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

Dated: 18.11.2021

MINUTES OF THE 19th EXPERT APPRAISAL COMMITTEE (INDUSTRY-3 SECTOR) MEETING HELD ON NOVEMBER 11-12, 2021

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

Time: 10:30 AM onwards

DAY 1: 11th NOVEMBER, 2021 (THURSDAY)

(i) Opening Remarks by the Chairman, EAC

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

Prof. Pandit also appreciated the efforts of the Ministry's Team (Industry 3 Sector) for preparation and uploading the agenda of the EAC meetings and draft record of discussion very scientifically, systematically and timely on Parivesh Portal.

(ii) Details of Proposals and Agenda by the Member Secretary

Dr. R. B. Lal, Scientist 'E' & Member Secretary, EAC appraised to the Committee about the details of Agenda items to be discussed during this EAC meeting.

(iii) Deliberation of API products

The Ministry has granted many environmental clearances to the Active Pharmaceutical ingredients (API) projects under the category 'B2'-API projects after the recommendations of the EAC. During the deliberation, the EAC want to know the compliance status of the ECs issued under category 'B2'-API projects and suggested that the consultant [M/s. AM Enviro Engineers and M/s. Right Source Industrial Solutions Pvt. Ltd.] may be called for making the detailed presentations on the status of the implementation of the projects and its compliances status to ensure the conditions stipulated in the EC is being complied or not. In this regard, the both the Consultant may be called for presentation in the next EAC meeting. The Member Secretary may communicate to the Consultants for making the detailed presentation before the EAC.

(iv) Confirmation of the Minutes of the 19th Meeting of the EAC (Industry-3 Sector) held during October 25-26, 2021 at MoEFCC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (Industry-3 Sector) members on the minutes of its **19**th **Meeting of the EAC (Industry-3 Sector) held during October 25-26, 2021** conducted through Video Conferencing (VC), and as such one request has been received for modifications, in the minutes of the project/activities, **confirmed the same with following corrections.**

<u>Correction in the minutes of the EAC meeting w.r.t.</u> Expansion of organic pigments manufacturing unit from capacity 4560 TPA to 7640 TPA, located at SI. Nos. 1,2,4,5,6,7 & 10, at Ladivali, Post Gulsunde, Taluka Panvel, District Raigad Maharashtra by M/s Lona Industries Limited -Consideration of Environmental Clearance.

[Proposal No. IA/MH/IND3/232150/2018; File No. J-11011/84/2018-IA-II (I)]

The instant EC proposal was recommended by the EAC in its 19th meeting held during 25-26 October, 2021. The Minutes were uploaded on Parivesh Portal on 01.11.2021.

Further, PP vide email dated 03.11.2021 submitted that in MoM at Page No. 59 of 113, Para 4 following description has appeared:

"The Committee suggested use of coal having ash content less than 15% only during the rainy season when the Biomass Briquettes may not be available".

PP requested to amend the condition, as,

"The Committee suggested use of coal having low sulphur and ash content. Further, 15% Biomass Briquettes replacing coal to be used as fuel".

It was also informed by PP that during deliberation in meeting w.r.t. usage of coal as fuel, Committee members suggested exploring the possibility for replacing coal with briquette. Here, Industry representative informed about non-availability of briquette on continuous bases in a command area of 200 Km as there are no briquette manufacturing units and there are no sugar factories for supply for bagasse. On this Committee had directed to at least explore usage of briquette in total coal quantity as fuel. This was accepted and commitment was given vide letter dated 26.10.2021 towards usage of 10% briquette replacing coal. But in minutes, the above condition is presented. In the present meeting it is requested the Committee to permit use of coal having low sulphur and ash content and 15% Biomass Briquettes replacing coal to be used as fuel.

After detailed deliberations, the Committee noted that non-availability of briquette may cause the problem in day to day operation of the unit. The Committee, after detailed deliberation accepted the request of PP and amended the condition, as, *"The Committee suggested use of coal having low sulphur and ash content. Further, 15% Biomass Briquettes replacing coal to be used as fuel".*

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 Proposals

<u>Agenda No. 20.1</u>

Expansion of existing unit for manufacturing of API product of capacity from 3.75 MTPM to 47.25 MTPM located at Plot No. B-28, MIDC Paithan, located at Village Mudhalwadi, Taluka Paithan, Aurangabad, Maharashtra by M/s Apex Medichem Pvt. Ltd Consideration of Environmental Clearance

[Proposal No. IA/MH/IND2/222259/2021; File No. IA-J-11011/212/2021-IA-II(I)

The project proponent and their accredited Consultant M/s. Amplenviron 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 existing unit for manufacturing of API product of capacity from 3.75 MTPM to 47.25 MTPM, located at Plot No. B-28, MIDC Paithan, Village Mudhalwadi, Taluka Paithan, Aurangabad, Maharashtra by M/s Apex Medichem Pvt. Ltd.

S. No.	Product Name	Qua	antity (MT/N	lonth)	CAS No.	UOM	Application [Therapeutic activity]
		Existing	Proposed addition	Total after Expansi on		MT	-
1.	Sildenafyl Citrate	1	00	1	-	MT	-
2.	N Amyl meta cresol	0.5	00	0.5	-	MT	-
3.	Fexofenadine	0.75	00	0.75	-	MT	-
4.	Methyl chloropepridine	1.5	00	1.5	-	MT	-
5.	Arte mether	00	15	15	71963- 77-4	MT	non-severe malaria

The details of products and capacity are as under:

6.	Arte ether	00	1	1	75887- 54-6	MT	severe falciparum malaria	
7.	Arte sunate	00	1	1	88495- 63-0	MT	severe malaria	
8.	Diacerein	00	3	3	13739- 02-1	MT	To treatment joint Pain	
9.	Pyrimethamine	00	3	3	58-14- 0	MT	To treat parasite infection	
10.	Methylcobala min	00	0.9	0.9	13422- 55-4	MT	nutritional diseases	
11.	Hydroxocobal amin Acetate	00	0.075	0.075	22465- 48-1	MT	dietary supplement	
12.	Hydroxocobal amin Chloride	00	0.075	0.075	59461- 30-2	MT	dietary supplement	
13.	Hydroxocobal amin Sulphate	00	0.075	0.075	13422- 51-0	MT	dietary supplement	
14.	Adenosylcobal amin	00	0.025	0.025	13870- 90-1	MT	nutritional supplement	
15.	Betamethason e Valerate	00	1	1	2152- 44-5	MT	swelling, itching, and redness	
16.	Beclomethaso ne Dipropionate	00	1	1	5534- 09-8	МТ	used to prevent difficulty breathing, chest tightness, wheezing, and coughing caused by asthma	
17.	Prednisolone Acetate	00	1	1	52-21- 1	MT	used to treat certain eye conditions due to inflammation or injury	
18.	Triamcinolone Acetonide	00	1	1	76-25- 5	МТ	used to treat the itching, redness, dryness, crusting, scaling, inflammation, and discomfort of various skin conditions	
19.	Methyl Prednisolone Acetate	00	1	1	53-36- 1	MT	used to treat pain and swelling that occurs with arthritis and other joint disorders	
20.	Deflazacort	00	1	1	14484- 47-0	MT	used to treat Duchenne muscular dystrophy (DMD)	

21.	Hydrocortison e Acetate MT	00	1	1	50-03- 3	MT	used to treat a variety of skin conditions (e.g.,
							eczema, dermatitis, allergies, rash).Hydrocortison
							e acetate reduces the swelling, itching, and redness)
22.	Clobetasol Propionate	00	1	1	25122- 46-7	MT	used on the skin to treat swelling, itching and irritation
23.	Dexamethaso ne Sodium Phosphate	00	1	1	2392- 39-4	MT	used to treat conditions such as arthritis, blood/ hormone disorders, allergic reactions, skin diseases, eye problems, breathing problems, bowel disorders, cancer
24.	Mometasone Furoate	00	1	1	83919- 23-7	MT	used to relieve the redness, swelling, itching and inflammation and discomfort of various skin conditions
25.	Fluticasone Propionate	00	0.1	0.1	80474- 14-2	MT	used to relieve seasonal and year round allergic and non-allergic nasal symptoms, such as stuffy/runny nose, itching, and sneezing
26.	Betamethason e Di propionate	00	1	1	5593- 20-4	MT	used to treat a variety of skin conditions (e.g., eczema, dermatitis, allergies, rash)
27.	Betamethason e Sodium Phosphate	00	1	1	151- 73-5	MT	used to treat a number of different conditions, such as inflammation (swelling),seve re allergies, adrenal

							problems, arthritis, lung or breathing problems, blood or bone marrow problems, eye or vision problems, lupus, serious skin conditions, kidney problems, ulcerative colitis, and flare-ups of multiple sclerosis
28.	Methylprednis olone	00	1	1	83-43- 2	MT	used to treat certain forms of arthritis; skin, blood, kidney, eye, thyroid, and intestinal disorders (e.g., colitis); severe allergies; and asthma
29.	Methylprednis olone Sodium Succinate	00	1	1	2375- 03-3	MT	used to treat conditions such as arthritis, blood disorders, severe allergic reactions, certain cancers, eye conditions, skin/kidney/intestina l/lung diseases, and immune system disorders
30.	Clotrimazole	00	1	1	23593- 75-1	MT	Used for treatment of antifungal diseases
31.	Lumefantrine	00	18	18	82186- 77-4	MT	to treat certain kinds of malaria infections
	Total	3.75	47.25	47.25		MT	

The project/activity is 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, 15.10.2020 & 16.07.2021). Due to applicability of general conditions (Jaikwadi Bird Sanctuary is at distance of 3.83 km), therefore, the project requires appraisal at central level by the Sectoral Expert Appraisal Committee (EAC) in the Ministry.

PP reported that existing unit is established in the year 2005 for the production of API products, as unit is established before EIA Notification, 2006, it doesn't require Environmental Clearance, now unit is going for expansion by addition of new API's products instead of all

existing products.

M/s Apex Medichem Pvt. Ltd. is having 4 nos. of existing products with capacity 3.75 MTPM. The existing consent no Bo/AST/RO-AD/UAN No. MPCB- CONSENT-00000029296/r/CC-1801000608 is granted for a period of 16.1.2018 to 31.7.2022 and valid for the manufacture of Sildenafyl citrate, N Amyl meta Cresol, Fexofenodine, Mehylchloropepridine.

The Certified Compliance Report of existing CTO was obtained from Maharashtra Pollution Control Board vide letter no. MPCB/SROA/349/2021, dated 30.3.2021. Most of the CTO conditions in certified compliance report is compiled. As informed by PP no litigation is pending against the proposal.

PP reported that the proposed project will be established in a land area of 1.0 Acres (4050 sqm). Industry will develop greenbelt in an area of 1336.50 Sq. m which is 33.0 % out of the total project area. The proposed project cost for expansion is about Rs. 251.00 Lakhs. Total capital cost earmarked towards environmental pollution control measures is 127.8 Lakhs and the recurring cost (operation and maintenance) will be about 18.5 lakhs per annum. Total Employment under proposed project will be of 30 persons. Industry proposes to allocate Rs. 2.51 Lakhs towards Corporate Environmental Responsibility.

PP reported that Jaikwadi Bird Centaury is at distance of 3.83 km in South- West direction. However, PP could not confirm whether the Unit is outside of ESZ or not.

Total water requirement is 111.50 KLD, out of which freshwater requirement is 26.5 KLD which will be met from MIDC. Generated effluent is 71 KLD. LCOD/LTDS effluent will be treated in conventional ETP comprises of Primary, Secondary and Tertiary treatment facility. Domestic effluent will be treated by providing septic tank and soak pit; the overflow from septic tank will be connected to the aeration tank of the ETP, where it will be treated along with LCOD/LTDS other effluent. HCOD/HTDS effluent will be treated in stripper MEE followed by ATFD after giving primary treatment to it. Treated effluent shall be reused in process for washing, cooling tower etc. Plant will be based on Zero Liquid Discharge system.

PP reported that Power requirement of project will be 250 kVA and will be met from MSEDCL. The unit is proposed to install 1 x 80 kVA DG Set, Stack height of 6 m will be provided as per CPCB norms. The unit has proposed to install 1 X 1 TPH Briquettes fired boiler with stack of height 30 m. Multi Cyclone separator will be installed for the boiler for controlling the particulate emissions (within statutory limit of 115 mg/ Nm³). The industry has also proposed for Thermic fluid heater of 2 Lakh kcal/Hr with chimney of height 30 m.

Details of Process emissions generation and its management.

