

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

Dated: 23.04.2021

MINUTES OF THE 9th EXPERT APPRAISAL COMMITTEE (INDUSTRY-3 SECTOR)
MEETING HELD DURING APRIL 12-13, 2021

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

Time: 10:30 AM onwards

DAY 1: APRIL 12, 2021 (MONDAY)

(i) Opening Remarks by the Chairman

Dr. R.B. Lal, Member Secretary informed to the Committee that Dr. Rajashekar P. Mandi, Chairman, Expert Appraisal Committee is not well and recommended that Prof. (Dr.) A.B. Pandit, Vice Chairman, EAC be act as the Chairman, EAC for this instant Meeting. The Committee agreed the same.

Prof. (Dr.) A.B. Pandit, Chairman EAC has welcomed to the Committee members and opened the EAC meeting for further deliberations.

(ii) Confirmation of the Minutes of the 8th Meeting of the EAC (Industry-3 Sector) held on March 25, 2021 at MoEFCC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (Industry-3 Sector) members on the minutes of its **8th Meeting of the EAC (Industry-3) held on March 25, 2021** 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. 9.1

Setting up of Active Pharmaceutical Ingredients (API's) manufacturing unit of capacity 25 TPM and R&D products of 0.1 TPM by M/s Vineela Biologics, located at Plot No. 98, Kadechur Industrial Area, Taluk & Distirct Yadagir, Karnataka.

[IA/K/IND2/206839/2021, J-11011/143/2021-IA.II(I)]

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

The proposal is for environmental clearance to the project for Setting up of Active Pharmaceutical Ingredients (API's) manufacturing unit of capacity 25 TPM and R&D products of 0.1 TPM by M/s Vineela Biologics, located at Plot No. 98, Kadechur Industrial Area, Taluk & Distirct Yadagir, Karnataka.

The details of products and capacities are as under:

S. No.	Name of Products	Qty. in TPM	Therapeutic use
1	Bendamustine HCl	1	To treat chronic lymphocytic leukemia
2	Bortezomib	2	Multiple myeloma
3	Busulfan	5	Chronic myelogenous leukemia
4	Cyclophosphamide	3	To treat cancer
5	Gefitinib	2	Anti cancer (lung cancer)
6	Ibrutinib	2	Anti cancer (Blood cancer)
7	Imatinib Mesylate	2	Anti cancer (Blood cancer)
8	Lenalidomide	5	To treat anemia
9	Melphalan	2	Alkylating agents – To treat ovarian cancer
10	Nintedanib	0.05	Anti cancer (lung cancer)
11	Pazopanib HCl	5	Anti cancer (kidney cancer)
12	Sorafenib	3	To treat cancer
13	Temozolomide	5	Anti-cancer ("antineoplastic" or "cytotoxic") chemotherapy drug
14	Zoledronic acid	5	To treat high levels of calcium
15	R & D products	0.1	--
	Total (5 Products)	25	

Note: Any 5 products along with R & D products will be manufactured at a given point of time.

LIST OF BY-PRODUCTS AND ITS QUANTITIES

S.No	Name of the Product	Name of the By Product	Quantity in Kgs/Day
1	Melphalan	O-Pthalamide	42

The project is covered under Category B2 of item 5(f) 'Synthetic, Organic Chemicals Industry' of the Environment Impact Assessment (EIA) Notification, 2006 & OM dated 27.03.2020 and 15.10.2020. 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. It was informed that no litigation is pending against the proposal.

Deliberations in the EAC:

The Member Secretary informed the EAC that the Consultant has submitted more than 10 applications in hurry with same EMP/PFR report. The various queries raised by EAC members were either not answered or unsatisfactory by the PP/Consultant. In place of topo sheet consultant submitted google image. The Committee found information filled in EMP/PFR report were vague/insufficient to address environmental concern. Risk assessment were not carried out by the consultant. The Committee opined that consultant should revise the EMP/PFR report by rectifying deficiencies observed.

- (i) The Notification dated 27.03.2020 is only for API not for intermediates. If the proposal is for API & Intermediate both, please apply for TOR. PP needs to submit the undertaking that the products are related to API only.
- (ii) The information filled in Form-I/PFR/ Reports is vagues/insufficient to address the environmental concern; accordingly, PP needs to revise the Form-I/PFR/EMP and other Reports.
- (iii) EMP is not adequate and not addressing the concern of Environment. Consultant has not read the provisions of the EIA Notification and applied the proposal in hurry without addressing the concern of EMP. Revised EMP needs to be submitted.
- (iv) Details of Raw material and its linkage and its mitigation measure during transportation needs to be submitted
- (v) As per the Ministry OM No. 22-23/2019-IA.III, dated 28.01.2021, the PP/Consultant needs to submit the details of pollution load i.e. quantity and quality, including composition, of emissions, discharges and waste (hazardous, solid & industrial) generation from the activities for further deliberations before the EAC.
- (vi) Details accreditation of Consultants under QCI/NABET along with certificate and disclosure of Consultant needs to be uploaded.

- (vii) Details of land conversion documents needs to be uploaded.
- (viii) All old CTEs/CTOs/ HW Authorization to be uploaded to verify the violation, if any.
- (ix) On examination it is observed by the Ministry that the Consultant has submitted many applications with same type of data and in-adequate information in Form-I, PFR & EMP. Please revise all the application as per provisions of the EIA Notification, 2006.

The proposal was accordingly **deferred** for the revision of application/Reports as per the provisions of the EIA Notification, 2006.

Agenda No. 9.2

Setting up of Active Pharmaceutical Ingredients (API's) manufacturing unit of capacity 310 TPM by M/s Meenakshi Pharma Parks Pvt. Ltd located at Sy. Nos.: 95, 134, 135, 136 & 138, Ekmai & Damarched Village, Basheerabad Mandal, Vikarabad District, Telangana.

[IATG/IND2/205729/2021, J-11011/136/2021-IA.II(I)]

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

The proposal is for environmental clearance to the project for setting up of Active Pharmaceutical Ingredients (API's) manufacturing unit of capacity 310 TPM by M/s Meenakshi Pharma Parks Pvt. Ltd., located at Sy. Nos.: 95, 134, 135, 136 & 138, Ekmai & Damarched Village, Basheerabad Mandal, Vikarabad District, Telangana.

The details of products and capacities are as under:

S. No.	Name of the Product	Quantity in TPM	CAS No	Therapeutic use
1	Ambroxol hydrochloride	5.00	23828-92.-4	Used to treat Bronchopulmonary diseases
2	Apixaban	5.00	503612-47-3	Anti- coagulant
3	Bilastine	50.00	202189-78-4	Anti-Histamine
4	Carbidopa	5.00	28860-95-9	Used to treat Parkinson's disease
5	Citalopram hydrobromide	10.00	59729-32-7	Anti-depressant
6	Clopidogrel Bisulfate	5.00	11365-84-2	Anti -coagulant
7	Edoxaban	5.00	1229194-11-9	Anti-coagulant
8	Gabapentin	10.00	60142-96-3	Anti-epileptic drug
9	Guaifenesin	5.00	93-14-1	Expectorant
10	Itraconazole	10.00	84625-61-6	Anti-fungal
11	Ketoconazole	10.00	65277-42-1	Anti-fungal
12	Lansoprazole	20.00	103577-45-3	Anti-ulcer

S. No.	Name of the Product	Quantity in TPM	CAS No	Therapeutic use
13	Levetiracetam	5.00	102767-28-2	Anti-convulsant
14	Linezolid	5.00	165800-03-3	Anti-biotic
15	Losartan potassium	10.00	114798-26-4	Anti-hypertensive
16	Mirtazapine	5.00	61337-67-5	Anti-depressant
17	Olmesartan	10.00	144689-63-4	Anti-hypertensive
18	Omeprazole	90.00	73590-58-6	Anti- ulcer
19	Oxcarbazepine	50.00	28721-07-5	Anti-convulsant
20	Pantoprazole Sodium	50.00	138786-67-1	Anti-ulcer
21	Rabeprazole Sodium	10.00	117976-90-6	Anti-Ulcer
22	Telmisartan	50.00	144701-48-4	Anti-hypertensive
23	Teneligliptin penta hydrobromide hydrate	5.00	760937-92-6	Used in treatment of type 2 diabetes mellitus
24	Ticagrelor	5.00	274693-27-5	Platelet aggregation inhibitors
25	Valsartan	20.00	137862-53-4	Anti-hypertensive
26	Vildagliptin	5.00	274901-16-5	Anti-diabetic
Total (Any 6 products will be manufactured at any given point of time)		310.00		

LIST OF BY-PRODUCTS AND ITS QUANTITIES

S. No	Name of the product	Name of the By-Product	Quantity in Kg/Day
1	Apixaban	Potassium chloride	71.00
		Potassium bromide	113.50
		Phosphorous trichloride	114.30
2	Bilastine	Sodium p-toluene sulfonate	985.00
		Potassium p-toluene sulfonate	950.00
3	Clopidogrel Bisulfate	TEA Hydrochloride	85.90
		P-Toluene sulfonic acid	92.50
4	Edoxaban	Triethylamine Hydrochloride	73.30
5	Ketoconazole	Benzoic acid	116.30
6	Linezolid	Imidazole	134.90
7	Losartan Potassium	Succinimide	108.80
		Trityl alcohol	248.70
		Sodium bromide	98.30
8	Omeprazole	Ammonium sulphate	1519.30
		Sodium nitrite	650.00
9	Oxcarbazepine	Sodium sulfite	1103.80

10	Pantoprazole Sodium	Sodium Di hydrogen phosphate	2417.10
11	Rabeprazole Sodium	Sodium acetate	193.30
		Acetic acid	141.40

The project is covered under Category B2 of item 5(f) 'Synthetic, Organic Chemicals Industry' of the Environment Impact Assessment (EIA) Notification, 2006 & OM dated 27.03.2020 and 15.10.2020. 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. It was informed that no litigation is pending against the proposal.

The total land area for the proposed project is 34.5 Acres (139616.53 Sqm). Industry will develop greenbelt in an area of 53263.38 Sqm which is 38.15 %. The proposed project cost is about Rs.28.0 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.384 Lakhs and the recurring cost (operation and maintenance) will be about Rs.47 Lakhs per annum. Total Employment will be of 300 persons. Industry proposed to allocate Rs.56 Lakhs for 5 years @ 2.0 % of the Project cost towards Corporate Environment Responsibility.

There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. The total water requirement is 430.07 m³/day of which fresh water requirement is 289.17 m³/day and will be met from Ground water supply. Generated effluent of 188.69 m³/day will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO plant will be based on Zero Liquid Discharge System.

The Power requirement will be 2000 kVA and will be met from Telangana State Southern Power Distribution Company Limited (TSSPDCL). The unit is proposed to install 1 X 500 kVA & 1 x1000 kVA DG Sets, Stacks (height 8 mts & 10 mtrs) will be provided as per CPCB norms to the proposed DG sets separately. The unit is proposed to install 1 x 4.0 TPH & 2 x 5.0 TPH Coal/ Biomass Briquettes fired Boilers. Cyclone separator followed by bag filters will be installed for the boilers separately for controlling the particulate emissions (within statutory limit of 115 mg/ Nm³). 1 x 2.0 Lakh K. Cal/Hr & 1 x 4.0 Lakh K. Cal/Hr. Thermic fluid heaters are proposed with stacks height of 11 mtrs. each.

Details of Process emissions generation and its management.

S. No.	Name of the Gas	Quantity in Kg/Day	Treatment Method
1	Carbon dioxide	1391.00	Dispersed into the atmosphere
2	Hydrogen	7.00	Diffused by using Nitrogen through Flame arrestor
3	Ammonia	107.00	Scrubbed by using chilled water media
4	Oxygen	805.00	Dispersed into the atmosphere
5	Nitrogen	41.00	Dispersed into the atmosphere
6	Hydrogen Bromide	481.00	Scrubbed by using C. S. Lye solution

7	Hydrogen chloride	665.00	Scrubbed by using chilled water media
8	Sulphur dioxide	2780.00	Scrubbed by using C. S. Lye solution

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

S. No	Name of the Hazardous Waste	Quantity	Disposal Method
1	Organic solid waste (Process Residue)	11551 Kg/Day	Will be sent to Cement Industries
2	Spent Carbon	350 Kg/Day	
3	Solvent Distillation Residue	2163 Kg/Day	
4	Organic distillate from MEE Stripper	3890 Ltrs/Day	
5	Inorganic Solid Waste	5229 Kg/Day	Will be sent to TSDF
6	MEE Salts	13290 Kg/Day	
7	ETP Sludge	440 Kg/Day	
8	Used Oils	300 Ltrs/Annum	Will be sent to SPCB Authorized Agencies for Reprocessing/ Recycling
9	Detoxified Containers/ Container liners	3000 No's / Month	After Detoxification will be sent to SPCB authorized agencies.
10	Used Lead Acid Batteries	4 No's/ Annum	Send back to suppliers for buyback of New Batteries
Solid waste details			
11	Ash from boilers	14.87 TPD	Will be sent to Brick Manufacturers

The Member Secretary informed the EAC that the Ministry has recently issued an Office Memorandum dated 28.01.2021 which inter-alia request EAC to clearly recommend the permissible pollution load i.e., quantity and quality, including composition of emissions, discharge and solid waste generation. In compliance this OM, PP has submitted the following pollution load information and the EAC deliberated on the issue. PP also requested that EC may include the name of products also otherwise PP will face difficulty in obtaining the CTE/CTO from concerned SPCB.

Water Input	Effluent Water	Inorganics In Effluent	Organics In Effluent	TDS	COD	HTDS	LTDS	Total Effluent	Organic solid waste	Inorganic solid waste	Spent Carbon	Distillation Residue	Process Emissions	Fugitive Emissions
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Ltrs/Da y	Ltrs/Da y	Kg/Day	Kg/Day	Kg/Day	Kg/Day	Ltrs/Da y	Ltrs/Da y	Ltrs/Da y	Kg/Day	Kg/Day	Kg/Day	Kg/Day	Kg/Day	Kg/Day
9906 6.67	1094 08.03	697 0.60	4327 .69	697 0.60	627 4.01	1190 08.72	217 6.49	1211 85.22	1155 0.52	522 9.19	350 .00	216 2.67	500 5.88	245 9.33

Water Input	Effluent Water	Inorganics in Effluent	Organics in Effluent	TDS	COD	HTDS	LTDS	Total Effluent
Ltrs/Day	Ltrs/Day	Kg/Day	Kg/Day	Kg/Day	Kg/Day	Ltrs/Day	Ltrs/Day	Ltrs/Day
99066.67	109408.03	6970.60	4327.69	6970.60	6274.01	119008.72	2176.49	121185.22

HAZARDOUS SOLID WASTE DETAILS

Organic solid waste	Inorganic solid waste	Spent Carbon	Distillation Residue
Kg/Day	Kg/Day	Kg/Day	Kg/Day
11550.52	5229.19	350.00	2162.67

EMISSION DETAILS

Process Emissions	Fugitive Emissions
Kg/Day	Kg/Day
5005.88	2459.33

GENERATED GASEOUS EMISSION DETAILS

Kg per Day							
CO2	H2	NH3	O2	N2	HBr	HCl	SO2
1390.96	6.56	107.06	804.97	40.57	480.59	665.42	2779.47

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, 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 an undertaking that the data and information given in the application and enclosures are true to the best of their 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 Member Secretary further informed the EAC that the Ministry has recently issued an Office Memorandum dated 28.01.2021 and inter-alia requested that EAC shall clearly recommend the permissible pollution load i.e. quantity and quality, including composition, of emissions, discharge and solid waste generation. In compliance of this OM, PP has submitted the pollution load and the EAC also deliberated on the pollution load as estimated by the PP/Consultant.

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 action plan and budget allocation for green belt development and suggested to increase the allocated amount accordingly PP submitted commitment to plant 5800 plant. The Committee deliberated mitigation measure towards Air, Water, Noise and Soil pollutions. It was suggested by the Committee to use coal having ash content less than 15% only during rainy season only when Biomass Briquettes were not available. The Committee also suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The EAC deliberated on the proposal with 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 also found the proposal in order and recommended for the 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 the grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions in the **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 PFR/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. Regular VOCs monitoring should be carried out.
- (iii). 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.
- (iv). As already committed by the project proponent, Zero Liquid Discharge (ZLD) 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 purpose.
- (v). 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.
- (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). Total fresh water requirement shall not exceed 289.17 m³/day which will be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (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). 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 (if applicable).
- (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 provided 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 valves 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. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.

- (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 at least 33% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and number of trees have to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within first year.
- (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 shall be satisfactorily implemented.
- (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. 9.3

Setting up of Active Pharmaceutical Ingredients (API's) manufacturing unit of capacity 27.5 TPM by M/s. RACS Pharmachem (India) Pvt. Ltd., located at Plot No. IP 13 PART-2, KIADB, Kudumalakunte Industrial area, 1st Phase, Kudumalakunte village, Gauribidanur Taluk, Chikkaballapur District, Karnataka.

[IA/K/IND2/205253/2021, J-11011/137/2021-IA.II(I)]

The EAC has deliberated on the proposal. Certified compliance report of the exiting unit was not obtained by PP before applying for expansion.

