropyl 5-((2-methylamino)-5-nitrophenyl)amino)-5-Oxopentanoate	1.14
			IV	Isopropyl 4-(2-hydroxy-1-methyl-5-nitro-2,3-dihydro-1H-benzoimidazol-2-yl)butanoate	0.74
			V	Isopropyl-4-(1-methyl-5-nitro-1H-benzoimidazole-2-yl)butanoate	0.26
			VI	Isopropyl 4-(5-amino-1-methyl-1H-benzoimidazol-2-yl)butanoate	0.22
			VII	Isopropyl 4-(5-bis(2-hydroxyethyl)amino)-1-methyl-1H-benzoimidazole-2yl-butanoate	0.10
7	Gemcitabine HCl	3	I	Crude Gemcitabine	5.10

			II	Crude Gemcitabine HCl	3.45
8	IrrinotecanHCl	0.5	I	Irinotecan base crude	0.70
9	Oxaliplatin	0.06	I	Cis-dichloro-trans-1-1,2-diaminocyclohexane platinum	0.08
10	Temozolomide	2.4	I	Temozolomide Crude	4.80
11	Thalidomide	1.2	-	-	
PROPOSED NEW PRODUCTS					
12	Citicoline	30	I	Citicoline Crude	39.96
13	FingolimodHCl	0.01	I	2-acetamido-2-phenethylmalonate	0.56
			II	2-acetamido-2-(4-Octanoylphenethyl)propane-1,3-diyldiacetate	0.14
			III	2-Acetamido-2-(4-Octylphenethyl)-Propane-1,3-diyldiacetate	0.13
			IV	Fingolimod free base	0.05
14	Macitentan	0.2	I	5-(4-bromophenyl)-6-chloro-N-(propylsulfamoyl)pyrimidiri-4-amine	0.37
			II	N-[5-(4-bromophenyl)-6-(-2-hydroxyethoxy)-4-pyrimidinyl]-N'-propylsulfamide	0.25
			III	N-[5-(4-Bromophenyl)-6-[2-[(5-bromo-2-pyrimidinyl)oxy]ethoxy]-4-pyrimidinyl]-N'-propylsulfamide	0.27
15	Palmidrol	100	I	PML-I (Palmidrol Crude)	139.41
16	Pirfenidone	5.25	I	5-Methyl-2-Hydroxy Pyridine	4.47
17	Praziquantel	10	I	4-(Cyclohexanecarbonyl)-1-Phenethyl-3,4-dihydropyrazine-2(1H)-one	16.22
18	Cyclophosphamide	2	I	Bis(2-chloroethyl)amine hydrochloride	1.96
			II	2-[Bis(2-chloroethyl)amino]tetrahydro-2*H*-1,3,2-oxazaphosphorin 2-oxide monohydrate	1.80
19	Dasatinib cyclamate	1.2	I	2-(6-chloro-2-methylpyrimidin-4-ylamino)-N-(2-chloro-6-methylphenyl)thiazole-5-carboxamide	1.54
			II	N-(2-chloro-6-methylphenyl)-2-[[6-[4-(2-hydroxyethyl)piperazin-1-yl]-2-methylpyrimidin-4-yl]amino]-1,3-thiazole-5-carboxamide	1.81
20	MelphalanHCl	0.06	I	P-Nitrol-L-Phenylalanine	1.23
			II	N-Phthaloyl-P-nitro-L-Phenylalanine	1.33
			III	N-Pthaloyl-P-amino-L-Phenylalanine	1.21
			IV	Methyl-n-Pthaloyl-p-amino-L-	0.82

				phenylalanine	
			V	Methyl-n-pthaloyl-p-bis-(2-hydroxyethyl)-amino-L-Phenylalanine	0.59
			VI	2-amino-3-(4-(bis(2-chloroethyl)amino)phenyl)propanica cid hydrochloride	0.60
21	Nilotinib amine HCl	2	I	3-(trifluoromethyl)-5-(4-methyl-1H-imidazol-1yl)benzonitrile	5.60
			II	3-(trifluoromethyl)-5-(4-methyl-1H-imidazol-1yl) benzoic acid	3.80
			III	Tert-butyl 3-(trifluoromethyl)-5-(4-methyl-1H-imidazol-1-yl) phenylcarbamate.	2.76
22	Palbociclib	0.12	I	2-Chloro-8-cyclopentyl-5-methylpyrido[2,3-d]pyrimidin-7(8H)-one	0.28
			II	6-Bromo-2-Chloro-8-cyclopentyl-5-methylpyrido[2,3-d]pyrimidin-7(8H)-one	0.26
			III	Tert-butyl 4-(6-(6-bromo-8-cyclopentyl-7,8-dihydro-5-methyl-7-oxopyrido[2,3-d]pyrimidin-2-ylamino)pyridine-3-yl)piperazine-1-carboxylate	0.36
			IV	Tert-butyl 4-(6-(6-(1-butoxyvinyl) -8-cyclopentyl-7,8-dihydro-5-methyl-7-oxopyrido[2,3-d]pyrimidin-3-ylamino)pyridine-3-yl)piperazine-1-carboxylate	0.30
			V	2-(5-(piperazin-1-yl)pyridin-2-ylamino)-6-acetyl-8-cyclopentyl-5-methylpyrido[2,3-d]pyrimidin-7(8H)-one hydrochloride	0.18
				TOTAL	**1,274**

The Ministry had issued EC earlier vide letter no. F. No. J-11011/191/2017-IA-II (I) dated 13th December 2019 to the existing project for manufacturing 30 products with total production capacity of 317.304 MT/annum in favor of M/s. Shilpa Medicare Ltd. - Unit I.Certified compliance report of earlier EC was submitted by RO MoEFCC, vide letter dated 19th October 2020. (site visit date: 6th October 2020). The Committee deliberated the compliance status and found in order.

Existing land area is 99,811 m^2 additional 4,046 m^2 land will be used for proposed expansion.Industry has already developed / will develop greenbelt in an area of 33% i.e., 34,275.96 m^2 out of total area of the project.

The estimated project cost is Rs.150.91 crores including existing investment of Rs.102.40 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.2 crores and the Recurring cost (operation and maintenance) will be about Rs.2.02 crores per annum. Total employment will be 545 persons as direct after expansion. Industry proposes to allocate Rs.48.52 Lakhs towards Corporate Environment Responsibility.

There are no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/water body river Krishna, two natural streams Konad Halla (Konnana Halla) & Dodda Halla are flowing at a distance of 4.2 km, 2.8 km & 3.2 km respectively in North, South & South East direction respectively.

Total water requirement is 218.87 m^3/day of which fresh water requirement of 170.44 m^3/day will be met from KIADB sourced from River Krishna. Effluent of 98 KLD quantity will be treated through Solvent stripper, Multi Effect Evaporator (MEE) and Agitated Thin Film Drier (ATFD) at Shilpa Medicare Ltd. Unit II located at a distance of 4.2 km from Unit I, as per the previous EC and CTO from KSPCB. The plant will be based on Zero Liquid discharge system (Unit I & Unit II together)**.**

Power requirement after expansion will be 2500 kVA including existing 1800 kVA and will be met from Gulbarga Electricity Supply Company, Karnataka State power distribution corporation limited (RESCOM). Existing unit has 3 DG sets of 325 kVA. Capacity each, additionally 4 DG sets of 380 kVA (1 no.), 625 kVA (2 no) and 1000 kVA (1 no.) are added; two 325 kVA DG sets will be replaced. They are used as standby during power failure. Stack height 11 m AGL will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 3 X 4 TPH Coal/briquette fired boilers of which one is standby. Additionally, two 6 TPH Coal/briquette fired boiler will be installed. Mechanical dust collectors with a stack of height of 33 m AGL for each 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.

Sl. no.	*Stack attached to*	*Fuel used*	*Fuel consumption*	*Number of stacks*	*Stack/s height*	*Air pollution control unit*	*Predicted emissions*
EXISTING							
1	Process section	-	-	13	3 m ARL / 9 m AGL for each	Packed column scrubbers – 13 no.s	Acid mist/ VOCs
PROPOSED							
2	Process section and R&D	-	-	6	3 m ARL / 9 m AGL for each	Packed column scrubbers – 6 no.s	Acid mist/ VOCs
3	Thermic fluid	Furnace	50 L/h	1	30 m AGL	Stack	SO_2, NO_x,

	heater – 8 Lakh Kcal/h – 1 no.	oil (FO)					PM

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

Solid waste

Sl. No.	Solid waste	Generation	Method of disposal
1	Domestic garbage	114 kg/day	Handed over to local piggery.
2	Boiler ash	7,131 kg/day	Sold to the nearby brick industries.

Hazardous Waste

Sl. No	*Hazardous waste*	*Categorization*	*Quantity*	*Mode of disposal or recycling or utilization in co-processing*
1	Used / spent oil	5.1	3 KL/annum	Stored in leak-proof containers and Sent to KSPCB authorized spent oil re-processors for regeneration & re-use.
2	Process residue and wastes	28.1	Residue - 205.54 TPA	Stored in HDPE carboys / LDPE bags and sent for incineration.
			Salt - 10.17 TPA	Stored in HDPE carboys / LDPE bags and sent to Treatment Storage and Disposal Facility (TSDF) for land-filling.
3	Spent catalyst	28.2	1.99 TPA	Stored in HDPE carboys / LDPE bags and sold as by-product for regeneration and re-use.
4	Spent carbon	28.3	30.67 MT/annum	Stored in polybags and sent for incineration.
5	Spent solvents	28.6	700 KL/annum	Stored in leak-proof containers and Sent to KSPCB authorized spent oil re-processors for regeneration & re-use.
6	Distillation residue	20.3	30 TPA	Stored in HDPE carboys / LDPE bags and sent for incineration.
7	Empty barrels/containers contaminated with hazardous chemical	33.1	10,000 no.s/annum	Stored in a secured manner and handed over to KSPCB authorized recyclers.
8	Return bulk drugs & APIs	28.5	1 TPA	Stored in leak-proof containers and sent for incineration / co-processing.
9	Off-specification products	28.4	1 TPA	Stored in leak-proof containers and sent for incineration / co-

				processing.
10	Used PPEs	33.2	0.5 MT/annum	Stored in a secured manner and sent for incineration / co-processing.
11	ATFD salts (MEE) from treatment of Unit I effluent at Unit II	35.3	612 TPA	Generated and disposed at Unit II.

