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

Dated: 25.01.2021

MINUTES OF THE 4th EXPERT APPRAISAL COMMITTEE (INDUSTRY-3) MEETING HELD DURING 14-15, JANUARY 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

DAY 1: 14, JANUARY 2021 (Thursday)

(i) Opening Remarks by the Chairman

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

(ii) Confirmation of the Minutes of the 3rd Meeting of the EAC (Industry-3) held during December 29-30 December, 2020 at MoEFCC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (Industry-3) members on the minutes of its 3rd Meeting of the EAC (Industry-3) held during 29-30 December 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, except for following propoals:

A. <u>Agenda No. 3.7 of 3rd Meeting of the EAC (Industry-3) held during 29-30 December 2021</u>

Expansion/Modernization of the Fertilizer Plant at Plot no. 712/846, 855, 856 of Saij,17-37 of Dhanaj, Kasturinagar, Kalol, District Ghandhinagar, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO).

[IA/GJ/IND2/185904/2009, J-11011/60/2009-IA II (I)]

The project proponent, vide letter dated 12.01.2021, has requested for modification in the ZLD condition for utilization of treated water for horticulture. The Committee has accordingly **recommended** to modify the said condition as under:

(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.

B. <u>Agenda No. 3.10 of 3rd Meeting of the EAC (Industry-3) held during 29-30 December 2021</u>

Agrochemical and Specialty Chemical (Technical Pesticide & Pesticide Intermediates) of capacity 52000 MTPA (Technical Pesticide) and 50000 MTPA (Pesticide Formulation)] manufacturing along with 12 MW Captive Power Plant at CZ 44, GIDC Estate, Dahej, Tehsil Vagra, District Bharuch, Gujarat by M/s Rallis India Limited.

[IA/GJ/IND2/119775/2019, IA-J-11011/289/2019-IA-II(I)]

The project proponent, vide email dated 15.01.2021, has requested for modification in the quantities of the thermopacks/Thermic Fluid Heater. The Committee has accordingly **recommended** to modify the said para, as under:

In proposed unit, 7 nos. of Natural gas/LDO/Briquette/Coal fired Boilers (5 TPH x 2 nos., 10 TPH x 4 nos. and 60 TPH x 1 no.), ten Natural gas fired Thermic Fluid Heater (4 lacs KCal/hr x 4 Nos. and 1 lacs KCal/hr x 6) will be installed. Water scrubber & ESP with stack height of 30 m & 35 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed utilities. There will be two stacks attached to the Thermic Fluid Heater.

C. <u>Agenda No. 3.30 of 3rd Meeting of the EAC (Industry-3) held during 29-30 December 2021</u>

Setting up Pesticides & Intermediates and Synthetic Organic Chemicals & Intermediate manufacturing unit of capacity 20100 TPA at D – 3/16 GIDC Industrial Estate Dahej –III, Village – Sambheti, Taluka – Vagra, District Bharuch, Gujarat by M/s Shivalik Rasayan Limited.

[IA/GJ/IND2/152048/2020, IA-J-11011/111/2020-IA-II(I)]

The project proponent, vide email dated 15.01.2021, has requested for modification in the source of power and greenbelt area. The Committee has accordingly **recommended** to modify the said condition as under:

- Power requirement for the proposed project will be 1500 KVA and will be met from Dakshin Gujarat Vij Co. Ltd. (DGVCL).
- Condition no. (xv) The green belt of at least 5-10 m width shall be developed in nearly 33 % of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

Records of tree canopy shall be monitored through remote sensing map. PP shall start plantation immediately, as committed.

The Committee opined that the project proponent shall verify the data before submitting to the EAC for its consideration. The Committee has also noted that the modifications suggested by the PP are factual errors and can be considered.

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. 4.1

Expansion of Active Pharmaceutical Ingredient (API's) Manufacturing unit by M/s RA Chem Pharma Ltd located at R. S. No. 50/1, Muktheswarapuram Village, Jaggaiahpeta Mandal, Andhra Pradesh - Consideration of Environment Clearance

[IA/AP/IND2/189563/2020, IA-J-11011/4/2021-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 Active Pharmaceutical Ingredient (API) manufacturing facility of capacity 502.03 TPM by M/s RA Chem Pharma Ltd located at R. S. No. 50/1, Muktheswarapuram Village, Jaggaiahpeta Mandal, District Krishna, Andhra Pradesh

The details of products and capacity are as under:

S. No	Product Name	Quantity in MT/Month	CAS No	Therapeutic Use
1	Abacavir Sulfate	2.00	188062-50-2	To treat HIV and AIDS
2	Articaine Hydrochloride	5.00	23964-57-0	An anesthetic for dental procedures
3	Baclofen	3.00	1134-47-0	To treat pain and certain types of spasticity
4	Benserazide Hydrochloride	1.00	14919-77-8	The management of Parkinson's disease

S. No	Product Name	Quantity in MT/Month	CAS No	Therapeutic Use
5	Brivudine	1.00	69304-46-8	The treatment of herpes zoster in adult patients
6	Carbidopa	10.00	28860-95-9	Anti-Parkinson agent
7	Chloroxine	2.00	773-76-2	Anti-dandruff
8	Cilostazole	2.00	73963-72-1	Anti-coagulants
9	Dabigatran Etexilate Mesylate	1.00	872728-81-9	Used to prevent stroke and harmful blood clots
10	Dantron	1.00	117-10-2)	To control nausea and vomiting
11	Darunavir Ethanolate	2.00	635728-49-3	The treatment of HIV-1 infection in antiretroviral-treatment
12	Desvenlafaxine succinate	1.00	386750-22-7	Ant anxiety therapeutic
13	Diflunisal	2.00	22494-42-4	No steroidal anti- inflammatory drug
14	Dipyridamole	20.00	58-32-2	Kawasaki disease or prevent blood clots after heart surgery
15	Dolutegravir Sodium	1.00	1051375-16-6	Integrase inhibitor
16	Dorzolamide Hydrochloride	1.00	130693-82-2	Ophthalmic open-angle glaucoma
17	Doxazosin Mesylate	2.00	77883-43-3	Anti-hypertensive Agents
18	Drotaverine Hydrochloride	30.00	985-12-6	Anti-spasmodic medicine
19	Entacapone	10.00	130929-57-6	Anti-Parkinson agent
20	Epinastine Hydrochloride	1.00	108929-04-0	An antihistamine
21	Etoricoxib	1.00	202409-33-4	arthritis and pain management
22	Fenofibrate	10.00	49562-28-9	Anti-hyperlipidemic Drug
23	Ferric Citrate	1.00	3522-50-7	Phosphate Binder
24	Fexofenadine Hydrochloride	10.00	153439-40-8	An antihistamine
25	Flurbiprofen	5.00	5104-49-4	Nonsteroidal anti- inflammatory agent
26	Fomepizole	1.00	7554-65-6	An anti-dote for ethylene glycol
27	Hydralazine Hydrochloride	5.00	304-20-1	The treatment of hypertension
28	Isothipendyl hydrochloride	1.00	1225-60-1	Anti-pruritic
29	Itraconazole	35.00	84625-61-6	Treat fungal infections

S. No	Product Name	Quantity in MT/Month	CAS No	Therapeutic Use	
30	Lamotrigine	35.00	84057-84-1	An anti-convulsant or anti-epileptic drug	
31	Levocetirizine Dihydrochloride	25.00	130018-87-0	An anti-histamine	
32	Levodopa	20.00	59-92-7	Treat Parkinson's disease	
33	Levomethadone HCI	10.00	5967-73-7	Opioid analgesic and antitussive	
34	Mebeverine Hydrochloride	35.00	2753-45-9	An anti-spasmodic	
35	Meclizine Hydrochloride	3.00	31884-77-2	The symptomatic treatment of motion sickness	
36	Metaxalone	6.00	1665-48-1	A muscle relaxant	
37	Mexiletine Hydrochloride	1.00	5370-01-4	Ventricular anti- arrhythmic	
38	MICAH	2.00	2128716-83-4	Cosmetic UV absorber	
39	Midazolam Hydrochloride	5.00	59467-96-8	Used in pediatric patients for sedation	
40	Oxolamine Citrate	25.00	1949-20-8	Anti-tussive Agents	
41	Oxolamine Phosphate	1.00	131378-45-5	Antitussive	
42	Oxybutynin chloride	5.00	1508-65-2	Anti-spasmodic & Anticholinergic	
43	Phloroglucinol dihydrate	2.00	108-73-6	Spasmolytic agent	
44	Piribedil	1.00	3605-01-4)	Parkinson's disease	
45	Posaconazole	15.00	171228-49-2	Treatment of invasive aspergillosis	
46	Propiomazine Maleate	1.00	3568-23-8	An atypical antipsychotic agent	
47	Propofol	1.00	2078-54-8	General anesthesia	
48	Ractopamine Hydrochloride	25.00	90274-24-1	To increase the rate of weight gain	
49	Silodosin	1.00	160970-54-7	Anti-adrenergic agents	
50	Sitagliptin L-Tartrate Hemihydrate	1.00	NA	Dipeptidyl peptidase-IV inhibitor	
51	Sitagliptin Phosphate Monohydrate	1.00	654671-77-9	Treat the symptoms of type 2 Diabetes Mellitus	
52	Solastay S1	20.00	947753-66-4	Cosmetic UV absorber	
53	Tamsulosin Hydrochloride	1.00	106463-17-6	Urological	
54	Tapentadol Dihydrogen Phosphate	2.00	1356394-30- 3	Treatment of moderate to severe pain	

S. No	Product Name	Quantity in MT/Month	CAS No	Therapeutic Use
55	Tapentadol Hydrochloride	10.00	175591-09-0	The treatment of moderate to severe pain
56	Tenofovir Alafenamide Hemifumarate	3.00	1392275-56-7	A hepatitis B virus (HBV) nucleotide reverse transcriptase inhibitor
57	Tianeptine Sodium	1.00	30123-17-2	An atypical anti- depressant
58	Tilidine Hydrochloride	1.00	27107-79-5	Opioid analgesic
59	Tolcapone	1.00	134308-13-7	Anti-Parkinson agent
60	Tolterodine Tartrate	1.00	124937-52-6	To treat an overactive bladder
61	Trimethyl Phloroglucinol	1.00	4463-03-0	Spasmolytic agent
62	Tulathromycin	1.00	217500-96-4	Anti-biotic
63	Vanillylamine Hydrochloride	1.00	10/2/7149	Used to treat Neuropathic pain
64	Venlafaxine Hydrochloride	5.00	99300-78-4	To treat depression
65	Verapamil Hydrochloride	50.00	152-11-4	To treat high blood pressure
66	Vildagliptin	10.00	274901-16-5	Orally active Antidiabetic drugs (DPP-IV inhibitors)
67	Zaltoprofen	1.00	74711-43-6	Nonsteroidal anti- inflammatory drug
68	Zilpaterol Hydrochloride	3.00	119520-06-8	To increase the size of cattle
69	Zonisamide	2.00	68291-97-4	To treat the symptoms of epilepsy and Parkinso n's disease
70	R&D Activity	0.03		
	Total	502.03		

List of By-Products and its quantities

S. No.	Name of the Product	Name of the By-product	Quantity in Kg/day
1	Lamotrigine	Spent Sulfuric acid - (33%)	3535.00
2	Tapentadol dihydrogen	(L) - (-) Dibenzoyl tartaric acid	152.00
	Phosphate	monohydrate	132.00
3	Tapentadol hydrochloride	(L) - (-) Dibenzoyl tartaric acid	1047.00
	rapentadornydrochionde	monohydrate	1047.00

The project/activities are covered under Category 'B2' of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 (amendment on 27.03.2020). Due to applicability of general condition (Interstate boundary Andhra Pradesh - Telangana State is within 5 km from the project location), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry. Public hearing is exempted since the proposed project falls under category B2. It was informed that no litigation is pending against the proposal.

The Ministry had issued EC earlier vide F. No. J-11011/9/2002-IA-II (I), dated: 19th August, 2003 for "Bulk drug unit of M/s IGOR Pharma chem Limited (now RA Chem Pharma Ltd.) in District Krishna, Andhra Pradesh. Certified compliance report of the exiting environmental clearance conditions has been forwarded by the Ministry's regional Office at Chennai vide letter No. EP/12.1/249/AP/837 dated 30.09.2020. The Committee deliberated the compliance status and found in order.

The proposed project expansion will be done in a land area of 21.46 Acres (86845.53 Sqm). Industry has already developed greenbelt in an area of 30067.28 Sqm (i.e. 34.62 % of the total project area). The proposed cost for expansion is about Rs.75.0 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.243 Lakhs and the recurring cost (operation and maintenance) will be about Rs.26 Lakhs per annum. Total Employment will be of 1000 persons. Industry proposed to allocate Rs.75 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.

The total water requirement is 598.99 m³/day of which fresh water requirement of 429.27 m³/day and will be met from Krishna River. Generated effluent of 213.60 m³/day out of Domestic effluent 40 KLD will be treated in existing STP & the industrial effluent of 173.6 KLD will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO. Plant will be based on Zero Liquid Discharge System.

Power requirement will be 3500 kVA and will be met from Andhra Pradesh State Southern Power Distribution Company Limited (APSPDCL). The unit has existing 2 x 500 kVA, 1 x 1000 kVA & 1 x 1010 kVA DG Sets, Stack heights of 11 mts, 10 mts & 8 mts respectively were provided as per CPCB norms to the DG sets. 16.0 TPH boiler is proposed for the expansion project along with existing 10.0 TPH boiler (Stand-by) and another existing 4.0 TPH boiler will be dropped. The stacks of height 40 mtrs for 16.0 TPH boiler & 30 mtrs for 10.0 TPH boiler. Multi-Cyclone separators and bag filters will be installed for the proposed boiler for controlling the particulate emissions (within statutory limit of 115 mg/ Nm³).

Details of Process emissions generation and its management.