The Committee deliberated on previous production and CTO compliance of the unit and demanded the documentary proof to this effect, but PP failed to provide certified CTO compliance report from SPCB as per TOR granted to PP. **The Committee is of the opinion that instant proposal is brownfield and expansion project; therefore, certified compliance report of CTO from SPCB is necessary as per granted TOR.**

The proposal was accordingly **returned** in its present form for revision of application on Parivesh portal with certified compliance report from the concerned authority.

Agenda No. 9.4

Setting up of Active Pharmaceutical Ingredients (API's) manufacturing unit of capacity 48 TPM by M/s. Laureatz Technochem Pvt. Ltd., located at Plot No. 62, Kadechur Industrial Area, Yadagir Taluk & District, Karnataka.

[IAKA/IND2/206839/2021, J-11011/143/2021-IA.II(I)]

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

The proposal is for environmental clearance to the project for setting up of Active Pharmaceutical Ingredients (API's) manufacturing unit of capacity 48 TPM by M/s. Laureatz Technochem Pvt. Ltd located at Plot No. 62, Kadechur Industrial Area, Yadagir Taluk & District, Karnataka.

The details of products and capacities are as under:

S. No.	Name of Products	Qty. in KG/M	Therapeutic Use
1.	Adefovir	2000	To treat chronic (long-term) hepatitis B infection
2.	Bortezomib	1000	Multiple myeloma
3.	Capecitabine	5000	Anti-Cancer
4.	Clopidogrel Bisulphate	5000	Cardiovascular
5.	Dapagliflozin	2000	Anti-diabetic
6.	Dapoxetine Hydrochloride	2000	Inhibitor
7.	Darunavir Ethanolate	3000	Antiviral
8.	Empagliflozin	2000	Anti-diabetic
9.	Etodolac	1000	Anti-inflammatory
10.	Etoricoxib	15000	Anti-inflammatory
11.	Famotidine	3000	To treat gastritis
12.	Imatinib Mesylate	1000	Anti-Cancer
13.	Irinotecan HCl	1000	Topoisomerase I inhibitors
14.	Ivabradine	2000	To treat heart disease
15.	Lenalidomide	1000	To treat anemia
16.	Linezolid	5000	Antibiotic
17.	Mesalamine	10000	Ulcerative colitis
18.	Olmesartan Medoximil	1000	Anti-hypertension

19.	Pantoprazole Sodium	8000	To treat gastritis
20.	Piroctone Olamine	5000	Antifungal
21.	Ramipril	5000	To treat high blood pressure
22.	Risperidone	2000	Schizophrenia
23.	Sacubitril	2000	Chronic heart failure and reduced ejection fraction
24.	Sparfloxacin	5000	Antibiotic
25.	Tadalafil	5000	To treat erection problems
26.	Tamsulosin hydrchloride	1000	To treat Benign Prostatic Hyperplasia (BPH)
27.	Telmisartan	5000	Anti-hypertensive
28.	Thalidomide	1000	To treat a skin condition and cancer
29.	Triclabendazole	3000	Anthelmintics
30.	Zoledronic acid	1000	To treat high levels of calcium
	Total (6 products)	48000	
Note: Any 6 products will be manufactured at a given point of time.			

LIST OF BY-PRODUCTS AND ITS QUANTITIES

S. No	Name of the Product	Name of the By Product	Quantity in Kgs/Day
1	Capecitabine	Peridine Hydrochloride	59.69
2	Famotidine	Potassium chloride	53.14
3	Piroctone Olamine	Aluminium hydroxide solution	1452.5
4	Pantoprazole Sodium	Potassium Sulphate	60
		Ammonium Phosphate	35
		Sodium Acetate	110
		Ammonium Chloride	72.25
5	Telmisartan	Sodium phosphate	251

The project is covered under Category B2 of item 5(f) 'Synthetic, Organic Chemicals Industry' of the Environment Impact Assessment (EIA) Notification, 2006 & OM dated 27.03.2020 and 15.10.2020. 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 Member Secretary informed the EAC that the Consultant has submitted more than 10 applications in hurry with same EMP/PFR report. The various queries raised by EAC members were either not answered or unsatisfactory by the PP/Consultant. In place of topo sheet consultant submitted google image. The Committee found information filled in EMP/PFR report

were vague/insufficient to address environmental concern. Risk assessment were not carried out by the consultant. The Committee opined that consultant should revise the EMP/PFR report by rectifying deficiencies observed.

- (i) The Notification dated 27.03.2020 is only for API not for intermediates. If the proposal is for API & Intermediate both, please apply for TOR. PP needs to submit the undertaking that the products are related to API only.
- (ii) The information filled in Form-I/PFR/ Reports is vagues/insufficient to address the environmental concern; accordingly, PP needs to revise the Form-I/PFR/EMP and other Reports.
- (iii) EMP is not adequate and not addressing the concern of Environment. Consultant has not read the provisions of the EIA Notification and applied the proposal in hurry without addressing the concern of EMP. Revised EMP needs to be submitted.
- (iv) Details of Raw material and its linkage and its mitigation measure during transportation needs to be submitted
- (v) As per the Ministry OM No. 22-23/2019-IA.III, dated 28.01.2021, the PP/Consultant needs to submit the details of pollution load i.e. quantity and quality, including composition, of emissions, discharges and waste (hazardous, solid & industrial) generation from the activities for further deliberations before the EAC.
- (vi) Details accreditation of Consultants under QCI/NABET along with certificate and disclosure of Consultant needs to be uploaded.
- (vii) Details of land conversion documents needs to be uploaded.
- (viii) All old CTEs/CTOs/ HW Authorization to be uploaded to verify the violation, if any.
- (ix) PP got land on 20.03.2021. However, CETP & TSDF NOC has obtained on 18.03.2021. Please provide the details.
- (x) On examination it is observed by the Ministry that the Consultant has submitted many applications with same type of data and in-adequate information in Form-I, PFR & EMP. Please revise all the application as per provisions of the EIA Notification, 2006.

The proposal was accordingly **deferred** for the revision of application/Reports as per the provisions of the EIA Notification, 2006.

Agenda No. 9.5

Expansion and addition of some new products in the category of API by M/s Mehta API Pvt. Ltd. at Gut No. 519, 520, 546 & 571, Village - Kumbhawali, Near MIDC Tarapur, Tehsil & District: Palghar, Maharashtra.

[Proposal No. IAMH/IND2/198787/2021, File No.J-11011/139/2021-IA.II(I)]

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

The proposal is for environmental clearance to the project for expansion and addition of some new products in the category of API by M/s Mehta API Pvt. Ltd., located at Gut No. 519, 520, 546 & 571, Village - Kumbhavali, Near MIDC Tarapur, Tehsil & District: Palghar, Maharashtra.

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

Deliberations in the EAC:

The proposal was deliberated by the EAC. The Committee noted that as per the layout presented before the EAC, in place of greenbelt, green grass were developed and shown, which will not serve the purpose and suggested to plant trees having high CO₂ sequestration. It was also noted that court cases against the project were not informed by the consultant. The Committee also observed that the information provided in EMP/PFR report were vague/insufficient to address environmental concern. The Committee also found the certified compliance report not satisfactory.

The Committee after detailed deliberation desired for additional information/inputs in respect of the following:

- (i). Action plan for development of greenbelt in 40 % of the project area with trees having high CO₂ sequestration. Project further be considered after actions on green belt development.
- (ii). Details of Court case against the project proposal/project proponent and the current status.
- (iii). Revised EMP/PFR report needs to be submitted as per provisions of the EIA Notification, 2006.
- (iv). EAC noted that PP has obtained earlier EC on 17.12.2006, however PP fails to comply the EC conditions, it means that PP ignored the compliances. EAC suggested that the Ministry may take necessary action against the PP for non-compliances of earlier EC conditions. Consultant aware that there are certain non-compliances, however submitted such in-adequate application before ethe EAC and wasting the time of the Committee.
- (v). Action taken report on non-complied EC conditions forwarded by the Ministry's Integrated Regional Office.

The proposal was accordingly **deferred** for the needful.

Agenda No. 9.6

Expansion of Unsaturated Polyester Resin manufacturing unit from 500 TPM to 2000 TPM by M/s Revex Plasticisers Pvt. Ltd. located at A-528, RIICO Industrial Area, Chopanki, Tapukara, Alwar, Rajasthan

[IARJ/IND2/172484/1989, IA-J-11011/150/2020-IA-II(I)]

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

The proposal is for environmental clearance to the project for expansion of Unsaturated Polyester Resin manufacturing unit from 500 TPM to 2000 TPM by M/s Revex Plasticisers Pvt. Ltd. located at A-528, RIICO Industrial Area, Chopanki, Tapukara, Alwar, Rajasthan.

The details of products and capacities are as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1.	Unsaturated Polyester Resin	500 MT/M	1500 MT/M	2000 MT/M

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. Project attract General Condition- Located within 5 km from Inter-State Boundary. It was informed that no litigation is pending against the proposal.

The ToR has been issued by Ministry vide letter dated 23rd July, 2020. Certified compliance of Consent to Operate (CTO) was issued from RO, RSPCB vide Letter dated 05th February, 2021. Public Hearing is exempted as the project site is located inside the notified Industrial Area.

The total land area for the proposed project is 1.0 Ha. No additional land is required for the Expansion project. Expansion will be done within the existing unit. Industry has already developed greenbelt in an area of 37% i.e. 0.37 Ha out of total area of the project. The estimated project cost is Rs.10.53 Crore including existing investment of Rs.5.93 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.15.15 Lakhs and the Recurring cost (operation and maintenance) will be about Rs.5.75 Lakhs per annum. Total Employment will be of 120 persons. Industry proposes to allocate Rs. 0.05 Cr. 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. Indori Nala is flowing at 5.5 km towards NE direction from Project site.

Ambient air quality monitoring was carried out at 8 locations during 1st Oct. 2019 to 31st Dec. 2019 and the baseline data indicates the ranges of concentrations as: PM10 (71.4 $\mu\text{g}/\text{m}^3$ to 93.4 $\mu\text{g}/\text{m}^3$), PM2.5 (24.8 $\mu\text{g}/\text{m}^3$ to 56.9 $\mu\text{g}/\text{m}^3$), SO₂ (12.4 $\mu\text{g}/\text{m}^3$ to 35.8 $\mu\text{g}/\text{m}^3$) and NO₂ (20.7 $\mu\text{g}/\text{m}^3$ to 38.7 $\mu\text{g}/\text{m}^3$). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 93.47 $\mu\text{g}/\text{m}^3$, 35.80 $\mu\text{g}/\text{m}^3$ and 38.70 $\mu\text{g}/\text{m}^3$ with respect to PM10, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total water requirement is 12 KLD. Total 3.2 KLD (80% of total domestic water consumption) will be generated after proposed expansion. Waste water is currently treated in Septic tank and for the proposed expansion, modular STP is proposed. Treated wastewater will be used for cleaning, washing, water sprinkling and other non-portable domestic purpose. No effluent will be generated from the process. Total 8 KLD of water is required in cooling tower.

Power Requirement for existing unit is 30000 KWH. Power Requirement for proposed expansion unit will be 91000 KWH which will be sourced from Jaipur Vidyut Vitran Nigam Limited (JVNL). Two D.G. sets of capacity 125 kVA and 62.5 kVA have already installed at the project site. One more D.G. set of capacity 400 kVA is proposed for the power backup. Stack height of 4m will be provided as per CPCB norms to the proposed DG sets.

Four boilers (Thermic Fluid Heaters) with capacity 2x2 Lac KCAL/Hr each (HSD Based), 10 Lac KCAL/Hr (Wood Briquettes based) and 1.5 Lac KCAL/Hr (HSD based) have already installed. LPG based boiler with the capacity of 10 Lac KCAL/Hr is proposed. As per direction received from Rajasthan Pollution Control board (RPCB) Letter dated 31/07/2019, Existing All Three boilers (Thermic Fluid Heaters) of HSD & Wood Briquettes were replaced by new LPG based TFH of 10 Lac KCAL/Hr capacity. All three TFHs are not in operation after replacing with new LPG based TFH. This is also confirmed from Regional Officer, RPCB, Bhiwadi as per Certified Compliance dated 05.02.2021. TFH of 10 Lac KCAL/Hr (Wood Briquettes based) is provided with Multi Cyclone separator along with Adequate Stack height to ensure emission of SPC within 150 mg/Nm^3 . Remaining two HSD based TFH are provided with Adequate Stack height. Acoustic enclosures and Stack heights have been provided with existing DG sets of 125 kVA and 62.5 kVA capacities.

Details of Process emissions generation and its management:

Emission from production process are recovered by evaporation which contain exhaust gasses like Nitrogen, Hydrogen, Carbon dioxide, Carbon Monoxide, VOC and traces of process emissions.

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

There is no hazardous waste generation from the process. Used oil from machineries/D.G. Set is carefully stored in HDPE drums in isolated covered facility and is sold to vendors authorized by Rajasthan State Pollution Control Board for treatment.

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, 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 an undertaking that the data and information given in the application and enclosures are true to the best of their 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 reflects the present environmental concerns and the projected scenario for all the environmental components. The Committee deliberated on the action plan and budget allocation for green belt development and suggested to increase the allocated amount accordingly PP submitted commitment to plant 795 additional plant having high survival rate and having high CO₂ sequestration within six months. The committee deliberated the biodiversity conservation plan and found satisfactory. The committee deliberated mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee also suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The EAC deliberated on the proposal with 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 also found the proposal in order and recommended for the 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 the grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions in the **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/EEMP 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. Regular VOCs monitoring should be carried out.
- (iii) 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.
- (iv) As already committed by the project proponent, Zero Liquid Discharge (ZLD) 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 purpose.
- (v) 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.
- (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) Total fresh water requirement shall not exceed 12 KLD which will be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (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) 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 (if applicable).
- (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 provided 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 valves 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. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.
- (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 at least 33% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and number of trees have to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within first year.
- (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 shall be satisfactorily implemented.
- (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. 9.7

Expansion of Active Pharmaceutical Ingredient (API) facility from 0.135 TPM to 1.875 TPM by M/s Aarti Industries Limited located at Plot No. D-53, MIDC Dombivali Phase II, Dist. Thane, Maharashtra.

[Proposal No. I/MH/IND2/206004/2021, F. No. J-11011/140/2021-IA.II (I)]

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

The proposal is for environmental clearance to the project for expansion of Active Pharmaceutical Ingredient (API)/ Bulk Drugs manufacturing facility from 0.135 TPM to 1.875 TPM by M/s Aarti Industries Limited located at Plot No. D-53, MIDC Dombivali Phase II, Dist. Thane, Maharashtra.

The details of products and capacities are as under:

Sr. No.	Product name	Quantity in TPM			CAS No.	Therapeutic use
		Existing	Proposed	Total		
1	Venlafaxine Hydrochloride	0.03	-0.03	0	99300-78-4	Antidepressant
2	Bambuterol Hydrochloride	0.025	0.175	0.2	81732-46-9	Bronchodilator
3	Fluticasone propionate	0.01	0.015	0.025	80474-14-2	Glucocorticoid
4	Budesonode (TTR)	0.02	0.18	0.2	51333-22-3	Glucocorticoid
5	Triamcinolone Acetomide	0.004	-0.004	0	76-25-5	Corticosteroid
6	R-Salbutamol Sulphate	0.013	0.487	0.5	51022-70-9	Beta adrenoceptor Bronchodilator
7	Ipratopium Bromide	0.008	-0.008	0	66985-17-9	Anticholinergic Bronchodilator
8	Deferiprone	0.025	0.475	0.5	30652-11-0	Anti Thalassemic
9	Peridopril Erbumine	0	0.2	0.2	107133-36-8	Angiotensin converting Enzyme inhibitor, Anti hyper tensile
10	Sitagliptine	0	0.050	0.05	486459-71-6	Anti-Diabetic
11	Montelukast Sodium	0	0.2	0.2	151767-02-1	Anti asthmatic
	Total	0.135	1.74	1.875		

The project is covered under Category B2 of item 5(f) 'Synthetic, Organic Chemicals Industry' of the Environment Impact Assessment (EIA) Notification, 2006 & OM dated 27.03.2020 and 15.10.2020. Due to applicability of general condition, the project requires appraisal at Central level by the Sectoral Expert Appraisal Committee (EAC) in the Ministry. It was informed that no litigation is pending against the proposal.

The total land area for the project is 1,000 sq. m. Neighbouring plot of area 927 sq. m will be utilized for green belt development. Industry will develop Green belt in an area of 1027 sq. m (53.3%) out of total area of the project. Out of 1027 sq. m of green belt, 100 sq. m will be developed within plot & 927 sq. m will be developed on outside plot.

The estimated project cost is Rs.24.03 Crores including existing investment of Rs.7.49 Crores. Total capital cost earmarked towards environmental pollution measures is Rs.2.135 Crores & the Recurring cost (operation & maintenance) will be about Rs.76.8 Lakhs per annum. Total employment will be 93 persons as direct & 450 persons indirect for proposed project. Industry proposes to allocate Rs.24.81 Lakhs towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Ulhas River is flowing at a distance of 3.7 km in North-West direction.

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.06 µg/m³, 1.02 µg/m³ & 0.04 µg/m³ with respect to PM₁₀, SO₂ and NO_x. The resultant concentrations will be within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 56 m³/day out of which fresh water requirement of 42 m³/day will be met from MIDC and balance 14 m³/day will be met from treated water. Trade Effluent of 11 m³/day will be treated through ETP, RO, stripper followed by single stage evaporator. Treated effluent will be fully recycled back. Proposed project will be ZERO LIQUID DISCHARGE facility. Domestic sewage of 4 m³/day will be treated in STP. Treated sewage will be reused for green belt.

