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

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Dated: 14.03.2022

MINUTES OF THE 27th EXPERT APPRAISAL COMMITTEE (INDUSTRY-3SECTOR) MEETING HELD ON MARCH 7-8, 2022

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: MARCH 7, 2022 [MONDAY]

(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) Confirmation of the Minutes of the 26th Meeting of the EAC (Industry-3 Sector) held during February 16-17, 2022 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 **26th Meeting of the EAC (Industry-3 Sector) held during February 16-17, 2022** conducted through Video Conferencing (VC), and one request has been received for modifications, in the minutes of the project/activities, as below:

Correction in the minutes of the EAC meeting w.r.t. Amalgamation of Environmental Clearances and Expansion/Amendment of plants in existing GSFC Complex at Fertilizernagar, Vadodara, Gujarat by M/s Gujarat State Fertilizers & Chemicals Limited - Consideration of Environmental Clearance

[Proposal No. IA/GJ/IND3/254550/2021; F. No. IA-J-11011/901/2007-IA-II(I)]

The instant EC proposal was recommended by the EAC in its 26th meeting held during February 16-17, 2022. The Minutes were uploaded on Parivesh Portal on 23.02.2022. Further, PP vide e-mail dated 26.02.2022 requested for correction/amendment in various specific conditions imposed by EAC. w.r.t. project title, fuel, fresh water requirement and compliance of existing EC conditions, as detailed below:

S. No.	Page No. of Minutes	Specific Points	Information as per Minutes of Meeting	Details to be Corrected	Justification/ Remarks and deliberation of the EAC
1.	Page no. 64	Title of Project	Amalgamation of Environmental Clearances and Expansion/Amendment of **existing Urea Plants, located at GSFC Complex** at Fertilizernagar, Vadodara, Gujarat by M/s Gujarat State Fertilizers & Chemicals Limited - Consideration of Environmental Clearance	Amalgamation of Environmental Clearances and Expansion/Amendment of **plants in existing GSFC Complex** at Fertilizernagar, Vadodara, Gujarat by M/s Gujarat State Fertilizers & Chemicals Limited - Consideration of Environmental Clearance	PP mentioned that there is typo graphical error. EAC deliberated the issue and instructed the PP to read all the documents before submission on portal. The EAC found the request of PP in order and accepted it.
2.	Page no. 82	Para 2, line 4-5, "Deliberations by the EAC"	As committed by the PP the Committee suggested use Biomass Briquettes as a fuel.	Deletion of this point	As GSFC is using Natural Gas as fuel this point is not applicable to PP. EAC deliberated the issue and accepted the request of PP as it was found in order.
3.	Page no. 83	Condition no. (iv) of specific conditions	Total fresh water requirement shall not exceed 35732.45 KLD will be met from 4 no. of French wells sourced from Mahi River. Necessary permission obtained in this regard shall be	Total fresh water requirement shall not exceed 35732.45 KLD will be met from 4 no. of French wells sourced from Mahi River. Necessary permission obtained in this regard shall be	PP requested to consider revision of condition. Freshwater shall be reduced by reusing rooftop rainwater harvesting system

S. No.	Page No. of Minutes	Specific Points	Information as per Minutes of Meeting	Details to be Corrected	Justification/ Remarks and deliberation of the EAC
			renewed from time to time. **The freshwater demand shall be reduced by 10% using rainwater harvesting system.**	renewed from time to time. **The freshwater demand shall be reduced by using roof top rainwater harvesting system to the maximum possible extent and by using tertiary treated sewage of Vadodara Municipal Corporation (VMC) in phased manner from 2024.**	to the maximum possible extent. Additionally, as per guideline of Govt. of Gujarat (GOG), GSFC along with other GOG promoted companies is setting up Tertiary Treatment Plant (42 MLD) to use treated sewage from the STP of VMC. Freshwater will be replaced with the tertiary treated wastewater in a phased manner from 2024.This will reduce the consumption of freshwater for industrial purposes to major extent. The EAC deliberated the issue. The EAC found the request of PP in order and accepted the same.
4.	Page no. 83	Condition no. (v) of Specific Conditions	The Unit shall comply with **all the EC conditions/Safeguards/Mitigation measures, as mentioned in the existing ECs**. The	The unit shall comply with all **the EC conditions/Safeguards/Mitigation measures, as mentioned in the existing ECs**. **except**	As the instant proposal had also sought amendment in the A1 specific condition of EC vide no. SEIAA/GUJ/EC/59)

S. No.	Page No. of Minutes	Specific Points	Information as per Minutes of Meeting	Details to be Corrected	Justification/ Remarks and deliberation of the EAC
			implementation report shall be submitted to the IRO, MoEF&CC in this regard.	**the A1. Specific condition of EC granted for setting up of new melamine plant vide No. SEIAA/GUJ/EC/5(f)/228/2016 dated 31st March 2016 which shall be read as Molten Urea (Intermediate Product of OGT section of Melamine-III) will be partly/completely used for production of Technical Grade Urea or Melamine as per market demand**. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.	/228/2016 dated 31st March 2016 along with the expansion and amalgamation of existing EC. The EAC deliberated the issue. The EAC found the request of PP in order and accepted the same.