S. No.	Name of the Gas	Quantity In Kg/Day	Treatment Method
1	Carbon dioxide	383.00	Dispersed into the atmosphere
2	Hydrogen	9.00	Diffused by using Nitrogen through Flame
	7 - 3 -		arrestor
3	Ammonia	243.00	Scrubbed by using chilled water media
4	Oxygen	59.00	Dispersed into the atmosphere
5	Nitrogen	5.00	Dispersed into the atmosphere
6	Hydrogen Bromide	380.00	Scrubbed by using C. S. Lye solution
7	Hydrogen chloride	1876.00	Scrubbed by using chilled water media
8	Dimethylamine	11.00	Scrubbed by using chilled water media
9	Methyl bromide	254.00	Scrubbed by using C. S. Lye Solution
10	Sulphur dioxide	317.00	Scrubbed by using C. S. Lye Solution

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

S. No	Name of the Waste	Quantity	Disposal Method	
	Hazard	ous Waste Details	3	
1	Organic solid waste (Process Residue)	11517 Kg/Day		
2	Spent Carbon	468 Kg/Day	Will be sent to Cement	
3	Solvent Distillation Residue	2315 Kg/Day	Industries/TSDF	
4	Organic distillate from MEE Stripper	2370 Kg/Day		
5	Inorganic Solid Waste	5759 Kg/Day		
6	MEE Salts	5916 Kg/Day	Will be sent to TSDF	
7	ETP Sludge	270 Kg/Day		
8	Used Oils	3500 Ltrs/Annum	Will be sent to SPCB Authorized Agencies for Reprocessing/ Recycling	
9	Detoxified Containers/	2000	After Detoxification will be sent	
9	Container liners	No's / Month	to SPCB authorized agencies.	
10	Used Lead Acid Batteries	10 No's/Annum	Send back to suppliers for buyback of New Batteries	
11	Insulation waste	3 TPA	Will be sent to TSDF	

S. No	Name of the Waste	Quantity	Disposal Method	
	Hazardo	ous Waste Details	•	
	Discarded Filter cloths/ Centrifuge bags, Discarded and used chemicals, soaked cotton waste, Gaskets, gland ropes, Used oil filters, Contaminated liners, spent or Discarded resins and Discarded Personnel Protective Equipment	200 Kgs/ day	Will be sent to Cement Industries/ TSDF	
13	Spent Mixed solvents	2.5 KLD		
14	Off specification, rejected materials and used laboratory chemicals	50 Kgs/ day		
15	Discarded Cooling tower fills	30 Kgs/ Day		
16	Paper waste from shredded	100		
10	documents or records	Kgs/ Annum		
17	Contaminated packing wood, packing materials, cartons, plastic, butter paper, shoe covers, sample covers, filter papers, filter discs, connecting pipes, tissue paper, foil, paper cups, rubber stoppers, plastic containers, any other laboratory discarded accessories.	50 Kgs/ Day	Will be sent to SPCB Authorized Agencies for Recycling	
18	Discarded laboratory glass/ plastic bottles, broken glass ware, discarded laboratory glassware.	50 Kgs/ Day	Will be sent to SPCB Authorized Agencies for Recycling/ TSDF.	
	Bio-med	lical waste Details	s	
19	Biomedical waste from OHC	4 Kgs/ Day	Will be sent to Authorized Biomedical waste treatment facility	
	Solid	l Waste Details		
20	Ash from boiler	22.4 TPD	Will be sent 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, have examined the proposal submitted by the Project Proponent in desired form along with PFR & EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

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

The Committee noted that the PFR/EMP report reflects the present environmental concerns and the projected scenario for all the environmental components. The Committee deliberated the action plan and budget allocation for green belt development, mitigation measure towards Air, Water, Noise and Soil pollution. The Committee also deliberated the compliance status of earlier EC conditions and found in order. The Committee has also deliberated the activities/action plan and it's mitigation plan and found to be addressing the issues in the study area. The committee recommended to plant ten thousand trees in the next six months, before the monsoon season. The Committee has suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following safety norms and best practices.

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

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

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

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the 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). 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 purpose.
- (iv). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (v). The 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 429.27 m³/day which will be met from Krishna 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.
- (x). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiv). As committed, the project proponent shall plant ten thousand trees in the next six months, before the monsoon season. The Project Proponent shall submit the implementation report to the RO, MoEFCC.
- (xv). The activities and the action plan proposed by the project proponent to address the socioeconomic 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.
- (xvi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Agenda No. 4.2

Expansion of API Manufacturing Unit by M/s Vamsi Labs Ltd. located at Plot No. A-14, A-15, A-31, A-32 & A-33 MIDC Chincholi, Tal. Mohol, Dist. Solapur, Maharashtra - Consideration of Environment Clearance

[IA/MH/IND2/175346/2020, IA-J-11011/331/2020-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 environmental clearance to the project for Expansion of Active Pharmaceutical Ingredient (API) manufacturing facility of capacity from 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, District Solapur, Maharashtra.

The details of products and capacity are as under:

S.	Name of the Product	Quanti	ty(Kg/M)
No		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	Domeperzil Hydrochloride	1000	1000
18	Pimozide	1000	1000
19	Formeterol Fumarate	10	10
20	Sumatripton Succinate	100	250
21	Bambuterol Hydrochloride	250	250
22	Carbidopa	200	200
23	Aluminium Hydroxide gel	2500	2500
24	Loratadine	500	500
25	Meta ProternolSulphate	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

S.	Name of the Product	uct Quantity(Kg/M)		
No		Existing	Total After	
			Expansion	
37	Carbamazepine		100	
38	Clopidogrel Bisulfate		50	
39	Clobetasole Propionate		200	
40	Dexamethasone		250	
41	Dexamethasone Acetate		10	
42	Dexamethasone Sodium		100	
	Phosphate		100	
43	Dofetilide		100	
44	Domeridone 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	
60	Pirfenidone		10	
61	Prednisolone		500	
62	Prednisolone Acetate		200	
63	Pregabalin		200	
64	Levobuterol HCL		10	
65	Sitagliptin		250	
66	Telmisartan		500	
67	Terbinafine		400	
68	Triamcinolone		150	
69	Triamcinolone Acetonide		100	
70	Triamcinolone Hexacetonide		100	
71	Triprolidine Hydrochloride		200	
72	Valsartan		500	
73	Voriconazole		750	

S.	Name of the Product	Quantity(Kg/M)	
No		Existing Total After	
			Expansion
	Total (Kg/M)	23197	35637
	Total (MT/M)	23.197	35.637

The project/activities are covered under Category 'B2' of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 (amendment on 27.03.2020). Due to applicability of general condition (due to presence of GIB sanctuary within 5 Km from Project Site), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The Proposed Project Site in MIDC Chincholi is located 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 is located at 1.56 Km away from Notified ESZ. Public hearing is exempted since the proposed project falls under category B2 and the project site is located in the Notified Industrial Area. It was informed that no litigation is pending against the proposal.

Ministry has earlier issued EC earlier vide F. No. J-11011/107/2005-IA.II(I), dated: 23rd December, 2005 in favour of M/s Vamsi Labs Ltd.

Deliberations in the EAC

The EAC has deliberated on the proposal. The Committee noted that the PP and consultant did not inform EAC about the earlier EC and tried to mislead/conceal information from the EAC. Certified compliance report of the exiting environmental clearance was not obtained by PP before applying for expansion.

The EAC is of the firm view that without compliance report of the existing EC, expansion cannot be granted.

The proposal was accordingly **returned** in its present form for revision of application on Parivesh portal with certified compliance report from RO, MoEFCC. **The EAC has also recommended** to issue Show Cause Notice to the consultant for concealing the information from EAC w.r.t. earlier EC and its requirement of certified compliance report as per Ministry's OM of 2012 and showed its displeasure on not sending complete documents to all EAC members on time.

Agenda No. 4.3

Pesticides industry and pesticide specific intermediates (excluding formulations) J-19, MIDC, Avadhan, Dhule, Maharashtra, Goga Industries, J-19, MIDC, Avadhan, Dhule, Maharashtra by M/s Goga Industries- Consideration of Environmental Clearance

[IA/MH/IND2/180715/2019, No.IA-J-11011/292/2019-IA-II(I)]

The Project Proponent and their Consultant M/s Jyoti Om Chemical Research Centre Pvt Ltd, informed that the proposal is for environmental clearance to the project for Pesticides industry and pesticide specific intermediates (excluding formulations) J-19, MIDC, Avadhan, Dhule, Maharashtra, Goga Industries, J-19, MIDC, Avadhan, Dhule, Maharashtra, Dhule, Maharashtra by M/s Goga Industries

Deliberations in the EAC

The Committee noted that the instant proposal was earlier placed before the EAC (Industry 2 Sector) held on November 2020 wherein the EAC has decided not to discuss the proposal and Return it in present form as the Consultant is not accredited with QCI/NABET. As per EIA Notification 2006, Consultant should be accreditation by QCI/NABET for preparation of EIA/EMP report.

The EAC has made a detailed deliberation on the proposal. The Committee has showed its displeasure on the technical quality of the EIA/EMP report and incomplete application and asked the consultant to get the accreditation from the QCI/NABET for preparation of EIA/EMP report.

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

- (i) Project proponent shall revise the complete EIA/EMP Report providing all the requisite information as per the Appendix III of the EIA Notification, 2006.
- (ii) Form -2 shall be revised with complete details of the project.
- (iii) Consultant to provide copy of valid accreditation certificate from the QCI/NABET, for preparation of the EIA/EMP report.
- (iv) Detailed process flow diagram.

The proposal was accordingly <u>returned</u> in its present form for submission of revised Report with valid accredited consultant under QCI/NABET as per provisions of the EIA Notification. 2006.

Agenda No. 4.4

Manufacturing of Synthetic organic chemicals industry at Plot No. 20, 21, 21/1, GIDC, PHASE-IV, PANOLI, DIST-BHARUCH, Anklesvar, Bharuch, Gujarat by M/s MEGHMANI ORGANICS LIMITED - Consideration of Environmental Clearance

[IA/GJ/IND3/190220/2020, IA-J-11011/194/2020-IA-II(I)]

The Member Secretary has informed the EAC that the project proponent, vide email dated 13.01.2021 requested that due to non-submission/uploading of requisite information like certified compliance report from the Regional Office of the Ministry/SPCB, and other documents The Committee has also showed its displeasure on the technical quality of the EIA/EMP report and incomplete application and asked the consultant [M/s Jyoti Om Chemical Research Centre Pvt. Ltd.] to get the accreditation from the QCI/NABET for preparation of EIA/EMP report as per provisions of the EIA Notification, 2006.

The proposal was accordingly <u>returned</u> in its present form for submission of revised Report as per provisions of the EIA Notification. 2006.

Agenda No. 4.5

Expansion of Existing Synthetic Organic Chemical plant by M/s Ran Chemicals Pvt. Ltd. located at Khasra No. 45, Mouza-Khapri, PO-Kalambi, Tehsil- Kalmeshwar, District Nagpur, Maharashtra - Consideration of Environment Clearance

[IA/MH/IND3/190274/2016, IA-J-11011/340/2016-IA-II(I)]

The Project Proponent and the accredited Consultant M/s SMS Envocare 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 Synthetic Organic Chemical plant of capacity from 26.6 TPD to 78 TPD by M/s Ran Chemicals Pvt. Ltd. located at Khasra No. 45, Mouza-Khapri, PO-Kalambi, Tehsil- Kalmeshwar, District Nagpur, Maharashtra

The details of products and capacity are as under:

S. No.	Product	Existing Quantity (MT/day)	Proposed Quantity (MT/day)	Total Quantity (MT/day)
1	Polyester based resin & other polyester and esters	24	36	60
2	Finishing agents & preparations	1.4	14.6	16

3	Spent Menthol and Glycol (By Product)	1.2	0.8	2
	Total	26.6	51.4	78

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

The ToR has been issued by Ministry vide letter No. J-11011/340/2016-IA-II (I) dated 28th February, 2017. Public Hearing for the proposed expansion project has been conducted by the Maharashtra Pollution Control Board on 16th May, 2018 which was presided over by Additional District Magistrate. The main issues raised during the public hearing are related to Local Employment, Local Area development under CER activities, Smell nuisance problems, water contamination and pollution control.

Certificate Compliance Report from RO of Ministry of Environment Forest & Climate Change is not required as existing project was developed before EIA Notification, 2006. However, Certified compliance report from State Pollution Control Board was submitted and the same was deliberated by the Committee.

Existing land area is 23572.152 m². Additional 1363.95 m² land will be used for proposed expansion. Total area 24936.102 Sq. m is already under the ownership of Ran Chemicals Pvt. Ltd. Total 8228.0 (33% of Total Plot Area) has been secured for greenbelt development. Earlier total plot area was 27600 sq. m but due to handover of part of land to NHAI for proposed Road Construction work, plot area reduced. Total 2662.898 sq. m area was handover to NHAI. As the area handover to NHAI was developed under greenbelt hence as compensation; company has developed total 2930.00 Sq. m.

The estimated project cost is Rs.2000 Lakhs including existing investment. Total capital cost earmarked towards environmental pollution control measures is Rs. 61.0 Lakhs and the Recurring cost (operation and maintenance) will be about Rs.17.0 Lakhs per annum. Total manpower requirement after expansion will be of 344 persons. Industry proposes to allocate Rs.40.0 Lakhs 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. Vena River is only water body which is flowing from West to South and South East direction at a distance of 7.0 km.

Ambient air quality monitoring was carried out at 8 locations during 1st March 2017 to 31st May, 2017 and the baseline data indicates the ranges of Concentrations of PM₁₀ and PM_{2.5} for all 8 AAQM locations range between 35.4 µg/m³ to 60.2 µg/m³ and 13.3 to 30.7 µg/m³ respectively.

As for as the gaseous pollutants SO_2 and NO_2 are concerned, SO_2 concentrations are in the range of 1.2 μ g/m³ to 21.6 μ g/m³ and NO_2 concentrations are in the range of 8.3 μ g/m³ to 26.6 μ g/m³. Based on the model simulation result under observed meteorological condition, 24 hours average maximum GLC of PM2.5, PM10, SO_2 , NO_x and CO due to proposed stacks are predicted to be approximately 0.30 μ g/m³, 0.59 μ g/m³, 2.36 μ g/m³, 14.41 μ g/m³ and 14.24 μ g/m³ respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). Additional, Ambient Air Quality data of year 2020 was deliberated by Committee and found within the National Ambient Air Quality Standards (NAAQS).

Existing water requirement for the project is 25.0 CMD. Total 65 CMD of additional water will be required for expansion unit hence total water requirement will be 90 CMD after expansion which will be met from MIDC. Total 11.3 CMD water will be generating from process. PP reported that the Effluent (Process and Other Industrial Effluent) of 11.4 KLD quantity will be treated through 15.0 KLD ETP based Aerobic Treatment system. Domestic waste water of 13.5 KLD will treated in 17 KLD STP capacity and bio reactor. The plant will be based on Zero Liquid discharge system as total treated effluent and domestic wastewater will be reused in cooling tower makeup.

Total power requirement will be of 1000 KW. The required power will be met from MSEDCL in construction and operation phase. DG set of 320 kVA has been already installed as back-up power support for in case of emergency for existing unit. Additionally, DG sets of 1000 kVA will be installed for expansion unit. Existing unit has TFH of 20 TPH Lakh Kcal per hr capacity. Additionally, TFH of 30 Lakh Kcal per hr will be installed. Multi cyclone separator/ bag filter with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit.

Details of Process emissions generation and its management: The main source of air pollution is from TFH, and DG Sets. To control the same, stacks have already provided those are attached with TFH, process vent and DG sets. As per the MPCB provision, emission of Particulate matter shall not exceed the limit of 150 mg/Nm³.

Details of Solid waste & Hazardous waste generation and its management: Main solid and hazardous waste from the plant are Sludge from ETP, Discarded containers/barrels/bags, waste oil and other municipal solid waste, Ash etc. The hazardous waste generated from different process shall be disposed to the CHWTSDF (Butibori, Nagpur), while the waste oil and used batteries shall be sent to authorize recyclers.