S. No.	Name of the Gas	Quantity In Kg/Day	Treatment Method					
1.	HCL	231.502	Scrubbed with chilled water and Caustic Solution					

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

S.	Description	Schedule	UOM	Frequency	Quantity	Disposal Method

No.		No										
1	Solvent Distillation Residue	28.10	Kg	Day	1750	CHWTSDF						
2	ETP Sludge	34.20	kg	Day	75	CHWTSDF						
3	Evaporation Salts	34.20	kg	Day	1923	CHWTSDF						
5	Off Specification Products	28.40	kg	Month	100	CHWTSDF						
6	Spent Carbon/ Hyflow	28.3	kg	Day	152	CHWTSDF						
7	Spent MI	20.20	kg	day	373	CHWTSDF						
8	Spent Solvent	28.60	kg	Day	663	Sale to authorized Recycler.						
9	Spent Oil/ Process Residue/Waste	5.10/5.20	kg	Month	200	CHWTSDF						
10	Discarded containers and Drums Barrels	33.10	No	Month	100	Sale to authorized Recycler/ Preprocessor						
11	Chemical sludge, Oil and grease skimming residues.	35.40	kg	Month	100	CHWTSDF						
12	Microbiology dead Culture	NS	kg	Month	5	CHWTSDF						
	Other & Miscellaneous Solid Wastes (Non Hazardous)											
S. No.	Description	Schedule No	UOM	Frequency	y Total	Disposal Method						
1	Boiler Ash	NA	kg	Day	400	Sent to Brick Manufacturers						
2	Canteen Waste	NA	MT	Month	0.40	Authorised vendor						
3	Packaging Waste	NA	MT	Month	0.80	Authorized recyclers						
4	Office waste	NA	MT	Month	0.60	Authorized recyclers						
5	Septic Tank Sludge	NA	MT	Month	0.40	Used as manure						
6	Polythene bags	NA	MT	Month	0.50	Authorized recyclers						
7	Broken Glass	NA	MT	Month	0.03	Authorized recyclers						
8	Electronic Waste	NA	kg	Month	11	Authorized recyclers						
9	Corrugated Box	NA	kg	Month	110	Authorized recyclers						
10	Mild still [MS Scrap]	NA	kg	Month	260	Authorized recyclers						
11	Paper Waste	NA	kg	Month	20	Authorized recyclers						
12	SS Scrap.	NA	kg	Month	150	Authorized recyclers						

Kg Per Day									
SOLID WASTE									
Organic solid waste	Inorganic solid waste	Spent Carbon	Distillation Residue						
NIL	1923.31	152.607	1750 .06						

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

	Kg Per Day EFFLUENT WATER SOLID WASTE												
Water Input	Effluent Water	Inorganics In Effluent	Organics In Effluent	TDS		LTDS	Total Effluent	Organic Solid waste	Inorganic Solid waste	Spent Carbon	Distillation Residue	Process emissions	Fugitive loss
47079.63	71000.00	1923.914	2678.00	2765.67 2678.4	5 C	100.00	76628.39	NIL	1923.31	152.607	1750.06	231.50 (HCI)	

HAZARDOUS SOLID WASTE DETAILS

Kg Per Day									
SOLID WASTE									
Organic solid waste	Inorganic solid waste	Spent Carbon	Distillation Residue						
NIL	1923.31	152.607	1750 .06						

EMISSION DETAILS

Kg Per Day						
Process emissions	Fugitive emissions					
231.50 (HCI)						

Kg Per Day										
CO2	CO2H2NH3O2N2HBrHCI(CH3)2NHCH3CIHF									SO2
						231.50				

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Experts Members/domain experts in various fields, examined the proposal submitted by the

Project Proponent and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Jaikwadi Bird Century is at distance of 3.83km in South-West direction, However, it was not explained by the consultant that whether the project falls under ESZ or outside of the ESZ. The EAC noted that since the industry is in operation before the EIA Notification, 2006 and the PP had not submitted year wise production details to check whether there was any violation related to production or not. It was also informed to the Committee during the presentation that plant started its operation after 2006, therefore Committee was of the opinion that there might be violation of EIA Notification, 2006.

PP informed the Committee during the presentation that the compound/products which are currently in production are inorganic compound but it was noted by the Committee that the product was organic instead of inorganic and all the synthetic organic chemicals needs the prior EC as per the provisions of the EIA Notification, 2006. EAC observed that the Consultant/PP want to mislead the information.

The Committee deliberated the issues related to pollution and conservation of environment. The Committee after, detailed deliberation, **returned** the proposal for revisions of the application as per provisions of the EIA Notification, 2006 along with following requisite information/inputs as follows:

- i. PP informed the Committee during the presentation that the compound/products which are currently in production are inorganic compound but it was noted by the Committee that the product was organic instead of inorganic and all the synthetic organic chemicals needs the prior EC as per the provisions of the EIA Notification, 2006. EAC warned the consultant and advise to read the provisions of the EIA Notification, 2006 before submission of the application on Parivesh portal. The Consultant could not explain about the applicability of EC for the existing Unit.
- ii. Year wise Production details with respect to CTO since inception of the Unit in tabular form along with the details of the Industry and start of production supported by relevant documents.
- iii. Letter from the Wildlife Department of State Govt. regarding the applicability of ESZ mentioning actual distance of plant from the Jaikwadi Bird Century.
- iv. Since this is the old Unit, details of NBWL clearance needs to be submitted.
- v. PP in various places mentioned different distance of the Jaikwadi Bird Century from the Unit. In this context, the PP needs to provide the correct distance and its proof from the Wild Life Department, State Govt.
- vi. EAC is of the view that if violation occurred by the PP, SPCB may take necessary credible action against the Unit under provisions of the E(P) Act, 1986.

Agenda No. 20.2

Setting up of API's manufacturing unit of production capacity 470TPM located at Sy. Nos. Parts of 290, Dondapadu Village, Chintalapalem Mandal, Chinthalapalem, Suryapet, Telangana by M/s Alister Pharma Chem Private Limited - Consideration of Environmental Clearance

[Proposal No. IA/TG/IND3/234017/2021; File IA-J-11011/439/2021-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 grant of environmental clearance (EC) to the project for setting up of API's manufacturing unit of production capacity 470TPM located at Sy. Nos. Parts of 290, Dondapadu Village, Chintalapalem Mandal, Chinthalapalem, Suryapet, Telangana by M/s Alister Pharma Chem Private Limited.

S. No.	Product Name	Quantity in TPM	CAS No.	Therapeutic Use
1	Ambroxol hydrochloride	5.00	23828-924	Used to treat respiratory diseases
2	Apixaban	5.00	503612-47-3	Anti- coagulant
3	Artesunate	30.00	88495-63-0	Anti malarial
4	Ascorbic Acid (Vitamin C)	30.00	50-81-7	Used to prevent and treat scurvy
5	Ascorbyl Palmitate	60.00	137-66-6	Used as an antioxidant
6	Bilastine	10.00	202189-78-4	Anti Allergic
7	Carbidopa	5.00	28860-95-9	Used to treat Parkinson's disease
8	Chloroquine phosphate	20.00	50-63-5	Anti malarial
9	Citalopram hydrobromide	10.00	59729-32-7	Antidepressant
10	Cetirizine Hydrochloride	30.00	83881-51-0	Anti Allergic
11	Clavulanate potassium	60.00	61177-45-5	Anti Bacterial
12	ClopidogrelBisulphate	5.00	11365-84-2	Anti coagulant
13	Domperidone	20.00	57808-66-9	Anti Emetic
14	Edoxaban	5.00	1229194-11-9	Anticoagulant
15	Enoxaparin Sodium	5.00	679809-58-6	Used to prevent blood clots
16	Esomeprazole Magnesium Trihydrate	5.00	217087-09-7	Anti Ulcer
17	Fexofenadine Hydrochloride	20.00	153439-40-8	Antihistamine
18	Fluconazole	20.00	86386-73-4	Anti fungal
19	Gabapentin	10.00	60142-96-3	Anticonvulsant
20	Guaifenesin	5.00	93-14-1	Used as an expectorant
21	Ibuprofen	20.00	15687-27-1	Pain Reliever

The details of products and by Products with quantities are as under:

S. No.	Product Name	Quantity in TPM	CAS No.	Therapeutic Use
22	Itraconazole	5.00	84625-61-6	Antifungal
23	Ketoconazole	10.00	65277-42-1	Antifungal
24	Lactose	60.00	63-42-3	Used as a filler or diluent in tablets and capsules
25	Lansoprazole	10.00	103577-45-3	Antiulcer
26	Levetiracetam	5.00	102767-28-2	Anticonvulsant
27	Linezolid	5.00	165800-03-3	Antibiotic
28	Losartan Potassium	5.00	114798-26-4	Antihypertensive
29	Metformin Hydrochloride	60.00	1115-70-4	Anti-Diabetic
30	Methyldopa	20.00	555-30-6	Used to treat high blood pressure
31	Mirtazapine	5.00	61337-67-5	Antidepressant
32	Montelukast Sodium	5.00	151767-02-1	Used to treat Asthma
33	Neomycin Sulfate	60.00	1405-10-3	Antibiotic
34	OlmesartanMedoxomil	5.00	144689-63-4	Antihypertensive
35	Omeprazole	40.00	73590-58-6	Anti ulcer
36	Oxcarbazepine	20.00	28721-07-5	Anticonvulsants
37	Pantoprazole Sodium	20.00	138786-67-1	Antiulcer
38	Paracetamol	40.00	103-90-2	Pain reliever
39	Phenylephrine Hydrochloride	20.00	61-76-7	Used to relieve sinus congestion
40	Posaconazole	5.00	171228-49-2	Anti Fungal
41	Pregabalin	2.00	148553-50-8	Antibiotics
42	Rabeprazole Sodium	2.00	117976-90-6	Anti-Ulcer
43	Sertraline Hydrochloride	30.00	79559-97-0	Anti-Depressant
44	Sildenafil citrate	30.00	171599-83-0	Used to treat erectile dysfunction
45	Telmisartan	20.00	144701-48-4	Anti-hypertensive
46	Teneligliptin pentaHydrobromide hydrate	5.00	760937-92-6	Used in treatment of type 2 diabetes mellitus
47	Ticagrelor	5.00	274693-27-5	Platelet aggregation inhibitors
48	Topiramate	30.00	97240-79-4	Used to treat epilepsy
49	Valsartan	20.00	137862-53-4	Antihypertensive
50	Verapamil Hydrochloride	5.00	152-11-4	Used to treat high blood pressure
51	Voriconazole	5.00	137234-62-9	Antifungal
52	Vildagliptin	5.00	274901-16-5	Anti-diabetic
53	Zidovudine	30.00	30516-87-1	Used to treat HIV
	(Any 10 products will be factured at any given point of	470.00		

S. No.	Name of the product	Name of the By-Product	Quantity in Kg/Day
		Potassium chloride	91.50
1	Apixaban	Potassium bromide	146.00
		Phosphorous trichloride	141.70
2	Artesunate	Boric acid	233.50
3	Ascorbic acid	Hexane	693.50
4	Carbidopa	Ammonium chloride	106.70
-	Chlere wine, pheenhete	Ethanol	372.00
5	Chloroquine phosphate	Phosphoric acid	221.50
<u>^</u>	Clarida mal Disulfata	Triethylamine Hydrochloride	74.80
6	Clopidogrel Bisulfate	P-Toluene sulfonic acid	84.40
-	Describer	Sodium bromide	752.10
7	Domperidone	Ammonium chloride	250.20
8	Edoxaban	Triethylamine Hydrochloride	73.30
~		Boric acid	122.70
9	Fexofenadine Hydrochloride	Sodium methoxide	107.20
4.0		Potassium iodide	511.70
10	Fluconazole	Potassium chloride	386.30
11	Ibuprofen	Aluminium hydroxide	410.30
		Potassium Bromide	189.90
4.0	Itraconazole	Sodium benzoate	230.00
12		Triethylamine Hydrochloride	173.50
		Potassium Methane Suffocate	133.70
4.0		Benzoic acid	
13	Ketoconazole	Sodium bromide	93.60
14	Lansoprazole	Sodium acetate	135.30
15	Linezolid	Imidazole	134.90
-		Acetic acid	39.10
		Succinimide	56.30
16	Losartan Potassium	Trityl alcohol	127.10
		Sodium bromide	50.30
		Ammonium hydroxide	205.50
17	Methyldopa	Ammonium bromide	363.70
18	OlmesartanMedoxomil	Trityl chloride	97.80
		Ammonium sulphate	3325.30
19	Omeprazole	Sodium nitrite	600.30
		Sodium acetate	713.60
20	Paracetamol	Acetic acid	615.60
21	Phenylephrine Hydrochloride	Ammonium sulphate	585.00
22	Pregabalin	Ammonium chloride	171.70
		Sodium nitrite	39.70
_		Sodium acetate	38.70
23	Rabeprazole Sodium	Acetic acid	28.30
		Ammonium chloride	17.00

Table: LIST OF BY-PRODUCTS WITH QUANTITIES

S. No.	Name of the product	Name of the By-Product	Quantity in Kg/Day
24	Sertraline Hydrochloride	Ammonium Chloride	216.00
		Ammonium sulfate	420.90
25	Sildenafil Citrate	Ammonium chloride	340.70
		Iron oxide	437.20
26	Valsartan	Potassium chloride	179.70
20		Potassium Bromide	286.80
27	Zidovudine	Triethylamine Hydrochloride	2148.70
21		Benzene sulfonic acid	696.60

The project/activity is 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, 15.10.2020 & 16.07.2021). Due to applicability of general conditions (interstate boundary within 5 km i.e. 0.53 km), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

PP reported that the proposed land area is 16.0 Acres (64749.7 sqm). Land conversion for industrial purpose has been done by the State Government. Industry will develop greenbelt in an area of 21797.85 sqm which is 33.7 % of the total project area. The proposed project cost is about Rs.50 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.471 Lakhs and the recurring cost (operation and maintenance) will be about Rs.56 Lakhs per annum. Total Employment will be of 300 persons. Industry proposed to allocate Rs.100 Lakhs towards Corporate Environment Responsibility.

PP reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. The Toposheet number of the project site are 56P/13,14,65 D/1and 2.

Total water requirement is 494.0 m³/day of which fresh water requirement of 329.31 m³/day and will be met from Ground water supply. The unit has applied to with draw 494.0 KLD Ground Water from bore well to Ground Water and Water Audit Department, Govt. of Telangana. Generated effluent of 214.95 m³/day will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO plant will be based on Zero Liquid Discharge System.

Power requirement will be 1000 kVA and will be met from Telangana State Southern Power Distribution Company Limited (TSSPDCL). The unit is proposed to install 1 X 380 kVA & 1 x 500 kVA DG Sets, Stacks (height 8 mtrs& 9 mtrs) will be provided as per CPCB norms to the proposed DG sets.1 x 12.0 TPH & 2 x 5.0 TPH Coal/ Biomass Briquettes boilers are proposed with stacks of height 30 mtrs each for 5.0 TPH boilers & stack height of 35 mtr for 12.0 TPH boiler. Cyclone separators followed by bag filters will be installed for the boilers separately for controlling the particulate emissions (within statutory limit of 115 mg/ Nm³). 1 x 2.0 Lakh K. Cal/ Hr& 1 x 4.0 Lakh K.Cal/Hr. thermic fluid heaters are proposed with stack height of 11 mtrs each and Cyclone separators will be installed for controlling the particulate emissions (within statutory limit of particulate emissions (within statutory limit of 115 mg/ Nm³).

Table: Details of Process emissions generation and its management.