Deliberations by the EAC:

It was informed to the Committee that the instant EC proposal was recommended by the EAC in its 26th meeting held during February 16-17, 2022.

The EAC, after detailed deliberations, noted that the request of PP may be accepted and **recommended** for the incorporation of the above mentioned corrections/modifications in the minutes of the meeting.

The EAC also noted that no other request has been received for modifications/factual correction, in the minutes of the 25th EAC meeting for the project/activities, and **confirmed the same.**

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

Details of the proposals considered during the meeting **conducted through Video Conferencing (VC)**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:

Consideration of Environmental Clearance Proposals

Agenda No. 27.1

Expansion of Existing EC (F. No. IA-J-11011/332/2018- IA ll(l) on dated 07th January, 2020) by addition of API (Paracetamol) Manufacturing Plant for B2 Category by M/s Punjab Alkalies and Chemicals Ltd., Located at Nangal-Una Road, Naya Nangal, Rupnagar District, Punjab [Total plot area is 85.6 Acres i.e. 34.64 Hectare]- Consideration of Environmental Clearance.

[Proposal No. IA/PB/IND3/247968/2021; File No. IA-J11011/332/2018-IAll(l)]

The Project Proponent and the accredited Consultant M/s Kadam Environmental Consultants, [Accreditation Number NABET/EIA/1922/RA 0138, valid up to 25-05-2022], made a detailed presentation on the salient features of the project and informed that:

The proposal is for consideration of environmental clearance to the project for the expansion of existing EC (F. No. IA-J-11011/332/2018- IA ll(l) on dated 07th January, 2020) by addition of API (Paracetamol) Manufacturing Plant for API-B2 Category by M/s Punjab Alkalies and Chemicals Ltd., located at Nangal-Una Road, Naya Nangal, Rupnagar District, Punjab.

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

S. No.	Product	CAS No.	Capacity (MTPA)			End Use of the Product
			Existing as per granted EC dated 7th March 2020	Proposed	Total	
Products						
1	Caustic Soda Lye	1310-73-2	2,64,000	0	2,64,000	Pulp, Paper, Pharmaceuticals, Textile, ETP & other organic & inorganic chemicals

S. No.	Product	CAS No.	Capacity (MTPA)			End Use of the Product
			Existing as per granted EC dated 7th March 2020	Proposed	Total	
2	Hydrogen Gas	1333-74-0	739.2 Lac Nm^3	0	739.2 Lac Nm^3	In house usage: used as fuel in flaring and process boilers, will be used in Hydrogen Peroxide plant. It will be also sold to Petroleum refining and Pharmaceuticals units
3	Liquid Chlorine	7782-50-5	2,33,904	0	2,33,904	Dyes intermediates & Pharmaceuticals
4	Caustic Flakes*	1310-73-2	66,000	0	66,000	Pulp, Paper, Pharmaceuticals, Textile, ETP & other organic & inorganic chemicals
5	Stable Bleaching Powder*	7778-54-3	33,000	0	33,000	Water treatment plants, paper industries
6	Hydrogen Peroxide*	7722-84-1	16,500	0	16,500	Bleaching agent for Pulp, Paper, Textiles, Sugar, Coir & Tobacco Industries, Antiseptic agent, Sterilizing agent, Effluent treatment, Propellant for Rockets & Aircrafts, Chemical reagent for extraction of different metals like Cobalt, Uranium, Tungsten, etc.
7	**Paracetamol**	**103-90-2**	**0**	**20,625**	**20,625**	**Analgesic; Used to treat fever**
Co-Products						
1	Hydrochloric Acid	7647-01-0	1,05,600	42,689	1,48,289	ETP, other organic & inorganic chemicals
2	Sodium Hypo Chlorite	7681-52-9	6,000	0	6,000	Water purification, textile dyes
3	Dilute Sulphuric Acid	664-93-9	5,600	20,180	25,780	SSP, manufacturing of hydrochloric acid, nitric acid, sulphate salts, synthetic detergents, dyes and pigments, explosives, and

S. No.	Product	CAS No.	Capacity (MTPA)			End Use of the Product
			Existing as per granted EC dated 7th March 2020	Proposed	Total	
						drugs; Petroleum refining to wash impurities out of gasoline and other refinery products; Metal processing metals; Rayon manufacturing).
4	Para Di Chloro Benzene (PDCB)	106-46-7	0	5,821	5,821	Disinfectant, deodorant, pre cursor to polymers
5	Ortho Di Chloro Benzene (ODCB)	95-50-1	0	3,604	3,604	
6	Meta Di Chloro Benzene (MDCB)	541-73-1	0	194	194	
7	Tri Chloro Benzene	120-82-1	0	97	97	
8	Ortho Nitro Chloro Benzene (ONCB)	88-73-3	0	12,870	12,870	Pre-cursor to Anti-Leprosy drug Dapsone & raw material for various Dyes
9	Meta Nitro Chloro Benzene (MNCB)	121-73-3	0	248	248	
10	Dilute Acetic Acid	64-19-7	0	18,563	18,563	Used to make MCAA and other chemicals

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). But, due to presence of interstate boundary within 5 km from Project Site, General condition is applicable to project and requires appraisal at Centre Level by the EAC.