Power requirement after expansion will be 450 KW including existing 200 KW and will be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). 1 no. of 250 KVA DG set will be used as standby during power failure. Stack height (3.5 m above building) will be provided as per CPCB norms to the proposed DG sets. Existing unit has 1 TPH LDO fired boiler. It is proposed to install 1.5 TPH LDO fired boiler. Existing boiler will be discontinued from operation & new boiler of 1.5 TPH will be installed. Adequate stack height of 30 m will be provided for proposed boiler. Particulate emissions of 150 mg/Nm³ will be maintained.

Details of Process emissions generation and its management.

Parameter	Process Scrubber	
	Acidic scrubber	Alkali scrubber
Scrubbing media	Water/ NaOH	HCl/H ₂ SO ₄
Packing type	Pall Ring 2"Dia	Pall Ring 2"Dia
Temp	Ambient	Ambient
Diameter	770 mm	550 mm
MOC	PPFRP	PPFRP
Shape	Round	Round
Height	7.2 m	7.2 m
Duty	Continuous	Continuous
Control Equipment	2 stage scrubber equipped with Temperature/ Pressure transmitter/ pH sensor	2 stage scrubber equipped with Temperature/ Pressure transmitter/ pH sensor

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

Sr. No.	Description	Quantity in TPM	Disposal
1.	Metal, Wood & paper scrap	0.1	Sale
2.	Pallets	0.1	Reuse/sale to authorized party
3.	E-Waste	0.05	Sell to Authorized party

Sr. No.	Cat. No. as per HW Rules	Type of Waste	Unit	Existing Quantity	Proposed Quantity	Total Quantity	Disposal
1.	35.3	Chemical Sludge from waste water treatment	TPM	0.01	2.5	2.51	CHWTSDF
2.	28.1	Process residue	TPM	-	3.0	3.0	CHWTSDF
3.	20.3	Distillation residue	TPM	-	1.2	1.2	CHWTSDF
4.	28.2	Spent Catalyst	TPM	-	2.1	2.1	CHWTSDF
5.	28.3	Spent Carbon (Process)	TPM	-	11.7	11.7	CHWTSDF/ Sale to authorized party
6.	28.4	Off specification drugs	TPM	-	0.5	0.5	CHWTSDF
7.	35.3	Spent Carbon (ETP)	TPM	-	0.5	0.5	CHWTSDF
8.	20.2	Spent Solvents MLR/	TPM	-	135.0	135.0	CHWTSDF/ Sale to authorized party
9.	33.1	Drums/ Containers	Nos./ M	-	200	200	CHWTSDF/ Sale to authorized party
10.	36.2	PPE/ plastic waste/ liners/ Filters and Filter Materials	TPM	-	1	1	CHWTSDF
11.	35.3	Evaporation Salts	TPD	-	1	1	CHWTSDF

The Member Secretary informed the EAC that the Ministry has recently issued an Office Memorandum dated 28.01.2021 which inter-alia request EAC to clearly recommend the permissible pollution load i.e., quantity and quality, including composition of emissions, discharge and solid waste generation. In compliance this OM, PP has submitted the following pollution load information and the EAC deliberated on the issue.

Kg/day													
EFFLUENT WATER									SOLID WASTE				
Water Input	Effluent Water	Inorganic in Effluent	Organic in Effluent	TDS	COD	HTDS	LTDS	Total Effluent	Organic solid waste	Spent Carbon	Distillation Residue	Process emissions	Fugitive emissions
56000	11000	2000	9000	105	100	2000	9000	11000	100	406	40	130	150

HAZARDOUS SOLID WASTE DETAILS

Kg Per Day		
SOLID WASTE		
Organic solid waste (Process residue)	Spent Carbon	Distillation Residue
100 kg/day	406 kg/day	40 kg/day

EMISSION DETAILS

Kg Per Day	
Process emissions	Fugitive emissions
130	150

Kg Per Day										
CO2	H2	NH3	O2	N2	HBr	HCl (acid mist)	(CH3)2NH	CH3Cl	HF	SO2
Nil	Nil	35	Nil	Nil	Nil	95	Nil	Nil	Nil	73

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, 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 an undertaking that the data and information given in the application and enclosures are true to the best of their 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 Member Secretary further informed the EAC that the Ministry has recently issued an Office Memorandum dated 28.01.2021 and inter-alia requested that EAC shall clearly recommend the permissible pollution load i.e. quantity and quality, including composition, of emissions, discharge and solid waste generation. In compliance of this OM, PP has submitted the pollution load and the EAC also deliberated on the pollution load as estimated by the PP/Consultant.

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 action plan and budget allocation for green belt development and suggested to increase the allocated amount accordingly PP submitted commitment to plant 230 saplings within six months and increased the allocated amount for green belt development. The committee deliberated mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee also suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following the safety norms and best practices. The committee was of firm opinion that effluent from this unit shall not be discharged to other unit as it may create difficulty in monitoring.

The EAC also deliberated the request of PP to use the facility of other plot, after detailed discussion the Committee did not agree as the same can not be monitored. Committee suggested PP to amalgamate all the plot and take one EC for better implementation of the project.

The EAC deliberated on the proposal with 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 also found the proposal in order and recommended for the 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 the grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions in the **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 PFR/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. Regular VOCs monitoring should be carried out.
- (iii) 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.
- (iv) As already committed by the project proponent, Zero Liquid Discharge (ZLD) 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 purpose.
- (v) 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.
- (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) Total fresh water requirement shall not exceed 42 m³/day will be met from MIDC. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (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) 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 (if applicable).
- (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 provided 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 valves 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. There shall be commitment from the brick manufacturer to

take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.

- (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 at least 40% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and number of trees have to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within first year.
- (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 shall be satisfactorily implemented.
- (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. 9.8

Setting up of Technical Ammonium Nitrate Manufacturing Plant by M/s Smartchem Technologies Ltd. (STL) located at DLCT-1, Domestic Tariff Area, Gopalpur Industrial Park, Chamakhandi, Tehsil- Chatrapur, District- Ganjam, Odhisha.

[Proposal No. IA/OR/IND2/160599/2020, F. No. IA-J-11011/152/2020-IA-II(I)]

The proposal was earlier placed before the EAC in its 7th EAC meeting (Industry 3 sector) held during March 11-12, 2021 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.	The Committee noted that the project proponent has not provided the clarification regarding	The proposed plant is situated in TSSEZL industrial park which is outside the CRZ area. Same has been confirmed by	EAC found the reply to be satisfactory and opined that Ministry may look the

	<p>applicability of CRZ clearance to the project. The PP should apply for both EC and CRZ clearance.</p>	<p>IRS Chennai. Also, Environmental clearance & CRZ clearance has already been granted to TSSEZL Industrial Park (Gopalpur Industrial Park) by MoEF&CC under item no. 7(c) vide letter no. 21-136/2015-IA.III dated 20.09.2018.</p> <p>The main raw material for manufacturing of TAN is Ammonia and Nitric Acid. Nitric acid shall be manufactured within the battery limit and Ammonia shall be imported through ship at Gopalpur port which is approx. 4.8 km away from the project site. Unloading and precooling pipelines for receipt of liquid Ammonia from the ship at the identified berth of Gopalpur port to STL project site inside TSSEZL Industrial Park will be laid. As per EIA notification,2006 & subsequent amendments, Pipeline doesn't attract Environmental clearance.</p> <p>Separate application for grant of CRZ clearance for Pipeline project was submitted to the OCZMA and recommendation has been received for the same vide letter dated 01.02.2021. Recommendation letter of OCZMA is submitted</p> <p>Further application to the MoEF&CC (CRZ Committee) for grant of CRZ clearance has been submitted vide proposal no. IA/OR/CRZ/204641/2021 and acceptance has been</p>	<p>administrative procedure in which EC and CRZ both clearance is required.</p>
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		<p>received vide F.No.-11/8/2021-IA.III. Acceptance letter is submitted. EIA report submitted for CRZ clearance is also submitted</p> <p>Map prepared by IRS, Chennai in 1:4000 scale showing plant location and pipeline is submitted. As per the map, proposed plant area is outside the CRZ zone area and doesn't attract CRZ clearance. As per the above facts, separate Environmental and CRZ clearance has been submitted to the concern committees.</p>	
2.	EAC noted that CETP has not commissioned yet. PP needs to submit a copy of agreement with CETP for disposal of treated water.	TSSEZL has committed to develop CETP to further treat the treated effluent received from STL complex as per the mutually agreed terms and timelines. Moreover, part of the water supply from TSSEZL to STL will be in form of recycled water from their CETP. This will be used within the STL plant as make-up for Cooling Tower. Copy of Agreement between TSSEZL and STL (PI refer point no-3 of letter dated 5th March'21) is submitted.	EAC found the reply to be satisfactory.
3.	The NOC from PESO needs to be submitted.	NOC from PESO is under process. STL presented their case on 22nd Dec'20 to the committee. Post technical presentation, committee has forwarded their recommendation to DIPP on our Industrial License application. Letter from PESO to invite STL for technical presentation is submitted.	EAC found the reply to be satisfactory

4.	The PP has submitted total project cost which includes cost of pipeline, however details of CRZ and its SCZMA recommendations also needs to be included in the report.	The total project cost of Plant including cross country ammonia pipeline is 1600 crores. Bifurcation of the same is mentioned below Plant cost- 1530 Crores Pipeline cost-70 Crores Further details and recommendation of OCZMA is submitted.	EAC found the reply to be satisfactory
5.	Details of pollution control equipment with efficiency needs to be resubmitted.	Details of Air pollution control system proposed along with efficiency is submitted.	EAC found the reply to be satisfactory
6.	Detailed greenbelt plan along with budgetary allocation for completion of greenbelt in one year. Action plan for high carbon sequestration species trees in the greenbelt needs to be submitted.	In order to mitigate and minimize the environmental impacts, arising due to project especially from air pollution, noise pollution, soil erosion etc. a dense Greenbelt shall be developed all around the proposed site. 13.28 Acres (5.374 ha.) of land i.e., 33% of total plot area shall be developed as Green Area. Total 6450 no. of trees and shrubs will be planted within the greenbelt. Approx. 1150 trees per hectare have been proposed to develop in the premises. The capital cost for Greenbelt development (5-year budget) of the project is estimated to be Rs.205.28 Lacs. Detailed Greenbelt plan is submitted.	EAC found the reply to be satisfactory
7.	Detailed action plan for mitigation of particulate emission (i.e. PM10, PM2.5) needs to be submitted.	To reduce the Particulate emission from process & utilities multiple air pollution equipment's, SOPs are proposed like ESP in Boiler, Scrubber in Prilling tower, Dust collectors, fly ash handling & Dust management, Dust collection system, etc.,. It is	EAC found the reply to be satisfactory

		being confirmed that all emissions shall be within the stipulated norms of CPCB/SPCB.	
8.	Detailed action plan for mitigation of noise pollution.	The equipment's are already designed with enclosures, silencers and mufflers which ultimately reduce the noise level around the machinery. According to the literature, the wide tree belts and higher relative height of trees result in more diffraction effect, longer noise pathway and greater noise reduction. Thus, wide greenbelt with 5-20 m high trees shall be planted all around the boundary for reduction of noise level. All engineering control practice shall be undertaken during procurement & installation of machinery to maintain noise level. Detailed action plan for reducing noise is submitted.	EAC found the reply to be satisfactory
9.	Safety measure to be taken for the storage of chemicals (i.e. raw material and finished products).	There will be storage of different Hazardous material like, Ammonium Nitrate, Ammonia, Nitric Acid, etc. All safety measures are incorporated in the planning to avoid any accident. Safety measures to be taken for the storage of chemicals and finished products are submitted.	EAC found the reply to be satisfactory
10.	Action plan for use of low ash coal for CPP to control particulate emission (guaranteed performance parameters like efficiency, design ash content of coal, etc., of ESPs).	The low ash Indonesian coal shall be fired in combination with Indian coal in the proposed boiler. The ESP shall be designed with minimum 99.8% efficiency and outlet dust concentration of 30 mg/Nm ³ to meet the	EAC found the reply to be satisfactory

		environmental norms. The material for emitting & collecting electrodes shall be IS 513 or equivalent. Detailed action plan is submitted.	
11.	Action Plan for the disposal of fly ash including agreement with cement plants or other suitable methods needs to be submitted.	<p>The Manufacturers (Cement & Fly ash Brick) in Ganjam District are situated maximum within 30 km radius. As project completion period is more than 2 years, Agreement with Manufactures shall be done at appropriate time. Undertaking by STL is submitted. List of Cement & Fly ash brick Manufacturer in Ganjam District is mentioned below</p> <p>Fly Ash Brick Manufacturer in Ganjam District:</p> <ol style="list-style-type: none"> 1. Rashmi Flyash Bricks, Hugulapatta KUKUDAKHANDI, Brahmapur, Ganjam760004, Odisha 2. Mata Tara Rani Fly Ash Brick Industry, Purushottampur, Berhampur, Ganjam761003, Odisha 3. Rupali Fly Ash Bricks Manufacturer, Berhampur, Ganjam-761003, Odisha 4. S K Fly Ash Bricks Unit, Raghunathpur, Near Reliance Petrol Pump, Ganjam-760007, Odisha 5. BABAMANI FLY ASH BRICKS, Keshapur, Ganjam, Odisha <p>Cement Manufacturer in Ganjam District:</p> <ol style="list-style-type: none"> 1. Penna Cement Industries Limited, Basanaputi, Gopalpur, Chhatrapur, Odisha (Hyderabad manufacturing unit requires fly ash) 	EAC found the reply to be satisfactory

		2. Sagar Cements Limited, Sri Krishna Nagar, Lanjipalli, Brahmapur, Odisha 760001 JSW Cement Limited, Duburi, Jajpur, Odisha	
12.	Commitment to use of recycled water for cooling in the power plant.	STL shall use the TSSEZL CETP treated water in Cooling Tower. Undertaking for the same is submitted.	EAC found the reply to be satisfactory
13.	Schedule-I species conservation plan need to be prepared.	As per the base line study the Olive Ridley (Lepidochelys olivacea), one of the endangered turtle species, reported in Odisha sea coast. Olive Ridley (Lepidochelys olivacea) is known for its mass nesting congregates at following three sandy beaches in Odisha coast: <ul style="list-style-type: none"> > The Gahirmatha rookery near Dhamra river mouth > The rookery near Devi river mouth > Rushikulya river mouth Though all the above three are nesting sites, none of them are located within the study area. The nearest Rushikulya river mouth is located about 17 km away from the proposed project site. The Olive sea turtle was directly not seen in study area during the study period. But as per the secondary data available it is rarely reported in 10 km study area. Though there is no nesting site of Olive sea turtle present within the study area. Thus, no impact is anticipated to the turtle species. However, as suggested by committee,	EAC found the reply to be satisfactory

		we have prepared the Schedule-I species conservation plan and same shall be submitted to the Concern office. Conservation plan is submitted.	
14.	Commitment to treat domestic effluent separately also needs to be submitted.	There will be generation of 108 KLD domestic wastewater (sewerage). It will be mixed industrial effluent and utilized as bio feed to reaction. Separate Section is proposed in the ETP to feed the sewage into industrial effluent. After achieving the desired characteristics, treated water from ETP will be sent to CETP for further treatment. CETP Treatment water shall be recycled back to STL for reutilization within the plant.	EAC found the reply to be satisfactory
15.	Project proponent shall revise the EIA/EMP Report accordingly with all the requisite information.	Addendum to EIA Report incorporating all above points is submitted.	EAC found the reply to be satisfactory

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

The proposal is for environmental clearance to the project for setting up of Technical Ammonium Nitrate Manufacturing Plant at TSSEZL industrial park, Village- Basanputi, Near Gopalpur, Tehsil- Chatrapur, District- Ganjam, Orissa.

All Chemical Fertilizer units are listed at S. No. 5(a) of the 'Schedule' of the Environmental Impact Assessment (EIA) Notification under Category 'A' and appraised at Central Level by Expert Appraisal Committee (EAC). The proposal also includes coal-based power generation of 10 MW, which is listed as category 1(d), i.e., thermal power plants in the Schedule under Category 'B' of EIA notification, 2006. Further, the pipeline of the project falls in the CRZ area. Therefore, CRZ clearance is also required.

The details of products and capacity are as under:

S. No	Name of Product	Quantity	
		MTPD	MTPA
1.	Nitric Acid (NA)- (100% basis)	900	2,97,000

2.	Technical Ammonium Nitrate Solution (TAN) (100% basis)	1143	3,77,190
3.	Technical Ammonium Nitrate Prill (LDAN or HDAN on campaign basis)	1000	3,30, 000
4.	Captive Power Plant (CPP) – (I + II)	14.6 MW	-
	I- From Coal Fired Boiler- Applicability of EC-I	10 MW	-
	II- From waste heat turbo Generator (STG)- (Exempted from EC)	4.6 MW	-

Terms of Reference (TOR) was issued by MoEF&CC vide letter dated 24.07.2020. Since environmental clearance has already been granted to TSSEZL Industrial Park (Gopalpur Industrial Park) by MoEF&CC under item no. 7(c) vide letter no. 21-136/2015-IA.III dated 20.09.2018, thus public hearing/public consultation is exempted for the instant proposal.