Public hearing is not required since the proposed project falls under category B2, the proposed project is located in industrial area. It was informed that Criminal case is filed by Karnataka State Pollution Control Board for not obtaining prior EC till 2019. Now Environmental Clearance for the existing industry is obtained under violation category from MoEF&CC vide EC no. F. No.J-11011/191/2017-IA-II (I) dated 13thDecember 2019. Name of the court: PLR Senior Civil Judge and CJM, Raichur, Karnataka. Case no.: P.C./34/2019

Deliberations in the 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 PFR & 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 PFR & 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 PFR/EMP report reflects the present environmental concerns and the projected scenario for all the environmental components. The committee deliberated on the court case issue and warned PP against for any violations in future. The committee suggested to use scrubbing system while loading and unloading of waste and to use GPS enabled vehicle for solvent and spent solvent movement. The committee deliberated the action plan and budget allocation for green belt development, mitigation measure towards Air, Water, Noise and Soil pollution. 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 Unit shall install waste water flow meter at the outlet of Unit – I and inlet of Unit- II, and keep record of waste water flow from Unit-I to Unit- II. The monitoring report shall be submitted to the SPCB/MoEFCC Regional office.

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

(iii). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. Regular VOCs monitoring should be carried out.

(iv). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(v). 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.

(vi). 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.

(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). Total fresh water requirement shall not exceed 170.44 m^3/day, proposed to be met from KIADB sourced from River Krishna. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(ix). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

(x). 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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xi). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(xii). 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.

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

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

(xv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit. Preference shall be given to local villagers for employment in the unit.

(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.

DAY 2: 9th December, 2020 (Wednesday)

Agenda No. 2.12

Expansion and Modification of the Active Pharmaceutical Ingredients (API's Manufacturing Unit with R&D Activity by M/s Shilpa Medicare Limited, 100% EOU, Unit-II, located at Plot 30, 31, 32 and 35-39, 33, 33A and 40-47, Raichur Industrial Growth Center, Wadloor Road, Chicksugur, Raichur, Karnataka - Consideration of Environmental Clearance
[IA/KA/IND2/176934/2020, IA-J-11011/301/2020-IA-II(I)]

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

The proposal is for environmental clearance to the project expansion and modification of the Active Pharmaceutical Ingredients (API's) and Intermediates Manufacturing Industry with R & D Activity by M/s Shilpa Medicare Limited, 100% EOU, Unit-II located at Plot 30, 31, 32 and 35-39, 33, 33A and 40-47, Raichur Industrial Growth Center, Wadloor Road, Chicksugur, Raichur, Karnataka.

The project/activities are covered under Category 'B2'of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the Environment Impact Assessment (EIA) Notification, 2006, as amendment on 27-03-2020. Due to applicability of general condition (interstate boundary within 5 km), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The details of products and capacity are as under:

1) PRODUCTS

Sl. No.	Name of the proposed Products	Proposed to be Manufactured Quantity in TPA
1	Anastrazole	0.1
2	Gemcitabine HCl	1
3	Bicalutamide	0.5
4	Ursodeoxycholic Acid	80
5	BendamustineHCl	0.2
6	Bortzomib	0.005
7	Capacitabine	80
8	Imatinib mesylate	5
9	Lenalidomide	0.5
10	Letrozole	0.05
11	Pemetrexed disodium	1
12	Decitabine	25
13	Cytrabine	0.05
14	Cabazitaxel	0.01
15	Cloferabine	0.01
16	Melphalan HCl	0.025
17	Tenfovirdisoproxilfumarate	300
18	ErlotonibHCl	2
19	Dimethyl fumarate	6
20	Busulfan	0.05
21	Zoledranic Acid	0.005
22	Tranexamic Acid	250
23	Sunitinib Malate	3
24	SorafenibTosylate	3
25	Praziquantel	50
Total		**807.505**

26	Custom Synthesis	5 TPA

2) BY-PRODUCTS

Sl. No	Name of the Product	By Products	By Products generated Qty in TPA	Remarks
1	Ursodeoxycholic acid	Potassium acetate	192.78	Sold
		Cholic Acid	520.30	Recovered & Reused
		Caustic potash lye	230.64	Sold
		Caustic lye	192.78	Both Sold & Reused
2	Capacitabine	Tin Salt	224.45	Sold
		Sodium acetate	93.12	Sold / TSDF
3	Lenalidomide	Raney-Ni	1	Both Sold & Reused
4	MelphlanHCl	Palladium Carbon	0.048	Recovered & reused / Sold
5	Busulfan	Triethylamine Hydrochloride	0.4	Sent to Co-Processing / Sold
6	Tranexamic acid	Tin oxide + 1,4-dicynocyclohexane	42.84	Sent to Co-Processing / Sold
		Raney-Ni	26.88	Sold
		Caustic Lye solution	932.4	Recovered & Reused

3) THE LIST OF FINAL PRODCUTS AND ITS CORRESPONDING INTERMEDIATES

Sl. No.	Name of the Product	Production capacity, Quantity in TPA	Name of the intermediates	Intermediates Quantity (in TPA)
1	Anastrazole	0.1	Intermediate-1 : a-a-a,a-Tetramethyl-5-(1H-methylbromide)-1,3-benzenediacetonitrile	0.4
			Intermediate-2: a-a-a,a-Tetramethyl-5-(1H-1,2,4-triazol-1-yl-methyl)-1,3-benzenediacetonitrile hydrochloride	0.225
2	Gemcitabine HCl	1	Intermediate-1: Crude Gemcitabine	1.683

			Intermediate-2: Crude Gemcitabine HCL	1.1385
3	Bicalutamide	0.5	Intermediate-1: N-[4-cyano-3-(tri fluromethyl)phenyl]-3-[4-fluro phenyl thio]-2-hydroxy-2-methyl propanomide.	0.6
4	Ursodeoxycholic acid	80	Intermediate-1: Methylcholonate	190.592
			Intermediate-2: 3a, 7a-diacetyl,12a-hydroxy-methyl cholanate	190.4
			Intermediate-3: 3a, 7a-diacetyl-12-keto-methyl cholanate	167.616
			Intermediate-4: 3a, 7a-dihydroxy-5b-Cholanic acid	167.616
			Intermediate-5: 3a, hydroxy-7-keto-Cholanic acid	106.656
5	BendamustineHCl	0.2	Intermediate-1: 4-{5-[Bis-(2-hydroxy-ethyl) amino)-1-methyl-1H-benzoimidazole-2-yl} butyric acid ethyl ester	0.85
6	Bortezomib	0.005	Intermediate-1: Isobutyl boronic acid n-Heptane,1N HCL Sat.sodium bicarbonate methanol, ethyl acetate	0.0055
7	Capecitabine	80	Intermediate-1: (2,3-di-O-acetyl-5 deoxy-5 flurocytidine)	81
			Intermediate-2: 5'- Deoxi-5- Fluoro- N-(Pentyloxy) Carbonyl Cytidine-2',3'- Diacetate	89.1
8	Imatinib mesylate	5	Intermediate-1: N-(4-methyl-3-yl)pyrimidin-2-yl)amino)phenyl)-4-((4-methylpiperazin-1-yl)methyl)benzamide,	5
9	Lenalidomide	0.5	Intermediate-1: 3-(4-Nitro-1-oxo-1,3-dihydro-isoindol-2-yl)-piperidine-2,6-dione	0.45

10	Letrozole	0.05	Intermediate-1: 4-[1-(1,2,4-Triazolyl)methyl] benzonitrile	0.15
11	Pemetrexed disodium	1	Intermediate-1: Diethyl-2-(4-(2-(2-amino-4-Oxo-4,7-dihydro-3H-pyrrolo[2,3-djpyrimidin-5yl)benzamido)pentanediate	0.561
			Intermediate-2: Pemetrexed di acid	0.42
12	Decitabine	25	Intermediate-1: 1- methyl-2-deoxy ribose	0.152
			Intermediate-2: 1-Methoxy-3,5-di-O-acetyl-2-deoxy ribose	0.204
			Intermediate-3: 1-(3,5-di-O-acetyl-2-deoxy-D-ribofuranosyl)-5-zacytosine	0.1
			Intermediate-4: Decitabine Crude	0.02
13	Cytarabine	0.05	Intermediate-1: CyclocytidineHCl	0.06
14	Cabazitaxel	0.01	Intermediate-1: 4α-Acetoxy-2α-benzoyloxy-5β, 20-epoxy-1β, hydroxyl-7β, 10β-dimethoxy-9-oxo-11-taxene-13α-yl (2R,4S,5R)-3-tert-butoxycarbonyl-2-(4-methoxyphenyl)-4phenyl-1,3-oxazolidine-5-carboxylate	0.0125
			Intermediate-2 : (2α,5β,7β,10β,13α)-4-acetoxy-13-({(2R,3S)-3[(tertbutoxycarbonyl) amino]-2-hydroxy-3-phenylpropanoyl}oxy)-1-hydroxy-7,10-dimethoxy-9oxo-5,20-epoxytax-11-en-2-yl benzoate – propan-2-one	0.0185
15	Clofarabine	0.01	Intermediate-1: 2-Deoxy-1-α-bromo-2-β-fluoro-3,5-di-O-benzoyl-D-ribofuranose	0.04301
			Intermediate-2: 2-Chloro-6-butyrylamido	0.03289

			Purine	
16	Melphalan HCl	0.025	Intermediate-1: N-Phthaloyl-p-amino-L-Phenylalanine	0.53376
			Intermediate-2: Methyl-N-Phthaloyl-p-amino-L-Phenylalanine	0.36
			Intermediate-3: Methyl-N-Phthaloyl-p-bis-(2-hydroxyethyl)-amino-L-phenylalanine	0.26208
			Intermediate-4: Methyl-N-Phthaloyl-p-bis-(2-chloroethyl)-amino-L-phenylalanine	0.26208
17	Tenfovirdisoproxilfumarate	300	Intermediate-1: (R) -9(2-phosphoniylmethoxy propyl)adenine	196.285
18	Erlotinib HCl	2	Intermediate-1: 4,5-bis(2-methoxyethoxy)-2-aminobenzonitrile	2.72
			Intermediate-2: N-(4,5-bis(2 methoxyethoxy)-2-cynophenyl)-N-N-dimethyl farmamidine	2.56
			Intermediate-3: 6,7-Bis-(2-methoxyethoxy)-N-((3-ethynylphenyl)-quinazolin-4-amine	2.72
19	Dimethyl Fumarate	6	Intermediate-1: Dimethyl Fumarate crude	14.6664
20	Busulfan	0.05	Intermediate-1: Butane-1,4-diyl dimethanesulfonate	0.1695
21	Zoledronic Acid	0.005	Intermediate-1: Imidazol-1yl-acetic acid methyl ester	0.01032
			Intermediate-2: Imidazol-1yl-acetic acid	0.00848
			Intermediate-3: (1-hydroxy-2-imdazol-1-phosphono-ethyl)-phosphoric acid	0.00508
22	Tranexamic Acid	250	Intermediate-1: Methyl 4-cyano cyclohexane carboxylate	520.8