The PP reported that the Ministry had issued EC earlier vide letter no. IA-J-11011/332/2018-

IA ll(l); dated 07th January, 2020 to the existing project of chlor alkali project. PP now want to add the API (Paracetamol) Manufacturing Plant in the existing Unit. IRO, MoEFCC, vide letter No. 5- 01/2020-ENV/104-105, dated 16.02.2022, has submitted the certified compliance report of earlier EC conditions. Summary of report is given below:

Total No. of Conditions in EC	Fully Complied	Partially Complied	Not Complied	Noted & Assured to Comply
49	14	17	5	13

The PP reported that the existing land area is 3,46,408 m^2 and no additional land will be acquired for proposed expansion. The estimated project cost is Rs. 150 Crore apart from existing investment of Rs. 1240 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 31.9 Crores and the Recurring cost (operation and maintenance) will be about Rs. 10.5 Crores per annum. Industry proposes to allocate INR 1.1250 crores i.e. 0.75% of project cost i.e INR 150 crores towards Corporate Social Responsibility. Total Employment will be 100 persons as direct & 20 persons indirect after expansion.

PP reported that the Ambient air quality monitoring modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.047 µg/m^3, 0.004 µg/m^3 and 0.13 µg/m^3 with respect to HCl, Cl_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). Total water requirement is 14,729 m^3/day of which fresh water requirement of 12,644 m^3/day will be met from River Sutlej by the Irrigation Department, Government of Punjab, through the existing Bhakra-Nangal dam project located nearby. Effluent of 2,038 KLD (1,926 KLD industrial + 112 KLD domestic) quantity will be treated through ETP-1 & ETP-2. The plant will be based on Zero Liquid discharge system.

The Power requirement after expansion will be 3.5 MW from own power plant for proposed project. Existing unit has 90 TPH CPP Boiler. Additionally, 0 Boiler will be installed.

Details of Process emissions generation and its management:

S. No.	Stack Attached to	Stack Details				Pollutants	Air Pollution Control measures
		Height (m)	Diameter (m)	Temp (°C)	Velocity (m/s)		
Flue Gas Stacks (Existing)							
1	Boiler 1 (Thermax)	40	0.55	125	12.5	PM, SO_2, NO_x	Adequate Stack Height
2	Boiler 2 (Thermax)	40	0.55	125	12.5	PM, SO_2, NO_x	Adequate Stack Height

S. No.	Stack Attached to	Stack Details				Pollutants	Air Pollution Control measures
		Height (m)	Diameter (m)	Temp (°C)	Velocity (m/s)		
3	DG SET - 1	9	0.15	150	12.5	PM, SO_2, NO_x	Adequate Stack Height
4	DG SET - 2	9	0.15	150	12.5	PM, SO_2, NO_x	Adequate Stack Height
5	DG Set - 3	9	0.15	150	12.5	PM, SO_2, NO_x	Adequate Stack Height
6	Rice Husk boiler (used as standby)	30	0.8	120	10	PM, SO_2, NO_x	Adequate Stack Height
7	CPP Stack 1 – Boiler (90 TPH)	60	2.2	150	15	PM, SO_2, NO_x	ESP
8	CPP Stack 2 – Boiler (90 TPH)	60	2.2	150	15	PM, SO_2, NO_x	ESP
9	CPP Stack 3 - Boiler (90 TPH)	60	2.2	150	15	PM, SO_2, NO_x	ESP
10	CPP Stack 4 - Boiler (70 TPH)	55	1.8	150	15	PM, SO_2, NO_x	ESP
11	Flaker Stack	30	0.2	150	15	PM, SO_2, NO_x	Adequate Stack Height
12	DG SET – 4	9	0.15	150	12.5	PM, SO_2, NO_x	Adequate Stack Height
13	DG SET – 5	9	0.15	150	12.5	PM, SO_2, NO_x	Adequate Stack Height
Flue Gas Stacks (Proposed)							
No addition in Boiler, Hence No Load							
Process Vents (Existing)							
1	Sodium Hypo 1	15	0.15	45	7.5	Cl_2	Alkali Scrubber
2	Sodium Hypo 2	15	0.15	45	7.5	Cl_2	Alkali Scrubber
3	HCl Furnace 1	25	0.15	55	5	HCl Acid Mist	Water Scrubbers
4	HCl Furnace 2	25	0.15	55	5	HCl Acid Mist	Water Scrubbers
5	Sodium Hypo 3	15	0.15	45	7.5	Cl_2	Alkali Scrubber

S. No.	Stack Attached to	Stack Details				Pollutants	Air Pollution Control measures
		Height (m)	Diameter (m)	Temp (°C)	Velocity (m/s)		
6	HCl Plant 3	25	0.15	55	5	HCl Acid Mist	Water Scrubbers
7	Solvent Recovery H_2O_2	32	0.4	45	2.5	HC	Chiller, Demister, Activated Carbon Adsorbed
Process Vents (Proposed)							
1	HCl Scrubber (PAP)	14	0.15	55	5	HCl	Water Scrubbers
2	Chlorinator of MCB	20	0.15	30	1.5	Chlorine and HCl	Water and Caustic Scrubber
3	Nitrator of PNCB/ONCB/MNCB	15	0.5	35	1.5	NOx	Caustic Scrubber