The total land area for the proposed project is 40.24 Acres. Industry will develop greenbelt in an area of 33.0% i.e., 13.28 acre out of total area of the project. The estimated project cost is Rs.1600 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.92.45 Crores and the Recurring cost (operation and maintenance) will be about Rs.20.70 Crores per annum. Total Employment will be of 1820 persons. PP reported that Rs. 8.0 Crore will spend towards Corporate Social Responsibility.

There are no environmentally sensitive components such as National Park, Wildlife Sanctuary, Elephant / Tiger Reserve, forest migratory routes of fauna and wet land present within 10 Km radius of plant site. However, few water bodies are flowing near to the project site i.e., Khari Nala (0.40 Km, W), Bay of Bengal (2.58 Km, E) and Surya River (8.19 Km, W).

Ambient air quality monitoring was carried out at 8 locations during 1st October 2020 to 31st December 2020 and the baseline data indicates the ranges of concentrations as: PM10 (47-110 µg/m³), PM2.5 (22.5-58.0 µg/m³), SO2 (5.38-15.4 µg/m³) and NOx (13.8-40.6 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.78 µg/m³, 3.03 µg/m³, 4.89 µg/m³, 1.17 µg/m³ and 1.52 µg/m³ with respect to PM10, PM2.5, NOx, SO2, & NH3. All parameter concentrations are within the National Ambient Air Quality Standards (NAAQS) except PM10.

The total water requirement is 7000 KLD. Industrial water will be provided by TSSEZL for industrial and domestic use. The total amount of industrial effluent that is envisaged to be generated is 1614 KLD. Rest water will be recirculated within the process. A suitable Effluent Treatment Plant (ETP) shall be installed for treatment of all wastewater. Discharge from this ETP shall be routed to the Common ETP developed by TSSEZL within the Industrial Park. In principle, TSSEZL has agreed to accept this STL ETP discharge as input to their CETP. The CETP of TSSEZL is RO based, which will further treat the disposed effluent from STL site. Part of the water supply in form of recycled water from TSSEZL will be from their CETP which will be used within the STL plant as make-up for Cooling Tower.

The total connected load of the complex shall be around 16 MW and normal operating load (demand load) will be 12~12.5 MW. 4.6 MW of power requirement will be sourced from NA plant process waste Steam turbo Generator (STG). The start-up power (5 MVA) will be sourced from the State grid. Remaining power requirement will be sufficed by coal based Captive Power plant. Power from coal based captive power plant will be produced in accordance with the requirement. 2250 kVA and 1250 kVA DG Sets will be used as standby during power failure. Stack Height of 30 m will be provided as per CPCB norms to the proposed DG sets. PP reported that 2 x 60 TPH coal fired boiler will be installed in the plant. ESP and stack of height of 70 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boiler.

Details of Process emissions generation and its management:

Stack No.	Stack Attached to	Stack Height	Fuel Used	APCS	Expected Pollutants
1	Tail Gas from Nitric Acid Plant	63 m	-	Passed through by selective catalytic reduction with ammonia in presence of Vanadium Pentoxide, Platinum or Iron/Chromium oxides catalysts	NOx (NO2)
2	Prilling Tower and TAN plant common scrubbing stack	35 m (Scrubber)	-	The air is cooled and scrubbed	PM, NH3

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

The municipal solid waste generation at the project site will be 99 Kg/day which will be segregated in biodegradable waste and recyclable waste. Recyclable waste (paper, plastic, glass, etc) will be sold off to authorized vendors and Biodegradable waste (canteen waste, food waste, green area waste, etc) to common waste management site of TSSEZL for disposal. Solid Waste Management Rules, 2016 shall be followed.

Sr. No	Name of Waste	Source of Generation	Category No. (As per HW Rules 2016)	Quantity	Mode of Treatment & Disposal Method
1	Discarded Containers/Bags /Liners	Storage & Handling of Raw Materials	Sch-I/33.1	150 MTPA	Collection, Storage, Decontamination or sale to authorised decontamination facility
2	Used/Spent Oil	Filtration	Sch-I/5.1	60 KL/Annum	Collection, Storage, Transportation &

					Disposal by selling to registered Refiners
3	ETP Sludge	In-house ETP	Sch-I/35.3	Approx. 300 MTPA	Collection, Storage, Transportation and disposal to authorized CHWTSDF
4	Metal Scrap	-	Non-Hazardous	60 MTPA	To approved recycler
5	Fly ash	Boiler	Non-Hazardous	41580 MTPA	Sell to cement Industry
6	Spent Ion Exchange resin	DM plant	Sch-I/35.1	5000 lit in 5 years	Collection, Storage, Transportation and disposal to authorized CHWTSDF
7	NOx abator used Catalyst	NOx abator	Sch-I/18.1	10 MT/five year	Collection, Storage, Transportation and disposal to authorized CHWTSDF
8	Catalyst (Platinum, Rhodium Catalyst)	Process	Sch-I/18.1	160 Kg/Year	Regeneration

PP also reported that the spent catalyst in the form of metallic oxides will be stored in MS drums with sealed lid. Same will be sold to CPCB/MoEF&CC authorized parties for recycling.

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, 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 an undertaking that the data and information given in the application and enclosures are true to the best of their 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 reflects the present environmental concerns and the projected scenario for all the environmental components. The Committee deliberated issue based on EC and CRZ clearance and suggested Ministry to take decision on administrative procedure in which both EC and CRZ clearance required. Action plan and budget allocation for green belt development was deliberated and revised commitment submitted by PP for green belt development and budget allocation for the same was accepted by the committee. Detailed action plan for mitigation of particulate emission (i.e. PM10, PM2.5) was also deliberated by the committee and found to be satisfactory. Schedule I conservation plan found satisfactory. The committee deliberated mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee also suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following the safety norms and best practices. Additional information submitted by PP was deliberated and found to be addressing the concerns of the EAC.

The EAC deliberated on the proposal with 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 also found the proposal in order and recommended for the 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 the grant of environmental clearance **subject to comments of CRZ sector**, and also to compliance of terms and conditions as under, and general terms of conditions in the **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). 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.
- (iii). 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.

- (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). 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.
- (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). Safety and risk assessment studies shall be conducted and action plan and mitigation measures shall be properly implemented.
- (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 7000 KLD which will be met from TSSEZL for industrial and domestic use. 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 at least 33% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and number of trees have to be increased accordingly. The plant species can be selected that will give better carbon sequestration.

All trees must be planted within first year. In addition to the above mentioned greenbelt development, PP shall also plant 10000 plant in around the study area.

- (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.
- (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.

Amendments/Corrigendum/Validity of EC Proposals

Agenda No. 9.9

Change in mode of disposal of Industrial effluent for M/s. Colosperse Dyes and Intermediates (Unit 3) at Plot No. 487, GIDC, Sachin, Surat, Gujarat- Amendment in Environmental Clearance

[IA/GJ/IND3/194081/2021, IA-J-11011/191/2020-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter no. IA-J-11011/191/2020-IA-II(I) dated 28th December 2020 for the project of synthetic organic chemicals (Dyes & Intermediates) manufacturing unit having capacity of 713 TPM located at Plot No. 487, Sachin GIDC, Surat, Gujarat in favour of M/s Colosperse Dyes & Intermediates (Unit – 3).

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	EC Condition No. 6	Total Water requirement will be 81.5 cum/day (76 cum/day for Industrial + 5 cum/day for Domestic + 0.5 cum/day for Gardening). Unit will recycle and reuse 11.4 cum/day water from RO plant. Thus, fresh water requirement will be reduced to 70.1 cum/day.	Total water requirement will be 81.5 KLD and entire water shall be sourced from Sachin Notified Area Authority (Sachin GIDC). Wastewater generated from manufacturing	1. Economic viability of inhouse ETP consisting of MEE plant. 2. Proper handling and management of concentrated effluent in common facility

		Fresh water will be met through Sachin Notified Area Authority (Sachin GIDC). Existing effluent generation is 26.3 cum/day (21.3 cum/day from industrial activities + 5 cum/day from domestic activities). Unit is sending 21.3 cum/day industrial effluent to common MEE facility of MEPPL. After proposed quantity of wastewater shall be 37.7 cum/day (32.7 cum/day Industrial + 5 cum/day Domestic)	process (29 KLD) and wastewater generated from Utilities (3.7 KLD) shall be sent to Common MEE of Globe Enviro Care Ltd. (GECL) after collection & Neutralization for further treatment.	with compare to inhouse facility. 3. Already obtained membership certificate from common MEE facility.
2	EC Condition No. 13 (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.	Total effluent generation will be 32.7 KLD (29 KLD from Manufacturing process + 3.7 from utilities). Entire effluent after neutralization, will be sent to common MEE facility of Globe Enviro Care Ltd. (GECL) which is also located in same industrial estate.	

Deliberations in the EAC:

The Committee made a detailed deliberation on the proposal. The Committee noted that the environmental clearance has been granted recently by the Ministry on 28th December 2020 based on the recommendations of the EAC (Industry-2) in its meeting held during 17-19 August, 2020. The Committee also observed that the proposal was considered in totality earlier regarding water balance and effluent management system and conditions has been stipulated accordingly with the commitments from the project proponent. Thus, the EAC found no rationale in considering the present proposal. The Committee suggested the project proponent to be environmentally conscious and practice best practices for environmental sustainability.

The proposal was accordingly **returned** in its present form.

Agenda No. 9.10

Establishment of API manufacturing unit Gat No. 88/2/C, 96, 97, 98/1/A/1, 98/1/A/2, 98/2, 98/3, 92/1, At Watwate, Post Inchgaon, Taluka Mohol, District Solapur, Maharashtra by M/s Jakraya Sugar Ltd.

[IAMH/IND2/204038/2021, IA-J-11011/260/2020-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 05.01.2021 for the project proposed API Manufacturing unit located at Gat No. 88/2/C, 96, 97, 98/1/A/1, 98/1/A/2, 98/2, 98/3, 92/1, At Watwate, Post Inchgaon, Taluka Mohol, District Solapur, Maharashtra in favour of M/s. Jakraya Sugar Ltd.

The project proponent has requested for corrigendum 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	Page No 2 Para 5	Total Employment under proposed expansion project would be 500 persons.	Total Employment under proposed project would be 500 persons.	There is a typographical error as 'expansion' project which should be 'proposed' project as the API Unit is New Project.
2	Page No. 2 Para 6	The Doodhganga River is flowing at 6.5 Km on North West and Krishna River at 8 Km on North East of project site.	The Bhima River is flowing at 4 Km on South of project site.	There is a typographical error w.r.t name of river. In Form 1 application submitted online, information is presented w.r.t river Bhima, whereas typo error occurred while submitting Annexure-I to Ministry before actual presentation.

Deliberations in the EAC:

The Committee warned the Consultant to read the Report before submission on portal. The Consultant has submitted that in future no such mistake will be done.

The Committee deliberated the corrigendum sought by PP and agreed to the request of PP as all the corrigendum were of typographical error submitted by PP. The Committee accordingly **recommended** the amendments as requested by PP.

Agenda No. 9.11

Bulk Drugs (APIs) manufacturing unit located at Sy. No. 595, 596 & 597, Talamadla (V), Bhiknoor (M), Kamareddy District (formerly Nizamabad District), Telangana State by M/s. Valens Molecules Private Limited (formerly M/s. Posh Chemicals Private Limited) – Extension of Validity of Environmental Clearance - reg.

[Proposal No. IATG/IND3/202859/2021, File No. J-11011/224/2011-IA.II(I)]

The Project Proponent and the accredited Consultant M/s. KKB Envirocare Consultants Pvt. Ltd., Hyderabad made a detailed presentation on the salient features of the project and informed that:

EC was granted to proposed project from MoEF vide order no. F.No. J-11011/224/2011-IA II(I) dated 30-12-2013. Consent to Establish (CFE) was issued vide order no. 05/TSPCB/CFE/RO-NZM/HO/2016-2274 dated 06-01-2016. M/s. Posh Chemicals Private Limited changed its name to M/s. Valens Molecules Private Limited w.e.f. 12-08-2016.

Subsequently obtained CFE Amendment vide order no.05/TSPCB/CFE/RO-NZM/HO/2016-2285 dated 25-11-2016 for M/s. Valens Molecules Private Limited. CFE is valid upto 30-10-2021. Implementation of the proposed project is not yet initiated as per EC and CFE.

During obtaining the EC for present unit at Talamadla village, certain instability in the state (Bifurcation of Telangana and Andhra Pradesh states) has delayed in the project implementation for some time. Meanwhile during the same period, land has been acquired in IDA, Achyutapuram, Vishakapatnam (Andhra Pradesh) in the year 2013 and establishment of the same unit has been commenced.

Consent for Establishment of the above unit was obtained from SPCB vide order no. 339/PCB/CFE/RO-VSP/HO/2014-160 dated 27-10-2014. Hence the focus was more into completing the project in IDA Achyutapuram and then start the construction activity in the present unit at Talamadla village.

However as mentioned above during political instability in both the Telangana and Andhra Pradesh states, there was certain delay in establishing the project in IDA Achyutapuram which is now completed. Now PP are focused in establishing this unit in Talamadla village.

There will be no change in the permitted Area (107 acres 35.8 guntas), Products (16 products), Capacities (production capacity of 1575 TPA from total 16 products) and pollution loads as permitted vide EC. Because CFE validity upto 30-10-2021, PP was confused regarding submission of application of EC validity extension and we were under the impression that we can submit the application upto 30-10-2021. Meanwhile validity of EC has expired on 30-12-

2020. Ministry has also extended the validity of all ECs granted for one year more during COVID pandemic. PP requested to consider the submission and pardon us for the delay in submitting the application and issue us the EC validity extension for a period of 3 more years to start the construction activity and obtain the necessary approvals.

Deliberations in the EAC:

The Committee deliberated the proposal and in the national interest (i.e. self-reliant in manufacturing of drugs) **recommended** for extension of the validity the EC upto 30.12.2023, as per the provisions of the EIA Notification, 2006 amended time to time.

DAY 2- April 13, 2021 [TUESDAY]

Agenda No. 9.12

Setting up of Active Pharmaceutical Ingredients (API's) manufacturing unit by M/s IPCA Laboratories Limited located at Village Hingni, Taluka Seloo, District Wardha, Maharashtra- Consideration of Environmental Clearance- regarding

[Proposal NO- I/MH/IND2/206120/2021, F.NO J-11011/141/2021-IA-II(I)]

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 for setting up of Active Pharmaceutical Ingredients (API's) manufacturing unit by M/s IPCA Laboratories Limited located at Village Hingni, Taluka Seloo, District Wardha, Maharashtra.

The details of products and capacities are as under:

Sr. No	List of Products	CAS No.	Quantity MT/A	Therapeutic Usage
1	Chloroquine Phosphate IUPAC Name: 4-N-(7-chloroquinolin-4-yl)-1-N,1-N-diethylpentane-1,4-diamine;phosphoric acid)	50-63-5	200	Anti-Malarial
2	Chloroquine Sulfate	6823-83-2	200	Anti-Malarial

	IUPAC Name: (4-N-(7-chloroquinolin-4-yl)-1-N,1-N-diethylpentane-1,4-diamine;sulfuric acid)			
3	Hydroxy Chloroquine Sulfate IUPAC Name: (2-[4-[(7-chloroquinolin-4-yl)amino]pentyl-ethylamino]ethanol;sulfuric acid)	747-36-4	300	Anti-Malarial
4	Etodolac IUPAC Name: (2-(1,8-diethyl-4,9-dihydro-3H-pyrano[3,4-b]indol-1-yl)acetic acid)	41340-25-4	300	NSAID
5	Allopurinol IUPAC Name: (1,5-dihydropyrazolo[3,4-d]pyrimidin-4-one)	315-30-0	300	Antigout
6	Mesalamine IUPAC Name: (5-amino-2-hydroxybenzoic acid)	89-57-6	300	Anti-Hypertensive
7	Furosemide IUPAC Name: (4-chloro-2-(furan-2-ylmethylamino)-5-sulfamoylbenzoic acid)	54-31-9	600	Diuretic
8	Valsartan IUPAC Name: ((2S)-3-methyl-2-[pentanoyl-[[4-[2-(2H-tetrazol-5-yl)phenyl]phenyl]methyl]amino]butanoic acid)	137862-53-4	300	Anti-Hypertensive
9	Losartan Potassium	124750-99-8	400	Anti-Hypertensive

	IUPAC Name: (potassium;[2-butyl-5-chloro-3-[[4-[2-(1,2,4-triaza-3-azanidacyclopenta-1,4-dien-5-yl)phenyl]phenyl]methyl]imidazol-4-yl]methanol)			
10	Hydrochlorothiazide IUPAC Name: (6-chloro-1,1-dioxo-3,4-dihydro-2H-1λ6,2,4-benzothiadiazine-7-sulfonamide)	58-93-5	200	Anti-Hypertensive
11	Chlorthalidone IUPAC Name: (2-chloro-5-(1-hydroxy-3-oxo-2H-isindol-1-yl)benzenesulfonamide)	77-36-1	100	Diuretic
12	Metoprolol Tartrate IUPAC Name: ((2R,3R)-2,3-dihydroxybutanedioic acid;1-[4-(2-methoxyethyl)phenoxy]-3-(propan-2-ylamino)propan-2-ol)	37350-58-6	400	Anti-Hypertensive
13	Amodiaquine Base IUPAC Name: (4-[(7-chloroquinolin-4-yl)amino]-2-diethylaminomethyl)phenol)	86-42-0	300	Anti-Malarial
14	Amodiaquine HCl IUPAC Name: 4-[(7-chloroquinolin-4-yl)amino]-2-(diethylaminomethyl)phenol; dihydrochloride	6398-98-7	300	Anti-Malarial
15	Metaclopramide HCl	7232-21-5	10	Anti-Emetic

	IUPAC Name: (4-amino-5-chloro-N-[2-(diethylamino)ethyl]-2-methoxybenzamide;hydrochloride)			
16	Piperaquine Phosphate IUPAC Name: (7-chloro-4-[4-[3-[4-(7-chloroquinolin-4-yl)piperazin-1-yl]propyl]piperazin-1-yl]quinoline;phosphoric acid)	85547-56-4	250	Anti-Malarial
17	Primaquine Phosphate IUPAC Name: (4-N-(6-methoxyquinolin-8-yl)pentane-1,4-diamine;phosphoric acid)	90-34-6	10	Anti-Malarial
	Total	--	4470	--

The project is covered under Category B2 of item 5(f) 'Synthetic, Organic Chemicals Industry' of the Environment Impact Assessment (EIA) Notification, 2006 dated 27.03.2020 and 15.10.2020. Due to applicability of general condition (proposed project is located within 5 km of protected forest (at distance of 2.4 km from protected forest (buffer area) of Notified Bor Wildlife Sanctuary), general conditions is applicable to the project.), the project requires appraisal at Central level by the Sectoral Expert Appraisal Committee (EAC) in the Ministry.