			Intermediate-2: Trans-Cis Mixture of Tranexamic Acid as Tranxamic acid	856.8
			Intermediate-3: Trans-Cis Mixture of Tranexamic Acid enriched trans to 80% in caustic Soda as TXA	856.8
			Intermediate-4: Tranexamic Acid- Crude caustic Soda -0.6%	856.8
			Intermediate-5: Tranexamic Acid in water	856.8
			Intermediate-6: Tranexamic Acid -95to97% in water	856.8
			Intermediate-7: Tranexamic Acid -98to99% in water	672
23	Sunitinib Maleate	3	Intermediate-1: N-(2-(diethyl amino)ethyl)-5-formyl-2,4- dimethyl-1H-pyrrole-3-carboxamide	2.592
			Intermediate-2: Sunitinib crude	2.7
24	SorefenibTosylate	3	Intermediate-1: 4-(4-Aminophenoxy)-N-methyl Picolinamide.	2.85
			Intermediate-2: 4-(4-Aminophenoxy)-N-methyl Picolinamide. (Crude)	2.925
25	Praziquentel	50	Intermediate-1 : Praziquantel crude	80.4

SML obtained Environmental Clearance from MoEF& CC for bulk drug unit vide EC letter no: F. No. J-11011/71/2007-IA II (I) dated 12th March, 2008 for manufacture of 13 Nos. of products with a capacity of 126.8 TPA. Further, SML obtained Environmental Clearance from SEIAA, Karnataka for expansion and modification of the APIs & Intermediates manufacturing with R & D activity vide EC letter no: SEIAA 50 IND 2016 dated 28th April, 2017 for manufacture of 35 Nos. of products with a capacity of 422.415 TPA. The corrigendum to EC (letter no: SEIAA 50 IND 2016) from SEIAA, Karnataka dated 15.03.2018 was obtained to include list of intermediates for products in EC. The MoEF& CC, Regional Office, Bangalore has visited the industry on 06.10.2020 and Certified Compliance Report (CCR) was issued vide letter dated 19.102.2020. The EAC deliberated the compliance status and report in order.

Existing land area is 84,336 m2, additional 54,727 m^2 land will be used for proposed expansion.Industry has already developed greenbelt in an area of 33.13% i.e., 46,072.56 m^2 out of total area of the project.

The estimated project cost is Rs.353.2238 crores including existing investment of Rs.252.2238 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.19.8066 crores and the Recurring cost (operation and maintenance) will be about Rs.5.5653 crores per annum after proposed expansion. Total employment will be 1150 persons as direct after expansion. Industry proposes to allocate Rs.75.75 Lakhs towards Corporate Environment Responsibility (CER).

There are no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/water body river Krishna, marched Kere, Machalapur Lake are at a distance of 7.7 km, 6.5 km & 7.84 km respectively in North, South West & South West direction respectively.

Total water requirement is 625.667 m3/day of which fresh water requirement of 293.114 m3/day will be met from KIADB sourced from River Krishna. The total effluent generation from unit II after expansion and SML unit I after expansion and its treatment system is as under:

Effluent from SML Unit	**Wastewater Generated (in KLD)**	**Treated Effluent Reused (in KLD)**	**Utilization / Reused At**
<u>Unit I*:</u> a) HTDS Effluent	61.5	40.93	SML Unit I
		20.57	SML Unit II
b) Cooling Tower Bleed	8.04	8.04	SML Unit II
<u>Unit II:</u> a) HTDS Effluent = 80.539 KLD b) Domestic & LTDS Effluent = 123.704 KLD c) Cooling Tower Bleed = 29.5 KLD d) Domestic Sewage = 30 KLD e) DM regenerate = 45 KLD	308.743	308.743	SML Unit II
	378.283	**378.283**	
*Note: * - HTDS Effluent from Unit I will be treated in ETP of Unit II.*			

Effluent treatment scheme is as under:

Sl. no	**Existing ETP with capacity**	**Proposed addition (in KLD)**	**Quantity of effluent proposed for treatment (in KLD)**
1	Solvent stripper, MEE and ATFD = 120 KLD	40 KLD	142
2	Biological treatment plant-1 = 200 KLD	-	153.7
3	MEE condensate treatment in Biological Treatment-2 = 200 KLD	-	82.54
4	Ash quenching from boiler blow down	-	14.6

	effluent		
5	RO Plant = 200 KLD	-	153.704

Power requirement after expansion will be 5000 kVA including existing 1800 kVA and will be met from Gulbarga Electricity Supply Company, Karnataka State power distribution corporation limited (GESCOM). Existing unit has 4 DG sets of 3 x 625 kVA& 1 x 750 kVA Capacity, additionally 5DG sets of 2 x 1500 kVA, 1 x 750 kVA & 2 x 625 kVA are proposed to be added. They are used as standby during power failure. Stack height 6 m ARL will be provided as per CPCB norms to each of the proposed DG sets.

Existing unit has 1x10 TPH & 1x6 THP Rice husk/coal/briquette fired boilers. Additionally, 1x16 TPH Rice husk/coal/briquette fired boiler will be installed. Electrostatic precipitator with a stack of height of 30m AGL will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

Details of Process emissions generation and its management.

Stack attached	Capacity and Numbers	Fuel type & Quantity	Stack height	Air Pollution control measures	Predicted emissions
Existing					
Process emissions	-	-	3 m ARL	Acidic Fume scrubbers: 15 Nos	Acid Mist, VOCs & odour

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

Hazardous waste	Category	Quantity in TPA	Mode of disposal
		After Expansion	
Used Oil (in KL)	5.1	5	Authorized recycler
Distillation Residues	20.3	25	Authorized recycler / co-processing
Process residue and Wastes	28.1	227.363	Incineration / co-processing
Spent Catalyst	28.2	0	-
Spent carbon	28.3	27.052	Incineration / co-processing
Date Expired Products	28.5	3	Incineration / co-processing
Spent Solvent	26.4	986.545	Authorized recycler
Empty barrels / containers / liners contaminated with hazardous chemicals	33.1	12000 Nos.	Authorized recycler
ETP Sludge	35.3	1500	To TSDF
MEE/ATFD Salts	35.3	1510	To TSDF
Boiler Ash	-	13,800	Brick manufacturer

Public hearing is not required since the proposed project falls under category B2, the proposed project is located in industrial area. It was informed that no litigation is pending against the proposal.

Deliberations in the 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 PFR & 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 PFR & 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 PFR/EMP report reflects the present environmental concerns and the projected scenario for all the environmental components. The committee deliberated on the court case against Unit-I of PP and warned PP against for any violations in future. The committee suggested to use scrubbing system while loading and unloading of waste and to use GPS enabled vehicle for solvent and spent solvent movement. The committee deliberated the action plan and budget allocation for green belt development, mitigation measure towards Air, Water, Noise and Soil pollution. 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 Unit shall install waste water flow meter at the outlet of Unit – I and inlet of Unit- II, and keep record of waste water flow from Unit-I to Unit- II. The monitoring report shall be submitted to the SPCB/MoEFCC Regional office.

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(iv). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

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(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). Total fresh water requirement shall not exceed 293.114 m^3/day, proposed to be met from KIADB sourced from River Krishna. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(ix). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

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

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

(xv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit. Preference shall be given to local villagers for employment in the unit.

(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. 2.13

Proposed establishment of Active Pharmaceutical Ingredients (APIs), Intermediates and Recombinant Human Albumin manufacturing Industry by M/s Shilpa Albumin Private Limited located at Plot No 286, 287, 288, Kadechur Industrial Area, Village Kadechur, Taluk and District Yadgir, Karnataka -Consideration of Environment Clearance
[IA/KA/IND2/176047/2020, IA-J-11011/302/2020-IA-II(I)]

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

The proposal is for environmental clearance to the project establishment of Active Pharmaceutical Ingredients (APIs), Intermediates and Recombinant Human Albumin manufacturing Industry by M/s Shilpa Albumin Private Limited located at Plot No 286, 287, 288, Kadechur Industrial Area, Village Kadechur, Taluk and District Yadgir, Karnataka.