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

S. No	Waste	Category as per HW Rules 2016	Source	Quantities Generated (MTPA)			Mode of Disposal
				Existing	Proposed	Total	
1.	Brine sludge (mercury based)	16.3	Erstwhile mercury cell based Chlor-alkali process	26,642	0	26,642	Disposed of in Secured Landfill Facility (on dry basis) within PACL premises
2.	Used or spent oil	5.1	Entire Site	2.7	0	2.7	Sold to authorized recyclers
3.	MEE sludge	35.3	MEE	1,750	2625	4375	Disposed as per HW Rules 2016
4.	ETP Sludge	35.3	ETP	0	2,500	2,500	Sent to authorized TSDF as per HW Rules 2016
5.	Spent catalyst	17.2	Production of Caustic soda	4,267	0	4,267	Sold to actual reusers

S. No	Waste	Category as per HW Rules 2016	Source	Quantities Generated (MTPA)			Mode of Disposal
				Existing	Proposed	Total	
6.	Distillation Residue	20.3	MCB/PNCB/ ONCB/MNC B	0	1,400	1,400	To CHWIF
7.	Waste Carbon	21.6	Paracetamol	0	205	205	To CHWIF

Solid Waste Generation & Disposal

S. No.	Solid Waste	Quantity (MTPA)			Mode of Disposal
		Existing	Proposed	Total	
1.	Brine Sludge	6,133	0	6,133	Although Brine sludge is not hazardous waste, the same is disposed to secured landfill facility developed inside PACL premises.
2.	Fly Ash	55,005	0	55,005	Fly Ash is given to nearest Cement plant (Gujarat Ambuja Cement) & Brick manufacturing units (Baljinder Pal Soni).
3.	Sodium Chloride (10% Moisture) (From PAP)	0	18,810	18,810	To Government agents for landfill as per instant Rules and Guidelines

Deliberations in the EAC

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent and submitted by the Consultant accredited by the NABET on behalf of the Project Proponent.

The EAC made detailed deliberations on the proposal. PP could not explain the water balance, action plan and budget allocation for green belt development, monitoring parameters related to API etc. The EAC deliberated the certified compliance report and advised the PP to submit the comparative list of EC conditions, vis-à-vis, non-compliances points, raised during monitoring and their Action Taken Report for further deliberations.

The Committee after, detailed deliberation, **deferred** the proposal and desired for certain requisite information/inputs as listed below:

(i). The Integrated Regional Office, MoEFCC, vide letter number File No. 5- 01/2020-ENV/104-105 dated 16.02.2022, has submitted the certified compliance report.

The report, inter-alia, mentioned some non-compliances. The EAC deliberated and advised the PP to submit the comparative list of EC conditions, vis-à-vis, non-compliances points as raised by IRO, MoEFCC; The Action taken report may be verified by the IRO, MoEFCC for further deliberations of the EAC;

(ii). EAC noted that PP has written "API & Intermediates both in Form-I"; however, the consideration of Cat B2 project API. In this regard PP needs to revise the Form-1 and resubmit:

(iii). The PP shall revise the water balance and waste water treatment plan and the same may be submitted on Parivesh portal;

(iv). The PP shall revise greenbelt plan along with timelines, species and budgetary allocations;

(v). The PP needs to submit the analysis report of effluents/emissions along with pollution control equipment's and their efficiency;

(vi). The PP needs to submit a list of products with production capacity (existing, expansion and total) and their EC/CTO details;

(vii). The PP needs to submit details of energy conservation measures proposed in the Unit;

(viii). The PP needs to submit details of implementation of environment conservation plan;

(ix). The Details of carbon foot prints and carbon sequestration w.r.t. proposed project needs to spell out;

(x). The PP needs to explore the possibility to use of bio fuel in place of coal; and

(xi). The PP needs to submit the details of onsite/offsite emergency plan and mitigation measures to be proposed during implementation of the project.

Agenda No. 27.2

Expansion of Active Pharmaceutical Ingredients (APIs) Bulk Drug manufacturing unit with production capacity from 25.5 TPM to 134.082 TPM within the Existing Plant located at Sy. No. 90/2, 90/3, 90/4, 99/1, 99/2, 99/3, 99/4, 99/5, 100/1, 100/2a, 100/2b, 100/3, Village Sathammai, Taluka Madurantakam, District Chengalpattu (Formerly Kancheepuram), Tamil Nadu by M/s Sun Pharmaceutical Industries Ltd. [Total land area 64688.76 Sq. m (15.98494 Acre)]- Consideration of Environmental Clearance

[Proposal No. IA/TN/IND3/248368/2021; File No. IA-J-11011/544/2021-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Eco Laboratories and Consultants Pvt. Ltd. having accreditation number NABET/EIA/2023/RA0211 valid till 17.12.2023 has made a detailed presentation on the salient features of the project and informed that:
The proposal is for consideration of the environmental clearance to the project for Expansion

of Active Pharmaceutical Ingredients (APIs) Bulk Drug manufacturing unit with production capacity from 25.5 TPM to 134.082 TPM within the Existing Plant located at Sy. No. 90/2, 90/3, 90/4, 99/1, 99/2, 99/3, 99/4, 99/5, 100/1, 100/2a, 100/2b, 100/3, Village Sathammai, Taluka Madurantakam, District Chengalpattu (Formerly Kancheepuram), Tamil Nadu by M/s Sun Pharmaceutical Industries Ltd.