Quantity of Hazardous Waste Generation in existing unit and disposal

S.	Name of Waste	Category	Quantity	Unit	Mode of	Mode of
No.	Name of Waste	Category	Quantity	Offic	Transport	Disposal

1	Sludge from treatment of waste water arising out of cleaning/ disposal of barrels/ containers	33. Category 2	4.5	Ltr/day	By road	CHWTSDF
2	Discarded containers/ liners used for hazardous waste/chemical s	33.3	2	Nos./day	By road	CHWTSDF/ Reuse/sale to authorized re- conditioners
3	Chemical Sludge from waste water treatment	35.3	35	Kg/day	By road	CHWTSDF
4	Spent solvent	20.2	30	MT/m	By road	By sale to MPCB Authorized party/CHWTSDF

Quantity of Proposed Hazardous Waste Generation in expansion unit and disposal

S. No.	Name of Waste	Category	Quantity	Unit	Mode of Transport	Mode of Disposal
1	Sludge from treatment of waste water arising out of cleaning/ disposal of barrels/ containers	33.2	4.5	Ltr/day	By road	CHWTSDF
2	Discarded containers/ barrels/ liners used for	33.3	4	Nos./day	By road	CHWTSDF/ Reuse/sale to authorized re- conditioners

	hazardous waste/chemical s					
3	Chemical Sludge from waste water treatment	35.3	35	Kg/day	By road	CHWTSDF
		Ger	nerated as E	By Product		
4	Spent solvent	20.2	30	MT/m	By road	By sale to MPCB Authorized party/CHWTSD F

Deliberations in the EAC:

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

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

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee deliberated the action plan on mitigation measures to minimize the PM10 and PM2.5 load. The committee also deliberated additional AAQ data for the year 2020. The Committee has also deliberated on the activities/action plan and found to be addressing the issues in the study area and public hearing issues. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. The Committee has noted that PP committed to plant 600 trees within a year starting from June, 2021. The additional requisite information submitted by the project proponent and compliance status of the existing CTO conditions found to be satisfactory.

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

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

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

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. Regular VOCs monitoring should be carried out.
- (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 purpose.
- (iv). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (v). The 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 90 CMD which 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.
- (x). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiv). As committed, 600 trees shall be planted within a year.
- (xv). The activities and the action plan proposed by the project proponent to address the socioeconomic 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.
- (xvi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Agenda No. 4.6

Expansion project for manufacturing of Pesticides Plot no.808/A/2, Phase-II, GIDC, notified industrial area, Vapi, Valsad, Gujarat by M/s Sandhya Organic Chemicals Pvt. Ltd- Consideration of Environment Clearance

[IA/GJ/IND2/190842/2018, J-11011/481/2011-IA-II(I)

The Project Proponent and the accredited Consultant M/s Precitech Laboratories 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 Pesticides Manufacturing Plant at Plot No. Plot no. 808/A/2, Phase-III, GIDC Estate, Vapi, Dist. Valsad (Gujarat) India by M/s Sandhya Organic Chemicals Pvt Ltd.

The details of products and capacity as under:

S. No.	Name of	CAS no.	Quan	itity (T/Moi	nth)	End Use	LD50
	Products		Existi	Propos	Total		(mg/kg)
			ng	ed			
1	Aluminum Phosphide	20859-73-8	100	300	400	Used as an insecticide and fumigant	Oral: 11.5 mg/kgDermal: >5000 mg/kg
2	Zinc Phosphide	1314-84-7	100	200	300	Used as a rodenticide	Oral: 42.6 mg/kgDermal: 1123 mg/kg
3	Ammoniu m Carbamate	1111-78-0	0	50	50	Used for captive consumpti on as a raw material for Aluminium Phosphide manufacturing	• Oral: <1470 mg/kg

4	Magnesiu	12057-74-8	0	25	25	Used as	Oral:
	m					an	>5000
	Phosphide					insecticide	mg/kg
						and	• Dermal:
						fumigant	>10000
							mg/kg
Total			200	575	775		

The project/activities are covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates' 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. J-11011/481/2011-IA-II(I) dated 01.06.2018. Public hearing is exempted, as the project site is located in the Industrial area. It was informed that there is no litigation pending against the proposal.

The Ministry had issued EC earlier vide File. No: J-11011/481/2011-IA II (I); Letter dated 25th June 2015 for Expansion of Pesticides viz. Aluminium Phosphide (25 to 75 MTPM) & Zinc Phosphide (25 to 75 MTPM) in favour of M/s. Sandhya Organic Chemicals Pvt. Ltd. MoEF&CC, RO, Bhopal has issued certified monitoring report on EC Compliance dated 13th Feb 2020 for existing EC "Expansion of Pesticides (Rodenticides), Aluminium Phosphide (25 to 75 MTPM) & Zinc Phosphide (25 to 75 MTPM)" F. No. J-11011/481/2011-IA II (I) dtd. 25th June 2015 wherein compliance of some conditions were marked as partly complied/ complied subject to condition.

SOCPL vide email dated 2nd July 2020 submitted an action taken cum compliance report (ATR). SOCPL further submitted the additional information vide email dated 4th Sep 2020 w.r.t. MoEF&CC RO Bhopal's email dated 2nd Sep 2020. Updated compliance status issued vide letter no. 5-111/2009(Env)/716 dated 14th Oct 2020.

Existing land area is 5337 m², no additional land will be used for proposed expansion. Industry has already developed greenbelt in an area of 12.37% i.e., 660.32 m² out of total area of the project. In addition to this, greenbelt development of approx. 1500 m² (28.1%) area to be done in GIDC, Vapi & surrounding Villages.

The estimated project cost is Rs. 8.29 Crores including existing investment of Rs. 3.19 Crores Total capital cost earmarked towards environmental pollution control measures is Rs. 0.7 Crores and the Recurring cost (operation and maintenance) will be about Rs. 0.12 Crores per annum. Total Employment will be 170 persons as 105 persons direct & 65 persons indirect after proposed expansion project. Industry proposes to allocate Rs 17 Lakh towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Rata Khadi is flowing at a distance of 2.5 km in NE direction.

Ambient air quality monitoring was carried out at 8 locations during Oct'18 to Dec'18 and the baseline data indicates the ranges of concentrations as: PM_{10} (58-88 $\mu g/m^3$), $PM_{2.5}$ (15-42 $\mu g/m^3$), SO_2 (10-24 $\mu g/m^3$) and NO_2 (11-28 $\mu g/m^3$). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.141 $\mu g/m^3$, 0.003 $\mu g/m^3$ and 0.555 $\mu g/m^3$ with respect to PM_{10} , SO_2 & NO_x , respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement will be 69.5 m³/day of which fresh water requirement of 45 m³/day will be met from GIDC water supply department. Approx. 24.5 m³/day will be reduced by recycling of Boiler condensate and reuse of w/w in Scrubbing system.

Effluent of 13.3 kl/day will be generated after proposed expansion (Domestic: 6.8 kl/day & Industrial: 6.5 kl/day). Domestic wastewater generated from the plant is disposed of through septic tank/ soak pit system. Industrial waste water generated from cooling blow down, boiler blow down and washing are reused in scrubbing system to scrub Phosphorous Pentoxide to recover Phosphoric Acid for further sale to end-users. Same scheme will be followed after proposed expansion project. The unit will be zero industrial w/w discharge unit.

Power requirement after expansion will be 250 kVA including existing 200 kVA and will be met from Dakshin Gujarat Vij Co. Ltd.. Existing unit has one DG sets of 125 kVA capacity, additionally one DG sets of 500 kVA capacity (existing D.G. set of 125 kVA will be discarded after proposed expansion project) will be used as standby during power failure. Stack (height: 11 m) will be provided as per CPCB norms to the proposed DG sets. Existing unit has 0.3 TPH Natural gas fired boiler. Additionally 2 nos. of 0.8 TPH (working-1 + standby-1) Natural gas fired boiler will be installed (existing boiler of 0.3 TPH will be discarded after proposed expansion project). Natural gas is/will be used as fuel in boilers. Stack (Height: 11 m) will be provided to additional boiler.

In existing operations, the company has installed the three-stage water scrubber in order to control the process emission in terms of P_2O_5 generated from Aluminium Phosphide & Zinc Phosphide. P_2O_5 will also be generated from proposed manufacturing of Magnesium Phosphate. Additional scrubber will be installed after proposed expansion project. Dilute Phosphoric Acid is sold out to various end-users having authorization under Rule-9 of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. There will chances of release of Ammonia during reaction and handling from the proposed product Ammonium Carbamate. The company will install two stage scrubber with dilute Sulphuric acid as scrubbing media to control these emissions. The bleed liquor from this scrubber will be sent to common co-processing facility of M/s. RSPL. Also, dust collector + bag filter is/will be provided to control particulate emission from blending and tablet packing machine.

Hazardous wastes are/ will be generated from process scrubbers, raw material consumption and DG sets & boilers.

S.	Types of	Source		Quantity		Method of
No.	Waste		Existing	Proposed	Total	Disposal
1.	Discarded	Empty	3000	11000	14000	After
	Containers	container	nos./annum	nos./annum	nos./annum	decontamination
	(Sch-I,	of RM				will be sold to re-
	33.3)					conditioners
2.	Used oil	Machinar-	80	20	100	Sold to
	(Sch-1, 5.1)	ies	L/annum	L/annum	L/annum	registered
						recyclers.
3.	Phosphoric	Process	100	325	425	Sale to end-
	Acid (15%)	Scrubber	T/Month	T/Month	T/Month	users having
	(Sch-2,					authorization
	B15)					under Rule-9
4.	Ammonium	Process			6 kL/annum	Disposal at
	Sulphate	Scrubber				common facility
	Solution					of RSPL
	(Sch-1,					
	35.1)					

Deliberations in the EAC:

The EAC has made a detailed deliberation on the proposal. The EAC has been informed that the project proponent has been undergoing pesticide manufacturing in the proposed site after obtaining EC. The Committee has observed that the Regional Office of the Ministry has pointed out various non-compliance of the existing EC conditions and PP shall first comply with the conditions. The Committee also noted that the project site is located in the CPA and PP has not provided any mitigation and management plan for controlling the emissions from the unit.

The Committee after detailed deliberations has asked for requisite/additional information in respect of the following:

- (i) The Committee noted that PP has obtained TOR in 1st June 2018 and PP want to increase the land area with adjacent plot. In this context Committee suggested that PP shall first submit the revised form I and PFR for amendments in TOR and accordingly revise the complete application along with new plot area.
- (ii) The Committee has observed that the Regional Office of the Ministry has pointed out various non-compliance of the existing EC conditions and PP shall first comply with the

- conditions. Action Taken Report on the non-complied points to be submitted to the Regional Office of the Ministry, and shall be forwarded to the Ministry/EAC for consideration by the RO.
- (iii) The Committee noted that PP has not done green belt development as per earlier EC condition. Revised layout with detailed greenbelt plan alongwith timelines needs to be submitted.
- (iv) Action plan for controlling the fugitive emissions from the unit considering the unit proposed in the CPA.
- (v) Detailed process flow diagram.
- (vi) The project site is located in the CPA, however, the baseline values are very well within the NAAQ limits. Data shall be revalidated and justification shall be provided for the submitted data values.
- (vii) The Committee also noted that the project site is located in the CPA and PP has not provided any mitigation and management plan for controlling the emissions from the unit.

The proposal was accordingly <u>returned</u> in its present form for submission of revised Report as per provisions of the EIA Notification. 2006.

Agenda No. 4.7

Expansion of Synthetic Organic Chemicals Unit, located at Plot no. D-2/CH/ 5 & 6, GIDC Industrial Estate, Dahej – II, Tehsil: Vagra, Dist.: Bharuch (Gujarat) by M/s Radha Madhav Processors Pvt. Ltd-Bifurcation of EC in favour of M/s Meghmani LLP (Unit-3) & M/s Amulis Finechem Pvt. Ltd. – Consideration of Environment Clearance

IA/GJ/IND3/191085/2021, IA-J11011/274/2014-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Anand Environmental Consultants Pvt Ltd., made a detailed presentation on the salient features of the project and informed that the proposal is for transfer & bifurcation of the Environmental Clearance granted by the Ministry vide letter no. IA-J-11011/274/2014-IA-II (I) dated 18 May 2018 to the project for manufacturing of Synthetic Organic Chemicals and Chemical Intermediates of total capacity of 11,000 TPM at Plot No. D-2/CH/5&6, GIDC Industrial Estate, Dahej-II, Tehsil-Vagra, District-Bharuch, Gujarat in favour of M/s. Radha Madhav Processors Pvt. Ltd, to M/s. Meghmani LLP (Unit-3) & M/s. Amulis Finechem Pvt. Ltd.