The project/activities are covered under Category 'B2'of item 5 (f) 'Synthetic, Organic Chemicals Industry'of the Environment Impact Assessment (EIA) Notification, 2006, as amendment on 27-03-2020. Due to applicability of general condition (interstate boundary within 5 km), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The details of products and capacity are as under:

PRODUCTS

S. No.	Name of the proposed Products	Proposed to be Manufactured Quantity in TPA
1.	Phenyl EphrineHCl	100
2.	Ursodeoxycholic Acid	80
3.	Praziqentel	50
4.	Citicoline	50
5.	Levetiracetam	150
6.	AbacavirSulfate	49.5
7.	Recombinant Human Albumin	43.2
Total		**522.7**

BY-PRODUCTS

S. No	Name of the Product	By Product	By Products generated Qty in TPA	Remarks
1	Phenylephrine HCl	Palladium Carbon	2.57	Recovered & Reused/sold
		Phenyl EphirineIsomer Salt	33.00	Recovered & Reused
2	Ursodeoxycholic acid	Potassium Acetate	192.65	Sale
		Cholic Acid	471.91	Recovered & Reused
		Caustic Potash Lye	230.62	Sale
		Caustic Soda Lye	126.93	Sold, Recovered & Reused

THE LIST OF INTERMEDIATES WITH CAPACITIES

S. No.	Name of the Product	Name of the intermediates	Intermediates Quantity (in TPA)
1	Phenyl ephirineHCl	Bromo-metahydroxyacetophenone	66.53
		DL-Phenyl ephirineHcl	93.06
2	Ursodeoxycholic acid	Cholic acid methyl ester	192.78
		3a, 7a-diacetyl,12a-hydroxy-methyl cholanate	192.78
		3a, 7a-diacetyl-12-keto-methyl cholanate	169.56
		3a, 7a-dihydroxy-5b-Cholanic acid	169.56
		3a, hydroxy-7-keto-Cholanic acid	108.00
3	Praziquantel	4-(Cyclohexanecarbonyl)-1-Phenethyl-3,4-dihydropyrazine-2(1H)-one	82.70
4	Citicoline	Citicoline Crude	67.93
5	Levetiracetam	(S)-2-(2-oxopyrrolidin-1-yl)butanamide	157.50

6	AbacavirSulfate	(1S,4R)-methyl-4-aminocyclopent-2-enecarboxylate(2R,3R)-2,3-dihydroxysuccinate	88.11
		((1S,4R)-4-aminocyclopent-2-en-1-yl)methanol(2S,3S)-2,3-dihydroxysuccinate	75.24
		N-(2-amino-4-chloro-6-((1R,4S)-4-(hydroxymethyl)cyclopent-2-en-1-yl)amino)pyrimidin-5-yl)formamide	64.85
		((1S,4R)-4-(2-amino-6-chloro-9H-purin-9-yl)cyclopent-2-en-1-yl)methanol	49.01
		((1S,4R)-4-(2-amino-6-(Cyclopropylamino)-9H-purin-9-yl)cyclopent-2-en-1-yl)methanol	49.01

Existing land area is 121410 m^2. Industry will develop greenbelt in an area of 33% i.e., 40065.3 m^2 out of total area of the project. The estimated project cost is Rs.175 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.11.7 crores and the Recurring cost (operation and maintenance) will be about Rs.3.757 crores per annum. Total employment will be 350 persons as direct after expansion. Industry proposes to allocate Rs.2.625 Crores towards Corporate Environment Responsibility (CER).

There are no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/water body River Bhima, tributary of perennial River Krishna is about 8.2 km south west and River Krishna is about 12.3 km south direction of the site.

Total water requirement is 1097.36 m^3/day of which fresh water requirement of 451.653 m^3/day will be met from KIADB supply by tapping water from Bhima River. Effluent of 608.512 KLD quantity out of which 30 KLD is domestic sewage, this will be treated in Sewage treatment plant and Industrial effluents will be segregated into HTDS and LTDS. HTDS effluent is treated in solvent stripper, MEE and the concentrated is dried in ATFD. The condensate is treated in RO unit I. RO permeate will be further treated in Biological treatment plant unit I. RO reject will be treated in RO unit II. RO permeate of 234.65 KLD from RO plant -1 & 35.848 KLD from RO plant-2 will be treated in Biological Treatment Unit-I. Treated water of 269.298 KLD will be used in cooling tower makeup. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 2500 kVA and will be met from Gulbarga Electricity Supply Company, Karnataka State power distribution corporation limited (GESCOM). 3 DG sets of 1500 kVA. Capacity each is proposed to install. They are used as standby during power failure. Stack height 6 m AGL will be provided as per CPCB norms to the proposed DG sets.

Proposed unit will have 2 X 10 TPH Rice husk/coal/ briquette fired boilers. Bag filters with a stack of height of 37 m AGL for each will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

Details of Process emissions generation and its management.

Stack attached	Capacity and Numbers	Fuel type & Quantity	Stack height	Air Pollution control measures	Predicted emissions
Process emissions	-	-	3 m ARL	4 Nos. of Scrubbers with scrubbing liquid	Acid Mist, VOCs & odour
Boilers	2 x 10 TPH	Rice Husk: 5 TPH or Coal: 4.1 TPH or Briquettes: 4.5 TPH	37 m AGL	Bag Filters	SO_2, NO_x, PM
Thermic fluid heater	1 x 12 Lakh kcal	FO: 50 LPH	21 m AGL	Stack	
DG set*	3 x 1500 kVA	HSD: 420 LPH	6 m ARL for each DG Set	Acoustic Enclosure	SO_2, NO_x, PM

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

Solid Waste

Sl. No.	Type	Quantity (in TPA)	Mode of disposal
1	Domestic Solid Waste	25.2	Organic waste will be composted and inorganic waste will be segregated and disposed through Local Municipality.
2	Boiler Ash	15940	Sent to Brick manufacturer
3	STP Sludge	5.4	Used as manure in greenbelt

Hazardous Waste

Hazardous waste	Category	Quantity (in TPA)	Mode of disposal
Used Oil (in KL)	5.1	3	Authorized recycler
Spent Solvent	26.4	764	Authorized recycler
Process residue and Wastes	28.1	2920	Incineration / co-processing
Inorganic Salts	28.1	79.05	To TSDF
Spent carbon	28.3	63.58	Incineration / co-processing
Date Expired Products	28.5	1	Incineration / co-processing
Empty barrels / containers / liners contaminated with hazardous chemicals	33.1	8000 Nos.	Authorized recycler
ETP Sludge / MEE Salts	35.3	3900	To TSDF

Public hearing is not required since the proposed project falls under category B2, the proposed project is located in industrial area. It was informed that no litigation is pending against the proposal.

Deliberations in the 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 PFR & 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 PFR & 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 PFR/EMP report reflects the present environmental concerns and the projected scenario for all the environmental components. The committee deliberated on the court case against Unit-I of PP and warned PP against for any violations in future. The committee deliberated the action plan and budget allocation for green belt development, mitigation measure towards Air, Water, Noise and Soil pollution. The committee suggested to use scrubbing system while loading and unloading of waste and to use GPS enabled vehicle for solvent and spent solvent movement. 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 Unit shall install waste water flow meter at the outlet of Unit – I and inlet of Unit- II, and keep record of waste water flow from Unit-I to Unit- II. The monitoring report shall be submitted to the SPCB/MoEFCC Regional office.

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

(iii). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. Regular VOCs monitoring should be carried out.

(iv). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(v). 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.

(vi). 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.

(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). Total fresh water requirement shall not exceed 451.653 m^3/day will be met from KIADB supply by tapping water from Bhima River. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(ix). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

(x). 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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xi). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(xii). 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.

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

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

(xv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit. Preference shall be given to local villagers for employment in the unit.

(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. 2.14

Manufacturing of API & API intermediates by M/s Canpex Life Science LLP, located at Survey No.-165/A/1, Village Ambhora, TalukaAshti, District Beed, Maharashtra - Reconsideration of Environmental Clearance
[IA/MH/IND2/83281/2018, IA-J-11011/355/2018-IA-II(I)]

The proposal was earlier placed before the EAC in its meeting held on 17th September, 2020 wherein EAC deferred the proposal and desired for certain requisite information/inputs. Information desired by the EAC and response submitted by the project proponent is as under:

S. No.	Additional information/inputs	Reply of PP	Observation of EAC
1.	Action plan for reducing the incremental GLC and controlling the emissions from the unit.	Detailed Action plan for reducing the incremental GLC and controlling the emissions from the unit is submitted.	EAC deliberated the Action Plan in detail and found the reply to be addressing the concerns of the Committee.
2.	PP mentioned that the land conversion still not completed. In this regard Committee is of the view that this is basic requirement for setting of Industry and the	PP has received a letter from the Tahsildar office issued by District collector office Beed dated 21.10.2020 regarding the application of the land conversion done by PP on 23.09.2020 for the Survey No.-	EAC deliberated the issue and found the reply to be addressing the concerns of the Committee.

	Consultant has not properly guided the PP in this regard. Without Land conversion document the proposal cannot be considered for further.	165/A/1, Ambhora Village, Tal.- Ashti, District Beed Letter issued by District collector office Beed states that, as per the Maharashtra Land Revenue Code, 1966, section 44-A this land can be used for industrial purpose and no permission is required for bonafide industrial use. Under the circumstances PP submitted the Affidavit to indemnify Ministry of Environment and Forest GOI that PP will not start any production activity until the receipt of NOC. Immediately after getting the NOC we will submit it to Ministry. PP further indemnify MoEF& CC GOI, in case of any land dispute while issuing NOC / conversion process the sole responsibility rests with Canpex Life Science LLP.	
3.	Detailed plan for ZLD;	Detailed water balance and plan for ZLD is submitted.	EAC deliberated the issue and found the reply to be addressing the concerns of the Committee.
4.	CER action plan addressing the public hearing issues.	PP submitted detailed action plan for issues raised in the Public Hearing. PP sincerely request that, since it is a new project and is a small scale industry, consider CER of 2% of the proposed project cost. Accordingly in anticipation PP are proposing a budget of Rs.48.4 lakhs i.e. 2% of proposed project cost of 24.18 Crores.	EAC deliberated the issue and found the reply to be addressing the concerns of the Committee.

		The CER activities addressing public hearing issues is submitted.	

The Project Proponent and the accredited Consultant M/s Goldfinch Engineering Systems Private Limited, made a detailed presentation on the salient features of the project and informed that**:**

The proposal is for environmental clearance to the project manufacturing of API & API intermediates by M/s Canpex Life Science LLP located at Survey No.-165/A/1, Village Ambhora, Taluka Ashti, District Beed, Maharashtra.