There is Notified Bor wildlife sanctuary within 10 km distance from the project site. Proposed project is located within 5 km of protected forest (at distance of 2.4 km from protected forest (buffer area) of Notified Bor Wildlife Sanctuary). Bor River is flowing at a distance of 0.5 Km in EAST direction. Water bodies like Dongargaon Dam and Bor Dam are located at distance of 1.7 Km and 7.5 Km respectively.

Deliberations in the EAC:

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

- (i) The project is located very near to ESZ therefore in the long run industry may negatively impact the flora and fauna of the area. It is therefore recommended to carry out alternate site analysis. Details report needs to be submitted.
- (ii) The project involves EC and NBWL clearance and as per Ministry's guidelines PP needs to submit the NBWL clearance and link with EC proposal. However in this case PP has only submitted EC application on Portal. As per Parivesh Portal of this

application, no NBWL clearance details mentioned by the PP/Consultant; it seems that application is being made in hurry without following due procedure.

- (iii) Details of Schedule –I species in in the study area, anticipated impact of the project and its conservation plan submitted to Chief Wild Life warden.
- (iv) Alternate fuel should be explored as the project site is very near to Sanctuary
- (v) Budget allocation for green belt development should be increased and detailed green belt alongwith species and budget needs to be submitted
- (vi) Details of Boundary wall should be atleast 12ft high with wire coils on the walls.
- (vii) Revised water balance and source of water along with permission from the concerned regulatory authority.
- (viii) Details of Forest clearance may be taken, if required.
- (ix) Details of existing project, along with copy of CTE/CTO with production details to verify, any violation.
- (x) Details of agreement with Dam Authority for supply of water;
- (xi) Details of application and its approval from forest Department for cutting of tree;

The EAC expressed its concern on the quality of the EMP prepared by Consultant and their extremely poor technical presentation before the Committee and flimsy justification. The Committee is of the view that Consultant shall guide the project proponent on the environmental aspects and provisions of the EIA Notification, which is not been seen in the present case. The PP/Consultant shall ensure compliance before the submission of the final EMP report and presentation before the EAC. The Committee was of the view that the Consultant should guide properly to the PP and improve the preparation of reports. EAC also observed that there seems no environmental expert in the Company and submitted the application for just taking benefit of Category B2 project. The application is incomplete.

*The proposal was accordingly **deferred** for submission of revised and updated reports as per provisions of the EIA Notification, 2006 for further consideration of the EAC.*

Agenda No. 9.13

Expansion of Synthetic Organic Chemical Manufacturing Unit from 300 TPA to 1,200 TPA by M/s Amarjot Chemical Corporation, located at Plot no. N -211/2/3, Tarapur MIDC, Palghar, Maharashtra-Consideration of Environmental Clearance- reg.

[Proposal No. IAMH/IND3/198508/2020, F.No. J-11011/155/2020-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Perfect Enviro Solutions Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project Expansion of Synthetic Organic Chemical Manufacturing Unit from 300 TPA to 1,200 TPA by M/s Amarjyot Chemical Corporation located at Plot No. N -211/2/3, Tarapur MIDC, Palghar, Maharashtra.

All the project is involved in the manufacturing of Synthetic organic chemicals and due to the applicability of the General Conditions (Project lies in Critically Polluted Area-MIDC Tarapur) are listed at S.No. 5 (f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity as under:

Products/By-Product Name	Existing (TPA)	Proposed (TPA)	After Expansion (TPA)
Para Nitro Phenol & its sodium salt	300	900	1,200

The Standard TOR (Terms of Reference) had been granted to the project by Ministry vide letter No. IA-J-11011/155/2020-IA-II(I) dated 06.10.2020. The project is an operational chemical manufacturing facility with a total production capacity of 300 TPA manufacturing Key Starting Material (KSM) for pharma i.e. Para Nitro Phenol & its sodium salt in accordance with CTO vide letter dated 08.05.2018 granted by Maharashtra Pollution Control Board. M/s. Amarjyot Chemical Corporation was incorporated in the year 1991 and the company commenced its commercial production of Key Starting Material (KSM) for pharma i.e. Para Nitro Phenol in the year 1994. The EC was not applicable to the existing unit as it was established before the applicability of EIA notification 14th September 2006. The site visit by MPCB was done on 13.10.2020 for the CTO compliance. No litigation is pending against the proposal.

Public Hearing for the proposed project is exempted as the unit lies within the notified industrial area i.e. Maharashtra Industrial Development Corporation (MIDC), Tarapur, Maharashtra.

Existing land area is 1000 m², proposed expansion will be done on the same land area only. Industry will develop greenbelt in an area of 40 % i.e., 400 m² (total 40% of Green area - 16.6 % within plot area (166 m²) and 23.4% (234 m²) outside plot premises i.e. at plot E 74, MIDC Tarapur which is owned by PP) out of the total area of the project.

The estimated project cost is Rs.229.64 Lakh including existing investment of Rs.100 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs.147.14 Lakhs and the Recurring cost (operation and maintenance) will be about Rs.178.08 lakhs per annum. Total Employment will be 35 persons as direct & indirect after expansion. The Industry has been working closely with the local panchayats and villages in the existing phase and for the expansion proposes to allocate additional Rs.2.54 Lakhs towards social activities like improvement in infrastructure; medical services for locals.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site.

Ambient air quality monitoring was carried out at 8 locations during December 2019 - February 2020. The baseline data indicates the ranges of concentrations as: PM₁₀ (68.53-96.38 µg/m³), PM_{2.5} (27.18-38.23 µg/m³), SO₂ (13.70-19.28 µg/m³) and NO₂ (19.66-27.64 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.611 µg/m³, 0.252µg/m³ and 1.26 µg/m³ with respect to PM₁₀, SO₂ and NO₂. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement after expansion will be 30.4 m³/day, out of which fresh water requirement of 13.3 m³/day will be met from MIDC water Supply. After expansion, industrial effluent of 19.2 KLD quantity will be treated through ETP (25 KLD), RO (20 KLD) & MEE (5 KLD) and 1.5 KLD of Domestic wastewater will be disposed of to a soak pit followed by a septic tank. Treated water of 17.1 KLD will be generated from the ETP/RO/MEE and will be reused within the plant for washing, Boiler makeup, cooling and gardening purposes. Thus the proposed project will be on Zero Liquid discharge (ZLD).

Power requirement after expansion will be 120.8 KW including existing 41 KW and will be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). Existing unit has 1 DG sets of 1*63 kVA capacity which will be dismantled, and 1*125 kVA DG set is proposed to be used as standby during power failure. Stack will be provided as per CPCB norms to the proposed DG sets. Existing unit has 0.5 TPH Furnace oil fired boilers. After expansion, the same capacity boiler with Briquette fuel will be installed during the proposed expansion activity. In the existing, Dust collector (Bag Filter) with a stack of height of 15 m has been installed and after expansion Wet scrubber with alkali media with a stack of height of 15 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³.

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

At present closed loop systems are being practiced in the process for arresting fugitive emissions, however after expansion, scrubber with alkali media with a stack height of 10 m will be provided in the process area to arrest air emissions. Other fugitive emissions due to leakages will be controlled using air handling units (AHU) followed by scrubbers both at process area & packing area. All vents from the plant are connected to the common vent scrubber, vent gases are absorbed in water & un-scrubbed gases vented to the atmosphere by vent blower.

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

Solid Waste

Category	Type of Waste	Treatment Method	Existing (Kg/day)	Proposed (Kg/day)	After Expansion (Kg/day)

Biodegradable	Organic Waste	Will be sent to the Municipal Solid waste Handling site	1.1	1.1	2.2
Non-Biodegradable	Recyclable Waste (Plastic, paper, wood, glass, etc)	Given to authorised recycler	1.6	1.5	3.1
Total Solid waste Generation (kg/day)			2.7	2.6	5.3

Hazardous Waste

For the safe disposal of the Hazardous waste, an agreement with “Mumbai waste Management Limited” at MIDC, Taloja has been made (Membership No-MWML-HzW-TAR-1180), a registered member of the CHW-TSDF.

S.No.	Hazardous Waste	Category (as per HWM Rules,2016)	Unit	Existing	Proposed	Total after expansion	Method of Disposal
1	ETP Sludge	35.3	TPA	1.2	8.8	10	CHWTSDF
2	MEE Salt	37.3	TPA	0	1521	1521	
3	Discarded empty Container	33.1	TPA	0	10	10	Sale to Authorized recycler after decontamination
4	Used Oil	5.1	TPA	0.006	0.018	0.024	Sale to Authorized recycler

Non Hazardous Waste: 50 TPA of Bottom ash will be generated from boiler fuel briquettes which will be sold to brick manufacturers.

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, 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 an undertaking that the data and information given in the application and enclosures are true to the best of their 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 reflects the present environmental concerns and the projected scenario for all the environmental components. The Committee deliberated on the action plan and budget allocation for green belt development and suggested to increase the allocated amount and plant trees having high survival rate and having high CO₂ sequestration within six months. The committee deliberated mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee also suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The EAC deliberated on the proposal with 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 also found the proposal in order and recommended for the 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 the grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions in the **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. Regular VOCs monitoring should be carried out.
- (iii) 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.
- (iv) As already committed by the project proponent, Zero Liquid Discharge (ZLD) 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 purpose.

- (v) 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.
- (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) Total fresh water requirement shall not exceed 13.3 m³/day will be met from MIDC water Supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (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) 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 (if applicable).
- (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 provided 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 valves 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. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.
- (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 at least 40% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and number of trees have to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within first year.

- (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 shall be satisfactorily implemented.
- (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. 9.14

Capacity expansion of manufacturing of Unsaturated Polyester Resin from 250 MT per month to 1200 MT per month in addition with Proposed manufacturing of Pigment Paste 50 MT per month by M/s. Revex Plasticisers Pvt. Ltd located at G-1, 466/467, at RIICO Industrial area, Phase-1, Bhiwadi, Alwar, Rajasthan-consideration of Environmental Clearance reg.

[Proposal No: IARJ/IND2/206466/2020, F.No: IA-J-11011/149/2020-IA-II (I)]

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

The proposal is for environmental clearance to the project of “Capacity expansion of manufacturing of Unsaturated Polyester Resin from 250 MT per month to 1200 MT per month in addition with proposed manufacturing of Pigment Paste 50 MT per month at G-1, 466/467, at RIICO Industrial area, Phase-1, Bhiwadi, Alwar, Rajasthan By M/s. Revex plasticisers Pvt. Ltd.

Project is listed at S.N. 5 (f) Category “Synthetic Organic Chemical Projects” of Schedule of Environment Impact Assessment (EIA) Notification under category ‘A’ and is appraised at Central Level by Expert Appraisal Committee (EAC) (Project attract General Condition- Located within 5 km from Inter-State Boundary).

The details of products and capacity as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1.	Unsaturated Polyester Resin	250 MT/M	950 MT/M	1200 MT/M
2.	Pigment	-	50 MT/M	50 MT/M

The ToR was issued by Ministry vide letter dated 27th August, 2020. Company developed existing project before EIA Notification 2006. Consent to Establish (CTE) was granted from RSPCB vide F.12 (729) RSPCB/AP/1987/0226-28, dated 26.11.1987. Public Hearing is exempted as the project site is located inside the notified Industrial Area. Certified Copy of Consent to Operate (CTO) was issued from RO, RSPCB Vide Letter No. RPCB/RO/BWD/254/3380 dated 04th February, 2021. There is no litigation pending against the project.

The total land for the existing project is 0.40 ha, which has already been allotted to the project proponent. No additional land is required for the Expansion project. Expansion will be done within the existing unit. Industry has already developed greenbelt in an area of 40.2 % i.e.0.1604 Ha out of total area of the project.

The estimated project cost is Rs.7.03 Crore including existing investment of Rs.4.03 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.11.00 Lakhs and the Recurring cost (operation and maintenance) will be about Rs.6.25 Lakhs per annum. Total Employment will be of 109 persons. Industry proposes to allocate Rs. 0.03 Cr. 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. Indori Nala is flowing at 4.4 km towards NE direction from Project site.

Ambient air quality monitoring was carried out at 8 locations during 1st Oct. 2019 to 31st Dec. 2019 and the baseline data indicates the ranges of concentrations as: PM10 (52.9 $\mu\text{g}/\text{m}^3$ to 98.4 $\mu\text{g}/\text{m}^3$), PM2.5 (23.5 $\mu\text{g}/\text{m}^3$ to 54.7 $\mu\text{g}/\text{m}^3$), SO₂ (15.7 $\mu\text{g}/\text{m}^3$ to 43.6 $\mu\text{g}/\text{m}^3$) and NO₂ (21.3 $\mu\text{g}/\text{m}^3$ to 39.8 $\mu\text{g}/\text{m}^3$). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 96.8 $\mu\text{g}/\text{m}^3$, 43.6 $\mu\text{g}/\text{m}^3$ and 40.3 $\mu\text{g}/\text{m}^3$ with respect to PM10, SO₂ and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement for existing project is 5 KLD which is sourced from RIICO and proposed water requirement is 7 KLD which will be sourced from Ground water. Industry does not require NOC from CGWA for extraction of 7 KLD as per CGWA notification dated 24.09.2020. No effluent will be generated from the process. Total water will be used in the process. There is no discharge of trade effluent outside the factory premises. From existing unit, domestic waste water generation of approx. 1.5 KLD treated in Septic Tank. After expansion, it is estimated that 3.2 KLD of domestic waste water will be generated for which a portable STP is proposed. Plant will be based on Zero Liquid Discharge.

Power Requirement for existing 16000 KWH/month. Power Requirement for proposed expansion unit will be 76000 KWH/month and Power requirement for the proposed manufacturing for Pigment Paste is 6000 KWH/month which will be sourced from Jaipur Vidyut

Vitran Nigam Limited (JVNL). 2 D.G. sets of capacity 62.5 KVA & of 125 KVA each are installed in the plant. Stack height 4 m will be provided as per CPCB norms to the proposed DG sets.

Two boilers (Thermic Fluid Heaters) with capacity 1 Lac KCAL/Hr and 2 Lac KCAL/Hr were earlier installed. After receiving direction from RSPCB; company replaced both the TFHs by installation of new LPG based TFH of 4 Lac KCAL/Hr capacity. LPG based TFH with the capacity of 10 Lac KCAL/Hr. is proposed for expansion unit. Emission from production process are recovered by evaporation which contain exhaust gasses like Nitrogen, Hydrogen, Carbon dioxide, Carbon Monoxide, VOC and traces of process emissions.

There is no hazardous waste generation from the process. The only Hazardous Waste generation is from maintenance of plant, waste Oil and Grease from DG sets. The same will be managed scientifically as per direction of RSPCB/CPCB. PP has also made agreement with M/s Petroways India Pvt. Ltd. for safe handling and management of waste. Used oil from machineries/D.G. Set is carefully stored in HDPE drums in isolated covered facility. Used oil is sold to vendors authorized by Rajasthan State Pollution Control Board for its treatment.

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, 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 an undertaking that the data and information given in the application and enclosures are true to the best of their 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 reflects the present environmental concerns and the projected scenario for all the environmental components. The Committee deliberated on the action plan and budget allocation for green belt development and suggested to increase the allocated amount and plant trees having high survival rate and having high CO₂ sequestration within six months. The committee deliberated mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee also suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following the safety norms and best practices. It was also suggested by the committee to install digital flow meter. Biodiversity Conservation Plan submitted by PP was deliberated by EAC and was found to be satisfactory.

The EAC deliberated the proposal with 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 also found the proposal in order and recommended for the 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 the grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions in the **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. Regular VOCs monitoring should be carried out.
- (iii) 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.
- (iv) As already committed by the project proponent, Zero Liquid Discharge (ZLD) 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 purpose.
- (v) 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.
- (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) Total fresh water requirement shall not exceed 12 KLD which will be sourced from Ground water @7KLD and RICCO Water supply @5KLD. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (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) 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 (if applicable).