The transfer & bifurcation of the Environmental Clearance proposed are as under:

S.	Para of	Details as per	To be Transferred/Bifurcated as	Justification/
No.	EC	the EC		Reason

	issued by MoEF&C C	M/s. Radha Madhav Processors Pvt. Ltd.	M/s. Meghmani LLP (Unit-3)	M/s. Amulis Finechem Pvt. Ltd.	
1	2		Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for manufacturing Synthetic Organic Chemicals of total capacity of 3500 TPM for M/s Meghmani LLP (Unit 3) at Plot No. D- 2/CH/5, GIDC Industrial Estate, Dahej-II, Tehsil- Vagra, District- Bharuch	Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for manufacturing Synthetic Organic Chemicals and	PP now intend to split and transfer the existing EC.
2	3	Total land area available for the project is 60,000 sq. m, out of which greenbelt will be developed	which greenbelt	Total land area available for the project is 30,000 sq. m, out of which greenbelt will be developed	PP now intend to split and transfer the existing EC.

		in an area of		in an area of	
		19,900 sq. m.	10,033 sq. m.	9,950 sq. m.	
		The estimated project cost of is Rs. 97.4 crores.	The estimated project cost of is Rs. 55.6 crores.	The estimated project cost of is Rs. 74 crores.	
		Total capital cost earmarked for pollution control measures is Rs. 503.19 lakhs and the recurring cost (operation and maintenance) will be about Rs. 2383.52 lakhs	for pollution	Total capital cost earmarked for pollution control measures is Rs. 720.5 lakhs and the recurring cost (operation and maintenance) will be about Rs. 946.95 lakhs per	
		per annum.	per annum.	annum.	
		Total	Total	Total	
		employment	employment	employment	
		opportunity will be for 200 persons as direct and 100 persons during construction phase.	opportunity will be for 80 persons as direct and 50 persons during construction phase.	opportunity will be for 120 persons as direct and 50 persons during construction phase.	
3	5	The details of products are asunder: Refer Annexure A	The details of products are asunder: Refer Annexure B	The details of products are asunder: Refer Annexure C	PP now intend to split and transfer the existing EC.
4	6	2156 cum/day, fresh water requirement of 1956 cum/day	water requirement of 1337 cum/day, fresh water requirement of	687 cum/day	to split and

GIE	DC Water	GIDC Water	GIDC Water	
Sup	oply.	Supply.	Supply.	
_{Da}		Damaining CO	Damaining 430	
	maining 200	Remaining 68	Remaining 132	
	n/day shall be	cum/day shall be	cum/day shall be	
thro	ough recycled	through recycled	through recycled	
wa	ter.	water.	water.	
Tot	al industrial	Total industrial	Total industrial	
effl	uent	effluent	effluent	
ger	neration is	generation is	generation is	
188	35 cum/day	1232.8 cum/day	652.2 cum/day	
and	-	and domestic	and domestic	
effi	uent	effluent	effluent	
	neration is 8	generation is 3.2	generation is 4.8	
	n/day . High	cum/day. Total	cum/day. Total	
	D, high TDS	1236 cum/day	of 657 cum/day	
	eam of 1237	will be treated in	will be treated in	
cui	m/day will be	ETP of capacity	ETP of capacity	
	-		700 cum/day.	
car	pacity 1250	Around 68	Around 132	
· · ·	n/day . Low	cum/day of water	cum/day of	
co	D and low	will be recycled	water will be	
TD TD	S stream of	and 1168	recycled and	
	cum/day will		525 cum/day will	
be	treated in	disposed in GIDC	be disposed in	
	P of capacity	drain.	GIDC drain.	
700	• •	G. G	0.2 0 d. d	
	ound 200			
	n/day of water			
	be recycled			
and	•			
	m/day will be			
	posed in GIDC			
dra	•			
		The power	The power	
The	e power	requirement for	requirement for	
	uirement for	the proposed	the proposed	
the	-	plant is 1.5 MW	plant is 2.0 MW	
	nt is 1 MW and	and will be met	and will be met	
	be met from	from Dakshin	from Dakshin	
	kshin Gujarat		Gujarat Vij	
	Company Ltd	-	Company Ltd	
		- 5pa	- 5pay = Ltd	

		(DGVCL). The	(DGVCL). The	(DGVCL). The	
unit has DG set		,	unit has DG set		
		of 250 kVA		of 250 kVA	
		capacity, stack	capacity, stack	capacity, stack	
		(height 11 meter)	, ,	(height 11 meter)	
		will be provided	•	will be provided	
		as per CPCB	as per CPCB	as per CPCB	
		norms to the	norms to the	norms to the	
		proposed DG set.	proposed DG set.	proposed DG set.	
		The unit will have	The unit will have	The unit will have	
		2x5 TPH coal	1x5 TPH coal	1x5 TPH coal	
		fired boilers and	fired boiler.	fired boiler and	
		20 Lac KCal		20 Lac KCal	
		capacity		capacity	
		Thermic Fluid		Thermic Fluid	
		Heater.		Heater.	
			Multi cyclone		
		Multi cyclone	_	Multi cyclone	
		separator/ bag		separator/ bag	
		filter with a stack		filter with a stack	
		height of 40 m will	be installed for	height of 30 m will	
		be installed for	controlling the	be installed for	
		controlling the	particulate	controlling the	
		particulate	emissions within	particulate	
		•		•	
		emissions within	the statutory limit	emissions within	
		the statutory limit of 115 mg/Nm ³ .	of 150 mg/Nm ³ .	the statutory limit of 150 mg/Nm ³ .	
5	7	The	The project/	The project/	PP now intend
		project/activities	activities are	activities are	to split and
		are covered	covered under	covered under	transfer the
		under category	category B of	category A of	existing EC.
		A of item 5(b)	item 5(f)	item 5(b)	
		'Pesticides	'Synthetic	'Pesticides	
		industry and	Organic	industry and	
		pesticide specific	_	pesticide specific	
intermediates		Industries' of the			
			intermediates		
(excluding		Schedule to the	(excluding		
formulation) and			formulation) and		
			Impact	5(f) 'Synthetic	
		Organic	Assessment	Organic	
		Chemical	Notification,	Chemical	
		Industries' of the	2006, and	Industries' 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.	requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.	Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.	
6 10	Based on the proposal submitted by the project proponent and recommendation s of the EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for Manufacturing Chlorinated and Hydrogenated Derivatives of total capacity of 11000 TPM for Agro Intermediates Plant by M/s Radha Madhav	project proponent and recommendation s of the EAC (Industry-3), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for Manufacturing of Synthetic Organic Chemicals of total capacity of 3500 TPM by M/s Meghmani LLP (Unit 3) at Plot No. D-2/CH/5, GIDC Industrial Estate, Dahej-II, Tehsil Vagra,	(Industry-3), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for Manufacturing of Synthetic Organic Chemicals & Chemical Intermediates of total capacity of 7500 TPM by M/s. Amulis Finechem Pvt. Ltd. at Plot No. D-2/CH/6, GIDC	to split and transfer the

		Survey No. 843/P, 844/P, 845/P, 850/P, 851/P, 852/P, GIDC Industrial Estate, Dahej-II, Tehsil Vagra, District Bharuch (Gujarat), under the provisions of EIA Notification, 2006 and the amendments made therein, subject to the compliance of terms and conditions, as under:-	the provisions of EIA Notification, 2006 and the amendments made therein, subject to the compliance of terms and	Dahej-II, Tehsil Vagra, District Bharuch (Gujarat), under the provisions of EIA Notification, 2006 and the amendments made therein, subject to the compliance of terms and conditions, as under:-	
7	10 (vi)	Total fresh	Total fresh	Total fresh	PP now intend
		water	water	water	to split and
		requirement	requirement	requirement	transfer the
		shall not exceed		shall not exceed	existing EC.
		be met from	1269 cum/day to be met from	687 cum/day to be met from	
		GIDC Water	GIDC Water	GIDC Water	
		Supply. Prior		Supply. Prior	
		permission in this		'''	
		regard shall be	regard shall be	regard shall be	
		obtained from the	obtained from the	obtained from the	
		concerned	concerned	concerned	
		regulatory	regulatory	regulatory	
		authority.	authority.	authority.	
Note	. All romaini	ng conditions of EC	granted on 19/05/	010 would romain a	name event the

Note: All remaining conditions of EC granted on 18/05/2018 would remain same except the above stated EC conditions.

Annexure – A: PRODUCTION CAPACITY OF M/S. RADHA MADHAV PROCESSORS PVT. LTD.

Plant	Common	Products	Capacity
Code	Name		(TPM)

Plant A	CPVC	Chlorinated Poly Vinyl Chloride	1,500
Plant B	Chlorinatio n of Benzene &Toluene	Benzyl Chloride, 2,6 Dichloro Phenol, 2,4 Dichloro Phenol, 2/4 Chloro Phenol, Benzyl Chloride/Benzo Trichloride/Benzal Chloride, P- Chorobenzyl Choride/P-Chorobenzal Choride/P-Chloro Benzotrichloride, o-Chorobenzyl Choride/o- Chorobenzal Choride/o-Chloro Benzotrichloride, Chloro Benzene/Di Chloro Benzene, Mono Chloro Benzene (MCB), Dichloro Benzene (DCB) (Ortho/Meta/Para), Para Chloro Toluene/Ortho Chloro Toluene	2,000
Plant C	Chlorinatio n of Acetic Acid	Mono Chloro Acetic Acid, Tri Chloro Acetyl Chloride	1,500
Plant D	Hydrolysis of Chlorinated Compound	Iso Phthaloyl Chloride, Phthaloyl chloride, o-Chlorobenzaldehyde, p-Chlorobenzaldehyde,Benzyl Alcohol, o-ChloroBenzyl Alcohol, p-Chloro Benzyl Alcohol, Benzoyl Chloride, Benzaldehyde, 2-Methoxy 5-Bromo 6-Methyl Benzoyl Chloride, 2,4 Dichloro Benzoyl Chloride, 4 Methyl Benzoyl Chloride, Propargyl Chloride, Pivaloyl Chloride, 4-Chloro Butyryl Chloride, Terephthaloyl Chloride, N-Valeroyl Chloride, 4-Chloro Benzoyl Chloride, 3-Nitro Benzoyl Chloride, 4-Nitro Benzoyl Chloride	1,500
Plant E	Amines	Primary Amines, Ethoxylation of Primary Amines	1,000
Plant F		Paracetamol	1,000
Plant G		4-Chloro 3,5 Dinitro Benzoic Acid, 6-Nitro3,4 Dichloro Aniline, 4-Nitro5-Chloro2-Methyl Aniline, 2-Nitro 4- Methyl Aniline,3-Nitro4-Chloro BenzoicAcid,3-Nitro-para Toluic Acid,2,4 Dichloro 6-Nitro Phenol, 2,3 Dichloro 4-Nitro Phenol,2,5 Dichloro 4-Nitro Phenol, 1,3 Di Nitro Benzene, Nitro Benzene, 2/3/4 Nitro Toluene, 3,5 Di Nitro Benzoic Acid, p-Nitro Salicylic Acid,2,5Dichloro Nitro Benzene,3,4/2,3DichloroNitro Benzene	1,000
Plant H	on	p-Hydroxy Aniline/o-Hydroxy Aniline 3,4Dichloro Aniline, 3-IsoPropoxy Aniline, o-Toluidine, m- Toluidine, p-Toluidine, Aniline,3,4Diamine Toluene,2,5 Dimethyl, 1,4 Phenylene Diamine, 2-Chloro5- Methyl1,4 Phenylene Diamine,2-Chloro 1,4 Phenylene Diamine,2,5 Dichloro1,4 Phenylene Diamine, 2,4,5Trichloro Aniline, 6- Methyl 5-Amino Benzimidazolone, 5-Amino	1,000 500

4- Di	enzimidazolone, 3-Amino 4-Chloro Benzoic Acid, 3-Amino -Chloro Benzotrifluoride, 3-Amino Benzotrifluoride, 3,5 vichloro Aniline, 2,5 Dichloro Aniline, 2,3 Dichloro Aniline, -Amino 4-Methyl Benzoic Acid	
	Total	11,000

Annexure - B: PRODUCTION CAPACITY OF M/S. MEGHMANI LLP (UNIT -3)

Sr.	Common Name	Products	Capacity
No.			(MT/Month)
1	CPVC	Chlorinated Poly Vinyl Chloride	1,500
2	Bulk Drug	Paracetamol	1,000
3	Hydrogenation	p-Hydroxy Aniline/	1,000
	Compounds	o-Hydroxy Aniline	
		Total	3,500

Annexure - C: PRODUCTION CAPACITY OF M/S. AMULIS FINECHEM PVT. LTD.

Sr.	Common	Products	Capacity
No.	Name		(MT/Month)
1	Chlorination	Benzyl Chloride, 2,6 Dichloro Phenol, 2,4 Dichloro	2,000
	of Benzene	Phenol, 2/4 Chloro Phenol, Benzyl Chloride/Benzo	
	&Toluene	Trichloride/Benzal Chloride, P-Chorobenzyl	
		Chloride/P-Chloro	
		Benzotrichloride, o-Chorobenzyl Chloride/o-	
		Chlora Banzana/Di Chlora Banzana Mana Chlora	
		Chloro Benzene/Di Chloro Benzene, Mono Chloro	
		Benzene (MCB), Dichloro Benzene (DCB)	
		(Ortho/Meta/Para), Para Chloro Toluene/ Ortho Chloro Toluene	
2	Chlorination	Mono Chloro Acetic Acid, Tri Chloro Acetyl	1,500
	of Acetic Acid	Chloride	1,500
3	Hydrolysis of	Iso Phthaloyl Chloride, Phthaloyl Chloride, o-	1,500
	Chlorinated	Chlorobenzaldehyde, p- Chlorobenzaldehyde,	1,500
	Compound	Benzyl Alcohol, o-Chloro Benzyl Alcohol,	
	Compound	p- Chloro Benzyl Alcohol, Benzoyl Chloride,	
		Benzaldehyde, 2-Methoxy 5-Bromo 6-Methyl	
		Benzoyl Chloride, 2,4 Dichloro Benzoyl Chloride,	
		4-Methyl Benzoyl Chloride, Propargyl Chloride,	
		Pivaloyl Chloride, 4-Chloro Butyryl Chloride,	
		Terephthaloyl Chloride, N-Valeroyl Chloride, 4-	

		Chloro Benzoyl Chloride, 3-Nitro Benzoyl Chloride, 4-Nitro Benzoyl Chloride	
4	Amines	Primary Amines, Ethoxylation of Primary Amines	1,000
5	Nitro Compounds	4-Chloro3,5 Dinitro Benzoic Acid, 6-Nitro 3,4 Dichloro Aniline, 4-Nitro5-Chloro2-Methyl Aniline, 2-Nitro4-Methyl Aniline, 3-Nitro4-ChloroBenzoicAcid,3-Nitro-para Toluic Acid, 2,4 Dichloro 6-Nitro Phenol, 2,3Dichloro 4-Nitro Phenol, 2,5 Dichloro 4-Nitro Phenol, 1,3 Dinitro Benzene, Nitro Benzene, 2/3/4 Nitro Toluene, 3,5 Dinitro Benzoic Acid, p-Nitro Salicylic Acid, 2,5 Dichloro Nitro Benzene, 3,4/2,3Dichloro Nitro Benzene	1,000
6	Hydrogenatio n Compounds	3,4 Dichloro Aniline, 3-Iso Propoxy Aniline, o-Toluidine, m-Toluidine,p-Toluidine,Aniline, 3,4 Diamine Toluene,2,5Dimethyl1,4 Phenylene Diamine,2-Chloro5-Methyl1,4 Phenylene Diamine,2-Chloro 1,4 Phenylene Diamine, 2,5 Dichloro 1,4 Phenylene Diamine, 2,4,5 Trichloro Aniline, 6-Methyl 5-Amino Benzimidazolone, 5-Amino Benzimidazolone, 3-Amino 4-Chloro Benzoic Acid, 3-Amino 4-Chloro Benzotrifluoride,3-Amino Benzotrifluoride, 3,5 Dichloro Aniline, 2,5 Dichloro Aniline, 2,3 Dichloro Aniline, 3 Amino 4-Methyl Benzoic Acid	500
		•	7,500

Deliberations in the EAC:

The EAC noted that the proposal is for transfer & bifurcation of the environmental clearance granted by the Ministry vide letter no. IA-J-11011/274/2014-IA-II (I) dated 18th May 2018 to the project for Manufacturing chlorinated and hydrogenated derivatives of total capacity of 11000 TPM for Agro Intermediates Plant by M/s Radha Madhav Processors Pvt Ltd located at Plot No. D-2/CH/5&6, Survey No.843/P, 844/P, 845/P, 850/P, 851/P, 852/P, GIDC Industrial Estate, Dahej-II, Tehsil Vagra, District Bharuch, Gujarat, in favour of M/s Meghmani LLP (Unit-3) & M/s Amulis Finechem Pvt Ltd.