All the Synthetic Organic Chemical units located outside notified industrial area listed at S.N. 5(f) of Schedule of Environment Impact Assessment (EIA) Notification are consider as category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity are as under:

S. No	Product Details	CAS Number	Existing Quantity(TPA)	Proposed Quantity (TPA)	Total Quantity (TPA)
1	Anastrozole	120511-73-1	0	6	6
2	Aripiprazole	129722-12-9	0	72	72
3	Benfotiamine	22457-89-2	0	360	360
4	Bisacodyl	603-50-9	0	180	180
5	Bupropion Hydrochloride	31677-93-7	0	60	60
6	Capecitabine	154361-50-9	0	36	36
7	Clomifene Citrate	50-41-9	0	120	120
8	Dimethyl fumarate	624-49-7	0	60	60
9	Fluconazole	86386-73-4	0	36	36
10	Gemcitabine hydrochloride	95058-81-4	0	18	18
11	ImatinibMesylat	220127-57-1	0	180	180
12	Letrozole	112809-51-5	0	36	36
13	Pioglitazone Hydrochloride	112529-15-4	0	72	72
14	Sildenafil Citrate	171599-83-0	0	72	72

15	Sodium picosulfate	10040-45-6	0	72	72
16	Tamoxifen Citrate	54965-24-1	0	120	120
17	Tranexamic acid	1197-18-8	0	72	72
18	Valsartan	137862-53-4	0	120	120
19	Zoledronic acid	118072-93-8	0	18	18
20	Tramadol HCL	22204-88-2	0	84	84
21	4-(Aminomethyl) benzoic acid	56-91-7	0	84	84
22	Thiamine monophosphate	532-40-1	0	120	120
23	1-[4-(2-(Dimethylamino)ethoxy)phenyl]-1,2-diphenylbutan-1-ol	748-97-0	0	24	24
24	4-Hydroxybenzophenone	1137-42-4	0	60	60
25	7-Hydroxy-3,4-dihydro-2(1H)-quinolinone	22246-18-0	0	24	24
26	1-[4-(2-(diethylamino)ethoxy)phenyl)-1,2-diphenylethanol	73404-00-9	0	24	24
27	4-[(4-Methylpiperazin-1-yl)methyl]benzoic acid dihydrochloride	106261-49-8	0	60	60
28	1-(2,3-dichlorophenyl) piperazine hydrochloride	119532-26-2	0	24	24
29	N-(5-Amino-2-methylphenyl)-4-(3-pyridyl)-2-pyrimidineamine	152460-10-1	0	60	60
30	5-Fluorocytosine	2022-85-7	0	36	36
31	Imidazole-1-acetic acid	22884-10-2	0	24	24
32	Imatinib Base	152459-95-5	0	60	60
Total			**0**	**2394**	**2394**

The ToR has been issued by Ministry vide letter No. J-11011/355/2018-IA-II(I); dated 14th December, 2018. Public Hearing for the proposed project has been conducted by the Maharashtra Pollution Control Board on 30th October 2019, which was presided over by Additional District Magistrate (ADM). The main issues raised during the public hearing are

related to Preference to the local people while recruiting employees for the proposed project, Issue discussed for the disposal of Hazardous waste & effluent treatment generating from the proposed project. Issues related to adjacent company such as effluent treatment scheme, emission from the boiler& construction of community hall etc.

Existing land area is 16388 m^2. Industry will develop green belt in an area of 33.56% i.e. 5500.75 m^2 out of total area of the project.The estimated project cost is Rs.24.18 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.660.4 Lacs and the Recurring cost (operation and maintenance) will be about Rs.1394.5 Lacs per annum. Total Employment will be 128 persons. Industry proposes to allocate Rs.48.4 lacs 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/ water body Athwad lake is flowing at a distance of 1.2 Km is in NW direction.

Ambient air quality monitoring was carried out at 08locationsduring January 2018 to March 2018 andthebaselinedataindicatestherangesofconcentrationsas:PM10 (20.1 -58.6 µg/m^3), PM2.5 (10.5 - 38.6 µg/m^3), SO2 (16.4 - 28.6 µg/m^3) and N O 2 (10.4 – 18.8 µg/m^3).AAQ modelingstudyforpointsourceemissionsindicatesthatthemaximumincremental GLCs after the proposed project would be 0.4 µg/m^3, 5.64 µg/m^3 and 3.9 µg/$m^3$with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). PP has also monitored additional Ambient air quality monitoring from 1st March 2020 but due to COVID -19 pandemic situation monitoring was done for 15 days at 08 locations during 1stMarch to 15th March 2020 2019 and the base line data indicates the ranges of concentrations as:PM10 (19.9 -58.2 µg/m^3), PM2.5 (11.8 – 36.5 µg/m^3), SO2 (20.8 – 29.1 µg/m^3) and N O 2 (12.6–19.3 µg/m^3).

Total water requirement is 363 m^3/day of which fresh water requirement after recycle will be 148m^3/day will be met from ground water. Total effluent of 191 CMD (Trade 185+ Domestic 6) quantity will be treated through ETP. Effluent will be segregated into two Streams - Low TDS and high TDS stream. High TDS stream will be treated in Multiple Effect Evaporator (MEE). Condensate from MEE will be treated with other low TDS streams in conventional ETP consisting of Primary, Secondary (along with domestic stream 6 CMD), Tertiary Treatment. Tertiary treated will be passed through Reverse Osmosis (RO). RO permeate will be recycled and RO reject will be fed to Multiple Effect Evaporator (MEE) to achieve ZLD. Domestic waste water will be treated in secondary treatment of ETP as combined treatment.

Power requirement for the project will be 2000 kVA and will be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). 1 no of DG set having capacity 500 kVA will be used as standby during power failure. Stack (height 4.5 m above enclosure) will be provided as per CPCB norms to the proposed DG set.

Boiler of capacity 3 TPH x 2 Nos. Coal/Briquette fired boilers will be installed. Multi cyclone separator/ bag filter with a common stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

Thermopac of capacity 2 lac Kcal/Hr X 1 no LDO fired will be installed with stack height of 30 m as a mitigation measure. Total Emissions of SO2 will be 7.584 kg/hr.

Details of Process emissions generation and its management.

Sr. No.	Source	Emissions	APC	Media	Disposal
1	Process	Acid Mist	Scrubber	Alkali	ETP

Emission from utility

Sr No	Equipment	Fuel	Full Load Operation	Concentration	Emission	Quantum
1.	Boiler	Coal/Briquette	600/ 868.42 Kg/hr.	Ash: 10% S: 0.5%	PM10 PM2.5 SO2 NOx	0.159 g/sec 0.23 g/sec 1.867 g/sec 1.187 g/sec
2.	Thermopac	LDO	24 Kg/hr	S: 1.8%	SO2	0.240 g/sec
3.	D G set	HSD	89.1 Kg/hr	S: 1%	SO2	1.782 kg/hr

Management

S No	Equipment	Fuel	Mitigation	Stack height
1	Boiler	Coal/Briquette	Multicyclone Dust Collector followed by bag filter	30 m (common Stack for both boiler)
2	Thermopac	LDO	By provision of adequate stack height	30 m
3	D G set	HSD	By provision of adequate stack height	4.5 m (above enclosure)

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

Hazardous Waste Generation and management

Category No.	Type of Waste	Quantity in TPA	Disposal/Management
28.1	Process residue	1025	CHWTSDF
28.1	Process waste	385	Sale to MPCB Authorized recycler/CHWTSDF
28.3	Spent Carbon from process	13	CHWTSDF
35.3	Spent Carbon from ETP	64	CHWTSDF
35.3	Chemical sludge from waste water treatment	451	CHWTSDF
35.3	MEE salts	4836	Sale to MPCB Authorized recycler

			/CHWTSDF
33.1	Discarded containers/barrels/liners	7200 nos	Collection, decontaminations, storage, reuse/sale to authorized recycler

Non-Hazardous Waste Generation and management

Sr No.	Type of Waste	Quantity in TPA	Disposal/Management
1	Coal Ash	520	Sale to Bricks manufacturer
2	Paper, Wood, Plastic and Metals	6	Sale to authorized party
3	Garbage like Paper, Corrugated Boxes, Plastics, Fiber drums, Brooms, Wipers, Floor cleaning mops, Tea cups, disposable approns, head caps & shoe covers etc.	3.6	Sale to authorized party

Other Waste Generation and management

Sr No.	Type of Waste	Quantity in TPA	Disposal/Management
1	Used Batteries	0.36	Sale to Authorized recycler
2	E-Wastes	2.4	Sale to authorized party

Deliberations in the 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 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 satisfactory for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The committee deliberated the action plan for the reduction of particulate matter in the area. The committee recommended to prepare action

plan for plantation and budget allocation for issue raised during the PH and green belt development. The committee recommended to use coal with Sulphur content less than 0.5%. Based on the deliberations in the EAC, PP has submitted additional information. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee.

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). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.

(iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iv). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(v). 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.

(vi). 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.

(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). Total fresh water requirement shall not exceed 148 m^3/day will be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(ix). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

(x). 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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xi). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(xii). 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.

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

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

(xv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit. Preference shall be given to local villagers for employment in the unit.

(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. 2.15

Proposed Expansion of Sugar 6000 TCD to 7500 TCD Sugar Plant and Molasses based Distillery 90 KLPD to 120 KLPD, by M/s Daund Sugar Pvt. Ltd., located at Gut No.99, Village-Alegaon, Taluka-Daund, District-Pune State-Maharashtra - Reconsideration of Environmental Clearance
[IA/MH/IND2/132134/2017, IA-J-11011/467/2017-IA-II(I)]

The Project Proponent and their accredited M/s Mantras Green Resources Ltd., made a presentation on the salient features of the project through video conferencing.

The consultant wasted precious time of the EAC due to poor preparation of the report and its presentation before the EAC. Information desired by the Committee is either not shown by the consultant or not explained properly. The present proposal was earlier considered by EAC (Industry-II) in August, October, wherein various information regard to EMP was desired by the EAC. The consultant was not able to explain the questions asked by the EAC. The EIA/EMP Report is not as per Appendix III of the EIA Notification, 2006. The TOR compliances is also not adequate.

The Committee noted that a show cause notice (SCN) has already been issued by the Ministry vide letter dated 04.12.2020 to the consultant. The Committee is of opinion that the consultant should be debarred for at least 3 months to give presentation before the EAC in the Ministry. The Committee also noted that PP/Consultant is also unable to explain the very basic mitigation measures related to the project. PP/Consultant attended the meeting without any preparation and explanation w.r.t. EMP and its management.

EAC, after detailed deliberation, given last chance to revise the complete EIA/EMP Report alongwith TOR compliances as per provisions of the Appendix III of the EIA Notification, 2006. *The proposal was accordingly* ***return in present for revision of EIA/EMP report*** *by the project proponent.*

Agenda No. 2.16

Expansion and debottlenecking of existing petrochemical manufacturing facility at Vadodara (Gujarat) Manufacturing Division (VMD) of M/s Reliance Industries Limited (RIL)- Environmental Clearance

[IA/GJ/IND2/100410/1998, J-11011/13/99-IA-II(I)]

The project proponent, vide email dated 08.12.2020, has informed about their inability to attend the EAC meeting **due to Covid to its senior technical people.** The Committee noted that, being an important and highly technical project, the presence of project proponent is absolutely necessary and desired to list the project in the concerned sectoral EAC in its next meeting. The proposal was accordingly **deferred** for the needful.