S. No.	Name of the Gas	Quantity in Kg/Day	Treatment Method
1	Nitrogen	38.00	Dispersed into the atmosphere
2	Hydrogen	108.00	Diffused by using Nitrogen through Flame arrestor to avoid the formation of explosive mixture
3	Ammonia	364.00	Scrubbed by using chilled water media
4	Oxygen	592.00	Dispersed into the atmosphere
5	Carbon dioxide	1548.00	Dispersed into the atmosphere
6	Hydrogen Bromide	272.00	Scrubbed by using C. S. Lye solution
7	Hydrogen chloride	2569.00	Scrubbed by using chilled water media
8	Methyl Bromide	64.00	Scrubbed by using C. S. Lye solution
9	Methyl chloride	241.00	Scrubbed by using C. S. Lye solution
10	Sulphur dioxide	1784.00	Scrubbed by using C. S. Lye solution

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

S. No.	Name of the Waste	Quantity	Disposal Method		
Hazard	ous Waste Details				
1	Organic solid waste (Process Residue)	15158 Kg/Day			
2	Spent Carbon	271 Kg/Day	Will be sent to Cement Industries		
3	Solvent Distillation Residue	2676 Kg/Day	will be sent to Cement industries		
4	Organic distillate from MEE Stripper	2850 Kg/Day	-		
5	Inorganic Solid Waste	5534 Kg/Day			
6	MEE Salts	10461 Kg/Day	Will be sent to TSDF		
7	ETP Sludge	320 Kg/Day			
8	Used Oils	180 Ltrs/Annum	Will be sent to SPCB Authorized Agencies for Reprocessing/ Recycling		
9	Detoxified Containers/ Container liners	3000 No's / Month	After Detoxification will be sent to authorize agencies.		
10	Used Lead Acid Batteries	4 No's/ Annum	Send back to suppliers for buyback of New Batteries		
Solid w	vaste details	- L	·		
11	Ash from boilers	25.55 TPD	Will be sent to Brick Manufacturers		

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

and the EAC deliberated on the issue. PP also requested that EC may include the name of products also otherwise PP will face difficulty in obtaining the CTE/CTO from concerned SPCB.

Water Input	Effluent Water	In-organics In Effluent	Organics In Effluent	TDS	COD	HTDS	LTDS	Total Effluent	Organic solid waste	Inorganic solid waste	Spent Carbon	Distillation Residue	Process Emissions	Fugitive Emissions
Ltrs/Day	Ltrs/Day	Kg/Day	Kg/Day	Kg/Day	Kg/Day	Ltrs/Day	Ltrs/Day	Ltrs/Day	Kg/Day	Kg/Day	Kg/Day	Kg/Day	Kg/Day	Kg/Day
1035	1121	592	316	592	628	1167	770	1244	151	553	27	267	582	300
00.0	73.3	6.2	8.3	6.2	9.4	48.7	4.9	53.6	58.2	4.4	0.5	5.6	5.9	3.3
0	0	2	3	2	3	0	9	9	9	0	6	7	7	3

HAZARDOUS SOLID WASTE DETAILS

Organic solid waste	Inorganic solid waste	Spent Carbon	Distillation Residue	
Kg/Day	Kg/Day	Kg/Day	Kg/Day	
15158.29	5534.40	270.56	2675.67	

GASEOUS EMISSION DETAILS

Kg per Day									
CO2	H2	NH3	02	N2	HBr	HCI	CH3CI	SO2	CH3Br
1548.05	108.15	364.11	592.22	37.48	272.14	2569.31	240.93	1783.51	63.83

Deliberations by the EAC:

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

The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in the PFR & EMP reports. 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 was further informed that the Ministry has recently issued an Office

Memorandum dated 28.01.2021 and inter-alia requested that EAC shall clearly recommend the permissible pollution load i.e. quantity and quality, including composition, of emissions, discharge and solid waste generation. In compliance of this OM, PP has submitted the pollution load. The EAC also deliberated on the pollution load as estimated by the PP/Consultant.

The Committee noted that the PFR/EMP reports reflect the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the greenbelt development in the unit complex and suggested the PP to develop greenbelt on at least 33% areas around the periphery of the complex. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considering 2m x 2m ratio and suggested to complete plantation within six months.

The EAC noted that the layout of the plant should be revised according to plantation, EAC also noted that a storm drain (Nallah) is passing through the proposed project layout as per KML. The Committee was of the firm opinion that flow of storm drain (Nallah) should not be affected, infact, the PP should plant trees along the storm drain (Nallah).

The Committee deliberated on the proposed mitigation measures towards Air, Water, Noise and Soil pollutions. The Committee suggested to use coal having ash content less than 15% only during the rainy season when the Biomass Briquettes may not be available. The Committee also suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

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

Accordingly, the EAC recommended for the grant of environmental clearance to the proposal subject to following conditions:

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent 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, <u>recommended the project for grant of</u> environmental clearance, <u>subject to compliance of terms and conditions</u> as under, and general terms and conditions in Annexure: -

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

recommendations made in the PFR/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

- ii. Project Proponent reported that the amount of CO₂ emissions per day is stated to be 1548.05 Kg/day and hence it is desirable that usage of economical viable technologies for CO₂ sequestration must be explored for usage in the Industry. The implementation report shall be submitted to the IRO, MoEFCC in this regard.
- iii. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
- 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. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no treated/untreated waste 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.
- vi. The unit shall make the arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Mock drill shall be conducted regularly.
- vii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- viii. Total fresh water requirement, sourced from ground water, shall not exceed 329.31 m³/day. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- ix. As committed by the PP, coal having ash content less than 15% is to be used as fuel only during the rainy season when the Biomass Briquettes may not be available and during all other seasons only biomass briquettes shall be used.
- x. 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.
- xi. Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server.
- xii. Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space provided with all safety measures. (d) Proper earthing shall be provided in all the

electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valves to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

- xiii. Process organic residue and spent carbon, if any, shall be sent to Cement or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.
- 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 at least 33% of the total project area, mainly along the plant periphery/ additional land. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Trees have to be planted with spacing of 2m x 2m and the number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within six months.
- xvi. The PP should not release waste water / hazards material/ waste in to the Nallah passing through the project and any other bore wells. Nallah shall not be diverted. PP shall develop plantation along the periphery of Nallah, by creating safety barrier of 7.5 m and safety zone of 300m. Project Proponent shall ensure that the entire peripheral plantation and the safety barrier plantation shall be completed within six months.
- xvii. The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented.
- xviii. 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. 20.3

Expansion of API's manufacturing unit of capacity from 160.6 MTPA to 1335 MTPA located at C-826, RIICO Industrial Area, Phase-II, Bhiwadi, Tehsil- Tijara, District-Alwar, Rajasthan by M/s Asiatic Drugs & Pharmaceuticals Pvt. Ltd- Consideration of Environmental Clearance

[Proposal No. IA/RJ/IND3/206183/1997; File No. IA-J-11011/453/2021-IA-II(I)]

The project proponent and their accredited Consultant M/s. Vardan EnviroNet, Gurugram Haryana 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 API's manufacturing unit of capacity from 160.6 MTPA to 1335 MTPA located at C-826, RIICO Industrial Area, Phase-II, Bhiwadi, Tehsil- Tijara, District- Alwar, Rajasthan by M/s Asiatic Drugs & Pharmaceuticals Pvt. Ltd..

The details of products and capacity are as under:

S.	Product	Existing	Proposed	Total				
No.	Details	Quantity	Quantity	Quantity				
А	Existing APIs							
1	Amoxicillin Trihydrate	116.80	183.2	300				
2	Ampicillin Trihydrate	29.20	150.8	180				
3	Cephalexin Monohydrate	14.60	10.4	25				
В	F	Proposed APIs						
		Steroid						
1	Dexamethasone Sodium	0.0	10	10				
	Phosphate		10	10				
2	Betamethasone Sodium	0.0	10	10				
	Phosphate			_				
3	Betamethasone Di Propionate	0.0	10	10				
4	Betamethasone Valerate	0.0	10	10				
5	Clobetasol Propionate	0.0	10	10				
6	Methyl Prednisolone	0.0	10	10				
7	Deflazacort	0.0	10	10				
	Ar	nti-Hypertensive						
1	Telmisartan	0.0	36.0	36.0				
		Anti-Asthma						
1	Montilucast Sodium	0.0	23.0	23.0				
		Anti-Diabetic						
1	Sitagliptin	0.0	30	30				
2	Gliclazide	0.0	30	30				
		Neuropathy						
	Citicoline Sodium	0.0	30	30				
		Bile Acid						
1	UDCA	00	50.0	50.0				

S.	Product	Existing	Proposed	Total
No.	Details	Quantity	Quantity	Quantity
	Ursodeoxycholic acid			
		nti-Inflammatory		
1	Mefanamic Acid	0.0	100	100
2	Nimesulide	0.0	90	90
		Vitamin		
1	Benfotiamine	0.0	10.0	10.0
2	Methylcobalmin	0.0	10.0	10.0
3	Niacinamide	0.0	80.0	80.0
		Anti-Epileptic	1	
1	Levetiracetam	0.0	15	15
		Anticonvulsant	-	-
1	Pregabalin	0.0	20	20
		De-Cognesent		
1	Phenylephrine hydrochloride	0.0	30.0	30.0
		Antibiotic	T	
1	Ornidazole	0.0	40.0	40.0
2	Sultamicillintosilatedihydrate	0.0	12	12
3	Ampicillin anhydrous	0.0	10	10
4	Cloxacillin Sodium	0.0	10	10
5	Dicloxacillin Sodium	0.0	10	10
6	Flucloxacillin sodium	0.0	5	5
7	Oxacillin Sodium	0.0	5	5
8	Cefadroxil Monohydrate	0.0	10	10
9	Cefixime	0.0	5	5
10	CefpodoxineProxitel	0.0	7	7
11	Cefuroxime Axetil	0.0	5	5
12	Cefdinir	0.0	5	5
13	Ofloxacin	0.0	26	26
		Anti Alcoholic		
1	Disulfiram	0.0	6	6
		Anthelmintic		
1	Albendazole	0.0	30.0	30.0
2	Mebendazole	0.0	10.0	10.0
3	Tiabendazole	0.0	10.0	10.0
Total		160.6	1175.4	1335.0
Total		MT/Anum	MT/Anum	MT/Anum

The project/activity is 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, 15.10.2020 & 16.07.2021). Due to applicability of general conditions (interstate boundary within 5 km i.e. ~1.1 km in NE direction), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

PP reported that the existing plant was developed and in operational stage before EIA notification 2006 hence Environmental Clearance was not applicable. Total capacity of

Existing APIs products is 160.6 MTPA. Consent to Establish for the project was granted on 30.12.1997 as per CTE number F.12 (2-372) RPCB/Gr. II/1426. First CTO was granted on 11.03.1998 as per Letter No. F.12 (2-372) RPCB/Gr. II/1426. Latest CTO was granted to the project on 01.1.2016 which is valid till 30.09.2021. Public Hearing is exempted as the project site is located within the Notified Industrial Area i.e. "RIICO Industrial Area Phase-II, Bhiwadi, Tijara, District Alwar. The Certified Compliance Report of existing CTO was obtained from Rajasthan State Pollution Control Board vide letter no.F. Tech (CD-23)/RPCB/CD/242 dated 6th August, 2021. Most of the CTO conditions in certified compliance report is compiled. As informed by PP there is no litigation/court case is pending against the proposal.

PP reported that total land required for the existing project is 0. 81 Hectares. No additional land is required for the Expansion project. Expansion will be done within the existing unit. Industry has proposed to develop greenbelt inside in an area of approx. 35.14 % i.e. 2846.86 square meters out of total project area and 5% will be developed nearby the unit in Industrial area. Hence , total 40% area will be developed under greenbelt. Total 370 Tree & small plants have been planted and additionally 630 trees are proposed to be planted.

The estimated project cost is Rs 2.70 Crores including existing investment of Rs 1.70 Crores. Capital investment on environmental control measures for existing unit is 38.0 Lahks and recurring cost of the same is 6.8 Lahks/annum where capital cost of EMP for expansion unit is envisaged to be about Rs 32.15 Lakhs and recurring cost of the same is 3.45 Lahks/annum. Total 70 workers are engaged in the existing unit. Additionally, 30 persons will be appointed for expansion unit. Total 100 workers will be required to run the project after expansion. Industry proposes to allocate Rs. 0.27 Crore towards Corporate Social Responsibility.

PP reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. No water body present in 10 km radius area from project site. The Toposheet number of the project site is H43W15 & H43W16.

Existing fresh water requirement of the project is 5.85 KLD and for proposed expansion project will be 4.0 KLD. Total water requirement for the project after expansion will be 9.85 KLD for which NOC has been granted from CGWA vide 21-4/15214/RJ/IND/2021 dated 06.01.2021. Total 6.53 KLD of Effluent will be generated after expansion. An Effluent treatment plant of 12 KLD Capacity already provided and is in operation stage. 1.98 KLD of domestic waste water will be generated which will be treated in Septic tank followed by Sock Pits. The plant will be based on Zero Liquid Discharge system.

Power requirement for the existing industry is 1440 kVA and for proposed expansion, it will be 467 KVA. Total power requirement for the unit after expansion will be 1907 KVA that will be sourced from the Jaipur VidyutVitran Nigam Limited (JVVNL).

Boiler of capacity 1.2 TPH and DG set of 250 kVA capacity is already installed in the existing unit. PP has proposed to shift from Coal fired boiler to PNG/LPG based Boiler of 3.0 TPH and 0.5 TPH Capacity. One additional DG sets of 1000 kVA capacity will be provided. Once PNG/LPG based boilers will be installed then existing coal based boiler will be closed down and will sold out to authorize dealer.