- (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 provided 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 valves 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. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.
- (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 at least 40% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and number of trees have to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within six month. The budget kept for plantation is Rs. 5 Lakhs.
- (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 shall be satisfactorily implemented.
- (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. 9.15

Expansion of API Manufacturing Unit of capacity 23.197 TPM to 35.637 TPM by M/s Vamsi Labs Ltd., located at Plot No. A-14, A-15, A-31, A-32 & A-33, MIDC Chincholi, Taluka Mohol, Dist. Solapur, Maharashtra -consideration of Environmental Clearance reg.

[Proposal No. IAMH/IND2/206661/2021; File No. J-11011/142/2021-IA-II (I)]

The Project Proponent and the Accredited Consultant M/s.Equinox Environments (I) Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that:

The proposal is for grant of Environmental Clearance (EC) to the project for expansion of API Manufacturing Unit of capacity 23.197 TPM to 35.637 TPM by Vamsi Labs Ltd., located at Plot No. A-14, A-15, A-31, A-32 & A-33, MIDC Chincholi, Taluka Mohol, Dist. Solapur, Maharashtra.

The project is covered under Category B2 of item 5(f) 'Synthetic, Organic Chemicals Industry' of the Environment Impact Assessment (EIA) Notification, 2006 & OM dated 27.03.2020 and 15.10.2020. Due to applicability of general condition (presence of GIB sanctuary within 5 Km from Project Site in MIDC), the project requires appraisal at Central level by the Sectoral Expert Appraisal Committee (EAC) in the Ministry. It was informed that no litigation is pending against the proposal. The Proposed Project Site in Chincholi MIDC is located at 2.5 Km from the boundary of GIB Sanctuary. Further, ESZ for GIB is finalized vide notification No. 596 dated 11/02/2020. Project Site in MIDC is located at 1.56 Km from Notified ESZ.

The details of products and capacities are as under:

No	Name of the Product	Quantity(Kg/M)	
		Existing	Total After Expansion
1	Salbutamol Sulphate	1500	1500
2	R-Salbutamol Tartarate	25	25
3	Tiotropium Bromide Monohydrate	2	2
4	Terbutaline Sulphate	500	500
5	Tramadol Hydrochloride	2000	2000
6	Cyclobenprine Hydrochloride	1000	1000
7	Amitriptyline Hydrochloride	1000	1000
8	Tulobuterol Hydrochloride	50	100
9	Nortriptyline Hydrochloride	1000	1000
10	Venlafaxine Hydrochloride	1000	1000
11	Ciclesonide	50	50
12	Montelukast Sodium	50	50
13	Ipratropium Bromide	10	200
14	Budesonide	50	250
15	Fluticasone Propionate	100	200
16	SalmeterolXinafoate	50	50
17	Donepezil Hydrochloride	1000	1000
18	Pimozide	1000	1000
19	Formeterol Fumarate	10	10
20	Sumatripton Succinate	100	250

No	Name of the Product	Quantity(Kg/M)	
		Existing	Total After Expansion
21	Bambuterol Hydrochloride	250	250
22	Carbidopa	200	200
23	Aluminium Hydroxide gel	2500	2500
24	Loratadine	500	500
25	Meta ProterolSulphate	100	100
26	Clenbuterol HCL	100	100
27	Domperidone	4000	4000
28	Haloperidol	1000	1000
29	Cyproheptadine Hydrochloride	3000	3000
30	Loperamide Hydrochloride	1000	1000
31	R- Salbutamol Sulphate	50	250
32	Azelastine HCL	---	500
33	BeclomethasoneDipropionate	---	100
34	Betamethasone Acetate	---	50
35	Betamethasone Sodium Phosphat	---	50
36	Betamethasone Valerate	---	100
37	Carbamazepine	---	100
38	Clopidogrel Bisulfate	---	50
39	Clobetasole Propionate	---	200
40	Dexamethasone	---	250
41	Dexamethasone Acetate	---	10
42	Dexamethasone Sodium Phosphate	---	100
43	Dofetilide	---	100
44	Domperidone Maleate	---	500
45	FenoterolHydrobromide	---	250
46	Fingolimod HCL	---	1000
47	FlucocinoloneAcetonide	---	10
48	Flucanazole	---	200
49	Glycopyrrolate	---	100
50	Halobetasole Propionate	---	100
51	Haloperidol Decanoate	---	250
52	Irbesartan	---	500
53	Itraconazole	---	1000
54	Ketoconazole	---	750
55	Methyl Prednisolone	---	100
56	Methyl Prednisolone Acetate	---	100
57	MometasoneFuroate	---	200
58	Olmesartan	---	1000
59	Oxcarbazepine	---	10

No	Name of the Product	Quantity(Kg/M)	
		Existing	Total After Expansion
60	Pirfenidone	---	10
61	Prednisolone	---	500
62	Prednisolone Acetate	---	200
63	Pregabalin	---	200
64	Levobutanol HCL	---	10
65	Sitagliptin	---	250
66	Telmisartan	---	500
67	Terbinafine	---	400
68	Triamcinolone	---	150
69	Triamcinolone Acetonide	---	100
70	Triamcinolone Hexacetonide	---	100
71	Tripolidine Hydrochloride	---	200
72	Valsartan	---	500
73	Voriconazole	---	750
	Total (Kg/M)	23197	35637
	Total (MT/M)	23.197	35.637

The Certified compliance report submitted by the Ministry's RO, MoEFCC, at Nagpur vide letter dated 16.03.2021. The Committee deliberated the compliance status of earlier EC of dated 23.12.2005 submitted by PP and found in order. It was informed that there is no litigation pending against the project.

Existing land area is 8,550 m². Additional 6,300 m² land will be used for proposed expansion. Industry has already developed greenbelt in area of 2,957 m² (19% of total area of 14,850 m²). After expansion greenbelt will be developed in an area of 34% i.e., 5,091 m² out of total area of the project.

The estimated project cost is Rs.88.48 Crores including existing investment of Rs.31.75 Cr. Total capital cost earmarked towards environmental pollution control measures after expansion will be about Rs.5.77 Crores and the Total Recurring cost (operation and maintenance) will be about Rs.0.97 Crores per annum. Total Employment will be of 75 persons. Industry proposes to allocate Rs.148 Lakh towards Corporate Environmental Responsibility.

The GIB Sanctuary is located about 2.5 KM. from project site in MIDC. ESZ for GIB is finalized vide notification No. 596 dated 11/02/2020. Same is also located at 1.56 Km from project site. River Sina is at a distance of 4.3 Km on South West from the project site.

Total water requirement after expansion will be 250.5 CMD of which, 168.5 CMD will fresh water will be met from MIDC water supply scheme at Ujani Dam on Bhima river while 70 CMD will be ETP treated effluent and 12 CMD will be STP treated effluent to be recycled. Effluent of quantity after expansion will be 83.5 M³/Day will be treated through ETPs provided separately for strong and weak streams thereby achieving Zero Discharge.

Power requirement after expansion will be 2,320 KWH and will be taken from MSEDCL. Existing unit has one DG set of 325 kVA capacity, additionally one DG set of 500 kVA will be installed under expansion as standby during power failure. Stack of height 4.5 m ARL is provided as per CPCB norms to the proposed DG set.

Existing unit has 4 TPH boiler with stack height of 30 m having dust collector as APC equipment. Additionally, 10 TPH boiler will be installed under expansion. Bag filter with a stack height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boiler.

Details of Process emissions generation and its management: Process emissions in the form of acidic, alkaline and solvent vapours are generated from the process. The emissions from the process would be taken care of through scrubbers and scrubbed material forwarded to ETP for treatment.

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

No	Description	Quantity (MT/M)		Disposal
		Existing	Total After Expansion	
1	Boiler Ash	83.5	233.5	Sale to Brick Manufacture Sale to Authorized recyclers
2	Metal Scrap	--	10.0	
3	Empty Containers & Drums	--	800 Nos./M	
4	Packaging Material	--	1.00	
5	E-Waste	--	0.008	

Details of Hazardous waste generated & its management:

No	Description	Cat	Quantity (MT/M)		Disposal Facility
			Existing	After Expansion	
1	Process Residue and Wastes	28.1	0.04	0.2	CHWTSDF
2	Spent Catalyst	28.2	0.145	0.345	Sale to Authorized party
3	Spent Carbon	28.3	0.450	1	CHWTSDF
4	Off specification products	28.4	0.040	0.095	CHWTSDF
5	Date-expired products	28.5	0.01	0.024	CHWTSDF
6	Spent Solvent	28.6	26	62	Sale to Authorized party
7	Empty barrel/ containers/liners	33.1	250 No./M	600 No./M	Sale to Authorized party

	contaminated with hazardous chemicals /wastes				
8	Chemical Sludge from waste water treatment	35.3	27	70	CHWTSDf

The Member Secretary informed the EAC that the Ministry has recently issued an Office Memorandum dated 28.01.2021 which inter-alia request EAC to clearly recommend the permissible pollution load i.e., quantity and quality, including composition of emissions, discharge and solid waste generation. In compliance this OM, PP has submitted the following pollution load information and the EAC deliberated on the issue. PP also requested that EC may include the name of products also otherwise PP will face difficulty in obtaining the CTE/CTO from concerned SPCB.

Kg/Day														
Water Input	Effluent Water								Solid Waste				Process Emission	Fugitive Emission
	Effluents	Inorganics in Effluent	Organics in Effluent	TDS	COD	HTDS	LTDS	Total Effluent	Organic Solid	Inorganic SW	Spent Carbon	Distillation / Process		
194500	83500	1492.88	861.15	1492.88	371.75	1440	52.88	1492.88	75	2340	33.3	7	700	125

Hazardous Solid Waste Details:

Kg/Day			
Organic Solid Waste	Inorganic Solid Waste	Spent Carbon	Distillation Residue
75	2340	33.3	7

Emission Details:

Kg/Day	
Process Emission	Fugitive Emissions
700	125

Kg/Day								
CO ₂	H ₂	NH ₃	O ₂	N ₂	HBr	HCl	(CH ₃ CH ₂) ₂ NH	SO ₂
250	10	25	200	40	60	100	10	5

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, 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 an undertaking that the data and information given in the application and enclosures are true to the best of their 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 Member Secretary further informed the EAC that the Ministry has recently issued an Office Memorandum dated 28.01.2021 and inter-alia requested that EAC shall clearly recommend the permissible pollution load i.e. quantity and quality, including composition, of emissions, discharge and solid waste generation. In compliance of this OM, PP has submitted the pollution load and the EAC also deliberated on the pollution load as estimated by the PP/Consultant.

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 action plan and budget allocation for green belt development and suggested to increase the allocated amount accordingly PP submitted commitment to plant 550 saplings. The committee deliberated mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee also suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following the safety norms and best practices. EAC also noted that the project was earlier deliberated in its EAC meeting held during January 14-15, 2021. The reply submitted by the PP are found in order and satisfactory.

The EAC deliberated on the proposal with 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 also found the proposal in order and recommended for the 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 the grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions in the **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 PFR/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. Regular VOCs monitoring should be carried out.
- (iii). 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.
- (iv). As already committed by the project proponent, Zero Liquid Discharge (ZLD) 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 purpose.
- (v). 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.
- (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). Total fresh water requirement shall not exceed 168.5 CMD and fresh water will be met from MIDC water supply scheme at Ujani Dam on Bhima river. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (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). 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 (if applicable).
- (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 provided 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 valves 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. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.
- (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 at least 33% of the total project area, mainly along the plant periphery/ additional land. 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. Trees have to be planted with spacing of 2m x 2m and number of trees have to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within six months.
- (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 shall be satisfactorily implemented.
- (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. 9.16

Manufacturing of various Dyes, Dye Intermediates and Optical Brightening Agent by M/s Aarna Chemicals at Survey No. 434, Village Neja, Taluka Khambhat, District Anand, Gujarat- Consideration for Environmental clearance

[I/AGJ/IND3/200864/2019, IA-J-11011/110/2019-IA-II(I)]

The proposal was earlier placed before the EAC in its meeting held during 11-12 March, 2021, wherein the Committee noted that information/documents related to the project were not circulated to all EAC members, and hence not considered the proposal. The project proponent has informed that the documents were circulated to all Committee members now and requested for consideration of the proposal.

The project proponent and the accredited Consultant M/s San Envirotech Pvt Ltd made a

detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Manufacturing Various Dyes, Dye Intermediates and Optical Brightening Agent of capacity 1005 TPM at Survey No. 434, Village Neja, Taluka Khambhat, District Anand, Gujarat by M/s Aarna Chemicals.

The details of products and capacity are as under:

S. No.	Product	Quantity (TPM)
1	Neville Winther's Acid (N W Acid)	5
2	Schaffer Acid	5
3	Opsamide /Methyl Opsamide /Anthranilic Opsamide	25
4	Blue HEGN	10
5	HEGN Base	10
6	3,5 Diamino Benzoic Acid (3-5 DABA)	10
7	Aniline 2, 5 Disulphonic Acid (Aniline 2, 5 DSA)	25
8	Aniline 2, 4 Disulphonic Acid (Aniline 2, 4 DSA)	25
9	Metanilic Acid	50
10	Sulphanilic Acid	100
11	Anthranilic Acid	25
12	5 Sulpho Anthranilic Acid	15
13	4 Sulpho Anthranilic Acid	25
14	4 Sulpho Hydrazone	25
15	5 Sulpho Hydrazone	5
16	Mix Clave Acid	10
17	Para Amino Azo Benzene 4 Sulphonic Acid (PAABSA)	50
18	4-Nitro 4 Amino Diphenylamine 2-Sulphonic Acid (4 NADPSA)	15
19	Para Nitro Chloro Benzene Ortho Sulphonic Acid (PNCBOSA)	15
20	4 Nitro 2 Amino Phenol (4 NAP)	10
21	4 Chloro 2 Amino Phenol (4 CAP)	25
22	G-Salt	25
23	2R Acid	15
24	Benzedine Disulphonic Acid (BDSA)	15
25	1 Phenyl 3 Methyl Pyrazolone (PMP)	10
26	1-(4-Sulpho Phenyl)-3 Methyl 5-Pyrazolone (SPMP)	10
27	Ferrous Sulphate	100
28	Acid Red 52 (Rodamine)	10
29	Acid Yellow 36 (Metanil Yellow)	10
30	Reactive Blue 220	50
31	Reactive Blue 221	50
32	Sunset Yellow	10
33	Orange TGLL (Direct Orange 39)	75

34	Meta Ureido Aniline (MUA)	50
35	4-4 Dinitro Stilbene 2-2 Disulphonic acid (DNSDA)	25
36	2-Nitro 4-Amino Diphenylamine 4-Sulphonic Acid (2-NADAPSA)	15
37	Optical Brightening Agents	50
Total		1005

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 standard ToR has been issued by Ministry vide letter no. IA-J-11011/110/2019-IA-II (I); dated 12/01/2020. Public Hearing for the project has been conducted by the Gujarat Pollution Control Board on 07.01.2021. The main issues raised during the public hearing are related to employment to local people and development of surrounding area as a part of CER. PP reported that there is no Litigation pending against the proposal.

Proposed land area of the project is 15881 m². Industry will develop greenbelt in an area of 33% i.e. 5250 m², out of total area of the project. The estimated project cost is Rs. 9.5 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 3.21 Crore and the Recurring cost (operation and maintenance) will be about Rs. 7.51 Crore per annum. Total employment will be 40 persons as direct. Industry proposes to allocate Rs. 19.0 Lakhs towards Corporate Environmental Responsibility.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance of the project site. Pond of Lunej Village is at a distance of 2.35 km in WNW direction.

Ambient air quality monitoring was carried out at 8 locations during December, 2019 to February, 2020 and the baseline data indicates the ranges of concentration as: PM₁₀ (62.3 - 76.1 µg/m³), PM_{2.5} (35.3 - 46.7 µg/m³), SO₂ (12.6 - 16.8 µg/m³), NO_x (16.4 - 19.8 µg/m³). AAQ modeling study for point source emission indicated that the maximum incremental GLCs after the proposed project would be 1.562 µg/m³, 0.710 µg/m³ and 0.550 µg/m³ with respect to PM₁₀, SO₂ and NO_x. The resultant concentrations are within the national ambient air quality standards (NAAQS).

Total water requirement is 200 m³/day of which fresh water requirement of 60 m³/day will be met from Ground Water Source – Bore well. 140 m³/day will be recycled/treated water. Sources of industrial effluent generation will be from process, washing, boiler blow down, cooling bleed off and scrubber w/w. Total trade effluent (207.5 KLD) will be taken into ETP, after primary treatment entire effluent will be passed through RO. RO permeate (125 KLD) will be reused within premises and RO reject (82.5 KLD) will be spray dried into in-house spray dryer. Thus,

unit proposed to achieve Zero Liquid Discharge (ZLD). Sewage (4.0 KLD) will be disposed into soak pit through septic tank.

Power requirement will be 1500 kVA and will be met from Madhya Gujarat Vij Company Ltd. (MGVCL). Unit proposed to install one D.G. Set of 125 kVA capacity and will be used as standby during power failure. Stack (height 11 meters) will be provided as per CPCB norms to the proposed D.G. Set.