Amendment in Environmental Clearance

Agenda No. 2.17

Development Drilling of (406 nos) of wells (Oil and Naturl Gas) in oil Field of Ahmedabad Asset at Kheda, Gandhinagar and Ahmedabad District of Gujarat by M/s ONGC Ltd.- Amendment in Environment Clearance

[IA/GJ/IND3/184542/2020, J-11011/92/2012-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 22.03.2016to the project for Development Drilling of (406 Nos.) of Wells (Oil and Natural Gas) in Oil Field of Ahmedabad Asset at Kheda, Gandhinagar and Ahmedabad Districts of Gujarat by M/s. ONGCLtd.

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

Sl. No.	Para of EC Issued by MoEF&CC	Details as per the EC	To be revised/read as	Justification/ Reasons
1.	Para no. 2	It is noted that the proposal is for development drilling of (406 nos.) of wells in oil Field of Ahmedabad Asset at Kheda, Gandhinagar and Ahmedabad districts of Gujarat	For inclusion of proposed associated activities, namely, Establishment of Early Production System (EPS) # 181 at Limbodara, Kolavada, Gandhinagar District and Onshore Oil & Gas Production Facility-Group Gathering Station (GGS-IV) at Gamij, Kheda District of Gujarat in the existing EC viz., Development Drilling of (406 Nos.) of Wells (Oil and Natural Gas) in Oil Field of Ahmedabad Asset at Kheda, Gandhinagar and Ahmedabad	The development wells drilled under this EC will be connected to the proposed establishments namely Establishment of Early Production System (EPS) # 181 at Limbodara, Kolavada, Gandhinagar District and Onshore Oil & Gas Production Facility-Group Gathering Station (GGS-IV) at Gamij, Kheda District of Gujarat for monetizing the crude oil & gas produced from Limbodara and Gamij Oil Fields of Ahmedabad Asset. Inclusion of these facilities will result in reducing tanker loading points

			Districts of Gujarat by M/s. ONGC granted by MoEF&CC vide F. No.J-11011/92/2012-IA II(I) dated 22.03.2016.	Existing facilities in the area will reach full handling capacity thereby necessitating establishment of the Limbodra EPS and Gamij GGS

The EAC has made a detailed deliberations on the proposal. The Committee has deliberated the compliance status of the existing EC conditions. **The Committee has suggested the project proponent to improve the greenbelt development in the project area and associated facility sites. In response the project proponent has submitted an undertaking that greenbelt development shall be developed in the project areas.** The Committee has noted that the proposed associated facilities are envisaged to meet the requirement necessitated from the exiting drilling operations. The development wells drilled under the existing project will be connected to the proposed facilities. The Committee noted that the proposed facilities, as standalone does not require prior EC.

*The Committee after detailed deliberations has **recommended for amendment in the EC** dated 22nd March, 2016, to include the associated facilities, viz. Establishment of Early Production System (EPS) # 181 at Limbodara, Kolavada, Gandhinagar District and Onshore Oil & Gas Production Facility- Group Gathering Station (GGS-IV) at Gamij, Kheda District of Gujarat, to complete the project as per scope of the project, subject to additional terms and conditions as under:*

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

(ii). Emissions from the storage facilities shall be monitored and controlled.

(iii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area of the EPS and GGS facilities, 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.

(iv). All other terms and conditions stipulated therein shall remain unchanged.

Agenda No. 2.18

Expansion of Chemical Unit located at Coastal Highways, Village Mujpur, Tehsil Padra, District, Vadodara, Gujarat by M/s Gulbrandsen Chemicals Pvt. Ltd- Amendment in Environment Clearance

[IA/GJ/IND3/183194/2020 , J-11011/490/2011-IA-II(I)]

The proposal is for Extension of validity in the Environmental Clearance granted by the Ministry vide letter No. J-11011/490/2011-IA-II (I) dated January 23, 2014 & EC Amendment letter March 07, 2018 for Expansion of Chemical Unit (From 24,980.04 to 1,45,685.04 MTPA) at Survey No. 194, 195, 196, 197, 198, 199, 200, 202, 203, 204, 205, 206, 265B, 266B, 266A, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 296, 297, 298, 321, 322, 323, 326, 327 & 449, Coastal Highways, Village: Mujpur, Tehsil: Padra, District: Vadodara - 391440 Gujaratof M/s. Gulbrandsen Chemicals Pvt. Ltd.

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

Explanation & Justification:

<table>
<tr><td colspan="3">Project Details</td></tr>
<tr><td>Sr. No.</td><td>Subject</td><td>As per File Upload time Justification of EC Extension</td></tr>
<tr><td>1</td><td>Environment Clearance Extension</td><td>EC was granted to M/s. Gulbrandsen Chemicals Pvt. Ltd. for manufacturing of following products:
<table>
<tr><th rowspan="2">Sr. No</th><th rowspan="2">Name of Products</th><th>Proposed in EC</th><th>Present status of proposed Expansion</th><th>Still Pending for Expansion</th></tr>
<tr><th>MTPA</th><th>MTPA</th><th>MTPA</th></tr>
<tr><td>1</td><td>Organometallic compounds</td><td>32700</td><td>27000</td><td>5700</td></tr>
<tr><td>2</td><td>Polyethylene wax</td><td>20000</td><td>20000</td><td>0</td></tr>
<tr><td>3</td><td>R&D Products Organometallic Compounds/Organic/inorganic chemicals</td><td>25.0</td><td>25.0</td><td>0</td></tr>
<tr><td>4</td><td>Aluminum Chloride (25%) (AICI3)</td><td>48510</td><td>48510</td><td>0</td></tr>
<tr><td>5</td><td>Ethyl Iodide (C2H5I)</td><td>19470</td><td>0</td><td>19470</td></tr>
<tr><td></td><td>Total</td><td>120705</td><td>95535</td><td>25170</td></tr>
</table>
Initially due to poor market penetration and our readiness for operations, we decided to go for expansion in phase wise manner and put up the facility for Product no. 2 to 4 & some of the products in Sr. No. 1. Rest of the products were to be considered in 2nd phase.</td></tr>
</table>

EC Products not converted in CCA and considered for 2nd phase are mentioned below:

Sr. No	List of pending product	Qty in MT/ Annum
1	Tri Methyl Aluminum (TMAl)	3000
2	IsoprenylAluminum (IPRA)	200
3	Methyl Aluminoxane (MAO)	1000
4	Modified Methyl Aluminoxane (MMAO)	1000
5	Ethyl Iodide (C2H5I)	19470
6	Magnesium Ethoxide	500
	Total	**25170**

PP could not convert all the EC products into Consent to Operate within the stipulated time due to market demand.

However, looking towards the current market scenario and high demand, we are now ready to take up the pending products and in view of that, we earnestly request you for extension of our Environmental Clearance validity for further three years.

The Committee made a detaileddeliberations on the proposal. **The Committee at the first instance noted that the Ministry has extended the validity of the environmental clearances ending till March, 2021 for further period of six months and accordingly PP can execute the project without stopping it.** The Committee, however, was very annoyed on the compliance status of the existing EC conditions. The Committee has advised the project proponent to complete the greenbelt development along the periphery of the plant, to combat the pollution and emissions from the unit. The Committee has suggested the PP to at first comply with the EC conditions and submit the monitoring report from the Regional Office of the Ministry. The Committee opined that the PP can approach the EAC/Ministry before completion of the EC validity period for further extension, if required, as per the EIA Notification, 2006.*The proposal was accordingly **returned** in its present form for the needful.*

Agenda No. 2.19

Expansion of Sugar Plant from 7000 TCD to 10000 TCD, Cogen plant from 28MW to 38 MW and distillery from 60KLPD to 90 KLPD by M/s Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd located at Village & Taluka Kagal, District Kolhapur, Maharashtra - Amendment in Environment Clearance
[IA/MH/IND2/144757/2020, J-11011/225/2015-IA II (I)]

The Committee noted that PP has submitted duplicate proposal and the same proposal has already considered by the EAC and recommended. No action is required in this regard. ***The proposal was accordingly return as already considered by the EAC.***

Agenda No. 2.20

Setting up Bamboo based Ethanol Project by M/s NumaligarhRefinary Limited at Village Owguri Chapori Gaon, Mauza Morong, Tahsil& District Golaghat, Assam - Amendment in Environment Clearance
[IA/AS/IND3/182924/2020, J-11011/274/2015-IA II (I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 6th November, 2017 for Setting up Bamboo based Ethanol project located at village Owguri Chapori Gaon, Mauza Morong, Tahsil & District-Golaghat, Assam in favour of M/s Assam Bio Refinery Private Limited (earlier granted in favour of M/s Numaligarh Refinery Limited).

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

Sr. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons
1.	Serial No. 10 (q)	"At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item-wise details along with time-bound action plan shall be prepared and submitted to the Ministry's Regional Office"	"At least 0.5% of the total project cost shall be allocated for Enterprise Social Commitment (ESC) / Corporate Environment Responsibility (CER) based on public hearing issues and item-wise details along with time-bound action plan shall be prepared and submitted to the Ministry's Regional Office"	As per Office Memorandum F.No.22-65/2017-IA.III dated 1st May, 2018, for greenfield projects with capital investment between INR 1000 crores to 10000 crores, the fund allocated for Corporate Environment Responsibility (CER) shall be maximum upto 0.5% of the capital investment.

The Environmental Clearance granted by the Ministry vide letter dated 6th November, 2017 to M/s Assam Bio Refinery Private Limited (earlier granted in favour of M/s Numaligarh Refinery Limited). The present proposal for amendment was deliberated by the EAC and recommended that OM dated 01.05.2018 may not be applicable to the instant proposal.

However, keeping in view of national importance and new technology of its kind project in India with high potential engagement of providing livelihood from its bamboo feedstock value chain starting from bamboo sapling production, nursery development, bamboo plantation, harvesting, pre-processing and transportation to the plant. The committee recommended to utilize 0.5% (Rs.8.75 Crore) on issue raised during the Public Hearing and 2% (Rs.35 Crore) for Sustainable bamboo feedstock value chain.

*The Committee after detailed deliberations **recommended** for amendment in the EC as above with all other terms and conditions remain unchanged.*

Agenda No. 2.21

Environmental and CRZ Clearance for augmentation in capacity of existing LNG Terminal of 5 MMTPA to 10 MMTPA along with pipeline of 13.9 km with suitable tap at S.No. 319, village-Hazira Tal- Choryasi District- Surat, Gujarat by M/s Hazira LNG Pvt Ltd- Amendment in Environment Clearance
[IA/GJ/IND3/181599/2020, 11-88/2011-IA.III]

The project proponent has informed that the application has been submitted wrongly to the Industry-3 sector and informed that different application has been submitted in the respective sector.