After bifurcation, the project for manufacturing Synthetic Organic Chemicals of total capacity of 3500 TPM at Plot No. D-2/CH/5, GIDC Industrial Estate, Dahej-II, Tehsil-Vagra, District-Bharuch (Gujarat) shall be handled by M/s Meghmani LLP (Unit 3) and the project for manufacturing

Synthetic Organic Chemicals and Chemical Intermediates of total capacity of 7500 TPM Ltd at Plot No. D-2/CH/6, GIDC Industrial Estate, Dahej-II, Tehsil-Vagra, District-Bharuch (Gujarat) shall be handled by M/s Amulis Finechem Pvt.

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

The EAC noted that M/s Radha Madhav Processors Pvt. Ltd. has provided 'NOC' for transfer and bifurcation of EC dated 18th May 2018 in favour of M/s Meghmani LLP & M/s Amulis Finechem Pvt. Ltd. M/s Meghmani LLP & M/s Amulis Finechem Pvt Ltd are registered with Ministry of Corporate Affairs and having CIN/identification number. M/s. Meghmani LLP & M/s Amulis Finechem Pvt. Ltd. has submitted undertaking stating that they shall accept and liable for the terms and conditions stipulated in the EC.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent. The Committee has been informed that the project proponent has not initiated any activities in the site and shall be starting the same after the proposed bifurcation and transfer of EC. The project proponents have informed the Committee that the bifurcation of the EC has been proposed for ease of doing business and for better compliance of the environmental conditions separately by the individual proponents.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and **have recommended for transfer and bifurcation of environmental clearance** in favour of M/s Meghmani LLP (Unit-3) & M/s Amulis Finechem Pvt. Ltd. However, the Committee pointed out that the validity of the environmental clearance shall be counted from the date of grant of earlier EC i.e. 18th May 2018.

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** for **bifurcation and transfer of EC** dated 18th May 2018 **in favour of M/s Meghmani LLP (Unit 3)** to the project for manufacturing Synthetic Organic Chemicals of total capacity of 3500 TPM at Plot No. D-2/CH/5, GIDC Industrial Estate, Dahej-II, Tehsil-Vagra, District-Bharuch (Gujarat), subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

- (i). The validity of the environmental clearance shall be counted from the date of grant of earlier EC i.e. 18th May 2018.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986.
- (iv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (v). The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.
- (vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.
- (ix). 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.

- (x). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xi). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xii). Total fresh water requirement shall not exceed 1269 cum/day to be met from GIDC Water Supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (xiii). 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.
- (xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of highpressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. PP shall start plantation immediately, as committed. The Project proponent must start construction of Plant and build up the greenbelt immediately after taking necessary clearances/approvals and submit the compliance status to the Regional Office of the Ministry/SPCB.
- (xvi). The activities and the action plan proposed by the project proponent to address the socioeconomic 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.
- (xvii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-

fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

The EAC, after detailed deliberations, has also **recommended** for bifurcation and transfer of EC dated 18th May 2018 in favour of **M/s Amulis Finechem Pvt.** to the project for manufacturing Synthetic Organic Chemicals and Chemical Intermediates of total capacity of 7500 TPM Ltd at Plot No. D-2/CH/6, GIDC Industrial Estate, Dahej-II, Tehsil-Vagra, District-Bharuch (Gujarat), subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

- (i). The validity of the environmental clearance shall be counted from the date of grant of earlier EC i.e. 18th May 2018.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986.
- (iv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (v). The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.
- (vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.

- (ix). 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.
- (x). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xi). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xii). Total fresh water requirement shall not exceed 687 cum/day to be met from GIDC Water Supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (xiii). 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.
- (xiv). 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.
- (xv). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. PP shall start plantation immediately, as committed. The Project proponent must start construction of Plant and build up the greenbelt immediately after taking necessary clearances/approvals and submit the compliance status to the Regional Office of the Ministry/SPCB.

- (xvi). The activities and the action plan proposed by the project proponent to address the socioeconomic 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.
- (xvii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

DAY 2: 15th January, 2021 (FRIDAY)

Agenda No. 4.8

Expansion of Chemical Industry by M/s LANXESS INDIA PVT. LTD., located at Plot No.161/2/ 162, Ujjain, Madhya Pradesh - Consideration of Environment Clearance

[IA/MP/IND2/83152/2018, IA-J-11011/350/2018-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Greencindia Consulting 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 Chemical Industry at Tehsil Nagda, District Ujjain, State Madhya Pradesh by M/s. Lanxess India Pvt. Ltd.

The details of products and capacity as under:

SI. No.	Name of Product	Existing Permitted Capacity* (MTPA)	Additional Proposed Capacity (MTPA)	Total Proposed Capacity (MTPA)
1	Benzyl Chloride	54750	25550	80300
2	Benzyl Alcohol	36000	0	36000
3	Benzyl Acetate	7200	7800	15000
4	Benzaldehyde	19000	13250	32250
5	Hydochloric Acid	212400	76300	288700
6	Sulphur Di Chloride	12400	-11800	600
7	Sodium Benzoate	2500	-150	2350
8	Thionyl Chloride	50000	20000	70000

SI. No.	Name of Product	Existing Permitted Capacity* (MTPA)	Additional Proposed Capacity (MTPA)	Total Proposed Capacity (MTPA)
9	Di Benzyl Ether	3600	1400	5000
10	Cinnamaldehyde	3000	7000	10000
11	Benzyl Benzoate	3000	6000	9000
12	Benzyl Salicylate	3000	7000	10000
13	Cinnamyl Alcohol	Cinnamyl Alcohol 3000		3000
14	Hexyl Cinnamaldehyde	3000	5000	8000
15	Fraction Finished Goods	9250	4250	13500
16	Industrial Salt	2675	9575	12250
17	Sodium HypoChlorite	Nil	250	250
18	Alpha amyl Cinnamaldehyde	Nil	2000	2000
19	Sulphuric Acid	Nil	6000	6000
TOTAL		4,24,775	1,79,425	6,04,200

Note: *After deducting 1,66,530 MTPA of surrendered product capacity

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

The ToR has been issued by Ministry vide letter No. J-11011/350/2018-IA-II(I); dated 31st December 2018. Public Hearing for the proposed project has been conducted by the Madhya Pradesh Pollution Control Board on 07/03/2020, which was presided over by the Additional District Magistrate. The main issues raised during the public hearing are related to Employment generation from enhancement of production, Air pollution control measures to be corrected. Latest techniques / devices to be deployed for control of Air and Water pollution, providing safe drinking water and high quality health care facilities to villagers and to ensure community development, the unit to help nearby villagers in getting education and healthcare facilities.

The present plant was started in 1978 by M/s Gwalior Chemicals Pvt. Ltd. for manufacturing of chemicals in an area of 23.468 ha in Village – Birlagram, Tehsil –Nagda, District – Ujjain, Madhya Pradesh. The Plant was taken over by LIPL on 1st September 2009 for manufacturing of chemicals for the same products and production capacity of 5,91,305 MTPA. No further expansion has been carried out till date by LIP Land therefore, environment clearance notification was not been attracted till the present proposal under consideration. Compliance Report of CTO Air and Water has been submitted to MPPCB on 23/12/2020 and certified by

RO, MPPCB on 14/01/2021.

Existing land area is 234680m² and No additional land is required for the project as the proposed expansion is within the existing site only. Industry has area for development of greenbelt in an area of 37.63% i.e., 88,300 m² out of total area of the project. The estimated project cost is Rs. 390 crores including existing investment of Rs. 600 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 55.0 crores and the Recurring cost (operation and maintenance) will be about Rs. 5.5 crores per annum. Total Employment will be 1020 persons as direct & indirect after expansion. Industry proposes to allocate Rs. 2.92 crores towards Corporate Social Responsibility.

There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Chambal River is flowing at a distance of 300 m in West direction from the boundary and at 700 m distance from plant facilities.

Ambient air quality monitoring was carried out at 10 locations during March to May 2019 and the baseline data indicates the ranges of concentrations as: PM10 (58.8-85.8 μ g/m³), PM2.5 (31.8-42.5 μ g/m³), SO2 (19.5-23.8 μ g/m³) and NO2 (21.8-40.2 μ g/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 24.1 μ g/m³ and 42.6 μ g/m³ with respect to SOx and NOx. For PM10, the values were insignificant. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 5064 KLDout of which 3048 KLD water demand is proposed to be met by Domestic wastewater from local areas treated by in-house STP of 3500 KLD, 766 KLD water demand is proposed to be met by steam Condensate water from external steam, 9 KLD of drinking water demand is met by external water suppliers and Recycled water from STP will be 1241 KLD. Total 1241 KLD waste water quantity will be recycled after required treatment through ETP, Reverse Osmosis (RO) Separation and Multiple Vapor Reclaimer (MVR) Evaporator. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 10.3 MW including existing units and will be met from MP Paschim Kshetra Vidyut Vitaran Company and 1x3.95MW Co-generation plant. After proposed expansion, an additional Co-generation plant of 6.0 MW will serve as power source. Existing unit has 4 DG sets of 1500 kVA, 1250 kVA, 1000kVA and 500 kVA capacity, No additional DG sets are proposed.

Existing unit has 3.5 TPH of Captive Liquid waste Incinerator with heat recovery boiler, 25 TPH AFBC Boiler (Standby) and 45 TPH of Coal and biomass fired Boiler. Additionally 3.5 TPH of Captive Liquid waste Incinerator with heat recovery boiler and 70 TPH of Coal and biomass fired Boiler will be installed. Bag filter with a stack of height of 72 m will be installed for controlling the particulate emissions within the statutory limit of 115

mg/Nm³ for the proposed boilers and 32 m stack will be provided to proposed liquid waste incinerator.

Details of Process emissions generation and its management.

Existing						I	Proposed					
Stack No.	1		2		3		4	5	6	7	8	9
Stack attache d to	Emergen cy¹ 500 kVA DG	Emergen cy 1000	Emergen cy 1250 kVA	Emergen cy 1500 kVA	3.5 TPH Boiler	25 TPH ² AFBC Boiler	45 TPH Boiler	Caustic Scrubber	Water absorber of HCL	3.5 TPH Boiler	6MW /70 TPH Co-	Sulphuric Acid Plant
Fuel type	HSD	HSD	HSD	HSD	Distillatio n Residue	Coal	95% Biomass+ 5% Coal	•	-	Distillatio n Residue	95% Biomass+ 5% Coal	
Fuel quantity	106.0 l/hr	201.0 l/hr	269.0 l/hr	291.0 l/hr	375 kg/hr	5000 kg/hr	11458kg/ hr + 625kg/hr	-	-	375 kg/hr	17916kg/ hr + 1041	
Stack height above ground in (m)	10		32		32		58	30	18	32	72	50
Stack diamete r in (m)	0.27		0.6		0.6	,	1.7	0.2 5	0.2	0.6	3	0.4
Sulphur %	<0.25		<0.25		0.00 01	Coal 0.5%	Blend 0.082%	-	-	0.00 01	Blend 0.082%	-
Flue gas volume (Am³/hr	2438	5637. 2	6854.8	7883.2	483 2.5	51,764	1,74,180	500 0	700	5250	2,59,88 8	500 0
Flue gas temp (K)	363		363		315	4	41	323	313	315	423	323
Exit velocity of gas in (m/s)	11.83	5.54	6.74	7.75	4.75	8.84	14.03	28. 31	6.2	5.16	10.25	11. 06
Emission	rate											

 $^{^{1}}$ All DG sets assumed to work for maximum 8 hours a day 2 The 25 TPH AFBC Boiler is assumed to work for 30 days in a year.

	Existing								Proposed			
Stack No.	1		2		3		4	5	6	7	8	9
PM (g/s)	-		-		-	2	2.1	-	-	-	1.5	-
SO ₂ (g/s)	0.04		0.34		0.00 02	2.4	4.4	0.0 10	-	0.00 02	5.02	1.8 8
NO ₂ (g/s)	0.34		2.33		0.60	0.8	6.3	-	-	0.60 0	5.02	-
CO (g/s)	0.13		0.67		-		-	-	-	-	-	-
HC/NM HC (g/s)	0.05		0.23		-		-	-	-	1	-	-
HCL (g/s)	-	-	1	ı	-		-	-	0.0043	1	-	-
H ₂ SO ₄ Acid mist (g/s)	-	-	-	-	-		-	-	-	-	-	0.0 752

Environmental Aspects/Issues	Mitigation Measures
	☐ Proper ventilation in storage & production area are always ensured and all materials are stored in suitable packing to prevent contamination of air due to particulates & volatile emissions from storage container & area.
	□ Electro static precipitator (ESP) and bag filter considered to keep PM emissions within limits. Due to lower combustion temperature, NO₂ will be within limit.
Impact of dust, smoke, gas, fumes & odour	Process emissions and fugitive emissions are properly scrubbed/condensed and recovered before vented out through stacks of adequate height.
	ESP will be provided to 70 TPH new boiler to keep emissions of PM within limits.
	Most of manufacturing process are in closed systems to eliminate any chances of fugitive emissions. All solvents/liquids are charged mechanically in the closed loop to avoid losses thus eliminating chances of air pollution also due to fugitive emissions.
	☐ Breather Valves, chilled water condensers have been provided on

storage tanks and process equipment to arrest fugitive emissions.
The storage tanks of low boiling solvents like Acetaldehyde are equipped with chilled water circulation system to avoid fugitive losses.
All the distillation columns are attached with double stage cooling water/chilled water condensers to control vapour emissions.
Monitoring of ambient air quality/ source emission is carried out as per monitoring plan.
Green belt/Plantation developed around the plant and along roads to arrest the fugitive emissions. Additional green belt shall be developed.