The details of products and capacity are as under:

S. No.	Product Details (complete name)	CAS No.	Existing Quantity	Proposed Quantity	Total Quantity	Uses
1.	Sodium Valproate	1069-66-5	8	27	35	Anticonvulsant
2.	Oxetacaine	126-27-2	1	2.4	3.4	Oral Anaesthetic
3.	Clomipramine	303-49-1	1	2	3	Antidepressant
4.	Metadoxine	74536-44-0	0.4	0.6	1	Non-alcoholic Steatohepatitis
5.	Flurbiprofen	5104-49-4	1	0	0	Nonsteroidal anti-inflammatory agent
6.	Analgin Magnesium	63372-86-1	6	0	0	Analgesic
7.	Carbamazapine	298-46-4	4	0	0	Anticonvulsant
8.	Metoprolol Tartrate	56392-17-7	3	0	0	Beta blockers
9.	Tramodol Hydrochloride	36282-47-0	1	0	0	opioid analgesics
10.	Danazol	17230-88-5	0.1	0	0	androgenic hormones
11.	Magnesium Valproate	62959-43-7	0	10	10	Anticonvulsant.
12.	Divalproex Sodium	76584-70-8	0	15	15	Anticonvulsant.
13.	Mephentermine sulphate	1212-72-2	0	0.75	0.75	Antihypotentive
14.	Elagolix sodium	832720-36-2	0	0.02	0.02	Gynaecology (Menstruation disorders)
15.	Valproic acid	1069-66-5	0	43	43	Anticonvulsant.
16.	Ranolazine	95635-55-5	0	10	10	Antianginal
17.	Amisulpride	71675-85-9	0	2	2	Dopamine receptor antagonist; neuroleptic.
18.	Hydroxychloroquin	747-36-4	0	0.55	0.55	Rheumatoid

	e					arthritis
19.	Carboplatin	41575-94-4	0	0.072	0.072	Various types of cancers.
20.	Orlistat	96829-58-2	0	2.4	2.4	Therapy of weight loss.
21.	Isotretinoin	4759-48-2	0	0.18	0.18	Treat severe recalcitrant nodular acne.
22.	Lumacaftor	936727-05-8	0	0.05	0.05	Treat cystic fibrosis
23.	Pregabalin	148553-50-8	0	4	4	Analgesic in treatment of peripheral neuropathic pain ,Anticonvulsant, Anxiolytic
24.	Dexmethyl Phenidate	19262-68-1	0	0.1	0.1	deficit hyperactivity disorder
25.	Tizanidine	64461-82-1	0	0.25	0.25	skeletal muscle relaxants
26.	Lenalidomide	191732-72-6	0	0.025	0.025	treat various types of cancers
27.	Liraglutide	204656-20-2	0	0.25	0.25	control blood sugar levels
28.	Methylphenidate HCL	298-59-9	0	0.475	0.475	attention deficit hyperactivity disorder - ADHD
29.	Lurasidone	367514-87-2	0	0.5	0.5	treat the symptoms of schizophrenia
30.	Imatinib	220127-57-1	0	1.9	1.9	treat certain types of leukemia
31.	Sunitib	341031-54-7	0	0.04	0.04	Antineoplastics
32.	Leuprolide	74381-53-6	0	0.1	0.1	Treatment of prostate cancer, endometriosis, uterine fibroids

33.	Semaglutide	910463-68-2	0	0.02	0.02	control blood sugar levels
34.	**Total**		**25.5**	**123.68**	**134.082**	

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). But, due to presence of the Vedanthangal Bird Sanctuary within 5 Km from Project Site i.e. 3.72 Km (West), General condition is applicable to project and requires appraisal at Centre Level by the EAC.

The PP reported that this is old unit before 2006 and is operating with valid CTO from SPCB. The unit has obtained CTO compliance from the Tamilnadu Pollution Control Board vide letter dated 07.03.2022. All the conditions were reported complied, however, some suggestion were given to the unit. The PP committed to implement the suggestion given by TNPCB. The EAC deliberated the compliance status and found satisfactory.

The PP reported that the Land area is 64688.76 sq.m. The expansion is proposed within the existing land. The industry has already developed 21992.00 sq.m. (33.99%) green area and an additional 2500 more trees will be developed in area of 4006.00 sq.m. near project site. So overall greenbelt proposed after expansion will be 40.19%. The estimated project cost is Rs. 202.36 Crores including an existing investment of Rs. 174.36 Crores. Total capital cost earmarked towards environmental pollution control measures for proposed expansion is Rs.149.5 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 59.97 lakhs per annum. Total Employment will be of 654 persons. Industry proposes to allocate Rs. 33 Lakhs of the proposed cost towards CER.