*The Committee has accordingly decided to **return** the proposal in its present form based on the request of PP.*

Amendment in ToR

Agenda No. 2.22

Establishment of Agrochemicals, Synthetic Organic chemicals manufacturing facility and Co-generation Power Plant by M/s NACL Multichem Industries Limited - Amendment in ToR

[IA/AP/IND3/184185/2020, IA-J-11011/452/2019-IA II (I)]

The PP, vide email dated 07.12.2020, requested that due to family emergency PP cannot attend the meeting. The PP has also not submitted any documents. The EAC tried to understand the proposal but nobody was there to address the concerns raised by the respected members of the Committee. Based on the request of PP the EAC has suggested to consider the proposal based on request of PP.

Agenda No. 2.23

Expansion of distilleries unit at Bagalkot-587302 Karnataka by M/s Siddapur Distilleries Ltd- Amendment in ToR (Exemption of PH).

[IA/KA/IND3/184125/2020, J-11011/274/2003-IA-II(I)]

The proposal is for seeking the exemption of public hearing w.r.t. Ethanol Blending Program (EBP).

The Member Secretary informed that in order to expedite production of Ethanol for its limited purpose of blending with petrol for its usage as bio-fuel the MoEF&CC has issued a

Notification dated 17th January, 2019 for appraisal of expansion projects of sugar manufacturing or distilleries, having ECs for their present industrial operations and intended to produce Ethanol for its limited purpose of blending with petrol exclusively for its usage as bio-fuel, as per the procedure applicable to category B2 projects specified in the EIA Notification, 2006 by the sectoral EAC/SEAC for grant of EC. The extension of validity of the said notification, which was initially for one year, has been further issued on 17.02.2020 andextended for one year more i.e. upto 16.02.2021.Category B2 projects are exempted from requirement of collection of baseline data, EIA Studies and public consultation.

The Committee noted that the consultant has not properly guided to the PP as there are already guidelines and notifications issued by the Ministry in this regard. Consultant should read the guidelines and notification before submission of the proposal. The EAC deliberated the proposal and opined that PP may apply under Ethanol Blending Programme as per above mentioned notification dated 17.01.2019.

*The proposal was accordingly **return** for the needful by the project proponent*

Reconsideration of Environmental Clearance

Agenda No. 2.24

Manufacture of Melamine Formaldehyde Resin (300 MT/Month), Phenol Formaldehyde Resin (300 MT/Month) and Urea Formaldehyde Resin (400 MT/Month) and Laminate sheets at Survey No. 203/15, B/h. Shaktiman Rotawetar, N. H. Road, Village Bhunava, TalukaGondal, District Rajkot (Gujarat) by M/s Swastik Laminates – Reconsideration of Environmental Clearance

[IA/GJ/IND2/64176/2017, IA-J-11011/207/2017-IA-II(I)]

The proposal was earlier considered by the EAC in its meeting held on 27-29 August, 2018 and 29-31 October, 2018. The Committee, after detailed deliberations, observed no change in the status from that reported during the last meeting on 27-29 August, 2018. The consent to establish dated 12th July, 2018 issued by the SPCB still shows present resin production of 300 TPM, whereas the present proposal is for setting up resin manufacturing unit of capacity 1000 TPM. The project proponent was asked to first get the same rectified and deferred the proposal.

In response, the PP has informed that CTE was received from GPCB vide letter no PC/CCA/RJ-2725(2)/ID-48231/510876 dated on 22.06.2019 in which it is mentioned that currently project is authorized for manufacturing of laminated sheet only. It was informed that resin manufacturing shall start after getting EC only.

The Project Proponent and the accredited consultant M/s T.R Associates, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Production of Phenol Formaldehyde Resin (300 MT/Month), Urea Formaldehyde Resin (400 MT/Month) and

Melamine Formaldehyde Resin (300 MT/Month) at Survey No.: 203/15, Plot No. 4, B/h. ShaktimanRotawetar, N.H. Road, Village: Bhunava, Taluka: Gondal, District: Rajkot, Gujarat byM/s. Tirupati Laminates (earlier M/s. Swastik Laminates).It is informed that directors of the company has changed and hence for application of environment clearance was pending. The Company has changed its name from M/s Swastik Laminates to M/s Tirupati Laminates.

The details of products and capacity as under:

S. No.	Name of Product	Capacity (MT/Month)
1.	Phenol Formaldehyde Resin	300 MT/Month
2.	Melamine Formaldehyde Resin	300 MT/Month
3.	Urea Formaldehyde Resin	400 MT/Month

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

The ToR has been issued by Ministry vide letter dated 30th May, 2017.Public hearing for the proposed project has been conducted by the State Pollution Control Board on 06/02/2018. The issues raised during the Public Hearing related to social upliftment activities in surrounding area. It was informed by the project proponent that no litigation is pending against the proposal.

Total land area is 9,942 m^2; no additional land will be used for proposed project.Industry will develop greenbelt in an area of 32.39% i.e. 3220 m^2 out of 9942 m^2 area of the project. Industry will develop 353 m^2 areas as a green belt outside the industrial premises adjacent to project boundary. So total 3573 m^2 (3220 m^2 + 353 m^2) area will be developed as Green belt. The estimated project cost is Rs125 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 43 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 31 lakh per annum. Total Employment will be 60 persons as direct. Industry proposes to allocate 2.5 Lakhs towards Corporate Environment Responsibility.There is no Sanctuary within 10 km distance from the project site.

Ambient air quality monitoring was carried out at 8 locations during October – December 2016 & May 2017 to June, 2017 and submitted baseline data indicates that ranges of concentrations of PM10 (60.81 to 96.50 µg/m3), PM2.5 (22.50 to 36.06 µg/m3), SO2 (9.62 to 25.00 µg/m3) NO2 (14.87 to 30.68 µg/m3), CO (B.D.L.), VOC (B.D.L.) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.22 µg/m3, 0.62 µg/m3 and 3.26 µg/m3 with respect to PM10, SO2 and NO2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is estimated to be 47.5 Kl/day, which includes fresh water requirement of 30.5 Kl/day proposed to be met from Bore Well.Industrial effluent of 12.16

m^3/day will be treated through Effluent Treatment Plant followed by Evaporator and the stated system will achieve Zero Liquid Discharge. Domestic effluent of 6.7 m^3/day will be treated in Sewage Treatment Plant. Treated water, 5.5 m^3/day will be reused in gardening & 1.2 m^3/day will be reused in domestic flushing.

Power requirement will be 200 KVA and will be met from Paschim Gujarat Vij Corporation limited (PGVCL). Industry propose one Briquettes/Coal fired 3 TPH Steam Boiler&15 Lac Kcal./Hr. Thermic Fluid Heater will be installed. Cyclone Separator followed by Bag Filter with a stack height of 30 m will be installed for controlling the Particulate Matter Emissions within statutory limit of 150 mg/Nm3 for the proposed boiler & TFH. 150 kVA D. G. Set will be used as standby during power failure. Stack (height 6.0 m) will be provided as per CPCB norms to the proposed D.G. set.

Details of Process emissions generation and its management.

Sr. No.	Stack attached to	Stack Height (m)	Expected Pollutant	APC System	Quality of pollutant
1	Dryer	11	Methanol	Condenser	As per GPCB Norms

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

Sr. No.	Description	Category	Quantity (TPA)	Mode of Disposal
1	ETP Sludge + Evaporation residue	35.3	42	Collection, storage and disposal at approved TSDF Site.
2	Edge cutting waste	23.1	9.6	Collection, storage and disposal at approved CHWIF for disposal
3	Spent Carbon	36.2	132	Collection, storage and disposal at approved CHWIF for disposal
4	Used / Spent Oil	5.1	0.048	Collection, storage and used within premises as a lubricant / sold to registered recycler.
5	Discarded bags/ drums/ containers	33.1	6.0	Collection, storage & sell to authorized vendor

Deliberations in the EAC:

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

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

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the public hearing action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. 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 noted that the ToR/PH/EIA report has been submitted by M/s Swastik Laminates and due to change in board of directors, company has changed its name to M/s Tirupati Laminates and proposal is now presented by the new applicant.

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). M/s Tirupati Laminates shall comply with all the environmental safeguards and commitments made by M/sSwastik Laminates during public hearing and in the EIA/EMP report.

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

(iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(iv). 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.

(v). The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.

(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). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(x). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.

(xi). Total fresh water requirement shall not exceed 30.5 cum/day proposed to be met from bore well/ground water. Necessary permission in this regard shall be obtained from the concerned regulatory authority/CGWA, and renewed from time to time.

(xii). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within

the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

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

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

(xv). The activities and the action plan proposed by the project proponent to address the public hearing and socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented. Preference shall be given to local villagers for employment in the unit.

(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. 2.25

Bulk Drugs Manufacturing Unit located at RS No:3/1 & 3/2, Anumanchipalli Village, Jaggayyapeta Mandal, Krishna District, Andhra Pradesh by M/s Orch Pharma Pvt. Ltd- Reconsideration of Environmental Clearance
[No.IA/AP/IND2/172555/2020, IA-J-11011/221/2020-IA-II(I)]

PP vide email dated 10.12.2020 informed that due to technical issue PP/Consultant could not connect the EAC meeting held on 09/12/2020. The EAC tried to understand the proposal but nobody was there to address the concerns raised by the respected members of the Committee.

PP requested to consider the proposal in next EAC meeting, accordingly the EAC **deferred** the proposal for consideration for the **next EAC meeting** to be held in December 2020.

Amendment in Environment Clearance

Agenda No. 2.26

Expansion of synthetic rubber and allied products at Survey No.27, 105, 131-137, 103, 104 Village Dungri, District Bharuch, Gujarat by M/s Apcotex Industries Limited- Amendment in Environment Clearance.