Pollution Control Devices

SI. No.	Facility	Unit	Existi ng Qty.	Existing Installe d Capacit y	Addition al Qty.	Propos ed addition al installe d Capacit	Tot al Qty.	Propose d Installed Capacity
1	Captive Incinerator with Waste Heat Recovery Boiler	kg/hr (steam in TPH)	1	375 (3.5 TPH)	1	375 (3.5 TPH)	2	750 (7 TPH)
2	WWPT (Wastewater Post Treatment)	KLD	1	260	1	260	2	520
3	PTRO (Post Treatment Reverse Osmosis)	KLD	1	900	1	900	2	1800
4	STP	KLD	1	3500	0	0	1	3500
5	Organic Waste Converter	kg/hr	0	0	1	100	1	100
6	ETP	KLD	1	300	0	0	1	300

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

Solid Waste Generation

Description	Rate	No. of Employees/Area	Solid waste generation kg/day	Туре
Municipal Solid Waste	0.2 kg/p/d	1020 persons	204	Non Hazardous
Horticulture Waste	15 kg/acre/day	21.81 acre	4.36	Non Hazardous
Total			208.36	Non Hazardous

Hazardous and Other Waste Generation and Disposal Details

SI.	Category of Hazardous		Authorized mode of disposal or	Quantity
No.	Waste as per the		Recycling or utilization or co-	(ton/annum)
	Schedules I, II and III of		processing, etc.	
	these rules			
1.	Used or Spent Oil	(I-5.1)	To be sold to authorized Reprocessors/ Recycler authorized with SPCB.	6.000-MT
2.	Oily rages/DG-filters etc.	(I-5.2)	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre- processing or Co- processing.	0.600 MT
3.	Chemical-containing residue Arising from decontamination.	(I-34.1)	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre- processing	5.000-MT
4.	Sludge From Treatment Of Waste Water Arising Out Of Cleaning / Disposal Of Barrels / Containers	(I-34.2)	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre- processing.	5.000-MT
5.	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	(I-33.1)	At Captive Incinerator or M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or to be sold to authorized Re- processors/ Recycler authorized with SPCB.	10.000-MT
6.	Ash from incinerator and flue gas cleaning residue	(I-37.2)	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre- processing	0.500-MT

			I NA D NA	
7.	Chemical sludge from waste water treatment	(I-35.3)	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre- processing	2000.000- MT
8.	Spent ion exchange resin containing toxic metals	(I-35.2)	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre- processing	8.000-MT
9.	Distillation Residues	(I 20.3)	At Captive Incinerator or M.P. Waste Management Project, Pithampur, Dist. Dhar.(M.P.) or pre processing	5200.000- MT
10.	Chemical sludge from waste water treatment	(I-35.3)	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre- processing with due permission from the disposal destination SPCB.	1500.000- MT
11.	Any process or distillation residue	(I-36.1)	CTSDF/Pre-processing.	3800.00 MT
12.	Any process or distillation residue	(I-36.1)	Captive Incinerator/CTSDF/Pre-processing.	2300.00 MT
13.	Spent Carbon or filter medium	(I-36.2)	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre- processing	510.000-MT
14.	Exhaust Air or Gas cleaning residue	(I-35.1)	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre- processing	6000.000- MT
15.	Oil And Grease, Skimming	(I-35.4)	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre- processing	5.000-MT

Environmental Aspects/Issues	Mitigation Measures
	☐ The total domestic solid waste generation after proposed expansion will be 208.36 kg per day, out of which, municipal waste will be 204 kg/day and Horticulture waste will be 4.36 kg/day.
Solid Waste & Hazardous Waste Management	☐ The waste collected is stored in twin bin waste collection system; green bins for bio-degradable wastes and blue bins for non-biodegradable wastes.
Management	Municipal solid wastes are segregated at source into biodegradable and non-biodegradable. Biodegradable waste handed over to Nagar Palika for further processing. Horticulture waste and sludge from

STP are dried and used as manure.
☐ The Non-biodegradable portion of MSW and hazardous wastes generated from the plant is disposed off to Treatment, Storage and Disposal Facility (TSDF), Pithampur (RAMKY).
☐ The company has already the Authorization under the Hazardous and Other Waste (Management. & Transboundary Movement) Rules, 2016 as amended vide Consent no. H-50734 with validity up to 31/08/2024.

Status of Litigation Pending against the proposal, if any.

	LEGAL CASES	RELATED WI	TH MPPCB		
Case No	Complainan t/ Respondent	Subject	Previous dates of hearing	Present status	Remark
	Na	tional Green T	ribunal, Bho	pal	
77/2017	Dinesh Dubey V/s. 1. Secretory Environment, Madhya Pradesh, Bhopal 2. MPPCB, HO Bhopal 3. MPPCB, Regional Office, Ujjain 4. Grasim Industries Limited (Staple Fiber Division) Nagda 5. Grasim Industries Limited (Chemical Division)	21 of the Constitution of India read with Section 14 of the National Green	30.01.202	Case closed	Vide order dated 30.01.2020 by Hon. NGT court ordered to withdraw the application due to not following NGT practice and procedure Rules, 2011 and therefore the case is close.

WP/5902/201 M.P. Control India Private 4 Isted for WP/5902/2013 Control Limited V/s. Board W/s. Central Lanxess India Private Limited Pollution Control Board. Peltion Filed Board. Peltion Filed Pollution Control Board. Peltion Filed Court India Private Pollution Control Board. Peltion Filed Court India Private Limited Pollution Control Board. Peltion Filed Court India Private India Private Limited Pollution Control Board. Peltion Filed Court India Private India Private India Private Limited Pollution India Private India Private India Private Lanxess India Private India Private India Private India Private India Private Lanxess India Private India Private India Private India Private India Private Lanxess India Private Ind	Nagda 6. LANXESS India Private Limited (Nagda) 7. Nagar Palika, Nagda	(Pollution and Prevention) Act, 1974 by Industries of Nagda. Case filed against 7 respondents including LANXESS, Nagda.			
3. Pollution Control Limited V/s. Board V/s. Howards V/s. India Private Limited V/s. India Private Limited Pollution Control Board. Peition filed under section 482 of the code of criminal procedure 193 for the Quashment of complaint lodged by Respondent under Water Act and Air Act 1974, U/s. 25 & 26 (Prevention of Control & Pollution Act) 1981.		High Cour	t Indore		
IMICLACO ILLIAINI	Pollution Control Board V/s. LANXESS India Private	LANXESS India Private Limited V/s. M.P.Pollution Control & Central Pollution Control Board. Peition filed under section 482 of the code of criminal procedure 193 for the Quashment of complaint lodged by Respondent under Water Act and Air Act 1974, U/s. 25 & 26 (Prevention of Control & Pollution Act)	18.07.201	listed for hearing since	WP/5902/2013 filed BY LANXESS India Private Limited before High Court Indore for quashment of order passed by CJM Court Ujjain dtd. 26.07.2011 against the petitioner in case no. 4077/11 and for Quashment of complaint filed by SRO of MPPCB before
<u>JMICLASS UJJAIN</u>	•	<u>JMICLASS</u>	UJJAIN	•	•

0000/0047	MD	\/:alatian -f	40.05.000	Nauthanis	1 anysaa 1
9699/2017	M.P.	Violation of	13.05.202	Next hearing	Lanxess has
	Pollution	Section	0	date awaited	filed a McRC
	Control	24,25,26.44			47769/2018 in
	Board	and 47			High Court
	(Through Dr.				Indore in this
	Suresh	Air Pollution			case which is
	Kumar) v/s.	Control and			pending for
	Lanxess	Prevention			hearing. Also
	India Private	Act. 1974			Lanxess filed IA
	Limited	Inspection			No. 8365/2018
		dated			for staying the
		16.09.2017.			proceedings
					before the
					Judicial
					Magistrate First
					Class Ujjain till
					final hearing of
					this petition. By
					order dt.
					14.12.2018
					High Court
					Indore has
					order let the
					warrant be not
					executed till the
					next date of
					hearing. Matter
					was last listed
					in High Court
					Indore on
					9.4.2020.
	1			l	

Deliberations in the EAC

The EAC has made a detailed deliberation on the proposal. The EAC has been informed that the project proponent is operating the existing unit with CTE/CTO from the State PCB, without obtaining any prior EC, as the unit is reported to be in operation before the EIA Notification and no expansion/modernization/product changes made. However, the Committee desired to have details of annual production along with copy of CTOs from the year 2005. The Committee has also noted that the project site is adjacent to Chambal river and location/expansion of such chemical industries in such ecologically sensitive locations needs to be revisited. The Committee at the first instance was not inclined to accept the proposal for expansion in the site. The Committee opined that once the project proponent submits the detailed information, site

visit may be conducted to ascertain the details. Further, the Committee has also observed that there are serious issues raised during public hearing related to the environment, cases filed in various courts and State PCB has issued notices under the Air and Water Act and taken legal action against the unit.

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

- (i) Considering the location of the project site adjacent to Chambal river, details of alternative site analysed.
- (ii) Details of existing products with consented and production capacity from 2005, along with copy of CTE/CTOs.
- (iii) Details of expansion/modernization/product mix changes undertaken without taking EC, and undertaking in this regard.
- (iv) Public hearing issues, response, detailed action plan/activities with. Issues raised by each Participant shall be provided with response and action plan and commitment.
- (v) Reason, if any for not conducting public hearing at the project site.
- (vi) Detailed effluent management plan.
- (vii) Detailed greenbelt development plan along the periphery of the plant with revised layout.
- (viii) Details of court case, and its implication on the project, present status along with copy of petition and affidavits.
- (ix) Closure notice/show cause notice issued by the SPCB in the last 5 years and response and present status.
- (x) Product list, separately mentioning products requiring EC and not.
- (xi) Masterplan/Flood plain of the project site and adjacent river plain from the concerned regulatory authority.
- (xii) Opinion/comments of the SPCB and local village administration on location of such chemical industries adjacent to the river.
- (xiii) Details of red category industries adjacent to the project site
- (xiv) The baseline data is found to be collected by another consultant and also presented during public hearing. Details of work done by the present consultant for preparation of EIA/EMP report and undertaking that they are liable for the authenticity of data and conclusion in the report.

After detailed deliberation by the EAC, the proposal was deferred for the needful.

Agenda No. 4.9

Setting up of Active Pharmaceutical Ingredient (API's) manufacturing Unit. by M/s Lifetech Sciences, located at Plot No. C-222, MIDC, Chincholi, Tal.: Mohol Dist; Solapur, Maharashtra - Consideration of Environment Clearance

[IA/MH/IND2/190071/2020, IA-J-11011/6/2021-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 environmental clearance to the project for Setting up of Active Pharmaceutical Ingredient (API's) manufacturing Unit of capacity 92.87 TPM by M/s Lifetech Sciences located at Plot No. C-222, MIDC, Chincholi, Taluka Mohol, District Solapur, Maharashtra.

The details of products and capacity are as under:

S. No	Product name	Quantity (MT/M)	CAS No.	Chemical Formula
1.	Progesterone	5.00	57-83-0	C ₂₁ H ₃₀ O ₂
2.	Acetozolamide	3.00	59-66-5	$C_4H_6N_4O_3S_2$
3.	HydroxychloroquineSulpahte	3.50	747-36-4	C ₁₈ H ₂₈ CIN ₃ O ₅ S
4.	Clozapine	4.55	5786-21-0	C ₁₈ H ₁₉ CIN ₄
5.	Acamprosate Calcium	2.22	77337-73-6	C ₁₀ H ₂₀ CaN ₂ O ₈ S ₂
6.	Leflunomide	1.80	75706-12-6	$C_{12}H_9F_3N_2O_2$
7.	Bronopol	5.00	52-51-7	C ₃ H ₆ BrNO ₄
8.	Cycloserine	2.00	68-41-7	$C_3H_6N_2O_2$
9.	Nebivolol Hydrochloride	0.20	152520-56-4	C ₂₂ H ₂₅ F ₂ NO ₄
10.	Lamividine	2.00	134678-17-4	C ₈ H ₁₁ N ₃ O ₃ S
11.	Lopinavir	2.00	192725-17-0	C ₃₇ H ₄₈ N ₄ O ₅
12.	Ritonavir	2.50	155213-67-5	$C_{37}H_{48}N_6O_5S_2$
13.	Tenofovir Disoproxil	3.00	202138-50-9	C ₂₃ H ₃₄ N ₅ O ₁₄ P
14.	Doultegravir	2.10	1051375-16-6	$C_{20}H_{19}F_2N_3O_5$
15.	Telmisartan	15.00	144701-48-4	$C_{33}H_{30}N_4O_2$
16.	Gabapentin	5.00	60142-96-3	C ₉ H ₁₇ NO ₂
17.	Nizatidine	5.00	76963-41-2	$C_{12}H_{21}N_5O_2S_2$
18.	Meropenem	5.00	119478-56-7	C ₁₇ H ₂₅ N ₃ O ₅ S

S.	Product name	Quantity	CAS No.	Chemical Formula
No		(MT/M)		
19.	Atazanavir Sulphate	3.00	229975-97-7	C ₃₈ H ₅₄ N ₆ O ₁₁ S
20.	Amidarone Hydrochloride	5.00	1951-25-3	C ₂₅ H ₃₀ CII ₂ NO ₃
21.	Vildagliptin	2.70	274901-16-5	$C_{17}H_{25}N_3O_2$
22.	Acyclovir	3.60	59277-89-3	$C_8H_{11}N_5O_3$
23.	Remedsvir	1.20	1809249-37-3	$C_{27}H_{35}N_6O_8P$
24.	Etodolac	3.50	41340-25-4	C ₁₇ H ₂₁ NO ₃
25.	Trazodone Hydrochloride	5.00	25332-39-2	$C_{19}H_{23}CI_2N_5O$
	Total	92.87		

The project/activities are covered under Category 'B2' of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 (amendment on 27.03.2020). Due to applicability of general condition (due to presence of GIB sanctuary within 5 Km from Project Site), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The Proposed Project Site in MIDC Chincholi is located 0.735 Km from the boundary of GIB Sanctuary. Further, ESZ for GIB is finalized vide notification No. 596 dated 11/02/2020. Project Site is located at 0.566 Km away from the Notified ESZ. Therefore, WL clearance is not required for the instant proposal.

Public hearing is exempted since the proposed project falls under category B2 and the project site is located in the Notified Industrial Area. It was informed that no litigation is pending against the proposal.

The proposed project will be done in a land area of 8000 sqm. Industry will develop greenbelt in an area of 2660 Sqm (i.e. 33.25% of the total project area). The estimated project cost is Rs.10 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.2.06 Crores and the Recurring cost (operation and maintenance) will be about Rs.0.46 Crores per annum. Total Employment under proposed expansion project would be 37 persons. Industry proposes to allocate Rs.20.50 Lakh towards Corporate Environment Responsibility.

The GIB Sanctuary is located about 0.735 Km. from Plot No. C-222 of project site in MIDC. ESZ for GIB is finalized vide notification No. 596 dated 11/02/2020. Same is also located at 0.566 Km from project site. Therefore, ESZ clearance is not required for the instant proposal. River Sina is at a distance of 7.3 Km on South West from the project site.

Total water requirement for the project will be 87 CMD. Out of which, 64 CMD will fresh water from MIDC Water supply scheme at Ujani Dam on Bhima river while 20CMD will be ETP treated effluent and 3CMD will be STP treated effluent to be recycled. Effluent of quantity 21.5 m³/Day

will be treated through ETPs provided separately for strong and weak streams thereby achieving Zero Discharge.

Power requirement for the project will be 250 KW which will be met from MSEDCL. 1 DG set of 340 kVA capacity will be installed as standby during power failure. Stack of height 8m above ground level is provided as per CPCB norms to the DG sets. Industry will install 2 TPH boiler. MDC followed by Bag Filter with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boiler.

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

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

Details of Solid waste generated & its management

No	Description	Quantity (MT/M)	Disposal
1	Boiler Ash	58	Sale to Brick manufacture
2	Plastic, Glass, Ferrous,	3	Sale to Recyclers Authorised by MPCB /
	Wooden, Metal Scrap		Recycle
3	Packing Material	0.5	
4	Battery Waste	2 Nos.	Return to Authorised Recycler
5	E-Waste	0.01	After decontamination it will be Sale to
			MPCB Authorised Recyclers.