Details of Solid waste/Hazardous waste generation and its management. Hazardous waste estimated to be generated in the proposed expansion industry in the form of hazardous chemicals/waste, ETP, Evaporation residues, and Used/spent oil, Empty barrels/containers contaminated with Hazardous chemical /waste and municipal solid waste from working staff. Quantity, type and disposal plan of all kind of waste generated is given below:

Waste Type	Existing (TPA)	Proposed (TPA)	Hazardous Waste Disposal Practices
Empty barrels/containers contaminated with Hazardous chemical /waste	0.25	1.0	CTDF Udaipur
ETP Sludge	0.18	0.75	CTDF Udaipur
Evaporation residue	0.15	0.18	CTDF Udaipur
Used or spent oil	0.10	1.14	M/s Total waste management project, RIICO, Bhiwadi

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

	KG PER DAY												
		EFF	LUEN	T WA1	ER	-	-		ç	Solid	WASTI	E	
Water input	Water in Effluent	Organics in Effluent	TDS	COD	HTDS	LTDS	Total Effluent	Organics Organics Inorganics Spent carbon Spent catalyst catalyst Emission Distillation residue					
9850	6530	6300	2314.2	596.2	21384.2	8674.5	6530	150	100	210.9	1240	123.4	330

EMISSION DETAILS:

Kg per day						
CO ₂	N ₂	O ₂	H ₂	HBr	HCI	NH ₃
84.5	21.3	78.9	2.8	37.6	78.9	35

Deliberations in the EAC:

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

The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in the EMP reports. 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 was further informed that the Ministry has recently issued an Office Memorandum dated 28.01.2021 and inter-alia requested that EAC shall clearly recommend the permissible pollution load i.e. quantity and quality, including composition, of emissions, discharge and solid waste generation. In compliance of this OM, PP has submitted the pollution load. The EAC also deliberated on the pollution load as estimated by the PP/Consultant.

The Committee noted that the EMP reports reflect the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the greenbelt development in the unit complex and suggested the PP to develop greenbelt on at least 35% areas around the periphery of the complex and 5% outside the periphery (adjoining areas) within three months. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considering $2m \times 2m$ ratio.

The Committee deliberated on the proposed mitigation measures towards Air, Water, Noise and Soil pollutions. The Committee suggested to use coal having ash content less than 15% only during the rainy season when the Biomass Briquettes may not be available. EAC also noted that PP committed to shift from Coal fired boiler to PNG/LPG based Boiler of 3.0 TPH and 0.5 TPH Capacity. The Committee also suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The committee noted that as the unit is in operation before the EIA Notification, 2006, prior EC is applicable to the existing project. The Certified Compliance Report of existing CTO was obtained from Rajasthan State Pollution Control Board vide letter dated 6th August, 2021. The EAC deliberated the compliance status of CTO and found in order. As informed by PP there is no litigation/court case is pending against the proposal.

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

Accordingly, the EAC recommended for the grant of environmental clearance to the proposal subject to following conditions:

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent 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, <u>recommended</u> the project for grant of environmental clearance, and <u>subject to compliance of terms and conditions</u> as under, and general terms and conditions given in Annexure: -

- i. The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- ii. Project Proponent reported that the amount of CO₂ emissions per day are stated to be 84.5 Kg/day and hence it is desirable that usage of economical viable technologies for CO2 sequestration must be explored for usage in the Industry. The implementation report shall be submitted to the IRO, MoEFCC in this regard.
- iii. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
- 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. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no treated/untreated waste 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.
- vi. The unit shall make the arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Mock drill shall be conducted regularly.
- vii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- viii. Total fresh water requirement, sourced from Ground water, shall not exceed 9.85 KLD. Prior permission in this regard shall be obtained from the concerned regulatory authority.

- ix. Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- x. Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server.
- xi. Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space provided with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valves to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- xii. Process organic residue and spent carbon, if any, shall be sent to Cement or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.
- 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. As committed by PP the green belt of at least 5-10 m width shall be developed in at least 40% of the total project area, mainly along the plant periphery/ additional land. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Trees have to be planted with spacing of 2m x 2m and the number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within three months.
- xv. PP shall use gas as a fuel. PP should install gas based boiler instead of coal based boiler.
- xvi. The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented.
- xvii. A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area)

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

Agenda No. 20.4

Setting up of Active Pharmaceutical Ingredients (API), intermediates & KSM manufacturing facility of capacity 100 MTPM located at Plot No. N-26, MIDC additional Patalganga Industrial Estate, Taluka Panvel, Maharashtra by M/s Cogent Lifescience Private Limited- Consideration of Environmental Clearance

[Proposal No.IA/MH/IND2/128715/2019; File No. IA-J-11011/377/2019-IA-II(I))

The project proponent and their accredited Consultant M/s. Eco footforward Environmental Consultancy made a detailed presentation on the salient features of the project and informed that:

The proposal is for Environmental Clearance to the project for setting up of Active Pharmaceutical Ingredients (API), intermediates & KSM manufacturing facility of capacity 100 MTPM located at Plot No. N-26, MIDC additional Patalganga Industrial Estate, Taluka Panvel, Maharashtra by M/s Cogent Lifescience Private Limited.

S.	Product Details	Proposed Quantity	Total Quantity
No.			
1.	Sertraline	60	60
2.	Montelukast Sodium	60	60
3.	Duloxetine	60	60
4.	Capecitabine	60	60
5.	Telmisartan	72	72
6.	Clopidogrel	72	72
7.	Abacavir Sulphate	120	120
8.	Brexpiperazole	216	216
9.	Dapagliflozin	240	240
10	Deferasirox	240	240
11	Pregabalin	72	72
12	Linezolid	72	72
13	Rosuvastatin Calcium	72	72
14	Rifaximin	72	72
15	Lornoxicam	72	72
16	Sertaconazole Nitrate	72	72
17	Tioconazole	72	72
18	Flubiprofen	72	72
	Canagliflozin Hemihydrate	72	72
20	Dimethyl Fumarate	72	72
21	Sofosbuvir	72	72
22	Ledipasvir	72	72

The details of products and capacity are as under:

S. No.	Product Details	Proposed Quantity	Total Quantity
	Pirfenidone	72	72
	Darunavir Ethanolate	72	72
25	Entecavir	72	72
26	Solifenacine Succinate	72	72
27	Eletriptan Hydrobromide	72	72
28	Fenticonazole Nitrate	72	72
29	Prasugrel Hydrochloride	72	72
	Ablraterone Acetate	72	72
31	Imatinib Mesylate	72	72
32	Cabazitaxel	72	72
33	Gefitinib	72	72
34	Erlotinib	72	72
35	Dasatinib	72	72
36	Perampanel	72	72
37	Teriflunomide	72	72
38	Pomalidomide	72	72
39	Lenalidomide	72	72
40	Latanoprost	72	72
41	Phenyl Vinyl Sulfone	72	72
42	3-Hydroxy Acetophenone	240	240
43	Maap Sulphate	120	120
44	Di-isopropyl ethylamine	240	240
45	3,3-Dimethyl acrylic acid	240	240
46	Maltol	240	240
47	2,3-Dichloro Acetophenone	300	300
48	3-Trifluoromethyl Acetophenone	300	300
49	2-Amino Acetophenone	120	120
	Para chloro phenol	360	360
	Ethyl chloro-(4-methoxyphenyl hydrazine) acetate	72	72
52	3-Chloro-5,6-dihydro-1-(4- nitrophenyl)-2-(1H) pyridinone	72	72
53	3-morpholin-4-yl-5,6-dihydro- 1H-pyridin-2-one	72	72
54	3-(4-morpholinyl)-1-(4- nitrophenyl)-5,6-dihydro- 2(1H)-pyridinone	72	72
55	(3β, 8ε, 9ε, 14ε)-17- Iodoandrosta-5,16-diene-3-ol	72	72
56	3-(Diethylboryl)pyridine	72	72
	N'-(4-pyridin-2-yl-benzyl)- hydrazine carboxylic acid butyl ester	72	72

S. No.	Product Details	Proposed Quantity	Total Quantity
58	Methoxycarbonyl-L-tert- leucine	72	72
59	Tert-butyl-{(1S)-1-[(2R)- oxiran-2- yl]-2-phenylethyl]- carbamate	72	72
60	N, N-dimethyl-3-(2- methylphenoxy)-3-phenyl- propan-1-amine oxalate	72	72
61	Methyl-5-bromo-2-methyl- benzoate	72	72
62	[(5-bromo-2- methylphenyl)methyl]-5-(4- fluorophenyl) thiophene	72	72
63	3-[(3-amino-4-methylamino- benzoyl)-pyridin-2-yl-amino]- propionic acid ethyl ester	72	72
64	N-(4-cyanophenyl)-glycine	72	72
65	(2S,3S)-1,2-epoxy-3-(Boc- amino)-4-phenyl butane	72	72
66	2-(2-hydroxyphenyl)-4H- benzo[e] [1,3]-oxazin-4-one	72	72
67	(2,butyl-5-nitrobenzofuran-3- yl)(4-hydroxyphenyl) methanone	72	72

The project/activity is covered under Category 'A' of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. Therefore, the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The project/activity is covered under Category 'B2'-API of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 (amendment on 27.03.2020, 15.10.2020 & 16.07.2021). Due to applicability of general condition (Karnala Wildlife Sanctuary within 5 km i.e. 2.75 km), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Deliberations in the EAC:

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

The Committee noted that the consultant has submitted nebulous information related

to the EMP and mitigation measures. The Committee deliberated the issues related to pollution and conservation of environment, Schedule-1 conservation plan, Green belt development and applicability of ESZ. The Committee noted that the PP has not prepared and submit the Schedule-1 species conservation plan to State Wildlife Department, and other requisite information. Further the quality of EMP is very poor. PP has only proposed 10% green belt. The EAC did not agree and suggested to rework on the layout as there is plenty space is available in the plot. In this context, revised green belt development plan @33 % with high carbon sequestration trees needs to be submitted along with budgetary provisions.

The Committee after, detailed deliberation, **returned** the proposal and desired for revision of the proposal with certain requisite information/inputs as follows:

- (i) PP could not explain whether the Unit is outside of the ESZ or not. In this regard PP needs to submit the letter from the State Wildlife Department about the distance from the Karnala Wildlife Sanctuary and whether the Unit is outside of the ESZ or not ?.
- (ii) EAC also noted that Unit is having built structure as shown in the KML file. A letter from SPCB needs to be submitted regarding the production details of the products/chemicals etc. and its CTO/EC, if any, to verify the violation.
- (iii) On examination EAC noted that the same case was earlier placed before the SEAC in August 2019, however Consultant has not provided the information on the same and want to mislead the information. The EAC has warned the Consultant not to hide the information before the EAC.
- (iv) Detailed presentation on the existing and future environmental parameters vis-à-vis the project needs to be submitted.
- (v) Details of court cases along with current status. Details of court case, if any, related Air & Water Act and E(P) Act along with detailed action plan needs to be submitted.
- (vi) Details of show cause notice issued from the SPCB and current status needs to be submitted.
- (vii) Detailed water scheme and effluent management system needs to be submitted.
- (viii) Detailed of Schedule-I species and its conservation plan (submitted to CWLW) needs to be submitted.
- (ix) PP has only proposed 10% green belt. The EAC did not agree and suggested to rework on the layout as there is plenty space is available in the plot. In this context, revised green belt development plan @33 % with high carbon sequestration trees needs to be submitted along with budgetary provisions.
- (x) Revised water conservation plan needs to be submitted.
- (xi) Detailed plan on Hazardous waste management.
- (xii) The Committee noted that the consultant has submitted nebulous information related to the EMP and mitigation measures. EAC warned the

Consultant [M/s. Eco footforward Environmental Consultancy] and advise to read the various provisions of the EIA Notification, 2006 before submission of the application in Parivesh Portal.

(xiii) The Committee opined that the project proponent shall revise the application along with the above mentioned details. PP agreed the revision of the application.

Agenda No. 20.5

Expansion project of Fine Chemicals and Intermediates for API Manufacturing Unit, located at Plot No. E-16, E-17, E-18, E-22 & T-7, Chincholi MIDC, Taluka Mohol, District Solapur, Maharashtra by M/s OC Specialities Pvt. Ltd.-Reconsideration of Environmental Clearance

[Proposal No. IA/MH/IND3/235840/2021; File No. J-11011/92/2015-IA-II (I)]

The proposal was earlier placed before the EAC in its meeting held during 14-16 July, 2020 wherein EAC sought certain requisite information/inputs. Information desired by the EAC and response submitted by the project proponent is as under:

S.	Queries Raised by	Reply by PP	Observation
No.	EAC		of EAC
_		Reply by PPEarlier EC was granted in Jan. 2017.Subsequently, 1 st CTO granted by MPCB on04.07.2019.Delay of 2 years forcommissioning of project subsequent to grantof EC since WLC was not issued inscheduled time.OCSPL had already approached MIDC in2019 requesting allotment of additional landsolely for development of GB. PP's requestwas under consideration for last 2 years.Due to no response from MIDC & asexpansion proposal was lingering whileawaiting for the additional land for GB,OCSPL planned to implement the shortfall ofGB on Plot T-7 (700 M away from E PlotsCluster) so that condition of 33% GB getfulfilled. Accordingly, by incorporating the T-7Plot along with other Plots E-16, E-17, E-18 &	
	adsorb pollutants and balancing impacts.	E-22 (resale plots with some structures) was submitted to Ministry for EC.	
	Considering space constraints for GB of	After, intensive follow up with MIDC, one	
	the project site,	adjacent vacant Plot (just opposite of road of	

	details of alternative site needs to be analysed by the PP for this expansion project.	E-18) of 4290 Sq.M. (bearing No. Open Space (OS) -23) was obtained solely for Green Belt development. MIDC has given NOC for development of GB only on the Plot OS-23 vide its letter dated 02.08.2021 and was received in industry on 11.08.2021. Plantation planning on this plot would complete GB adequacy by fulfilling the deficit towards overall area required to meet condition of 33%.	
3.	Details of process emissions and fugitive emission and its action plan for mitigation measures needs to be submitted.	In Existing Unit, there are process emissions of HBr, NOx, NH3 HCl, SO2. After Expansion, same will be there. Presently, there are 5 scrubbers and after Expansion additional 6 scrubbers will be installed. Fugitive Emissions are the Dust & VOCs. For control of same, Paved Internal Roads, Regular Self-Monitoring of Work Zone Dust Levels, FES, Efficient Exhaust & Ventilation, Solvent Recovery System & Green Belt provided.	The EAC deliberated the matter and found the reply to be satisfactory.
4.	this is existing Unit,	In EC granted to existing unit, there was no condition stipulated w.r.t approval of Schedule-I species Conservation Plan. Further, as per ToRs of expansion project, the Schedule-I species Conservation Plan was prepared and submitted for approval to Chief Wildlife Warden; Nagpur on 29.10.2021. Therein, budget of Rs. 20 Lakh is allocated for WCP and implementation scheduled is planned.	The EAC deliberated the matter and found the reply to be satisfactory.
5.	Details of existing products with consented / EC production capacity from start of production/inception of Unit, with copy of CTEs /CTOs to verify violation, if any.	The list of products in EC and CTO is presented in Chapter -2, Section 2.6.3 & 2.6.4. Production data was also submitted to the Regional Officer; MoEFCC Nagpur during his site visit for inspection on 10.11.2020.	deliberated the matter and found the reply to be

6.	Details of expansion modernization/product mix changes undertaken without taking prior EC, if any and its undertaking needs to be submitted in this regard.	No any products other than those mentioned in EC & CTO have been manufactured and no violation has undertaken by the PP.	
7.	Detailed greenbelt development plan along the periphery of the plant with revised layout and budget needs to be submitted.	A copy of revised layout showing 39.5% GB after expansion is submitted.	The EAC deliberated the matter and found the reply to be satisfactory.
8.	Closure notice/show cause notice issued by the SPCB in the last 5 years, if any and its action plan/response and present status needs to be submitted	A closure was issued by MPCB vide letter No. MPCB/RO/MPCB/CD/2010070001 dated 07.10.2020. Subsequently, restart orders were issued by MPCB vide letter dated 25.11.2020.	
9.	Details of Product list, separately mentioning products requiring EC or not needs to be submitted.	On plot E-17, OCSPL is planning to undertake formulation products for which separate orange category consent is procured from MPCB. These products do not require EC. The list of existing & proposed products along with formulation products is submitted.	deliberated the matter and
10.	Details of red category industries adjacent to the project site needs to be submitted.	Details of red category industries adjacent to the project site is submitted.	TheEACdeliberated thematterandfound the replytobesatisfactory.
11.	Details of completed Actions for Enterprise Social Commitment as per earlier EC conditions needs to be submitted.	Under existing unit Rs.5.00 Lakh have been spent for ESC activities. Further, the proposed ESC plan is prepared allocating Rs. 1.0 Cr and same will be executed till 2026 year. Copy of propose ESC plan is submitted.	The EAC deliberated the matter and found the reply to be satisfactory.