[IA/GJ/IND3/185454/2020 (J-11011/242/2005-IA(II)-I)]

The Proposal is for amendment in the **Environmental Clearance** granted in favour of **M/s. Apcotex Industries Ltd.** located at **Survey No. 27, 105, 131-137, 103 & 104, Village: Dungri, Tal: Valia, Dist: Bharuch, Gujarat, India,** as per details as under:

<table>
<tr><th>Sr. No.</th><th>Purpose of Application</th><th>Technical details</th><th>Justification/ Reasons</th></tr>
<tr><td>1</td><td>Amendment in EC</td><td>Propose Re-configuration of Boiler capacity (18 TPH to 24 TPH), Additional DG Set, change in quantity of Fuel, additional e-waste in Hazardous Waste & Relocation of SBR/HSR Plant. for applied CTE Amendment application at Gujarat Pollution Control Board (GPCB).</td><td>It is proposed for Re-configuration of boiler capacity from 18 TPH to 24 TPH and planning to install 24 TPH Boiler instead of 18 TPH Boiler along with one existing boiler-1 of 6 TPH to be kept as a stand-by & maintain total steam generation 31.2 TPH after proposed amendment as per permitted/consented AND due to this boiler capacity re-configuration and as per below given details, total steam generation and requirement won’t increase/change as one existing boiler-1 of capacity 6 TPH will remain stand-by and will be in operation only during non-operation of one existing another 6 TPH Boiler-2 (working).
<table>
<tr><th colspan="2">Existing</th><th colspan="2">Proposed</th></tr>
<tr><td>Boiler-1: 6 TPH (Working)</td><td rowspan="3">Generated steam (13.2 TPH) is utilized in Rubber Products Production</td><td>Boiler-1: 6 TPH (Stand-by)</td><td>Stand-by</td></tr>
<tr><td>Boiler-2: 6 TPH (Working)</td><td>Boiler-2: 6 TPH (Working)</td><td rowspan="2">Generated steam (7.2 TPH) will be utilized in Rubber Products Production</td></tr>
<tr><td>WHRB: 1.2 TPH (Working)</td><td>WHRB: 1.2 TPH (Working)</td></tr>
<tr><td>Boiler: 18 TPH (yet not in operation)</td><td>Steam (18 TPH) is utilized in Power Generation.</td><td>Boiler: 24 TPH- Coal Based (Co-generation)</td><td>Steam (18 TPH) will be utilized in Power Generation.</td></tr>
<tr><td colspan="2"></td><td colspan="2">Steam (6 TPH) will be utilized</td></tr>
</table>
</td></tr>
</table>

			Rubber Products Production.
• Generated steam **(6+6+1.2 = 13.2 TPH) is** utilized in Rubber Products Production • **18 TPH** for Power generation (**yet not in operation)** • **Total Steam Generation: 31.2 (13.2 + 18) TPH**		• **(7.2+6 = 13.2 TPH)** for Rubber Products Production. • **18 TPH** for Power generation. • **6 TPH** (stand by). • **Total Steam Generation: 31.2 (13.2 + 18) TPH**	

And therefore, after above-said proposed amendment, there will not be increase/change in total production tonnage of permitted/consented products.

There will be operation of 3 Boilers in proposed scenario as compared to operation of 4 Boilers in existing scenario.

Discontinuation of old Boiler of 6 TPH capacity will reduce pollution load on environment.

Additional DG Set of 910 KVA will be added in the flue gas emission as a power back up.

There was typographical mistake. Additional fuel consumption in CCA and will be Indian Coal: 36.81 MT/Day OR Imported Coal: 67.24 MT/Day) and quantity of diesel is added (From 374 litres/Day to 569 Litres/Day).

e-waste generated from the project is introduced in the hazardous waste list.

SBR/HSR Plant is in operation since 2006, and hence plant structure, equipment & machinery needs to be reconstruct or reinstall.

The main objectives for relocation of SBR/HSR plant are:

1. To provide a plant capable of producing SBR/HSR on dry basis continuously at 833 MT/month on a 26 working days operation.
2. To start production no later than 1st Nov 2021 while seeking every opportunity for an earlier start up (each such

			opportunity tested against the economic benefit for early completion). 3. To complete within the control estimate of INR [450 mio] +/- 10% (subject to objective 2). 4. To increase production flexibility and reduce the exposure to business interruption risks. 5. To complete the construction and commissioning phase of the project without any lost time accident, major incidence or dangerous occurrences.

The Committee, after detailed deliberations, ***recommended*** *for changes in boiler capacity from 18 TPH to 24 TPH and to install 24 TPH Boiler instead of 18 TPH Boiler along with one existing boiler of 6 TPH as a stand-by. The Committee has suggested that the SPCB shall confirm that the boiler capacity has not been changed without consent from SPCB before grant of CTO for the same.*

All other terms and conditions in the EC shall remain unchanged.

2.27 Any other Items with permission of the Chair

Agenda No. 2.27.1

Representation from the Bulk Drug Manufactures Association of India

It was informed to the Committee that the Bulk Drug Manufactures Association of India has submitted a representation vide letter dated 16th November, 2020 to the Ministry to consider the following points, and the Ministry has desired to obtain the comments of the EAC on the matter.

Suggestions of the Bulk Drug Manufactures Association of India:

(i) Issue of EC, CTE/CTO permissions category wise, instead of individual product wise.

(ii) Pollution load based permissions, instead of quantity of product wise.

(iii) Support and Strengthening of CETP to have effective waste treatment

(iv) Incentives for waste reduction and development of by-products from waste.

The Committee has made detailed deliberations on the proposal. The Committee was of the opinion that Category wise EC may be considered in place of individual products, subject to proponent meeting pollution load norms. The Committee has also suggested that CETP shall be encouraged and CETP shall follow ZLD system by giving back treated effluent to the individual units for further utilizations, than discharging into marine/river waters. The Committee has also supported the incentives schemes for utilization of by-products/ products from waste.

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.

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Annexure-I

List of the Expert Appraisal Committee (Industry-3) members participated during Video Conferencing (VC) meeting

S. No.	Name of Members	Designation
1.	**Dr. Rajashekar P. Mandi** Director, School of Electrical & Electronics Engineering, REVA University, Bangalore - 64 E-mail: rajashekarmandi@yahoo.com	Chairman
2.	**Dr. Ashok Kumar Saxena, IFS** Bunglow No. 38, Sector-8A, Gandhinagar, Gujarat – 382008 E-mail: ashoksaxena1159@gmail.com	Member
3.	**Prof. (Dr.) A.B. Pandit** Vice Chancellor, Institute of Chemical Technology, Mumbai, Sir JC Bose Fellow, Government of India Email: ab.pandit@ictmumbai.edu.in	Member
4.	**Prof. (Dr.) S. N. Upadhyay** Research Professor (Hon.), Department of Chemical Engineering & Technology, Indian Institute of Technology (Banaras Hindu University), Varanasi E-mail:snupadhyay.che@iitbhu.ac.in	Member
5.	**Prof. (Dr.) Suneet Dwivedi,** Professor in K Banerjee Centre of Atmospheric and Ocean Studies, University of Allahabad, Allahabad - 02 Uttar Pradesh, E-mail:dwivedisuneet@rediffmail.com /suneetdwivedi@gmail.com	Member
6.	**Prof. (Dr.) Arvind K. Nema** Professor, Department of Civil Engineering Indian Institute of Technology, Delhi, Hauz Khas, New Delhi -110 016 Email: aknema@civil.iitd.ac.in / aknema@gmail.com	Member
7.	**Shri Santosh Gondhalkar** 'Shree' Apartment, Flat 401, Plot No. 22, Tukaram Society, Santnagar, Pune- 411009 E-mail: santoshgo@gmail.com	Member
8.	**Prof. (Dr.) Pradeep Kumar Mishra** Department of Chemical Engineering & Technology, Indian Institute of Technology (BHU) Varanasi, Varanasi - 221005 Email: pkmishra.che@itbhu.ac.in / drpkm18@gmail.com	Member
9.	**Prof. (Dr.) Vijay S. Moholkar** Professor in Department of Chemical Engineering, Block-K (Academic complex), Room No. 111, Inidia Institute of Technology Gawahati, Gawahati – 781039 E-mail: vmoholkar@iitg.ernet.in	Member
10.	**Dr. Suresh Panwar** House No.4, Gayateri Green Society, NH 58 Bypass,Kankerkhera, Meerut, Uttar Pradesh	Member

	Email-spcppri@gmail.com	
11.	**Shri Dinabandhu Gouda** Additional Director, DH IPC-I, Room No. 309A, Third Floor, Central Pollution Control Board, PariveshBhawan, East Arjun Nagar, Delhi – 110032 E-mail: dinabandhu.cpcb@nic.in	Member
12.	**Shri Tukaram M Karne** Nagpur, Maharashtra E-mail: tmkarne@gmail.com	Member
13.	**Shri Sanjay Bisht** Scientist 'E', Room No. 517, Office of the Director General of Meteorology, Indian Meteorological Department, MusamBhawan, Lodhi Road, New Delhi -110003 E-mail: sanjay.bist@imd.gov.in	Member
14.	**Dr. Uma Kapoor** Regional Director, CGWA, 18/11, Jamnagar House, Mansingh Road, New Delhi E-mail: Uma-cgwb@nic.in	Member
15.	**Dr. R. B. Lal,** Scientist 'E'/Additional Director Indira Paryavaran Bhawan, Ministry of Environment, Forest and Climate Change Room No. V-304, Vayu Wing, Jor Bag Road, New Delhi-110003 Telefax: 011-24695362 E-mail: rb.lal@nic.in	Member Secretary
MoEFCC		
16	**Dr. E.P. Nobi**	Research Officer
17	**Mr. Ritin Raj**	Research Assistant

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Annexure-II

Approval of EAC Chairman

Email **rb.lal@nic.in**

Re: Zero Draft Minutes of the 2nd EAC (Industry-3) meeting held during December 8-9, 2020 for comments

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From : **rajashekarmandi@yahoo.com** **Thu, Dec 17, 2020 12:15 PM**

Subject : Re: Zero Draft Minutes of the 2nd EAC (Industry-3) meeting held during December 8-9, 2020 for comments

To : Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in>

Reply To : Rajashekar Mandi <rajashekarmandi@yahoo.com>

Dear Dr. R.B. Lal,

The minutes of 2nd EAC meeting held during 8-9th Dec. 2020 is in order and is approved.

With warm regards,

Dr. Rajashekar P. Mandi
Director,
School of Electrical & Electronics Engineering,
REVA University,
Rukmini Knowledge Park,
Kattigenahalli, Yelahanka,
Bangalore - 560 064,

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