The PP reported that the unit is located at 3.72 km (West) from the Vedanthangal Bird Sanctuary. There are no other National Park, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. The Kiliyar River is flowing at a distance of 2.03 km in SSW direction. Palar River is flowing at a distance of 7.52 km in ENE direction.

The PP reported that total water required after expansion will be 286.5 KLD out of which fresh water will be 182 KLD. Fresh water will be sourced from private tankers. Effluent of 83 KLD will be treated through existing Effluent Treatment Plant of 60 KLD followed by RO (40 KLD), MEE (80 KLD) and ATFD (22KLD). The plant is based on Zero liquid discharge system.

The PP reported that the power requirement after expansion will be 42000 kVA including existing 36000 kVA and will be met from TANGEDCO. Existing unit has DG sets of 1x380 kVA, 1x1500 kVA, 1x1010 kVA, 1x 500 kVA capacities, additionally DG sets are used as standby during power failure. Stack height of 7m for 380 kVA & 500 kVA and 30 m for 1010 kVA & 1500 kVA has been provided as per CPCB norms.

Existing unit has 3 TPH (2 Nos.), 6 TPH (1 No.) and 10 TPH (1 No.) coal/wood fired boilers. No additional boiler will be installed. Dust collector with a stack height of 30 m (for 6 TPH

boiler) and dust collector followed by bag filter with a stack height of 36 m (for 10 TPH boiler) has been installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3.

The Project proponent committed to comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996. The Onsite and Offsite Emergency plan will be implemented as cited in the provisions of the Rules.

The PP reported that a petitioner has filed an application before Hon'ble NGT Southern bench stating that the existing industry is operating without environmental clearance and located close to the Vedanthagal Bird Sanctuary (Case No. 88 of 2020). The Hon'ble NGT formed a committee and after having reports from the committee appointed for the purpose and reply by all the respondents including TNPCB, Wildlife officials, MOEF and Sun Pharma, had directed to Tamil Nadu Pollution Control Board to submit the report whether there were any other industries located along with the bird sanctuary. The Case was last listed on 01.02.2022 and 01.03.2022. The case has not disposed of yet. In this context, the EAC is of the view that the EC is subject to orders/ judgment of Hon'ble NGT and any other Court of Law, as may be applicable to this project.

Details of Process Emissions Generation and its Management: HCl, VOC, SO_2, NH_3, will be there in process emissions and for its management wet scrubbers have been installed with process stacks.

Details of Solid Waste/ Hazardous Waste Generation and its Management: PP reported that 131 kg/day of Municipal solid waste will be generated after expansion out of which 59 kg/day of organic waste will be treated through composting. Recyclable waste will be disposed to TNPCB Authorized Recyclers Hazardous wastes like Spent oil (Cat. 5.1), Spent Catalyst (Cat. 28.2), Spent Carbon (Cat. 28.3), Spent Organic Solvent (Cat. 28.6), Discarded Barrels / Containers / Liners (Cat. 33.1), ETP Sludge (Cat. 35.3), Process residues and wastes (Cat. 28.1), Date Expired products (Cat. 28.5), Off specification products (Cat. 28.4) will be generated which will be disposed to TSDF.

The Committee was informed that the Ministry has 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	COD	HTDS	LTDS	Total Effluent	Organic Solid waste	Inorganic Solid waste	Spent Carbon	Distillation Residue	Process emissions	Fugitive loss
1,82,000	83,000	617	475	514	528	36,500	46,500	83,000	59	72	127	9,143	927.7	66.36

HAZARDOUS SOLID WASTE DETAILS

Kg Per Day			
SOLID WASTE			
Organic solid waste	Inorganic solid waste	Spent Carbon	Distillation Residue
59	72	127	9,143

EMISSION DETAILS

Kg Per Day	
Process emissions	Fugitive emissions
927.7	66.36

Kg Per Day										
CO2	H2	NH3	O2	N2	HBr	HCl	(CH3)2NH	CH3Cl	HF	SO2
895.7 (P) + 15 (F) = 910.7	0.3 (P)	0.3 (P)	14 (F)	16 (F)	0	12.6 (P)	0	0	0	18.6 (P) + 21.36 (F) = 39.96

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in 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 his 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 noted that the PFR/EMP reports are in order, reflecting 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 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 on the revised water balance data submitted by PP and found it satisfactory. The Committee also deliberated on the action plan and budget allocation for green belt development. As committed by the PP the green belt development shall be completed within one year. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considered 2m x 2m ratio. The Committee deliberated on mitigation of carbon emissions, biofuels and socioeconomic study submitted by PP and found satisfactory. The committee deliberated the status of court case and compliance status of CTO and found the reply of PP satisfactory and reply of PP found to be satisfactory.

The Committee deliberated the Onsite and Offsite Emergency plans and various mitigation measures to be proposed during implementation of the project and advised the PP to implement the provisions of the Rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and 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, **recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms and conditions in Annexure**: -

(i). This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble NGT and any other Court of Law, as may be applicable to this project.