12.	Status of onsite and off-site emergency plan and its implementation viz. conduction of mock drill details and details of accidents, if any, needs to be submitted.	Onsite & Offsite emergency plans have been prepared by OCSPL. As per the Plans, fire mock drills are conducted once in six months. Latest drill was conducted on 21.05.2021. Till date, no any accidents have taken place in OCSPL.	The EAC deliberated the matter and found the reply to be satisfactory.
13.	The project proponent may utilize modern technologies for capturing of carbon emitted and to develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The details needs to be submitted	The carbon foot prints from manufacturing operations, stack emissions, transportation, have been quantified using a software Sima Pro for LCA. The software run & mitigation measures for control the carbon emissions have been presented. Details on mitigation measures are is submitted.	The EAC deliberated the matter and found the reply to be satisfactory.

The project proponent and the accredited consultant M/s. Equinox Environments (I) Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for grant of environmental clearance (EC) to the project for expansion project of Fine Chemicals and Intermediates for API Manufacturing Unit, located at Plot No. E-16, E-17, E-18, E-22 & T-7, Chincholi MIDC, Taluka Mohol, District Solapur, Maharashtra by M/s OC Specialities Pvt. Ltd.

The details of products and capacity as under:

S.	Name of the Product	Quant	ity (TPA)	CAS No.	Chemical
No.		Existing	After		Formula
			Expansion		
Α.	Products		·		
1.	Sodium Bromide Sol.	4680.0	4680.0		NaBr
	40%				
	Sodium Bromide	2782.8	2782.8	7647-15-6	NaBr
	Powder				
	Zinc Hydroxide	1270.8	1270.8	20427-58-1	Zn(OH) ₂
	Zinc Oxide	885.6	0	1314-13-2	ZnO
2.	Di Isopropyl	219.6	600.0	7087-68-5	C ₈ H ₁₉ N
	Ethylamine (DIPEA)				C8F119IN
3.	Methyl-2-Chloro	122.4	0	57486-68-7	$C_9H_8CI_2O_2$

S.	Name of the Product	Quant	ity (TPA)	CAS No.	Chemical
No.		Existing	After Expansion	-	Formula
	Phenyl Acetate				
4.	4 Methoxy Phenyl Acetone	118.8	0	122-84-9	C ₁₀ H ₁₂ O ₂
5.	2,3 Dichloro Pyridine	118.8	1500.0	2402-77-9	C5H3Cl2N
6.	2-Amino-2-Phenyl Butyric Acid	75.6	0	5438-07-3	C10H13NO2
7.	Ortho Hydroxy Phenyl Acetic Acid	180.0	0	614-75-5	C8H8O3
8.	2 Coumaranone	147.6	0	553-86-6.	C8H6O2
9.	3-Isochromanone	144.0	0	4385-35-7	C9H8O2
10.	2,6 Dichloro Benzoyl Chloride	266.4	300.0	4659-45-4	C7H3Cl3O
11.	Methyl-2- Dimethylamino-2- Phenyl Butyrate	118.8	0	39068-93-4	C13H19NO2
12.	2-Dimethylamino-2- Phenyl Butanol	36.0	0	39068-94-5	C12H19NO
13.	P-Bromonisole / 4- Bromo Anisole	198.0	0	104-92-7	C7H7BrO
14.	Para BromoPhenetole / 4-Bromophenetole	172.8	0	588-96-5	C8H9BrO
15.	2,4- Dimethyl Phenyl Acetyl Chloride	475.2	0	1668-53-7	C10H11CIO
16.	2,5-Dimethyl Phenyl Acetyl Chloride	388.8	300.0	55312-97-5	C10H11CIO
17.	Indoline	435.6	0	120-72-9	C8H9N
18.	Ethyl Phenyl Glyoxalate (Epg)	342.0	100.0	1603-79-8	C10H10O3
19.	Ethyl-1-Hydroxy Cyclohexane Carboxylate	396.0	200.0	1127-01-1	C9H16O3
20.	Ethyl-1-Hydroxy Cyclopentane Carboxylate	435.6	250.0	41248-23-1	C8H14O3
21.	3-Chloro-2-Hydrazinyl Pyridine	432.0	1500.0	22841-92-5	C5H6CIN3
22.	2,4,6 Trimethyl Phenyl Acetyl Chloride	0	200.0	52629-46-6	C11H13CIO
23.	2,6 Dichlorobenzonitrile	0	100.0	1194-65-6	C7H3Cl2N
24.	2,6 Dimethoxy Benzoyl Chloride	0	300.0	1989-53-3	C9H9CIO3
25.	S-2-Chloro Propionic Acid	0	200.0	29617-66-1	C3H5CIO2

S.	Name of the Product	Quant	ity (TPA)	CAS No.	Chemical Formula
No.		Existing	After		
			Expansion		
26.	S-Methyl-2chloro propionate	0	200.0	73246-45-4	C4H7ClO2
27.	Ethyl-2- Chloropropionate	0	100.0	535-13-7	C5H9CIO2
28.	2-Methoxy Propionic Acid (MEPRA)	0	300.0	4324-37-2	C4H8O3
29.	Methyl 2,3 DichloroPropionate	0	100.0	07-09-3674	C4H6Cl2O2
30.	Amido Chloride	0	300.0	816431-72-8	CIH2HgN
31.	(2-Chloro-4-Fluoro-5- Nitro phenyl) ethyl carbonate	0	150.0	153471-75-1	C9H7CIFNO5
32.	N-Methyl-2-Oxo-2- Phenyl Acetamide	0	100.0	83490-71-5	C9H9NO2
33.	4 Fluoro 3 Trifluoromethyl Phenol	0	150.0	61721-07-1	C7H4F4O
34.	3-Methyl Pyradizine (3- MP)	0	100.0	1632-76-4	C6H7N
35.	Ortho ChloroBenzamide (OCBA)	0	300.0	619-56-7	C7H6CINO
36.	Chlorinated Paraffin Wax (CPW)	0	1500.0	609-66-5	
37.	BPCA (3-bromo-1-(3- chloropyridin-2-yl)-1H -pyrazole-5-carboxylic acid)	0	200.0	63449-39-8	
38.	R&D / Pilotation Products	0	60.0		
39.	API & Intermediates	0	2900.0		
	Total (A)	14443.2	20743.6		
В	Byproducts				
1.	Sodium Sulphite Solution (25%)	2184.84	3984.84	7757-83-7	Na2SO3
2.	Hydrochloric Acid Solution (30%)	907.08	2347.08	7647-01-0	HCI
3.	Sodium Nitrite Soln.30%	365.04	365.04	7632-00-0	NaNO2
4.	Distillation Residue of Pxylene	43.2	43.2	106-42-3	C8H10
5.	Ammonium Chloride Solution	432.0	432.0	12125-02-9	NH4CI
6.	Sodium Bromide	432.0	1212.0	7647-15-6	NaBr
7.	Spent Catalyst for	432.0	474.0		

S.	Name of the Product	Quantity (TPA)		CAS No.	Chemical
No.		Existing	After Expansion		Formula
	Regeneration				
	Total (B)	4,796.2	8,858.2		
	Total (A+B)	19,239.4	29,601.8		

As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amendments thereto; the expansion project comes under Category – B1. But, due to presence of GIB sanctuary within 5 Km from Project Site in MIDC, General condition is applicable to project and requires appraisal at Centre Level at the MoEFCC. The GIB sanctuary is located about 1.96 Km from Plot No. T-7 and about 2.31 Km from Plot No. E-16, E-17, E-18 & E-22 of project site in MIDC. The ESZ for same is finalized and located at 1.68 Km from Plot No. T-7 and about 2.1 Km from plot no. E-16, E-17, E-18 & E-22 from declared ESZ of GIB.

The Standard ToR was issued by MoEFCC vide dated 02nd October, 2021. Public hearing is exempted for the proposed project as it is located at MIDC, Notified Industrial area. Ministry has issued EC earlier vide letter no. J-11011/92/2015-IA-II (I) dated 31.01.2017 to the existing Fine Chemical Intermediates Manufacturing Unit in favour of OC Specialities Pvt. Ltd.

PP has submitted that the total land area is 23,945.71 sqm. Existing built-up area is 3,168.00 sqm built-up area for expansion project is 6,144.68 sqm. Apart from total plot area (E-16, E-17, E-18 & E-22), MIDC has allotted Industry Plot No. OS -23 admeasuring 4290 sqm solely for development of green belt. Industry has developed Green Belt in an area of 9466 sqm (39.5% of total plot area). This Green Belt is developed within Industry premises as well as on plot OS-23 allotted by MIDC only for Green belt development adjacent to existing plots.

The estimated expansion project cost is Rs. 69.01 Crores. Total capital cost earmarked towards environmental pollution control measures under proposed project is Rs.12.20 Crores and the Recurring cost (operation and maintenance) will be about Rs.1.29 Crores per annum. Total Employment under expansion project would be 158 persons (as direct & indirect). Industry proposes to allocate Rs. 128.5 Lakh towards CER.

Project Proponent reported that the GIB sanctuary is located about 2.31 Km from project site at Plot No. E-16, E-17, E-18 ,E-22 & OS-23 in Chincholi MIDC. ESZ for GIB is finalized vide notification No. 596 dated 11/02/2020. ESZ is located at 2.1 Km from project site i.e. the Unit is outside of the ESZ. The River Sina is at a distance of 6 Km on South West from the project site.

Ambient air quality monitoring was carried out at 8 locations during Oct.- Nov.- Dec.- 2020 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (42.10–69.30 μ g/m³), PM_{2.5} (10.40 – 22.90 μ g/m³), SO₂ (7.80 – 25.70 μ g/m³) and NOx (11.60 – 27.70 μ g/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs would be 0.256 μ g/m³ for PM₁₀ (towards West side), 0.0650 μ g/m³ for PM_{2.5} (towards West side), 1.60 μ g/m³ for SO₂ (towards West side) and 0.950 μ g/m³

NO_x (towards West side). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

PP reported that total water requirement after expansion project will be 746 CMD. Out of which, 488 CMD fresh water will be taken from MIDC Water supply scheme at Ujani Dam on Bhima river. 245 CMD will be treated in ETP & 13 CMD will be STP treated effluent to be recycled thereby reducing fresh water demand. Total Effluent after expansion of 274.5 CMD will be generated and same will be segregated as strong and weak streams and treated through 2 separate ETP schemes. The treated effluent will be recycled thereby achieving Zero Discharge. STP will be provided for treating domestic effluent of 16 CMD. Treated water will be recycled for flushing.

Power requirement after expansion of project will be 5750 kVA and will be taken from MSEDCL. Six DG sets of 1250 kVA (2 Nos.), 380 kVA (2 Nos.) & 100 kVA (2 Nos.) capacity will be installed as standby during power failure. Stack of height 20 m AGL, 5 m ARL, 3 m ARL is provided as per CPCB norms to the DG sets of 1250 kVA, 380 kVA, 100 kVA respectively. Existing unit has 3 TPH boiler which will be used as standby after expansion. Additionally, industry will install 16 TPH boiler and Thermopack of 12 Lakhs Kcal/Hr. Fuel Briquettes will be used for same. MDC followed by Bag Filter with a stack of height of 31 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: There would be process emissions in the form of HBr, NOx, NH₃ HCl, SO₂ & HCN same would be controlled through installation of Scrubbers. Presently, five scrubbers (HBr, NOx, NH₃ HCl & SO₂) are installed on site. Under expansion, additional six number of scrubbers (HBr, NOx, NH₃, HCl, SO₂ & HCN) will be provided.