In proposed unit, one Bio Coal/ Imported Coal fired Boiler (2 TPH) and one Bio Coal/ Imported Coal fired Hot Air Generator (15 Lakhs Kcal/hr) will be installed. Cyclone separator and bag filter with a stack height of 21 m & 30 m will be installed on Boiler & HAG respectively for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed utilities.

Process emission generation will be from stack attached with Process Vessel (NW acid) Process Vessel (Sulphonation) and Process Vessel (Sulphonation/Nitration), one vent of Spin Flash Dryer, one vent of Spray Dryer for dyes (1000 lit/hr.), one vent of Bio Coal/Imported Coal fired Spray Dryer for effluent (3000 lit/hr.) and one vent of Bio Coal/Imported Coal fired Spray Dryer for effluent (1500 lit/hr.). Alkali Scrubber will be installed to control process emission from reactor. In built Cyclone and bag filter will be provided as APCM on vents of Spin Flash Dryer and Spray Dryers.

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

Sr. No.	Type of Waste	Category as per HWM rules, 2016	Quantity	Method of Disposal
1.	ETP Waste	35.3	150 MT/month	Collection, Storage, Transportation, Disposal at TSDF site.
2.	Salt of Spray Dryer	35.3	65 MT/month	Collection, Storage, Transportation, disposal at TSDF site.
3.	Iron Sludge	26.1	294 MT/month	Collection, Storage, Transportation, disposal at TSDF site or to Cement industries for co-processing.
4.	Gypsum Waste	26.1	45 MT/month	Collection, Storage, Transportation, disposal at TSDF site or to Cement industries for co-processing.
5.	Used Oil	5.1	1.0 KL/Year	Collection, Storage, Transportation, sell to registered re-processors or use for lubrication within premises.

6.	Discarded Containers/ Liners/Bag	33.1	300 Nos./month 0.5 MT/month	Collection, Storage, Transportation, Sell to registered recyclers.
7.	Spent Sulphuric Acid (30-45%)	26.3	600 MT/month	Collection, Storage and partly reuse in-house and partly will be sold to actual users under Rule-9.
8.	SBS (30-35%)	26.3	90 MT/month	Collection, Storage and sold to actual users under Rule-9.

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, 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 an 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 found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee also deliberated on the activities/action plan and found to be addressing the issues in the study area and public hearing concerns. The Committee suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The project proponent submitted an undertaking before the Committee stating that they propose to increase the number of trees to be planted from 1312 to 1750 numbers (with average height of 1.5 to 2m) and accordingly greenbelt development cost of Rs 4 lakhs and recurring cost of Rs,1.5 lakhs/annum shall be increased to Rs. 8.75 lakhs (including cost of plant, land development, manure etc) and Rs. 2 lakhs/annum respectively, considering high salinity of soil and water. The Committee found the additional information submitted by the project proponent to be satisfactory and addressing to the concerns of the Committee.

The EAC deliberated on the proposal with 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 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 60 cum/day, proposed to be met from bore well. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA. Project activities shall be started only after obtaining permission for water extraction.
- (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.
- (xvi). 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/adjacent areas. 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. Trees have to be planted with spacing of 2m x 2m and number of trees have to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within first year.
- (xiii). The activities and the action plan proposed by the project proponent to address the socio-economic/public hearing 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.
- (xiv). 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.

Amendments/Validity of EC Proposals

Agenda No. 9.17

Modification in existing Agrochemical & Agrochemical Intermediate products without increase production capacity & for increase in wastewater discharge permission of M/s. Tagros Chemicals India Pvt. Ltd at Plot No. 43/1 & 43/3, GIDC Dahej, Taluka VAGRA, District Bharuch, Gujarat- Amendment in EC

[IAGJ/IND3/204740/2021, J-11011/122/2016- IA II(I)]

The proposal is for Amendment in the Environmental Clearance granted by the Ministry vide letter dated 25th February, 2019 for the project of Expansion of Agrochemical & Agrochemical Intermediate at Plot No. 43/1, GIDC Dahej, Tal. Vagra, Dist: Bharuch, Gujarat in favour of M/s. Tagros Chemical India Ltd. vide letter no. J-11011/122/2016-IA II (I) 25th February, 2019 and its amendment dated 25th February, 2020 & 11th December, 2020.

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

Sr. No.	Para of ToR/EC issued by MoEF&CC	Details as per the ToR/EC	To be revised/ read as	Justification/reasons submitted by PP
1	Para No. 3 (Page 1 of 7)	The details of Products/by-products are as under: Refer Annexure – 1	The details of Products/by-products are as under: Refer Annexure – 2	The product quantities have been altered to accommodate to produce max of certain product because of change in market demand without altering the pollution load as per EC clearance. This alteration has resulted in net decrease in overall quantity.

Annexure - 1 (As Per EC Granted)

SR. NO.	PRODUCT NAME	EXISTING CAPACITY (MT/MONTH)	TOTAL PROPOSED CAPACITY (MT/MONTH)	CAS NOS.	LD ₅₀ (mg/kg)
PESTICIDES & PESTICIDES INTERMEDIATES					
1	DV Acid Chloride	200	250	52314-67-7	4123
2	Carfentrazone	100	150	128621-72-7	>4000
3	Ethofumesate	50	100	26225-79-6	>8743
4	Metamitron	100	150	41394-05-2	>4000
5	Cypermethrin	150	200	52315-07-8	Oral - >355 Dermal - >2000

6	Permethrin	75	100	52645-53-1	430 to 4000
7	Alphamethrin	50	75	67375-30-8	Oral - >400 Dermal - >2000
8	Meta Phenoxy Benzaldehyde	200	250	39515-51-0	1222
9	Metaphenoxybenzyl Alcohol	100	100	13826-35-2	2040
10	RRCMA	30	30	59042-50-8	>2000
11	Dicamba	50	500	1918-00-9	>2740
12	Deltamethrin tech.	10	30	52918-63-5	>2000
13	Sulfentrazone	100	100	122836-35-5	>2855
14	Thiamethoxam	50	100	153719-23-4	>2000
15	Bio Pesticides	-	215	-	-
TOTAL		1265	2350		
INORGANIC PRODUCTS (NOT COVERED UNDER EIA NOTIFICATION,2006)					
15	PAC/AlCl ₃	572.50	656.75	1327-41-9	2000
16	Sodium Sulphite Powder	560.7	747.6	7757-83-7	820
17	NH ₄ Cl Powder	162.7	216.6	12125-02-9	1300
18	KCl Powder	124.4	137.5	7447-40-7	3020
TOTAL		2685.3	4267.7		
BY PRODUCTS:					
1	HCl Solution	606.51	606.51	7647-01-0	238-277
2	Cu (OH) ₂ Powder	2.10	2.63	20427-59-2	200
3	Spent Acid	3333.7	7618	7664-93-9	2440
TOTAL		3942.31	8227.14		

Annexure – 2 (Required as per EC Amendment)

SR. NO.	PRODUCT NAME	EXISTING CAPACITY (AS PER EC GRANTED) (MT/MONTH)	TOTAL PROPOSED CAPACITY (REQUIRED AS PER EC AMENDMENT) (MT/MONTH)	CAS NOS.	LD ₅₀ (mg/kg)
PESTICIDES & PESTICIDES INTERMEDIATES					
1	DV Acid Chloride	250	751	52314-67-7	4123
2	Sulfentrazone	100		122836-35-5	>2855
3	Meta Phenoxy Benzaldehyde	250		39515-51-0	1222
4	Meta Phenoxy Benzyl Alcohol	100		13826-35-2	2040
5	RRCMA	30		59042-50-8	>2000

6	Permethrin Tech.	100		52645-53-1	430 to 4000
7	Thiamethoxam	100		153719-23-4	>2000
8	Ethofumesate	100		26225-79-6	>8743
	Cypermethrin Tech.	200	200	52315-07-8	Oral - >355 Dermal - >2000
	OR				
9	Phoenix	0	431	447399-55-5	>5000
		75	75	67375-30-8	Oral - >400 Dermal - >2000
10	Alphamethrin Tech.				
11	Dicamba	500	100	1918-00-9	>2740
12	Deltamethrin Tech.	30	30	52918-63-5	>2000
13	Carfentrazone	150	50	128621-72-7	>4000
14	Metamitron	150	150	41394-05-2	>4000
15	Bio Pesticides	215	215	-	-
TOTAL		2350	1802		
INORGANIC PRODUCTS (NOT COVERED UNDER EIA NOTIFICATION,2006)					
15	PAC/ $AlCl_3$	656.75	2114.18	1327-41-9	2000
16	Sodium Sulphite Powder	747.6	694.68	7757-83-7	820
17	NH_4Cl Powder	216.6	492.15	12125-02-9	1300
18	KCl Powder	137.5	629.6	7447-40-7	3020
TOTAL		1758.45	3930.61		
BY PRODUCTS:					
1	HCl Solution	606.51	1622.2	7647-01-0	238-277
2	$Cu(OH)_2$ Powder	2.63	7.89	20427-59-2	200
3	Spent Acid	7618	12783.34	7664-93-9	2440
TOTAL		8227.14	14413.43		

Sr. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/reasons
2	Para No. 6 (Page 2 of 7)	<p>Total water requirement after expansion is estimated to be 2353 cum/day, of which fresh water demand of 1413 cum/day will be met from GIDC water supply.</p> <p>Total effluent generation shall be increased from 920 cum/day to 1474 cum/day, which would be treated in the ETP followed by Multiple Effect Evaporator & Reverse Osmosis. The RO permeate of 940 cum/day and steam condensate of 40 cum/day will be recycled/reused, and remaining treated effluent of 494 cum/day shall be sent to GIDC effluent pipeline for final disposal to deep sea.</p> <p>Power requirement will be increased from 4.5 MW to 5.5 MW and will be met from DGVCL. Existing unit has 3 Nos. of DG sets of 2500 KVA, 1500 KVA & 1000 KVA capacity. Two more DG sets of capacity 1500 KVA and 1000 KVA would be installed and kept as standby. Stack height of 10 m will be provided to propose DG</p>	<p>Total water requirement after expansion is estimated to be 2353 cum/day, of which fresh water demand of 2353 cum/day will be met from GIDC water supply.</p> <p>Total effluent generation shall be increased from 920 cum/day to 1474 cum/day, which would be treated in the ETP followed by Multiple Effect Evaporator. Total treated effluent i.e. 1474 KL/day shall be sent to GIDC effluent pipeline for final disposal into deep sea.</p> <p>Power requirement will be increased from 4.5 MW to 9 MW and will be met from DGVCL. Existing unit has 3 Nos. of DG sets of 2500 KVA, 1500 KVA & 1000 KVA capacity. Two more DG sets of capacity 1500 KVA and 1000 KVA would be installed and kept as standby. Stack height of 10m will be</p>	<p>RO operations have been stopped due to techno commercial issue. The recycle of water is no more a practical and so the fresh water required for plant operations will be met with GIDC water supply.</p> <p>The Final effluent after Treatment is complying with the prescribed outlet norms. The waste water need not be treated through RO to comply with outlet norms. The effluent generated of 1474 Cum/day will be discharged to GIDC pipeline for final disposal to Deep sea.</p> <p>The adjoining plot had been acquired for expansion and it has been amalgamated with the existing by GIDC and approved by MoEFCC. The power and utilities for</p>

		<p>set as per CPCB norms.</p> <p>Existing Unit has three coal fired boiler of 16 TPH, 10 TPH and 10 TPH (stand by). No additional Boiler will be installed under proposed expansion.</p>	<p>provided to propose DG set as per CPCB norms.</p> <p>Existing Unit has three coal fired boiler of 16 TPH, 10 TPH and 10 TPH (stand by). 10 TPH boilers will be replaced with 16 TPH Boiler each and Additional 2 Nos. of 30 TPH Boilers are proposed will be installed under proposed expansion.</p>	<p>the same by oversight had been undersized due to calculation error in EC presentations. This discrepancy is being corrected with this EC amendment. By oversight the utilities required for the overall productions was captured incorrectly and those predicted were on the lower side so we wish to increase the power from 4.5 MW to 9 MW and Boiler up gradation from 16TPH, 10TPH, 10TPH (stand by) to 16TPH*3 Nos. and 30TPH*2 Nos Additional Boilers.</p>
3	Para No. 7 (Page 2 of 7)	<p>Used lube oil @ 670.8 Liters/ month will be sold to GPCB authorized recyclers. Discarded drums & containers @ 40 MT/ month, discarded liners and cardboards @ 6 MT/ month will be sent back to the supplier or sold to GPCB authorized vendor. Cotton wastes/raw dust/bag filters containing pesticides @ 0.2 MT/ month will be sent for co-processing at cement industry or common incineration facility. Spent catalysts @ 97.28 MT/ month will be used for regeneration or returned to suppliers.</p>	<p>Used lube oil @ 670.8 Liters/ month will be sold to GPCB authorized recyclers. Discarded drums & containers @ 40 MT/ month, discarded liners and cardboards @ 6 MT/ month will be sent back to the supplier or sold to GPCB authorized vendor. Cotton wastes/raw dust/bag filters containing pesticides @ 0.2 MT/ month will be sent for co-processing at cement industry or common incineration facility. Spent catalysts @ 97.28 MT/ month will be used for</p>	<p>Due to calculation error in earlier EC presentations MEE Salt and Fly Ash quantities were shown on lower side but actually they are getting increased. This discrepancy is being corrected with this EC amendment. So, we wish to increase the quantity of the same.</p>

		<p>Process/Distillation residue @ 195 MT/ month will be sent for co-processing or disposed off at common incineration facility. ETP sludge @ 639.3 MT/ month, MEE salt @ 1200 MT/Year, spent carbon from ETP @ 250 MT /month, sludge from wet scrubber @ 2 MT/ month, incineration ash will be disposed to TSDF site. Spent ion exchange resins @ 0.184 MT/month will be processed for regeneration or returned to supplier. Fly ash @ 120 MT/Month will be sold to brick manufacturers or disposed at common TSDF site.</p>	<p>regeneration or returned to suppliers. Process/Distillation residue @ 195 MT/ month will be sent for co-processing or disposed off at common incineration facility. ETP sludge @ 639.3 MT/ month, MEE salt @ 2400 MT/Year, spent carbon from ETP @ 250 MT /month, sludge from wet scrubber @ Spent ion exchange resins @ 0.184 MT/month will be processed for regeneration or returned to supplier. Fly ash @ 600 MT/Month will be sold to brick manufacturers or disposed at common TSDF site.</p>	
4	<p>Para No. 11 (Page 3 of 7)</p>	<p>Based on the proposal submitted by the project proponent and recommendations of EAC (Industry-2), the Ministry of Environment and Climate Change hereby accords environmental clearance to the project for expansion of agrochemicals and agrochemical intermediates from 1265 TPM to 2350 TPM (15 nos of products) by Tagros Chemical India Ltd. at Plot No. 43/1, GIDC Dahej , Taluka Vagra, District Bharuch (Gujarat), under the provisions of EIA</p>	<p>Based on the proposal submitted by the project proponent and recommendations of EAC (Industry-2), the Ministry of Environment and Climate Change hereby accords environmental clearance to the project for expansion of agrochemicals and agrochemical intermediates from 1265 TPM to 1802 TPM (15 nos of products) by Tagros Chemical India Pvt. Ltd. at Plot No. 43/1 & 43/3, GIDC Dahej , Taluka Vagra, District</p>	<p>The product quantities have been altered to accommodate to produce max of certain product because of change in market demand without altering the pollution load as per EC clearance. This alteration has resulted in net decrease in overall quantity.</p>

		Notification, 2006 subject to the compliance of terms and conditions as below:-	Bharuch (Gujarat), under the provisions of EIA Notification, 2006 subject to the compliance of terms and conditions as below:-	
5	Para No. 11 Condition No. (b) (Page 3 of 7)	The incremental treated effluent of 980 cum/day and also the present discharge of 494 cum/day to GIDC pipeline, shall be reused/recycled for different industrial operations. No waste/treated water shall be discharged outside the premises and thus ensuring Zero Liquid Discharge. The Project Proponent shall achieve Zero Liquid Discharge within five years (as per EC Amendment Letter No. J-11011/122/2016-IA II (I) dated 25 th February, 2020).	The incremental treated effluent of 980 cum/day along with present discharge of 494 cum/day i.e. Total 1474 cum/day shall be sent to GIDC effluent pipeline for final disposal into deep sea after treatment and meeting discharge norms.	The recycle and reuse of water after RO is not techno commercially feasible, since water from RO is not being recycled back, we need incremental discharge of 980 cum/day in addition to 494 cum/day so total discharge to deep sea will be 1474 cum/day
6	Para No. 11 Condition No. (i) (Page 4 of 7)	Total fresh water requirement shall not exceed 1413 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.	Total fresh water requirement shall not exceed 2353 cum/day to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.	Recycle is not techno commercially viable for recycle and reuse. The Gap in recycle water for manufacturing will be met with GIDC water supply.
7	Para No. 11 Condition No. (j) (Page 4 of 7)	Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through	Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be	The treated industrial waste water after MEE and treatment through the biological primary, secondary and tertiary systems is complying

		stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.	passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP to meet the prescribed standards.	with outlet norms as per EC. Further treatment through RO is not required.
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Deliberations in the EAC

The EAC made deliberations on the proposal. The project proponent informed the Committee that the amendment envisage reduction in total production without any increase in pollution load. The Member Secretary informed the Committee that the Ministry vide Notification S.O.980(E) dated 2nd March, 2021 has decided that any increase in production capacity in respect of processing or production or manufacturing sectors with or without any change in raw material-mix or product-mix or quantities within products or number of products including new products falling in the same category or configuration of the plant or process or operations in existing area or in areas contiguous to the existing area (for which prior environmental clearance has been granted) shall be exempt from the requirement of prior environmental clearance provided that there is no increase in pollution load. The Member Secretary informed that, considering the submission of the project proponent that there is no increase in pollution load envisaged due to the proposed amendment, EC or amendment in the EC may not be required.