(ii). The PP 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.

(iii). No banned chemicals 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 in this regard.

(iv). 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.

(v). All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The Project proponent shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

(vi). The 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.

(vii). The project proponent shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.

(viii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no treated/untreated wastewater 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.

(ix). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

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

(xi). The 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.

(xii). 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. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.

(xiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(xiv). The solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump

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

(xv). Total fresh water requirement, sourced from private tankers shall not exceed 182 KLD. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA and renewed from time to time.

(xvi). The 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.

(xvii). The PP 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.

(xviii). 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 ratio and as committed by PP shall plant 2500 number of trees in first year itself and subsequent years the green belt shall be monitored. The plant species can be selected that will give better carbon sequestration.

(xix). 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 PFR/EMP report in letter and spirit.

(xx). 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. 27.3

Setting up of Technical Pesticides Specific Intermediates & Specialty Chemicals of Production capacity upto 550.5 MTPM located at Plot No. 1032-11, Phase-II, GIDC Industrial Estate - Panoli, District- Bharuch, Gujarat by M/s. Remark Technologies- Consideration of Environmental Clearance

[Proposal No.: IA/GJ/IND3/233790/2021, File No.: IA-J-11011/430/2021-IA-II(I).]

The Project Proponent and the accredited Consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd. (NABET Accreditation No.: NABET/EIA/2023/IA0062 (Rev. 01) Valid Up to 7.10.2023 has informed the EAC on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Setting up of Technical Pesticides Specific Intermediates & Specialty Chemicals of Production capacity upto 550.5 MTPM located at Plot No. 1032-11, Phase-II, GIDC Industrial Estate - Panoli, District-Bharuch, Gujarat by M/s. Remark Technologies.

The project/activities are covered under Category 'A' of item 5(b) & 5(f) 'Pesticides industry and pesticide specific intermediates' and synthetic organic chemicals of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry. PP accepted that inadvertently while filling form-2 only 5(b) category was mentioned, however, the product are both from 5(b) & 5(f) Category.

Deliberations by the EAC:

The Committee noted that PP has not submitted Life Cycle Analysis Study which was asked from PP in agenda. In this regard, the PP/Consultant is requested to revise the application and submit the details. The EAC accepted the request of PP and accordingly, the proposal was **returned** in its present form for the needful.

Agenda No. 27.4

Setting up of Dye Intermediates manufacturing unit of production capacity 660 MTPM located at Survey No.399, Village: Neja, Taluka: Khambhat, District: Anand, Gujarat by M/s. Jay Ganesh Industries - Consideration of Environment Clearance.

[Proposal No. IA/GJ/IND3/217059/2021, F. No. IA-J-11011/264/2021-IA-II(I)]

The project proponent and the accredited Consultant M/s. San Envirotech Pvt. Ltd having accreditation No.: NABET/EIA/1922/RA0216 Valid Up to 23.12.2023 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 Dye Intermediates manufacturing unit of production capacity 660 MTPM located at Survey No.399, Village: Neja, Taluka: Khambhat, District: Anand, Gujarat by M/s. Jay Ganesh

Industries.

All Synthetic Organic Chemicals Industries located outside the notified industrial area/estate are listed at S. N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and requires appraisal at Central Level by Expert Appraisal Committee (EAC).

The details of products and capacity are as under:

Sr. No.	Name of the Product	CAS No.	Quantity MT/Month	End use of products
1	4-Nitro Toluene-2-Sulfonic Acid (PNTOSA)	121-03-9	**300**	Dyes manufacturing
2	Para Nitro Chloro Benzene Ortho Sulfonic Acid (PNCBOSA)	96-73-1		
3	Ortho Nitro Chloro Benzene Para Sulfonic Acid (ONCBPSA)	121-18-6		
4	Sulfo Tobias Acid (2-Naphthyal Amino 1-5 Disulphonic Acid)	117-62-4		
5	Armstrong Acid (1,5-Naphthalenedisulfonic acid)	81-04-9		
6	Aniline 2.4 Di-sulfonic Acid	24605-36-5		
7	Aniline 2.5 Di-sulfonic Acid	24605-36-5		
8	Ortho Anisidine 4 Sulfonic Acid (OA4SA)	98-42-0		
9	Schaeffer's Acid (6-Hydroxynaphthalene-2-sulphonic acid)	93-01-6		
10	Para Toluidine-2,5-Disulfonic Acid (PT2,5DSA)	26585-57-9		
11	Chloro Benzene Sulfonic Acid (CBSA)	98-66-8		
12	Para Anisidine 2 Sulfonic Acid (PA2SA)	6470-17-3		
13	Para Anisidine 3 Sulfonic Acid (PA3SA)	13244-33-2		
14	Sulpho OAVS (1-Amino-2-Methoxy-4-Beta Hydroxy Ethyl Sulphone Sulphate Ester)	121-88-0		
15	Sulfo VS (3 Sulphonyl-4-Amino Phenyl Beta Hydroxy Ethyl Sulphone Sulphate Ester)	42986-22-1		
16	Para Phenylenediamine 2.5 Disulfonic Acid (PPD2,5DSA)	7139-89-1		
17	Meta Phenylene Diamine 4.6 Di-	137-50-8		