S.	Emissions	Dia.	Ht.	Packing	Mode of	Scrubbing	Disposal/
No.		(M)	(M)	Material	regeneration	Media	Recycle/
					of the packing		Reuse/byproduct
					material		
1	SO ₂	0.5	3	Glass	Water washing	Water /	Sodium Sulphite
				/HDPE		Caustic	Solution
						Soda	
2	NH ₃	0.5	3	Glass	Water washing	Water	Ammonia to
				/HDPE			process
3	HBr	0.5	3	Glass	Water washing	Caustic	NaBr
				/HDPE		Soda	
4	NOx	0.5	3	Glass	Water washing	Water /	To ETP
				/HDPE		Caustic	
						Soda	
5	HCI	0.6	6	Glass	Water washing	Water	HCI Acid Sale
				/HDPE			
6	HCN	0.5	3	Glass	Water washing	Caustic Lye	To ETP

Table: Details of Scrubber with Disposal Facility under expansion

S. No.	Emissions	Dia. (M)	Ht. (M)	Packing Material	Mode of regeneration of the packing material	Scrubbing Media	Disposal/ Recycle/ Reuse/byproduct
				/HDPE			

Table: Process Emissions Quantification & Treatment Details

S. No.	Emissions	Qty. (kg / Day)	Treatment Method
1	H ₂	16.05	Diffused by using Nitrogen through Flame Arrestor
2	O ₂	58.0	Dispersed into the Atmosphere
3	N2	25.29	Dispersed into the Atmosphere
4	CO ₂	135	Dispersed into the Atmosphere
5	SO ₂	1642	Scrubbed by using aqueous caustic lye solution
6	NH ₃	291	Scrubbed by using dilute HCI Medium
7	HCI	910	Scrubbed by using C.S. Lye Solution
8	HBr	521.8	Scrubbed by using C.S. Lye Solution
9	Amines	12.0	Scrubbed by using dilute HCI Water Medium

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

S.	Description	Quant	ity (MT/M)	Disposal
No.	Existing After Expansion			
			Expansion	
1	Boiler Ash	83.5	457 .0	Sale to Brick Manufacture
2	Metal Scrap		10.0	Sale to authorized recyclers
3	Empty Containers & Drums		1000 Nos./M	
4	Packaging Material	15.0	30.0	
5	E-Waste		1	

Table: Details of Hazardous Waste Generated & its Management

S.	Description	Cat	Qu	antity (MT/M)	Disposal Facility
No.			Existing	After Expansion	
1	Process Residue	28.1	12.97	20	CHWTSDF
2	Distillation Residue	20.3	14.3	65.20	CHWTSDF
3	ETP sludge	35.3	15.00	571.50	CHWTSDF
4	MEE Salt	35.3	30.00	360.00	
5	Spent Carbon	28.3		1.70	
6	Spent Catalyst	28.2		3.50	
7	Discarded containers /	33.1		90.00 Nos.	Sale to authorized
	barrels / liners				recycler / re-
					processor.
8	Filter Medium	36.2		60.00 Nos.	CHWTSDF

S.	Description	Cat	Qu	antity (MT/M)	Disposal Facility
No.			Existing	After Expansion	
9	Date-expired products	28.5		5.00	
10	Spent Solvent	28.6		90.00	
11	Spent / Used Oil	35.4		50.00 Lit	
12	Sodium Sulphate	35.3	153	150.00	
	Solution 25%				
13	HCI 30%	35.3	56.16	120.00	
14	Sodium Nitrite Solution	35.30	24.99		
	30%				
15	Distillation residue of P-	35.30	3.60		
	Xylene				
16	Ammonium Chloride	35.3	36.00		

Deliberations in the EAC:

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

The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in the EIA/ EMP reports. 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 reports is in compliance of the TOR and reflect the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measures towards Air, Water, Noise and Soil pollutions. The Committee suggested to use Biomass Briquettes as a fuel, as committed also by the PP. The Committee also suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The Committee deliberated the Green belt development plan submitted by PP. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considering 2m x 2m ratio and suggested to complete plantation with-in six months. The committee deliberated the requisite information submitted by PP related to schedule-1 conservation plan, compliance of CTO/EC, Actions for Enterprise Social Commitment, etc. The Committee also deliberated the compliance of conditions mentioned in the Certified compliance report of EC issued by the IRO, Nagpur and the compliance report is found to be in order. The committee suggested to explore IMV solar voltaic energy generation plant installation and PP committee for the same.

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

Accordingly, the EAC recommended for the grant of environmental clearance to the proposal subject to following conditions:

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent 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, <u>recommended</u> the project for grant of environmental clearance, and <u>subject to compliance of terms and conditions</u> as under, and general terms and conditions given in 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. Project Proponent reported that the amount of CO₂ emissions per day are stated to be 135 Kg/day and hence it is desirable that usage of economical viable technologies for CO₂ sequestration must be explored for usage in the Industry. The implementation report shall be submitted to the IRO, MoEFCC in this regard.
- iii. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
- 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. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no treated/untreated waste 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.
- vi. The unit shall make the arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Mock drill shall be conducted regularly.
- vii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

- viii. Total fresh water requirement, sourced from MIDC water supply, shall not exceed 488 CMD Prior permissions in this regard shall be obtained from the concerned regulatory authority.
- ix. Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- x. Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server.
- xi. Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space provided with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valves to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- xii. Process organic residue and spent carbon, if any, shall be sent to Cement or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.
- 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 39.5% of the total project area (as committed by the PP), mainly along the plant periphery/ additional land. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Trees have to be planted with spacing of 2m x 2m and the number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All trees must be planted within six months.
- xv. As committed by the PP, 1 MV solar volataic energy generation plant should be installed.
- xvi. The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule

presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented.

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.

Consideration of TOR

Agenda No. 20.6

Setting up Formaldehyde, Melamine formaldehyde resin and Cardanol Phenol Formaldehyde resin manufacturing unit of production capacity 400 TPD located at Khasra Nos. 18//6/2 (7-0), 7/2 (6-4), 8/2 (6-4), 9/2 (6-0), 10/2 (3-0) Village-Jeetpur, Behra Road, Barwala, District- Panchkula, Haryana by M/s Virgo Laminates Ltd. - Consideration of TOR

[Proposal No. IA/HR/IND3/229066/2021, File No. IA-J-11011/285/2021-IA-II(I)]

The project proponent and their accredited Consultant M/s. Gaurang Environmental Solutions Private Limited made a detailed presentation on the salient features of the project and informed that:

The proposal is for Terms of Reference to the project for setting up Formaldehyde, Melamine formaldehyde resin and Cardanol Phenol Formaldehyde resin manufacturing unit of production capacity 400 TPD located at Khasra Nos. 18//6/2 (7-0), 7/2 (6-4), 8/2 (6-4), 9/2 (6-0), 10/2 (3-0) Village-Jeetpur, Behra Road, Barwala, District- Panchkula, Haryana by M/s Virgo Laminates Ltd.

The details of products and capacity are as under:

S.	Product	Capacity
No.		
1.	Formaldehyde	300 TPD
2.	Melamine Formaldehyde Resin	25 TPD
3.	Cardanol phenol Formaldehyde Resin	75 TPD

As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amendments thereto; the proposed project is listed at S.N. 5 (f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and to be appraised at Central Level by Expert Appraisal Committee (EAC) as the proposed Unit is located outside of the Industrial area. PP reported that the project is green field and no activity in the site has started. The activity will start only after taking necessary clearances under the various Acts/Rule.

PP reported the total land area for the proposed project is 14,366.22 sq. m. (3.5 acres. PP

has obtained land conversion from the State Govt. for its industrial purpose. Industry will develop greenbelt in an area of 33 % i.e., 4740.85m² out of total area of the project. The estimated project cost is Rs.471.73 lakhs. Total 15 workers will be employed in the proposed unit.

PP reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. The Toposheet number of the project site is H43K15, H43K11, H43K14, H43L2& H43L3

Total water requirement is 353 m³/day of which fresh water requirement of 330.4 m³/day will be met from Ground water. Effluent of 24 m³/day will be treated through ETP (Effluent Treatment Plant). The plant will be based on Zero Liquid discharge system.

Deliberations in the EAC:

The EAC deliberated on the proposal. The Committee deliberated water recycling plan, green belt development plan and other uses of other pollution control devises for mitigation of air, water and noise pollution. Based on the KML file presented by the PP, the proposed Unit is green filed project and no activities on the site started and no violation case is observed.

The Committee, after detailed deliberations, recommended for issuing **Standard ToR** [Annexure-I] in addition to the **additional ToR with public hearing**, as per the provision of the EIA Notification, 2006, as the project site is not located in the notified industrial area :

- (i) Action plan for utilization of modern technologies for capturing carbon emitted and developing carbon sink/carbon sequestration resources.
- (ii) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species.
- (iii) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
- (iv) PP should conduct Public Hearing and all issues should be addressed in the EIA/EMP.
- (v) PP should develop Greenbelt 2500 saplings/ha, accordingly the plant species selected for greenbelt should have greater ecological value and should be of great utility value to the local population with emphasis on local and native species and the species which ae tolerant to air pollution. Trees have to be planted with spacing of 2m x 2m and number of trees has to be calculated accordingly.
- (vi) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.

Agenda No. 20.7

Setting up of Formaldehyde manufacturing unit of production capacity 200 TPD, located at Khasra No. 2//23, 8//3, 8//7, 8//8/1 Village: Sherpur, Tehsil: Shahzadpur, District.: Ambala, Haryana by M/s Surya Organics- Consideration of Term of Reference

[Proposal No. IA/HR/IND3/23379/2021, File No. IA-J-11011/433/2021-IA-II(I)]

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

The proposal is for Term of Refrence to the project for setting up of Formaldehyde manufacturing unit of production capacity 200 MTPD, located at Khasra No. 2//23, 8//3, 8//7, 8//8/1 Village: Sherpur, Tehsil: Shahzadpur, District.: Ambala, Haryana by M/s Surya Organics.

The details of products and capacity as under:

Product	Capacity
Formaldehyde	200 TPD

As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amendments thereto; the proposed project is listed at S.N. 5 (f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC) as the proposed Unit is located outside of the Industrial area. PP reported that the project is green field and no activity in the site has started. The activity will start only after taking necessary clearances under the various Acts/Rule.

PP reported the total land area for the proposed project is 8447.82 Sq.m. PP reported that land conversion for industrial purpose has been obtained. Industry will have developed greenbelt in an area of approx. 51.6 % i.e.4364 square meters out of total area of the project. The estimated project cost is Rs 7.0 Crores and the total required for the proposed unit will be 20 persons.

PP reported that there are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. falling within 10 km distance from the project site. Gaganhari PF is 8.90 km SE direction. Begna River is at 1.68 km E direction; Markanda River is at 8.90 km SE direction, Amri River at 2.03 E direction and Dhanana River 8.8 Km NW direction. The Toposheet number of the project site are H43K15 & H43L3.

The freshwater requirement of the project is 150 KLD which will be met from Ground Water source for which application to HWRA will be submitted. There will be no liquid effluent generation from the process. Domestic waste water will be treated in Septic tank followed by Soak Pit.

Deliberations in the EAC:

The EAC deliberated on the proposal. The Committee deliberated water recycling plan, green belt development plan and other uses of other pollution control devises for mitigation of

air, water and noise pollution. Based on the KML file presented by the PP, the proposed Unit is green filed project and no activities on the site started and no violation case is observed.

The Committee, after detailed deliberations, recommended for issuing **Standard ToR** [Annexure-I] in addition to the **additional ToR with public hearing**, as per the provision of the EIA Notification, 2006, as the project site is not located in the notified industrial area :

- (i) Action plan for utilization of modern technologies for capturing carbon emitted and developing carbon sink/carbon sequestration resources.
- (ii) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species.
- (iii) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
- (iv) PP should conduct Public Hearing and all issues should be addressed in the EIA/EMP.
- (v) PP should develop Greenbelt 2500 saplings/ha, accordingly the plant species selected for greenbelt should have greater ecological value and should be of great utility value to the local population with emphasis on local and native species and the species which ae tolerant to air pollution. Trees have to be planted with spacing of 2m x 2m and number of trees has to be calculated accordingly.
- (vi) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
- (vii) PP shall conduct Detailed Biological Study for a period. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished.

Agenda No. 20.8

Setting up of Formaldehyde Manufacturing Unit by M/s White Field Chemicals, located at B-48/B49, UPSIDA and Industrial Area Baghpat, Uttar Pradesh - Consideration of TOR

[Proposal No. IA/UP/IND3/230614/2021; File No. IA-J-11011/393/2021-IA-II(I)]

The Committee took note that the documents uploaded on the Parivesh portal are not according to the provision of EIA notification 2006 and was not legible.

EAC noted that layout is wrong. There is no boiler proposed in the Unit. How PP can manufacture the formaldehyde without boiler ?. The technical quality of Report is extremely poor. Consultant could not explain the project adequately.

The EAC also warned to the Consultant [M/s Enviro Infra Solution Pvt. Ltd.] not to submit the immature proposal and read the various provisions of the EIA Notification, 2006 before submitting the application on Parivesh Portal.

In view of the above, PP/Consultant need to revise application accordingly as per provisions of the EIA Notification, 2006. Accordingly, the proposal was **returned** in the present form and advised the PP to revise the application.

Consideration of EC Proposal

Agenda No. 20.9

Expansion of Synthetic Organic Chemicals manufacturing unit of capacity from 924.46 TPM to 41,974.46 TPM located at Plot No. F-13, MIDC Chincholi, Taluka: Mohol, District: Solapur, Maharashtra by M/s MVL Medisynth Pvt. Ltd.- Consideration of EC

[Proposal No. IA/MH/IND3/236707/2021, File No. IA-J-11011/293/2013-IA-II(I)]

The proposal is for environmental clearance to the project for expansion of Synthetic Organic Chemicals manufacturing unit of capacity from 924.46 TPM to 41,974.46 TPM located at Plot No. F-13, MIDC Chincholi, Taluka: Mohol, District: Solapur, Maharashtra by M/s MVL Medisynth Pvt. Ltd.

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 Project was considered earlier in the 16th EAC meeting held on 1-2nd September, 2021 and the proposal was returned because the Project Proponent has not properly implemented the basic condition of green belt mentioned in the earlier EC. Now PP submitted that the industry has planted 1370 nos. of trees in 0.55 Ha land area. As per direction of EAC industry will plant additional 1000 nos. of trees in vicinity of industry and nearby 4 Villages. Plantation will be done within period of six months.