The Committee after detailed deliberations observed that the project proponent has not achieved the production as envisaged in the EC dated 25th February, 2019, whereas already obtained two amendments and has now further requested for another amendment. The Committee highlighted that as per the existing scenario, the project profile of the unit shall be considered with the production capacity of 1265 TPM only. As per the EC granted and amendment considered by the EAC earlier, the project proponent was also asked to achieve ZLD. The Committee also noted that now there are drastic changes in production profile, raw material, mass balance, process flow, water balance, effluent management, power requirement, utilities, hazardous and other waste quantity, boilers, etc, and such the project requires thorough appraisal as a fresh case and cannot be considered under amendment category. The Committee took serious note on the misrepresentation of the fact by the project proponent/consultant before the Committee. The project proponent has informed the Committee that the changes are occurring due to miscalculations and oversight while considering earlier project. The Committee suggested the project proponent to submit proposal afresh for ToR with complete details and to obtain the environmental clearance with accurate EIA/EMP report.

The proposal was accordingly **returned** in its present form.

Agenda No. 9.18

Expansion and Modification of Bulk Drugs, Active pharmaceutical ingredients manufacturing industry by M/s Shilpa Medicare Limited located at plot no. 1A, 1AP, 1B, 2, 2A, 2B, 3A to 3E, 4A, 4B, 4C, 5A & 5B, 20, Deosugur Industrial Area, Taluk & District Raichur, Karnataka-Amendment in Environment Clearance reg.

[IA/K/IND2/202357/2021, IA-J-11011/300/2020-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 5th January 2021 for the project M/s. Shilpa Medicare Ltd. Unit I located at Plot No.s 1A, 1A"P", 1B, 2, 2A, 2B, 3A to 3E, 4A, 4B, 4C, 5A & 5B, 20, Deosugur Industrial Area, Deosugur, Raichur Taluk & District, Karnataka in favour of M/s. Shilpa Medicare Ltd. Unit I.

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

S.No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons															
1	Page 1, Sl. no. 4	List of APIs, by-products & intermediates as per Enclosure 1	<p>The details of products and capacity are as under:</p> <table border="1"> <thead> <tr> <th>Sl. No.</th> <th>Name of the proposed Products</th> <th>Quantity in TPA</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bulk drugs and Active Pharmaceutical Ingredients (API's)</td> <td>460.06</td> </tr> <tr> <td>2</td> <td>By-products</td> <td>549.7</td> </tr> <tr> <td>3</td> <td>Intermediates</td> <td>1274</td> </tr> <tr> <td>4</td> <td>R&D and Custom Synthesis</td> <td>3</td> </tr> </tbody> </table>	Sl. No.	Name of the proposed Products	Quantity in TPA	1	Bulk drugs and Active Pharmaceutical Ingredients (API's)	460.06	2	By-products	549.7	3	Intermediates	1274	4	R&D and Custom Synthesis	3	As per MoEF&CC Office Memorandum vide letter No. F.No. 22-33/2019-IA.III dated 28.01.2021 it indicates that issuance of EC for API and intermediates as single category instead of individual products. Hence, the amendment is sought.
Sl. No.	Name of the proposed Products	Quantity in TPA																	
1	Bulk drugs and Active Pharmaceutical Ingredients (API's)	460.06																	
2	By-products	549.7																	
3	Intermediates	1274																	
4	R&D and Custom Synthesis	3																	

2	Page 6, Sl. no. 9	“...Effluent of 98 KLD will be treated through solvent stripper, Multi-Effect Evaporator (MEE) and Agitated Thin Film Drier (ATFD) at Shilpa Medicare Ltd. Unit II...”	<p>Total water requirement is 218.87 m³/day of which fresh water requirement of 170.44 m³/day will be met from KIADB sourced from River Krishna.</p> <p><u>Effluent shall be treated as under:</u></p> <table border="1" data-bbox="610 342 1308 1948"> <thead> <tr> <th data-bbox="610 342 854 600">Effluent source</th> <th data-bbox="854 342 1000 600">Effluent quantity, KLD</th> <th data-bbox="1000 342 1162 600">Effluent treated at</th> <th data-bbox="1162 342 1308 600">Treated effluent recycled and reused at</th> </tr> </thead> <tbody> <tr> <td data-bbox="610 600 854 1062">Process, washing, scrubbers, DM/Softener/RO rejects, QC/R&D, custom synthesis</td> <td data-bbox="854 600 1000 1062">61.5</td> <td data-bbox="1000 600 1162 1062">Unit II - solvent stripper, Multi-Effect Evaporator (MEE), Agitated Thin Film Drier (ATFD).</td> <td data-bbox="1162 600 1308 1062">40.93 KLD at Unit I, rest at Unit II.</td> </tr> <tr> <td data-bbox="610 1062 854 1482">Cooling tower bleed-off</td> <td data-bbox="854 1062 1000 1482">8</td> <td data-bbox="1000 1062 1162 1482">Unit II - High-Rate Contact Clarifier (HRSCC tank), sand and carbon filter.</td> <td data-bbox="1162 1062 1308 1482">Unit II</td> </tr> <tr> <td data-bbox="610 1482 854 1734">Boiler blow-down</td> <td data-bbox="854 1482 1000 1734">7.5</td> <td data-bbox="1000 1482 1162 1734">Unit I - directly reused for spraying on boiler ash.</td> <td data-bbox="1162 1482 1308 1734">Unit I for spraying on boiler ash</td> </tr> <tr> <td data-bbox="610 1734 854 1860">Total industrial effluent</td> <td data-bbox="854 1734 1000 1860">77</td> <td data-bbox="1000 1734 1162 1860">-</td> <td data-bbox="1162 1734 1308 1860">-</td> </tr> <tr> <td data-bbox="610 1860 854 1948">Domestic sewage</td> <td data-bbox="854 1860 1000 1948">21</td> <td data-bbox="1000 1860 1162 1948">Unit I - septic</td> <td data-bbox="1162 1860 1308 1948">-</td> </tr> </tbody> </table>	Effluent source	Effluent quantity, KLD	Effluent treated at	Treated effluent recycled and reused at	Process, washing, scrubbers, DM/Softener/RO rejects, QC/R&D, custom synthesis	61.5	Unit II - solvent stripper, Multi-Effect Evaporator (MEE), Agitated Thin Film Drier (ATFD).	40.93 KLD at Unit I, rest at Unit II.	Cooling tower bleed-off	8	Unit II - High-Rate Contact Clarifier (HRSCC tank), sand and carbon filter.	Unit II	Boiler blow-down	7.5	Unit I - directly reused for spraying on boiler ash.	Unit I for spraying on boiler ash	Total industrial effluent	77	-	-	Domestic sewage	21	Unit I - septic	-	<p>It is proposed in the EMP that all industrial effluent from Unit I i.e. 61.5 KLD from Process, washing, scrubbers, DM/Softener/RO rejects, QC/R&D, custom synthesis and 8 KLD from cooling tower bleed-off will be treated in ETP of Shilpa Unit II and 21 KLD domestic sewage will be treated in septic tank and soak pit at Unit I.</p> <p>Whereas in EC, it is mentioned effluent of 98 KLD will be treated in Unit II.</p>
Effluent source	Effluent quantity, KLD	Effluent treated at	Treated effluent recycled and reused at																									
Process, washing, scrubbers, DM/Softener/RO rejects, QC/R&D, custom synthesis	61.5	Unit II - solvent stripper, Multi-Effect Evaporator (MEE), Agitated Thin Film Drier (ATFD).	40.93 KLD at Unit I, rest at Unit II.																									
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Total industrial effluent	77	-	-																									
Domestic sewage	21	Unit I - septic	-																									

					tank and soak pit.		Hence, the amendment is sought together with pollution load as extracted from EMP.	
			Pollution load of total effluent:					
			Sl. No.	Parameter	Concentration of raw wastewater, mg/L	Total quantity in KLD	Pollution load (kg/Day)	
			1	pH	2-12	77	2-12	
			2	BOD ₃ at 27° C, mg/L	15,000 – 25,000		1100 - 2000	
			3	COD, mg/L	50,000 – 70,000		3800 - 5400	
			4	TSS, mg/L	300 – 350		23 - 27	
			5	TDS, mg/L	30,000 – 40,000		2300 - 3100	
			Pollution load from air pollution sources:					
			Source		Parameter	Total predicted pollution load from all sources (in kg/day)		
			<ul style="list-style-type: none"> Boilers: 3 x 4 TPH, 2 x 6 TPH Thermic fluid heater: 1 x 8 Lakh kCal/hr DG Sets: 1 x 325 kVA; 1 x 380 kVA; 2 x 625 kVA; 1 x 1000 kVA 		PM	80		
					SO ₂	24		
					NO _x	127		
			Process emissions		Acid/Ali kali mist	15		
3	Page 9, Specific condition (x)	Continuous online (24x7) monitoring system for stack	For industrial effluent storage tanks, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within premises.				As per the CPCB's Guidelines for Continuous Emission	

		<p>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.</p> <p>For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within premises.</p>		<p>Monitoring Systems August 2018 – continuous emission monitoring for 5(f) category i.e. synthetic organic chemicals manufacturing – bulk drug and intermediate industry are not covered for online monitoring of emissions. Extract enclosed as Enclosure 2 for ready reference.</p> <p>Hence, the amendment is sought.</p>
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Deliberations in the EAC:

The Committee deliberated point wise amendments sought by PP and recommended as below:

1. As far as amendment sought at Sl. No. 1 is concerned there is no need of any amendment as the same capacity was mentioned in the EC granted dated 5th January 2021.

2. Amendment sought at Sl. No. 2 includes detailed industrial effluent discharge from unit I that may be treated in unit II. It is also noted that 21 KLD of domestic sewage will be treated in septic tank and soak pit at Unit I. Therefore, committee accepted the amendment sought at Sl. No. 2.

3. Amendment sought at Sl. No. 3 is concerned about Continuous online (24x7) monitoring system. The Committee was of the view that monitoring system shall be mandatory. Therefore, the amendment sought at Sl. No. 3 was not accepted by the committee.

Agenda No. 9.19

Bulk Drug Manufacturing Unit (19.70 MTPM) at Plot No.29 P (I), Raichur Growth Centre Industrial Area, Village Chicksugur, District Raichur, Karnataka by M/s J. K. Chern Labs Pvt. Ltd. – Extension of validity of Environmental Clearance reg.

[IAKA/IND3/193799/2021, J-11011/373/2011-IA II (I)]

The proposal is for Validity of EC of Environmental Clearance granted by the Ministry vide F. No. J-11011/373/2011-IA-II (I)] dated: 07.01.2014 for the proposed Bulk Drugs Manufacturing Unit located at Plot. No. 29 P (I), Raichur Growth Centre Industrial Area, Chicksugur Village, Raichur District, Karnataka in favour of M/s. J. K. Chem Labs Pvt. Ltd.

The project proponent has requested for extension of validity of EC with the details are as under:

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons by PP
1.	EC F. No.: J-11011/373/2011-IA-II (I)] Dated: 07.01.2014	Valid up to 06.01.2021	To extend the validity of EC up to 06.01.2024	Due to financial constraints, we are unable to start the project but recently we have received the loan sanction letter from Rajadhani Co-Op. Urban bank Ltd. of amount Rs. 12.5 Crores on 01.03.2021. So, we request to extend the validity of EC granted on 07.01.2014. The loan sanction letter is enclosed for your reference.

Deliberations in the EAC:

The Committee deliberated the request for extension in validity of EC. Member Secretary has informed to the committee that as per latest guideline released vide S.O. 221(E), dated the 18th January, 2021 “the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Prior Environmental Clearances granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the Environmental Clearance granted shall

be treated as valid.” Also keeping in view of financial constraint of PP committee **recommended** to accept the request of PP and extend the validity of EC up to 06.01.2024 as per the provisions of the Ministry.

Agenda No. 9.20

Proposed zero pollution paper sizing products (formulation type) Manufacturing Unit at Sry No. 36/1, Adoni (V&M), Kurnool District, Andhra Pradesh by M/s. Sree Padma Industries- Clarification on applicability of prior EC.

The Project Proponent M/s. Sree Padma Industries, made a detailed presentation on the salient features of the project and informed that:

The proposal is for clarification on applicability of prior environmental clearance to the project for zero pollution paper sizing products (formulation type) Manufacturing Unit, located at Sry No. 36/1, Adoni (V&M), Kurnool District, Andhra Pradesh by M/s. Sree Padma Industries.

The details of products and capacities are as under:

Sl. No.	List of Products	Quantity (TPM)	Quantity (TPA)	End use
1	AKD Wax Emulsion	100	1200	Paper Sizing Chemicals used for Pharmaceutical paper manufacturing
2	Akenyl Succinic Anhydride (ASA)	100	1200	
3	Starch Based Products	100	1200	
4	Rosin Based Products	100	1200	
Total 4 products		400	4800	

Deliberations in the EAC:

The EAC carefully examined the proposal and deliberated the manufacturing process, details of raw material used in process, Process Flow, end use of the product etc. The EAC after detailed deliberation opined that the instant process falls under Synthetic Organic Chemical and should require prior Environmental Clearance as per the provisions of the EIA Notification, 2006 amended time to time.

The meeting ended with thanks to the Chair.

GENERAL CONDITIONS

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.
- (iii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iv) 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).
- (v) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (vi) 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.
- (vii) 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.
- (viii) 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 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.

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

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

S. No.	Name of Members	Designation	Attendance
1.	Dr. Rajashekar P. Mandi Director, School of Electrical & Electronics Engineering, REVA University, Bangalore - 64 E-mail: rajashekarmandi@yahoo.com	Chairman	Attended only on 13.04.2021.
2.	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	Chairman (Acting)	Chaired the meeting for both the days
3.	Dr. Ashok Kumar Saxena, IFS Bungalow No. 38, Sector-8A, Gandhinagar, Gujarat – 382008 E-mail: ashoksaxena1159@gmail.com	Member	Both days
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	Both days
5.	Shri Santosh Gondhalkar 'Shree' Apartment, Flat 401, Plot No. 22, Tukaram Society, Santnagar, Pune- 411009 E-mail: santoshgo@gmail.com	Member	Both days
6.	Dr. Suresh Panwar House No.4, Gayateri Green Society, NH 58 Bypass, Kankerkhera, Meerut, Uttar Pradesh Email-spcppri@gmail.com	Member	Both days
7.	Shri Tukaram M Karne Nagpur, Maharashtra E-mail: tmkarne@gmail.com	Member	Both days
8.	Dr. Uma Kapoor Regional Director, CGWA, 18/11, Jamnagar House, Mansingh Road, New Delhi E-mail: Uma-cqwb@nic.in	Member	Both days

9.	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	Both days
10.	Shri Sanjay Bisht Scientist 'E', Room No. 517, Office of the Director General of Meteorology, Indian Meteorological Department, Musam Bhawan, Lodhi Road, New Delhi -110003 E-mail: sanjay.bist@imd.gov.in	Member	Both days
11.	Prof. (Dr.) Vijay S. Moholkar Professor in Department of Chemical Engineering, Block-K (Academic complex), Room No. 111, India Institute of Technology Gawahati, Gawahati – 781039 E-mail: vmoholkar@iitg.ac.in	Member	Attended on 13.04.2021
12.	Dr. R. B. Lal, Scientist 'E'/Additional Director Ministry of Environment, Forest and Climate Change Jor Bag Road, New Delhi-110003 Telefax: 011-24695362, E-mail: rb.lal@nic.in	Member Secretary	Both days
MoEFCC			
14.	Dr. E.P. Nobi	Research Officer	
15.	Mr. Ritin Raj	Research Assistant	

Approval of EAC Chairman

From: ab.pandit@ictmumbai.edu.in

Date: Apr 22, 2021 10:40

Subject: Re: Zero Draft Minutes of the 9th EAC (Industry-3) meeting held on April 12-13, 2021 (through Video Conferencing) for comments of the EAC and approval of the Chairman Sir

To: Additional Director MoEFCC Dr R B LAL

<rb.lal@nic.in>, rajashekarmandi@yahoo.com, snupadhyay.che@iitbhu.ac.in, dwivedisuneet@rediffmail.com, suneetdwivedi@gmail.com, aknema@civil.iitd.ac.in, aknema@gmail.com, ashoksaxena1159@gmail.com, santoshgo@gmail.com, pkmishra.che@itbhu.ac.in, drpkm18@gmail.com, spcpri@gmail.com, tmkarne@gmail.com, Dinabandhu Gouda <dinabandhu.cpcb@nic.in>, Sanjay Bist <sanjay.bist@imd.gov.in>, Uma Kapoor <umacgwb@nic.in>

Cc:

Dear Dr. Lal,

The minutes are fine and I am approving the same through this email.

Please do take care,

With Warm Regards

Pandit