Details of Hazardous waste generated & its management

No	Description	Cat	Quantity (MT/M)	Disposal Facility
1	Process Residue	28.1	20	CHWTSDF
2	ETP Sludge	35.3	15	CHWTSDF
3	Used Lubricating Oils	5.1	0.2	CHWTSDF/Sale To Authorised
				Recyclers
4	Spent Carbon/ Charcoal	28.3	2	CHWTSDF
5	Cotton Waste	33.2	0.5	CHWTSDF
6	Discarded containers / barrels /	33.1	300 Nos.	Sale to authorized recycler / re-
	liners			processor
7	Filter Medium	36.2	15 Nos.	Sale to authorized recycler / re-
				processor
8	Date-expired products	28.5	2	CHWTSDF
9	Spent Solvent	28.6	2	CHWTSDF

Deliberations in the EAC:

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

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

The Committee noted that the PFR/EMP report reflects the present environmental concerns and the projected scenario for all the environmental components. The committee deliberated the action plan and budget allocation for green belt development, mitigation measure towards Air, Water, Noise and Soil pollution. The Committee has also deliberated the activities/action plan and it's mitigation plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following safety norms and best practices.

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

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

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

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the

- recommendations made in the 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). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iv). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (v). The 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 64 CMD which 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.
- (x). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiv). The activities and the action plan proposed by the project proponent to address the socioeconomic 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. 4.10

Expansion of Dyes Intermediates Plot No.-J 2327, Phase III, Notified Industrial Area, GIDC Vapi, Ta-Pardi, Valsad, Gujarat by M/s Colorband Dyestuff Pvt. Ltd. - Reconsideration of Environment Clearance

[IA/GJ/IND2/150213/2019, IA-J-11011/246/2019-IA-II(I)]

The proposal was earlier placed before the EAC (Industry-2) in its meeting held on 15-17 September, 2020. Based on the request of the project proponent, the proposal was not considered as the certified compliance report of existing project was not available. Subsequent to submission of the requisite information, the proposal placed before the Committee now.

The Project Proponent and the accredited Consultant M/s Eco Chem Sales & Services (ECSS) made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion of Dyes Intermediates manufacturing unit from 4.1 TPM to 25 TPM at Plot No. J 2317, Phase III, Notified Industrial Area, GIDC Vapi, Taluka Pardi, District Valsad, Gujarat by M/s Colorband Dyestuff Pvt Ltd.

The details of products and capacity as under:

S.	CAS Capacity (TPM)				End use	
No.	Product	Number	Existing	Proposed	Total	of product
1.	EBA Oil (Benzoyl Aceto Acetate)	5396-89-4	1.0	-1.0	0	
2.	(N-N Di Ethyl) Meta Amino Methane Sulpfonylide	52603-47-1	1.1	-1.1	0	
3.	N-N Di Cyano Ethyl Aniline	1555-66-4	1.0	-1.0	0	
4.	N-N Di Hexyl Meta Toludine	121-72-2	1.0	-1.0	0	
	GROUP: A					
A1	N-[(3- DIETHYLAMINO)PHENY L]METHANESULPFONA MIDE (M-34B) Or	52603-47-1				
A2	3-ACETYLAMINO-N,N- DIETHYL ANILENE (M- 12) Or	6375-46-8				Used as intermedi
A3	N-CYANOETHYL,N- BENZYL ANILENE (M- 38) Or	26322-20-3	0	10.0	10.0	ates in dyes as
A4	METAAMINO PHENYL BENZENE SULPHONATE (Y-114 AMINE) Or	NA				requirem ent
A5	N,N-DIETHYL META TOLUIDINE (DEMT)	91-67-8				
	Total Group A		0	10.0	10.0	
	GROUP: B					
B1	N.N-BIS(2- CYANOETHYL)BENZEN AMINE (M-22) Or	1555-66-4				
B2	3-N,N-(DIALLYL)4- METHOXY ACETANILIDE (M-29) Or	51868-45-2	0	10.0	10.0	
В3	1-ETHYL-3-CYANO-4- METHYL-6-HYDROXY-2- PYRIDINONE (EP) Or	28141-13-1				

	Total + (Group A + B + C)		4.1	20.9	25.0	
	Total Group C		0	5.0	5.0	
C3	PROPIONYL CHLORIDE (DBPC)	18791-02-1				
C2	2:6-DIBROMO -4- METHYL ANILINE (DBPT) Or 2:4-DI BROMO	6968-24-7	0	0.0	3.0	
C1	4'-P- AMINO2'SULPHONIC ANILINE(1- AMINO-2- ANTHRAQUINONE SULPHONIC ACID (BA- 04SH) Or	NA	0	5.0	5.0	
	GROUP: C			10.0		
B5	N,N-BIS(3-METHOXY-3- OXYPROPYL)BENZENA MINE (M-19) Total Group B	53733-94-1	0	10.0	10.0	
B4	3 (N,N BIS METHOXY CARBONYLMETHYL)AM INO-4-METHOXY ACETANILIDE (M-39) Or	NA				

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

The ToR has been issued by Ministry vide letter dated 13th September 2019. Public hearing is exempted, as the project site is located in the Industrial area. It was informed that there is no litigation pending against the proposal.

Existing land area is 583 m², and no additional land is required for proposed expansion. Industry will develop greenbelt in an area of 233 m² (Existing 160 m² + Proposed 73 m²) covering 40% of total project area. The estimated project cost is Rs. 584.13 Lakhs including existing investment of Rs 134.13 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 20 Lakhs and the recurring cost (operation and maintenance) will be about Rs 16.35 Lakhs per annum. Total Employment will be 20 numbers persons including existing 10 numbers. Industry proposes to allocate total Rs 9 Lakhs towards Corporate Environment Responsibility.

There are no National parks, Wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, wildlife corridors etc. within 10 km distance from the project site. River Daman Ganga is flowing at a distance of 5 km in South West direction.

Ambient air quality monitoring was carried out at 8 locations during 1st October 2019 to 31st December 2019 and the baseline data indicates the ranges of concentrations as: PM₁₀ (60.3 – 87.1 μ g/m³), PM_{2.5} (31.2 – 47.7 μ g/m³), SO₂ (8.6 – 16.5 μ g/m³) and NOx (13.2 – 21.6 μ g/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.17 μ g/m³, 0.068 μ g/m³ and 0.009 μ g/m³ with respect to NOx, SO₂ and HCl. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 11.88 KLD (Existing: 6.81 KLD + Proposed 5.07 KLD) will be met from GIDC water supply department. Presently, unit is generating total 4.31 KLD industrial effluent. Out of which 0.8 KLD of concentrated effluent is segregated and sent to CMEE of M/S VGEL, Vapi and balance 3.51 KLD of normal effluent is treated in primary followed by tertiary ETP and discharge into underground effluent drainage line to CETP Vapi. After proposed expansion, total industrial effluent generation will be 5.94 KLD. Out of which 2.44 KLD of concentrated effluent is segregated and sent to CMEE of BEIL, Dahej / VGEL, Vapi and balance 3.5 KLD of normal effluent is treated in primary followed by tertiary ETP and discharge into underground effluent drainage line to CETP Vapi. Domestic wastewater of 1.0 KLD will be disposed off through septic tank/soap pit system

Total power requirement after expansion will be 400 kVA including existing 63 kVA and will be met from Dakshin Gujarat Veej Co. Ltd. One D.G. set of 75 kVA will be used as standby during power failure. Stack (height 11 m) will be provided as per CPCB norms to the proposed D.G. sets. Existing one number of 600 kg/hr Natural gas fired steam boiler and stack of height of 11 m is provided for controlling the particulate emissions within the statutory limit of 115 mg/Nm³.

Presently, there is no generation of any process gas emission. After proposed expansion, there will be generation of SO₂, HBr, Br₂ and HCl gases from the process of Group C products only. To scrub SO₂, HCl, HBr, Br₂ gases two stage water followed alkali scrubber will be provided. Also 11 meters height of vent will be provided.

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

S.	Type Category		Quantity, TPA			Mode of disposal
No.	i ype	Category	Existing	Proposed	Total	Widde of disposal
1	Waste from ETP	Sch: I/35.3	1.0	1.0	2.0	Collection, storage, transportation and disposal into TSDF of BEIL, Dahej or TSDF, Vapi

2	Discarded containers	Sch: I/33.1	1.0	1.0	2.0	Collection, storage, transportation by Return to raw material supplier or selling to authorized recycler
3	Used oil	Sch: I/5.1	0.0	0.01	0.01	Collection, storage, transportation by Selling to authorized recycler
4	HCl (30%) from scrubber	Sch: II/B15	0.0	31.3	31.3	Collection, storage, and in-house Recycle in process of DBPT
5	Bleed liquor from scrubber mainly mixture of sodium sulphate, bisulphite and sodium bromide	Sch: II/C3	0.0	40.89	40.89	Collection, storage, transportation and disposal into CMEE of M/s BEIL, Dahej.
6	Spent solvent (toluene)	Sch: I/26.4	0.0	26.44	26.44	Recovered by distillation and recycle in process of M-39

Deliberations in the EAC:

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

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

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the

environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee deliberated the action plan on mitigation measures to minimize the emissions considering the site in CPA. The Committee has suggested the PP to initiate greenbelt development for abatement of pollution. The project proponent has submitted an undertaking stating that greenbelt development shall be initiated within 3 months. The Committee has also deliberated on the activities/action plan and found to be addressing the socio-economic issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee has found the additional information submitted by the project proponent to be satisfactory and compliance status of the existing CTO conditions found to be satisfactory.

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

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

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

- (i). The SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24th October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25th October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.
- (ii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii). Treated effluent of 5.94 cum/day shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, for discharge into CMEE of M/s BEIL/Ms VGEL and CETP for further treatment and disposal. Efforts shall be made to reuse treated

- effluent in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (v). The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.
- (vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (ix). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (x). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xi). Total fresh water requirement shall not exceed 11.88 cum/day proposed to be met from GIDC water supply. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.
- (xii). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within

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

- (xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv). The green belt of at least 5-10 m width shall be developed in nearly 40% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. PP shall start plantation immediately, as committed.
- (xv). The activities and the action plan proposed by the project proponent to address the socioeconomic 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.
- (xvi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

Modification/Amendment/Validity in Environment Clearance

Agenda No. 4.11

Nicotine/Derivative Manufacturing Plant-Extension of validity of EC of Proposal of M/s NTA PHARMA PVT. LTD. Village-akhiyal, Tehsil: Thasra, District: Kheda Gujarat

[IA/GJ/IND2/149273/2020, J-11011/84/2011-IA II (I)]

The proposal is for extension of the validity of the EC dated 22nd March, 2013 issued to the project for Nicotine/Derivative manufacturing unit (35 MTPA) located at Sy. No 304, Village Rakhiyal, Taluka Thasra, District Kheda, Gujarat in favour of M/s. NTA Pharma Pvt. Ltd.

The project proponent has requested for validity extension in the Environmental Clearance with the details are as under:

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/reasons		
1	EC received dated 22 nd March, 2013	 Validity period as per EC 5 years. As per Gazettee Notification by 	Extension for 3 years	S. No.	EC Extension Process till date	Date
		MoEF&CC Delhi dated 29th April 2015, validity of Environment Clearance shall be 7 years from the date of issue instead of 5 years. Hence, EC is valid till 21st March 2020		1	EC Received	22 nd March 2013
				2	Validity of EC for 7 years	21 st March 2020
				3	Application for EC Validity Extension	16 th March 2020
				4	EDS Raised by MoEF&CC	22 nd March 2020
				5	EDS reply	01 st January 2021
				6	Acceptance of Application by MoEF&CC, Delhi	5 th January 2021
				7	EC Extension Presentation at MoEF&CC, Delhi	15 th January 2021

Deliberations in the EAC

The EAC has made a detailed deliberation on the proposal. The project proponent has informed the Committee that the project could not be executed due to low demand of the products in the export market. It was informed that the project will be now completed within two years. The

Member secretary informed the Committee that the Ministry has issued notifications to extent the validity of the environmental clearance affected due to covid/lock down.

The Committee after detailed deliberation has **recommended** for extension of validity of the EC dated 22nd March, 2013 till 21st March, 2023 for completion of the work as per scope of the project. All other terms and conditions remain unchanged.

Other Agenda items

Agenda item No. 4.12:

Finalization of Guidelines regarding the rating of Consultants by EAC members on the basis of the EIA/EMP report, forms filled on PARIVESH portal and presentation before the EAC Committee-Regarding

The guidelines regarding rating of Consultants by EAC members based on the EIA/EMP report, forms filled on PARIVESH portal and presentation before the EAC Committee, has been circulated to the Committee members for comments and deliberations.

The Committee has deliberated on the guidelines. The Committee after deliberations suggested that the EAC members may examine the guidelines for betterment and for including points which could be monitored. The Committee has accordingly desired that the matter may be considered in the next EAC meeting after obtaining comments from the members.

Agenda item No. 4.13:

Standardization/Optimization of conditions w.r.t. Standard Terms of Reference (TOR)

The Committee has taken up the issue related to Standardization/Optimization of conditions w.r.t. Standard Terms of Reference. Following items and project/activities as per the EIA Notification, 2006 related to Industry-3 sector has been considered.

Category	Sector					
4(d)	Chlor-alkali industry					
4(e)	Soda ash Industry					
5(a)	Chemical fertilizers					
5(b)	Pesticides industry a	and	pesticide	specific	intermediates	(excluding
	formulations)					

5(f)	Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and		
	intermediates excluding drug formulations; synthetic rubbers; basic organic		
	chemicals, other synthetic organic chemicals and chemical intermediates)		
5(h)	Integrated paint industry		

[1] 4(d): TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENTAL IMPACT ASSESSMENT STUDY FOR CHLOR ALKALI PROJECTS AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

A. STANDARD TERMS OF REFERENCE

- 1) Executive Summary
- 2) Introduction
 - i. Details of the EIA Consultant including NABET accreditation
 - ii. Information about the project proponent
 - iii. Importance and benefits of the project

3) Project Description

- Cost of project and time of completion.
- ii. Products with capacities for the proposed project.
- iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
- iv. List of raw materials required and their source along with mode of transportation.
- v. Other chemicals and materials required with quantities and storage capacities
- vi. Details of Emission, effluents, hazardous waste generation and their management.
- vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- viii. Process description along with major equipments and machineries, process flow sheet (quantitative) from raw material to products to be provided
- ix. Hazard identification and details of proposed safety systems.
- x. Expansion/modernization proposals:
 - a. Copy of <u>all</u> the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in <u>all</u> the existing environmental clearances including Amendments shall be provided. In addition, copy of the latest CTO and status of compliance of Consent to Operate for the ongoing/existing operation of the project from SPCB shall be attached with the EIA-EMP report.
 - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection

Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Details w.r.t. option analysis for selection of site
- iv. Co-ordinates (lat-long) of all four corners of the site.
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Landuse break-up of total land of the project site (identified and acquired), government/private agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land. Documents related to conversion of land for Industrial purpose.
- xiii. R&R details in respect of land in line with state Government policy

5) Forest, wildlife and CRZ related issues (if applicable):

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- ii. Landuse map based on High resolution satellite imagery of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)

- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Wardenthereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife
- vii. Recommendations and NOC from the concerned State/UT Coastal Zone Management Authority on CRZ angle

6) Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

7) Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8) Occupational health

- Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
- iv. Annual report of heath status of workers with special reference to Occupational Health and Safety.

9) Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report
 - 10) Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.11) Corporate Environmental Responsibility (CER)
 - i. Adequate funds, as per the Ministry's OM/Guidelines, shall be earmarked towards the Corporate Environmental Responsibility based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon. For the projects where public hearing is not conducted, CER plan shall be provided based on socio-economic study of the area.
- 12) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and

Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13) A tabular chart with index for point wise compliance of above TORs.

B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR CHLOR ALKALI INDUSTRIES

- 1. Details on demand of the product chlorine and its associated products.
- 2. Details on raw materials used in the production of chlorine (sodium chloride, potassium chloride, *etc.*), its storage and handling.
- 3. Details of proposed source-specific pollution control schemes (salt washing, filtration, cell ventilation as, chlorine handling and safety, *etc.*) and equipments to meet the national standards.
- 4. Detailed effluent treatment scheme including segregation for units adopting 'Zero' liquid discharge.
- 5. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
- 6. Details on products to rage and handling-chlorine, caustic soda, etc.
- 7. Details on tail gas treatment.
- 8. Details on requirement of energy and water alongwith its source and authorization from the concerned department.
- 9. Incase of modernization of existing mercury based chlor-alkali plants with membrane cell Process(MBCP) industries or new unit in the existing industry premises, remediation measures adopted to restore the environmental quality of the ground water, soil, crop, air, etc., are affected due to salinity and a detailed compliance to the prior environmental clearance/ consent conditions.
- 10. Details on ground water quality and surface water quality of near by water sources and other surface drains. The parameters of water quality may include Residual chlorine*, TDS*, alkalinity*, pH* &Mercury* (in water & sediment), etc. (*- As applicable)
- 11. Details on existing ambient air quality and expected, emissions for PM10, PM2.5, SO2*, NOx*, CO2*, CO*, Chlorine*, acid mist* etc., and evaluation of the adequacy of the proposed pollution control devices to meet standards for point sources and to meet AAQ standards. (*-As applicable))
- 12. Specific programme to monitor safety and health protection of workers.
- 13. Risk assessment using advanced/latest models should also include leakages and location near to caustic soda plant & proposed measures for risk reduction

14. Details of the emergency preparedness plan for chlorine/ Hydrogen storage, handling and transportation and on- site and off- site disaster management plan.

[II] 4(e): TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR <u>SODA ASH PROJECTS</u> AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

A. STANDERD TERMS OF REFERENCE

<Same>

B. SPECIFIC TERMS OF REFERENCEFOREIASTUDIES OF SODA ASH

- 1. Complete process flowdiag ram describing each unit, its processes and operations, alongwith material and energy inputs and outputs (material and energy balance).
- 2. Details on requirement of raw materials (sea water, lime-stone, coke, ammonia, additives, etc.), its source and storage at the plant.
- 3. Details of handling ammonia and risk assessment.
- 4. Details on water balance including water use, quantity of effluent generated, recycled and reused and its impact of discharge to receiving water body.
- 5. Detail so effluent treatment plant, inlet and treated water quality with specific efficiency of each treatment unit in reduction in respect of all concerned/ regulated environmental parameters.
- 6. Details of CO2 emissions including its quantum per tonne of soda ash.
- 7. Management plan for solid waste generation (fines of lime stone, grits, brine sludge etc.), storage, utilization and disposal modes.
- 8. In case of coast at plants details on extraction of seawater and effluent disposal, development of solar salt works based on sea water evaporation, etc,.
- 9. Details on ground water quality and surface water quality of near by waters ounces and other surface drains. The parameters of water quality may include CI-*,Ca2+*, Na+*, SO42-*, NH4+, Suspended solids* etc. (*- As applicable)
- 10. Ambient air quality should include NH3.

11.

[III] 5(a): TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR <u>CHEMICAL FERTILIZERS</u> AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

A. STANDERD TERMS OF REFERENCE

< Same>

B. SPECIFIC TERMS OF REFERENCEFOREIASTUDIES FOR CHEMICAL FERTILIZER

- 1. Details on requirement of energy and water alongwith its source and authorization from the concerned department.
- 2. Energy conservation in ammonia synthesis for urea production and comparison with best technology.
- 3. Details of ammonia storage and risk assessment thereof.
- 4. Measures for control of urea dust emissions from prilling tower.
- 5. Measures for reduction of fresh water requirement.
- 6. Details of proposed source-specific pollution control schemes and equipments to meet the national standards for fertilizer.
- 7. Details of fluorine recovery system in case of phosphoric acid plants and SSP to recover fluorine as hydrofluorosilicicacid (H₂SiF₆) and its uses.
- 8. Management plan for solid/hazardous waste including storage, utilization and disposal of bye products viz., chalk, spent catalyst, hydro fluoro silicic acid and phosphor gypsum, sulphur muck, *etc*.
- 9. Details on existing ambient air quality for PM10, PM2.5, Urea dust*, NH3*, SO2*, NOx*,HF*,F*,Hydrocarbon (Methane and Non-Methane) etc., and expected, stack and fugitive emissions and evaluation of the adequacy of the proposed pollution control devices to meet standards for point sources and to meet AAQ standards.(*as applicable)
- 10. Details on water quality parameters in and around study area such as pH, Total Kjeldhal Nitrogen, Free Ammonical Nitrogen, free ammonia, Cyanide, Vanadium, Arsenic, Suspended Solids, Oil and Grease, *Cr as Cr⁺⁶, *Total Chromium, Fluoride, *etc*.

[IV] 5(b): TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR <u>PESTICIDES INDUSTRY AND PESTICIDE SPECIFIC INTERMEDIATES</u> (EXCLUDING FORMULATIONS)AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

Minutes of the 4th EAC meeting (Industry 3 sector) held during January 14-15, 2021

A. STANDERD TERMS OF REFERENCE

<Same>

B. SPECIFIC TERMS OF REFERENCEFOREIASTUDIES FOR PESTICIDES INDUSTRY AND PESTICIDE SPECIFIC INTERMEDIATES (EXCLUDING FORMULATIONS)

- 1. Commitment that no banned pesticides will be manufactured.
- 2. Details on solvents to be used, measures for solvent recovery and for emissions control.
- 3. Details of process emissions from the proposed unit and its arrangement to control.
- 4. Ambient air quality data should include VOC, other process-specific pollutants* like NH3*,chlorine*, HCl*, HBr*, H2S*,HF*, CS2etc.,(*-as applicable)
- 5. Work zone monitoring arrangements for hazardous chemicals.
- 6. Detailed effluent treatment scheme including segregation for units adopting 'Zero' liquid discharge.
- 7. Action plan for odour control to be submitted.
- 8. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
- 9. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
- 10. Material Safety Data Sheet for all the Chemicals are being used/will be used.
- 11. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
- 12. Details of incinerator if to be installed.
- 13. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
- 14. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

[V] 5(F): TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR SYNTHETIC ORGANIC CHEMICALS INDUSTRY (DYES & DYE INTERMEDIATES; BULK DRUGS AND INTERMEDIATES EXCLUDING DRUG FORMULATIONS; SYNTHETIC RUBBERS; BASIC ORGANIC CHEMICALS, OTHER SYNTHETIC ORGANIC CHEMICALS AND CHEMICAL INTERMEDIATES) AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

A. STANDARD TERMS OF REFERENCE

<Same>

- B. SPECIFIC TERMS OF REFERENCEFOREIASTUDIES FOR SYNTHETIC ORGANIC CHEMICALS INDUSTRY (DYES & DYE INTERMEDIATES; BULK DRUGS AND INTERMEDIATES EXCLUDING DRUG FORMULATIONS; SYNTHETIC RUBBERS; BASIC ORGANIC CHEMICALS, OTHER SYNTHETIC ORGANIC CHEMICALS AND CHEMICAL INTERMEDIATES)
 - 1. Details on solvents to be used, measures for solvent recovery and for emissions control.
 - 2. Details of process emissions from the proposed unit and its arrangement to control.
 - 3. Ambient air quality data should include VOC, other process-specific pollutants* like NH3*,chlorine*,HCI*,HBr*,H2S*,HF*,etc.,(*-as applicable)
 - 4. Work zone monitoring arrangements for hazardous chemicals.
 - 5. Detailed effluent treatment scheme including segregation of effluent streams for units adopting 'Zero' liquid discharge.
 - 6. Action plan for odour control to be submitted.
 - 7. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
 - 8. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
 - 9. Action plan for utilization of MEE/dryers salts.
 - 10. Material Safety Data Sheet for all the Chemicals are being used/will be used.
 - 11. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
 - 12. Details of incinerator if to be installed.
 - 13. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
 - 14. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

[VI] 5(h): TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR INTEGRATED PAINT INDUSTRY AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

A. STANDARD TERMS OF REFERENCE

B. SPECIFIC TERMS OF REFERENCEFOREIASTUDIES FOR INTEGRATED PAINT INDUSTRY

- 1. Details on requirement of raw materials (binders, solvents, pigments, additives, resin, driers *etc.*), their source and storage at the plant.
- 2. Whether any of the material content lead if so details thereof.
- 3. Details on solvent management including loss accounting.
- 4. Details on composition, generation and utilization of waste from the plant–left out raw materials, paint sludge, filter cartridges, off-specification paint, *etc*
- 5. Existing ambient air quality for expected emissions (VOCs, pigment dust, *etc.*) from paint industry

Deliberations in the EAC

The proposal for rationalization of the Standard ToR conditions has been deliberated in the Committee. The Committee observed that, as per the recent directions from the regulatory authority, violation proposals also need to be considered by the sectoral EAC and ToR conditions in this regard shall also be included in the Standard ToR.

The Committee was of the considered view that the members shall examine each and every ToR points and proposal can be considered by the Committee in the upcoming meeting.

Agenda item no. 4.14 : Any other Items with permission of the Chair

Agenda No. 4.14.1

Expansion of Water based latex polymer manufacturing unit located at Plot No. 1-7, SIPCOT Industrial Parka (Phase-II), Ponthur A B C village, Sriperumbudur Taluk, Kancheepuram District, Tamil Nadu by M/s Dow Chemical International Private Limited - Clarification of the applicability of the EIA Notification, 1994/2006.

The Member Secretary informed the Committee that M/s Dow Chemical International Private Limited has requested for issuing clarification on the applicability of the EIA Notification, 1994/200 for Expansion of Water based latex polymer manufacturing unit located at Plot No. 1-7, SIPCOT Industrial Parka (Phase-II), Ponthur A B C village, Sriperumbudur Taluk, Kancheepuram District, Tamil Nadu by M/s Dow Chemical International Private Limited.

Based on the representation submitted earlier by the PP, the matter has been considered by the Expert Committee (Policy) for streamlining the environmental clearance procedures including examination of various technical issues under the EIA Notification in its meeting held on 5th March, 2019. Based on the recommendations of the Expert Committee, the Ministry vide letter dated 25th March, 2019 has clarified that the water based latex is natural polymer and does not attract the provision of the EIA Notification, 1994 or 2006. The project proponent has informed the Ministry that water based polymer is not a natural polymer but a synthetic polymer and falls under category 5 (f) of the EIA Notification, 2006.

The Member Secretary also informed the Committee that the project proponent vide letter dated 10th September, 2020 has again requested the Ministry that the SEIAA Tamil Nadu requires additional clarifications of the applicability of the EIA Notification, 1994 at the time of establishment of the manufacturing unit. As the tenure of the Expert Committee on streamlining the environmental clearance procedures has been completed, it was desired to place the representation for consideration before EAC (Industry-3) and accordingly the proposal has been placed before the Committee.

The project proponent made a detailed presentation on the proposal. The PP has informed that they intended for Expansion of Water based latex polymer manufacturing under category 5 (f) and submitted the application with the SEIAA/SEAC Tamil Nadu. While considering the EC application, the SEIAA Tamil Nadu desires to have clarifications on the applicability of the EIA Notification, 1994 at the time of establishment of the manufacturing unit.

As per the EIA Notification, 1994, "Integrated paint complex including manufacture of resins and basic raw materials required in the manufacture of Paints" requires prior environmental clearance for its operations. It was applicable for Paint manufacturing complex which used solvents, thinners and host of other chemicals. Most of the Integrated paint complexes uses alkyd resins, varnishes and lacquers which are volatile and hazardous. The Integrated paint

complexes involve lot of activities and handling of volatile organics and it was listed as separate category.

The proponent is not involved in Paint manufacture and is making water-based polymer emulsions only and therefore do not fall under Integrated paint manufacturing.

Deliberations in the EAC

The Committee noted that the Ministry vide letter dated 25th March, 2019 has clarified that the water based latex does not attract the provision of the EIA Notification, 1994 or 2006, considering it as a natural polymer. However, considering the submission of the project proponent and on detailed deliberations on the process and analysis, it is observed that water based polymer is a synthetic polymer and falls under category 5 (f) 'Synthetic Organic chemical industry' requiring prior environmental clearance as per the provisions contained in the EIA Notification, 2006. It is also noted that the project proponent has not expanded the unit without prior EC and has submitted application for expansion of the unit, which is under consideration in the SEIAA/SEAC.

The Committee noted that as per the EIA Notification, 1994, the projects related to "Integrated paint complex including manufacture of resins and basic raw materials required in the manufacture of Paints" requires prior environmental clearance for its operations. It was observed that the requirement of prior EC was applicable to the paint industry. The product water based latex polymer is only a minor component of the paint industry as an additives and such it cannot be considered under integrated paint complex.

The proponent has also submitted an undertaking and also informed that they are not involved in Paint manufacturing and is making water-based polymer emulsions only and therefore do not fall under Integrated paint manufacturing.

The Committee, after detailed deliberations, and considering the clarifications issued by the Ministry vide letter dated 25th March, 2019, and considering that water based latex polymer is one of the additives only along with other component in the Paint industry, was of the view that the Water based latex polymer manufacturing project does not require prior environmental clearance at the time of establishment of the unit, as per the EIA Notification, 1994. However, considering the project under category 5 (f) 'Synthetic Organic chemical industry' of the schedule to the EIA Notification, 2006, the project proponent shall obtain prior EC for expansion/modernization of the project from the concerned regulatory authority.

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.

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

S.	Name of Members	Designation
No.		
1.	Dr. Rajashekar P. Mandi	Chairman
	Director, School of Electrical &	
	Electronics Engineering, REVA University, Bangalore - 64	
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Annexure-II

Approval of EAC Chairman