S.	Name of the		Quantity(TP)	CAS No.	End Uses	
No.	Product	Existing	Expansion	Total After Expan.		
	Products					
1	Meropenam	12	-	12	119478- 56-7	Antibiotics
2	Carboplatin	0.048	-	0.048	41575- 94-4	Anticancer

The details of products and capacity as under:

S.	Name of the		Quantity(TP	CAS No.	End Uses	
No.	Product	Existing	Expansion	Total After Expan.		
3	Cisplatin	0.024	-	0.024	15663- 27-1	Anticancer
4	Famicyclovir	50.4	-	50.4	1042227 -87-4	Antibiotics
5	ImatinibMesylate	4.8	-	4.8	152459- 95-5	Anticancer
6	Azacitidine	0.048	-	0.048	320-67-2	
7	Efavirenz	24.6	-	24.6	154598- 52-4	Antiretroviral
8	Tenofovir	49.8	-	49.8	147127- 20-6	
9	Travoprost	0.012	-	0.012	157283- 68-6	Ophthalmic /Antiglucoma
10	Latanoprost	0.012	-	0.012	130209- 82-4	Ū
11	Bimatoprost	0.012	-	0.012	155206- 00-1	
12	Erlotinib	0.0478 8	-	0.04788	183321- 74-6	Anticancer
13	Impenem	12	-	12	74431- 23-5	Antibacterial
14	CaffeicacidPhenethylest er	39.513 6	-	39.5136	104594- 70-9	Anti HIV drug
15	Curcumin	50.232	-	50.232	458-37-7	Anti- inflammatory
16	Pterostibene	39.6	-	39.6	537-42-8	Antioxidant agent
17	Reserveratrol	36.00	-	36.00	501-36-0	Supplement in Bp
18	Methyl Amine Hydrochloride	-	2500.00	2500.00	593-51-1	
19	Ethyl Amine Hydrochloride	-	2500.00	2500.00	557-66-4	
20	Propylamine Hydrochloride	-	2500.00	2500.00	556-53-6	
21	Butylamine Hydrochloride	-	2500.00	2500.00	3858-78- 4	Pharmaceutica I uses
22	N-Methyl Piperazine	-	5000.00	5000.00	109-01-3	
23	N-Ethyl Piperazine	-	5000.00	5000.00	5308-25- 8	
24	N-Methyl Morpholine	-	4000.00	4000.00	109-02-4	Catalyst for
25	N-Methyl Morpholine N- oxide	-	4000.00	4000.00	7529-22- 8	generation

S.	Name of the		Quantity(TP	CAS No.	End Uses	
No.	Product	Existing	Expansion	Total After Expan.		
26	Metformin Hydrochloride	-	5000.00	5000.00	1115-70- 4	Antidiabetic
27	Paracetamol	-	5000.00	5000.00	103-90-2	Antipyretic
28	Para Hydroxy Phenyl Acetamide	-	1000.00	1000.00	17194- 82-0	Intermediate
29	4-Hydroxyacetophenone	-	1000.00	1000.00	99-93-4	
30	1,2,4-Triazole		1000.00	1000.00	288-88-0	
31	Intermediate & R&D Products		50.00	50.00	-	-
	Total (A)	319.15	41050.00	41369.15		
В	By-Products					
1	Potassium Chloride	0.30	-	0.30	7440-09- 7	Reagent
2	HBr				10035-	Source of Br
		43.68	-	43.68	10-6	
3	Ammonium Chloride + Acetic Acid	50.64	-	50.64	64-19-7	By product
4	Triethyl Amine HCI Salt	7.20	-	7.20	554-68-7	Dye industry
5	HydroxyBenzotriazole	6.24	-	6.24	80029- 43-2	Racemization suppressor
6	Buta-1,3-Diene	22.14	-	22.14	106-99-0	Artificial rubber
7	MgBr	22.14	-	22.14	1826-67- 1	Sedative
8	Imidazole	24.60	-	24.60	288-32-4	Reagent
9	4Methylbenzene sulfonic Acid	39.84	-	39.84	104-15-4	Reagent
10	Bromo Ethane	30.88	-	30.88	74-96-4	Alkylation
11	DBUHI	0.12	-	0.12		Reagent
12	Potassium Bromide	0.08	-	0.08	7758-02- 0	Reagent
13	Sodium Sulphate	99.78	-	99.78	7757-82- 6	Isosmotic solution
14	Aluminum Hydroxide	60.82	-	60.82	21645- 51-2	Antacid
15	Pyridine. HCL	11.59	-	11.59	628-13-7	Reagent
16	Potassium Carbonate	36.00	-	36.00	584-08-7	Reagent
17	Phosphorodibromidous Acid	56.72	-	56.72		Fertilizer
18	Diethyl Phosphate Sodium	39.00	-	39.00	2870-30- 6	Used cosmetic
19	3,4-dihydro-2H-pyran	24.00	-	24.00	110-87-2	Intermediate
20	Tetrabutyl Ammonium Carbonate	0.88	-	0.88	17351- 62-1	Reagent

S.	Name of the		Quantity(TPA)			End Uses
No.	Product	Existing	Expansion	Total After Expan.		
21	PiperidineHydrochloride	10.08	-	10.08	6091-44- 7	Sequencing
22	Sodium Chloride	18.42	-	18.42	7440-23- 5	Reagent
23	Silver lodide	0.17	-	0.17	7783-96- 2	Proteomic research
	Total (B)	605.31	-	605.31		
	Total (A+B)	924.46	41,050	41,974.4 6		

As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amendments thereto; the expansion project comes under Category – B1. But, due to presence of Great Indian Bustard (GIB) sanctuary within 5 Km from Project Site in MIDC, General condition is applicable to project and requires appraisal at Centre Level by the EAC. The GIB sanctuary is located about 2.43 Km from project site in Chincholi MIDC. ESZ for GIB is finalized and located at 2.16 Km from project site. PP reported that the Unit is outside of the ESZ.

The MVLMPL was granted EC vide letter J-11011/293/2013-IA-II (I) dated 28.03.2016 for setting up of Bulk Drug & Intermediate manufacturing unit. Subsequent to grant of EC, the project was not implemented on site due to insufficient funds problem. The new management has started activity on site w.r.t. Spent Solvent distillation after procurement of consents from MPCB. The capacity of same is 100 MTPD. Distillations of Glycols / Ethanol Amines / Acetonitrile / BDO / NMP / NEP/Other Solvents are done as per latest CTO-Format 1.0/AS (T)/UAN No. 0000072210/CO-2003000539 dated 09.03.2020. Also, MVLMPL has been granted 1st CTO expansion with amalgamation of existing CTO for distillation activity - Format 1.0/AS(T)/UAN No. 0000110048/CO-2104000662 dated 12.04.2021. MPCB granted CTO for distillation of gycols/ Ethanol/Amines/ Aceto Nitriles/ BDO/NMP/NEP/ other solvents.

The Standard ToR for the expansion project has been issued by Ministry vide letter No. No.J-11011/293/2013-IA II (I), dated 3rd February, 2021. Public hearing for expansion project has been exempted as the project is located in Notified Industrial Area. MoEF&CC, RO, Nagpur issued certified monitoring report on EC Compliance dated 31.03.2021, wherein it is mentioned that the project was not implemented on site. As informed by PP no any litigation is pending against the proposal.

PP reported that total plot land area is 16,388 sqm. Existing built-up area 3,371.83 sqm additional built-up for proposed expansion is 2,768.93 sqm. Industry has developed Green Belt in an area of 3500 sqm (21 % out of total plot area). Moreover, additional Green Belt area of 1976 sqm (12 % out of total plot area) will be developed under expansion. After expansion of project, the total Green Belt area would be 5476 sqm. which accounts for 33 % of total plot area. Further, PP committed that the industry will plant additional 1000 nos. of

trees in vicinity of industry and nearby 4 Villages. Plantation will be done within period of six months.

The estimated expansion project cost is Rs.30 Crores. Total capital cost earmarked towards environmental pollution control measures under proposed project is Rs.7.15 Crores and the Recurring cost (operation and maintenance) will be about Rs.0.81 Crores per annum. Total Employment under expansion project would be 100 persons (as direct& indirect). Industry proposes to allocate Rs.85 Lakh towards Corporate Social Responsibility.

PP reported that The GIB Sanctuary is located about 2.43 Km from project site in MIDC.ESZ for GIB is finalized vide notification No. 596 dated 11/02/2020. ESZ is located at 2.16 Km from Plot i.e. the Unit is outside of the ESZ. The River Sina is at a distance of 6.3 Km on South West from the project site

Ambient air quality monitoring was carried out at 8 locations during Oct.- Nov.- Dec.- 2020 and submitted baseline data indicates that ranges of concentrations of PM10 (42.10–71.10 μ g/m³), PM2.5 (10.40 – 23.70 μ g/m³), SO2 (7.80 – 27.50 μ g/m³) and NOx (11.60 – 29.90 μ g/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs would be 0.111 μ g/m³ for PM10 (towards West side), 0.033 μ g/m³ for PM2.5 (towards West side), 1.53 μ g/m³ for SO2 (towards West side) and 0.819 μ g/m+ NOx (towards West side). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

PP reported that total water requirement, after expansion project will be 356 CMD. Out of which, 200 CMD fresh water will be taken from MIDC Water supply scheme at Ujani Dam on Bhimariver. 153 CMD will be ETP treated &3 CMD will be STP treated effluent to be recycled thereby reducing fresh water demand. Effluent of 180 m³/Day will be generated and same will be segregated as strong and weak streams and treated through 2 separate ETP streams. The treated effluent will be recycled thereby achieving Zero Discharge. STP will be provided for treating domestic effluent of 4 CMD. Treated water will be recycled for flushing

Power requirement after expansion of project will be 250 KWH including existing kVA and will be taken from MSEDCL. Existing DG set of 300 kVA (1 No) is installed as standby during power failure. Stack of height 3 m ARL is provided as per CPCB norms to the DG sets of 300 kVA. Existing unit has 6 TPH boiler and 29 Lac Kcal/Hr Thermic Fluid Heater. Additionally, industry will install10 TPH boiler. Fuel Bagasses / Coal will be used for same. 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/Nm³for the proposed boiler.

Details of Process emissions generation and its management: There would be process emissions will be in the form of Cl₂, H₂SO₄, HBr, SO₂, Ammonia, Amines are controlled through installation of Scrubbers. Four scrubbers will be installed on site.

S. No.	Scrubber attached to	Process Emissions	Dia.	Ht.	Packing Material	Scrubbing Media	Disposal Method
1.	Production Block-1	Cl2, H2SO4,	0.5 M	3 M	Polypropylene Pal Rings	Caustic soda lye	To ETP for

2.	Production	HBr, SO2,	0.5 M	3 M		furth
	Block-2	Ammonia,				treatm
3.	Production	Amines,	0.5 M	3 M		
	Block-3	HCL				
4.	Production		0.5 M	3 M		
	Block-4					

Table: Process Emissions Quantification & Treatment Details

S. No.	Emissions	Qty. (kg / Day)	Treatment Method
1	Cl ₂	114.00	 Scrubbing by using caustic solution & saturated solution to MEE Scrubbing in water media till achieving concentration 28-35%. Aq. HCl solution will be used in the in-house processes.
2	HBr	10.00	Scrubbing by using caustic solution & saturated solution to MEE
3	N ₂	10.00	Dispersed into the Atmosphere
4	CO ₂	120.00	 Scrubbed by using caustic solution & saturated solution used back in the process to replace fresh carbonate usage Proposed to bottle the excess CO2
5	SO ₂	75.00	• Scrubbing by using caustic solution & saturated solution is sold to reprocessing agencies
6	NH3	25.00	 Scrubbing by using Chilled Water Media till achieving concentration 8-12% & same will be used in the in-house process
7	Amines	50.00	• Will be scrubbed by using dil. HCl solution and saturated solution will be treated in MEE

Solid waste/ Hazardous waste generation and its management:

Table: Details of Solid Waste Generated & its Management

S.	Description	Quantity (MT/M)		Disposal
No.		Existing	After Expansion	
1	Boiler Ash	30	60	Sale to Brick
			00	Manufacture
2	Metal Scrap		2	Sale to authorized
3	Empty Containers & Drums		1000 Nos./ A	recyclers
4	Packaging Material		30	
5	E-Waste		0.1	

Table: Details of Hazardous Waste Generated & its Management

S.	Description	Cat	Quantit	ty (MT/M)	Disposal Facility
No.			Existing	After Exp.	
1.	Process Residue	28.1	1.39	33	CHWTSDF
2.	Distillation Residue	20.3	1.93	33	CHWTSDF
3.	ETP sludge	35.3	36.9	50	CHWTSDF
4.	Spent Carbon	28.3	0.76	1	
5.	Spent Catalyst	28.2		1	
6.	Discarded containers / barrels / liners	33.1	250 Nos.	500 Nos.	Sale to authorized recycler / re-processor.
7.	Filter Medium	36.2		2 Nos.	CHWTSDF
8.	Date-expired products	28.5		14	
9.	Spent Solvent	28.6	3.02	5	Would be sold to Authorized Spent Solvent re-processor
10.	Spent / Used Oil	35.4	50 Lit/M	100 Lit/M	Shall be sold to Authorized Re-processor
11.	Contaminated aromatic, aliphatic or naphthenic	20.1		2 MT/Day	(Low Boiler) Sale to Authorised Re- processor
12.	Solvent	20.1		4.8 MT/Day	(High Boiler) Sale to Authorised Re- processor

Deliberations in the EAC:

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

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

The EAC noted that GIB sanctuary is located about 2.43 Km from project site at Plot No. E-16, E-17, E-18, E-22 & OS-23 in Chincholi MIDC. ESZ for GIB is finalized vide notification No. 596 dated 11/02/2020. The ESZ is located at 2.16 Km from project site i.e. the Unit is outside of the ESZ. The River Sina is at a distance of 6.3 Km on South West from the project site.

The Committee noted that the EIA/EMP reports are in compliance of the ToR issued for the project, considering the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested use of coal having ash content less than 15% and Biomass Briquettes as a fuel. The Committee also suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices. The Committee deliberated the solvent recovery and its mitigation plan and found satisfactory. The committee also deliberated water balance and found satisfactory. The Committee also suggested to find possibility to increase the use the recycled water.

The Committee deliberated the Green belt development plan submitted by PP wherein, PP submitted that the industry has planted 1370 nos. of trees in 0.55 Ha land area which accounts 33% of the total plot area. As committed by the PP the industry will plant additional 1000 nos. of trees in vicinity of industry and nearby 4 Villages. Plantation will be done within period of six months. The Committee found the reply of PP satisfactory. The Committee deliberated the requisite information submitted by PP related to schedule-1 conservation plan, compliance of CTO/EC. The committee also deliberated the compliance of conditions mentioned in the Certified compliance report of earlier EC and noted due to insufficient funds problem the project was not implemented on site.

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

Accordingly, the EAC recommended for the grant of environmental clearance to the proposal subject to following conditions:

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent 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, <u>recommended</u> the project for grant of environmental clearance, and <u>subject to compliance of terms and conditions</u> as under, and general terms and conditions given in 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). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97% with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
- (iii). The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (iv). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no treated/untreated waste water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (v). No banned Chemicals/Products shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government issued in this regard.
- (vi). An 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). Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture purpose.
- (viii). The unit shall make the arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Mock drill shall be conducted regularly.
- (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (x). Total fresh water requirement, sourced from MIDC Water supply scheme at Ujani Dam on Bhima river, shall not exceed 200 CMD. Prior permissions in this regard shall be obtained from the concerned regulatory authority.
- (xi). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (if applicable).

- (xiii). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space provided with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valves to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xiv). Process organic residue and spent carbon, if any, shall be sent to Cement or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.
- (xv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high-pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi). The green belt of at least 5-10 m width shall be developed in at least 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. Trees have to be planted with spacing of 2m x 2m and the number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration. As committed by the PP the industry will plant additional 1000 nos. of trees in vicinity of industry and nearby 4 Villages. Plantation will be done within period of six months.
- (xvii). The activities and the action plan proposed by the project proponent to address the socio-economic and public hearing issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EIA/EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented.
- (xviii). 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. 20.10

Expansion for manufacturing of Phenol Formaldehyde Resin@300 MT/M, MF Resin@300MT /M, UF Resin@700 MT /M in Existing Unit (manufacturing of Industrial Laminated Sheets / Decorative Laminated Sheets@100000 No./M) by M/s Platinium Laminates, located at S. No. 760, Village Isanpur Dodiya, Taluka Dehgam, District Gandhinagar, Gujarat –Re-Consideration of Environmental Clearance

[Proposal No.: IA/GJ/IND2/107855/2019; File No. IA-J-11011/206/2019-IA-II(I)]

The Project proponent has not submitted any documents to the EAC. The EAC tried to understand the proposal but nobody from the Consultant/PP was there to address the concerns raised by the respected members of the Committee.

The EAC also warned to the Consultant [M/s Bhagwati Enviro Care Ltd.] to submit the complete details and read the various provisions of the EIA Notification, 2006 before submitting the application on Parivesh Portal. The EAC also warned the PP/Consultant not to waste the time of the EAC and submit the proposal once PP/Consultant is ready for the presentation before the EAC.

The proposal was accordingly **returned** in its present form for submission of revised application as per provisions of the EIA Notification, 2006.

Consideration of Amendments in Environmental Clearance

Agenda No. 20.11

Amendment in existing EC letter for Bulk Drug Manufacturing Unit (2.60 MTPM) by M/s Asutosh Pellet, located Block No. 515, Village Vamaj," Vamaj Adraj Road, Taluka Kadi, District Mehsana, Gujarat –Consideration of Amendment in EC

[Proposal No. IA/GJ/IND3/236609/2021, File No. IA-J-11011/334/2010-IA-II(I)

The proposal is for amendment in the Environmental Clearance granted by the Ministry for Bulk Drug Manufacturing Unit (2.60 MTPM) by M/s Asutosh Pellet, located Block No. 515, Village Vamaj," Vamaj Adraj Road, Taluka Kadi, District Mehsana, Gujarat.

Deliberations in the EAC:

The Project Proponent neither attended the meeting nor communicated to the Ministry regarding the reason for not attending the same. The Project proponent has not submitted any documents to the EAC. The EAC tried to understand the proposal but nobody from the Consultant/PP was there to address the concerns raised by the respected members of the Committee.

The Committee, is of opinion that when the PP or Consultant are not ready for the

presentation before EAC the same should be communicated to the Ministry. Valuable time of EAC should not be wasted.

The Committee, after deliberations, *returned* in the proposal in the present form.

Agenda No. 20.12

Proposed production of Formaldehyde 100 MT/day, located at Seehpur, H. B. No. 176, Tehsil- Derabassi, District- SAS Nagar, Punjab by M/s Feel Organic - Consideration of Term of Reference

[Proposal No. IA/PB/IND3/237115/2021, File No. IA-J-11011/461/2021-IA-II(I)]

The project proponent and their accredited Consultant M/s Eco Laboratories and Consultants Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that:

The proposal is for Term of Reference to the project for proposed production of Formaldehyde 100MT/day, located at Seehpur, H. B. No. 176, Tehsil- Dera bassi, District-SAS Nagar, Punjab by M/s Feel Organic.

The details of products and capacity reported by the PP, as under:

Product Details	Proposed Quantity	Total Quantity
Formaldehyde	100MT	100MT

As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amendments thereto; the proposed project is listed at S.N. 5 (f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC), as the Unit is located outside of the notified industrial area and PH is required for the instant project. PP also reported that the Unit is located at interstate boundary of Haryana and Punjab at a distance of 500m.

PP reported the total land area for the proposed project is 3.353.8 m². Industry will develop greenbelt in an area of 33.7 % i.e., 1,128.77 m² out of total area of the project The estimated project cost is Rs. 500 Lakhs and the total manpower required for the proposed unit will be 37 persons.

PP reported that there are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. falling within 10 km distance from the project site. NW direction. Dangri Nadi is the nearest river flowing at a distance of 1.4 km in E Direction. The Topo sheet number of the project site is H43K15.

Deliberations in the EAC:

It was informed to the EAC that there are various court cases are going on in the Hon'ble

NGT and Hon'ble Supreme Court related to illegal operation of formaldehyde Units without prior EC under the provisions of the EIA Notification, 2006.

The Committee took note that there are built structures/ shed observed in the KML present in the plant premises and the EAC is of the view that at first instance SPCB may be requested to provide the details of operations of the earlier products/industry, operation status of the Unit to check the violation, if any, reported by the Unit. PP shall submit all the details of CTE/CTO/EC of the earlier operations.

The Committee took note that the PFR and other Reports/Presentation is also not according to the provision of EIA notification 2006. The EAC also warned to the Consultant not to submit the immature proposal and read the various provisions of the EIA Notification, 2006 before submitting the application on Parivesh Portal.

In view of the above, PP/Consultant need to revise application as per provisions of the EIA Notification, 2006. Accordingly, the proposal was **returned** in the present form and advised the PP to revise the application as the whole process is online on Parivesh Portal. The PP committed to revise the application and submit the SPCB letter to provide the details of operations of the earlier products/industry to check the violation, if any.

The meeting ended with thanks to the Chair.

Standard TOR for 5 (f) Category

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

- i. 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. Details of existing products and production, if any, along with present product/production details in tabular format, to verify the compliance of the EIA Notifications.
- v. List of raw materials required and their source along with mode of transportation.
- vi. Other chemicals and materials required with quantities and storage capacities
- vii. Details of Emission, effluents, hazardous waste generation and their management.
- viii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- ix. Details of boiler/gensets (including stacks/exhausts) and fuels to be used
- x. Process description along with major equipment's and machineries, process flow sheet (quantitative) from raw materials to products to be provided
- xi. Hazard identification and details of proposed safety systems.
- xii. Expansion/modernization proposals:
 - a. Copy of all 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 Integrated Regional Office of the Ministry of Environment, Forest and Climate Change as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all 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 topo-sheet 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 download 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. Land-use 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. Land-use 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 Warden-thereon
- 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 micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
 - 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. Study should indicate minimum, maximum value of different parameters for the period (3 months) collected. Collected data should be supported by the reference data of either CPCB or SPCB. AAQ data & GLC of pollutants from stack emissions should suggest technology/ measures- Best Practiced Technology (BPT) indicating best achieved results.
- ii. 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.
- iii. 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.
- iv. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- v. Ground water monitoring at minimum at 8 locations shall be included.
- vi. Noise levels monitoring at 8 locations within the study area.
- vii. Soil Characteristic as per CPCB guidelines.
- viii. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- ix. 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.
- x. Socio-economic status of the study area.

7) Environment 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

- i. 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 health 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
- v. 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.

10) 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/socioeconomic issues and item-wise details along with time bound action plan shall be included (CER activities shall be related to environment). 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.

10) Additional studies/Measures to be considered

- (i). Provide latest and ecofriendly technology for product manufacturing.
- (ii). Emphasize on Green chemistry/Clean Manufacturing
- (iii). Provide CAS No. of products along with product list.
- (iv). Provide details of amount of carbon sequestered in their unit through greenbelt/other modes, in case of expansion project.
- (v). Life structure and sustainability for carbon and water foot print.
- (vi). Detailed pollution Load estimation.
- (vii). Transportation of Hazardous substance, effluents etc shall be carriedout through authorized and GPS enable vehicles/Trucks only.
- (viii). Category of Hazardous Wastes shall be mentioned in the EIA/EMP report and in presentation.
- (ix). Details of greenhouse gases and emissions shall be provided.
- (x). Greenbelt shall be developed in the first year of the project and wind breaks shall be erected.
- (xi). Study area map shall be overlapped with all the associated features.
- (xii). Emphasize on green fuels.
- (xiii). The project from NCR shall not use Coal as fuel. Further, PP shall avoid use of Coal in the CPAs and elsewhere also if alternatives are available.

(xiv). Provide the Cost-Benefit analysis with respect to the environment due to the project.

11) 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.

12) A tabular chart with index for point wise compliance of above TORs and its details needs to be submitted in the EIA/EMP Report.

<u>B.</u> SPECIFIC TERMS OF REFERENCE FOR EIASTUDIES FOR SYNTHETIC ORGANIC CHEMICALS INDUSTRY

- 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.

GENERAL EC 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 upload/submit six monthly reports on Parivesh Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated 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 Integrated Regional Office of MoEF&CC by e-mail.

- (x) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (xi) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- (xii) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

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

S.	Name of Members	Designation
No.		
1.	Prof. (Dr.) A.B. Pandit	Interim EAC
	Vice Chancellor, Institute of Chemical Technology,	Chairman
	Mumbai, Sir JC Bose Fellow, Government of India	
	Email: ab.pandit@ictmumbai.edu.in	
2.	Dr. Ashok Kumar Saxena, IFS	Member
	Bunglow No. 38, Sector-8A, Gandhinagar, Gujarat –	
	382008	
•	E-mail: ashoksaxena1159@gmail.com	
3.	Prof. (Dr.) Vijay S. Moholkar	Member
	Professor in Department of Chemical Engineering,	
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4	E-mail: vmoholkar@iitg.ac.in Shri Santosh Gondhalkar	Manahan
4.		Member
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5.	Dr. Suresh Panwar	Member
J.	House No.4, Gayateri Green Society, NH 58 Bypass,	Member
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6.	Shri Dinabandhu Gouda	Member
0.	Additional Director, DH IPC-I, Room No. 309A, Third	Monibol
	Floor, Central Pollution Control Board, Parivesh	
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7.	Shri Tukaram M Karne	Member
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	E-mail: tmkarne@gmail.com	
8.	Shri Sanjay Bisht	Member
	Scientist 'E', Room No. 517, Office of the Director	
	General of Meteorology, Indian Meteorological	
	Department, Musam Bhawan, Lodhi Road, New Delhi -	
	110003	
	E-mail: sanjay.bist@imd.gov.in	
9.	Dr. Rakesh Kushwaha,	Member
	Sr. Scientist,	
	Central Ground Water Authority 18/11, Jamnagar House,	

	Mansingh Road New Delhi - 110011 E-mail ID- <u>kushwaha-cgwb@gov.in</u>	
10.	Dr. R. B. Lal Scientist 'E'/Additional Director Ministry of Environment, Forest and Climate Change Indira Paryavaran Bhawan, Room No. V-304, Vayu Wing, Jor Bag Road, New Delhi-110003 Telefax: 011-24695362 E-mail: <u>rb.lal@nic.in</u>	Member Secretary

MoEFCC

11.	Dr. Saranya P	Scientist D
	Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bag Road, New Delhi-110003	
12.	Mr. Ritin Raj Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bag Road, New Delhi-110003	Research Assistant

Annexure-III

Approval of EAC Chairman

Email

Re: Zero Draft Minutes of the 19th EAC (Industry 3 Sector) meeting held during October 25-26, 2021 (through Video Conferencing) for comments of the EAC and approval of the Chairman Sir.

From : ab pandit <ab.pandit@ictmumbai.edu.in> Subject : Re: Zero Draft Minutes of the 19th EAC (Industry 3 Sector) meeting held during October 25-26, 2021 (through Video Conferencing) for comments of the EAC and approval of the Chairman Sir.</ab.pandit@ictmumbai.edu.in>	Thu, Nov 18, 2021 05:37 PM 1 attachment
To: Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in>, ashoksaxena1159@gmail.com, snupadhyay che <snupadhyay.che@iitbhu.ac.in>, dwivedisuneet@rediffmail.com, suneetdwivedi@gmail.com, santoshgo@gmail.com, pkmishra che <pkmishra.che@itbhu.ac.in>, drpkm18@gmail.com, spcppri@gmail.com, tmkarne@gmail.com, Dinabandhu Gouda <dinabandhu.cpcb@nic.in>, Sanjay Bist <sanjay.bist@imd.gov.in>, vmoholkar@iitg.ac.in, Rakesh kushwaha <kushwaha-cgwb@gov.in></kushwaha-cgwb@gov.in></sanjay.bist@imd.gov.in></dinabandhu.cpcb@nic.in></pkmishra.che@itbhu.ac.in></snupadhyay.che@iitbhu.ac.in></rb.lal@nic.in>	
Cc : Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in></rb.lal@nic.in>	

Dear Dr. Lal, The minutes of the 20th EAC meeting are approved. PFA for your reference. Thanks and warm Regards, Pandit

Approved

Bandhil

Prof. A. B. Pandit Interim EAC Chairman Vice Chancellor, Institute of Chemical Technology, Mumbai, Sir JC Bose Fellow, Government of India