Sr. No.	Name of the Product	CAS No.	Quantity MT/Month	End use of products
	sulfonic Acid (MPD4,6DSA)			
18	N-Ethyl-N-Benzyl Aniline Sulfonic Acid (EBAMSA)	101-11-1		
19	Para Cresidine Ortho Sulfonic Acid (PCOSA)	6471-78-9		
20	Para Nitro Aniline Ortho Sulfonic Acid (PNAOSA)	30693-53-9	**100**	
21	Ortho Nitro Aniline Para Sulfonic Acid (ONAPSA)	82324-60-5		
22	Para Nitro Aniline (PNA)	100-01-6		
23	Ortho Nitro Aniline (ONA)	88-74-4		
24	4-Amino Azobenzene-4-Sulfonic Acid (PAABSA)	104-23-4	**100**	
25	Sodium Naphthionate (SN)	130-13-2	**70**	
26	Alpha Naphthylamine	134-32-7		
27	Alpha Naphthol	90-15-3		
28	NW Acid	84-87-7		
29	C Acid (2-Naphthylamine 4,8 Di Sulfonic Acid)	131-27-1	**40**	
30	Epsilon Acid (1-Naphthol 3,8 Di Sulfonic Acid)	117-43-1		
31	2-Pyridone	142-08-5	**50**	
32	Ethyl Cyano Pyridone (3-Cyano-1-Ethyl-6-Hydroxy-4-Methyl-2-Pyridone)	28141-13-1		
33	Diethyl Cyano Pyridone (3-Cyano-6-Methyl-2-Pyridone)	4241-27-4		
		Total	**660**	

The standard ToR issued by Ministry vide letter no. IA-J-11011/264/2021-IA-II (I); dated 3.07.2021. Public Hearing for the project was conducted by the Gujarat Pollution Control Board on 29.12.2021. The Public Hearing proceeding was presided over by Resident Additional Collector & Additional District Magistrate. The main issues raised during the public hearing were related to local employment, development of greenbelt in surrounding area and conservation of environment. As informed by the PP that there is No Litigation is pending against the proposal.

The PP reported that Proposed land area of the project is 5000 m^2. Industry will develop greenbelt in an area of 33% i.e. 1650 m^2, out of total area of the project. The estimated project cost is Rs. 5.0 Crore**.** Total capital cost earmarked towards environmental pollution control measures is Rs. 2.29 Crore and the Recurring cost (operation and maintenance) will be about Rs. 4.48 Crore per annum. Total employment will be of 50 persons. Industry proposes to allocate Rs. 10.0 Lakhs towards Corporate Environment Responsibility.

The PP reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance of the project site. Pond of Lunej Village is at a distance of 1.8 km in WW direction.

The Ambient air quality monitoring was carried out at 8 locations during March, 2021 to May, 2021 and the baseline data indicates the ranges of concentration as: PM_{10} (63.6 - 74.6 µg/m^3), $PM_{2.5}$ (35.9 - 44.4 µg/m^3), SO_2 (13.8 - 18.2 µg/m^3), NOx (19.8 – 23.1 µg/m^3). AAQ modeling study for point source emission indicated that the maximum incremental GLCs after the proposed project would be 3.665 µg/m^3, 1.692 µg/m^3 and 1.502 µg/m^3 with respect to PM_{10}, SO_2 and NOx. The resultant concentrations are within the national ambient air quality standards (NAAQS).

The PP reported that total water requirement is 260 m^3/day of which fresh water requirement of 120 m^3/day will be met from Ground Water Source – Bore well. 140 m^3/day will be recycled/treated water. Sources of industrial effluent generation will be from process, scrubber, washing, boiler blow down, cooling bleed off. Total trade effluent (150.5 KLD) will be taken into ETP, after primary treatment effluent will be passed through RO. RO permeate (105 KLD) will be reused within premises and RO reject will be sent to MEE. MEE condensate (35 KLD) will be reused. Slurry of MEE will be Spray Dryer in in-house Spray Dryer. Thus, unit proposed to achieve Zero Liquid Discharge (ZLD). Sewage (5.0 KLD) will be disposed into soak pit though septic tank.

The PP reported that Power requirement for proposed project will be power requirement will be 450 kVA and will be met from Madhya Gujarat Vij Company Ltd. (MGVCL). Unit proposed to install one D.G. Set of 250 kVA capacity and will be used as standby during power failure. Stack (height 11 meters) will be provided as per the CPCB norms to the proposed D.G. Set.

The Project proponent committed to comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996. The Onsite and Offsite Emergency plan will be implemented as cited in the provisions of the Rules.

The unit will have Imported Coal/Briquette fired Boiler-1 (3 TPH), Boiler-2 (3 TPH), Thermic Fluid Heater (2.5 Lakhs Kcal/hr.), Hot Air Generator-1 (10 Lakhs Kcal/hr), Hot Air Generator-2 (15 Lakhs Kcal/hr) will be installed. Cyclone separator and bag filter with a stack height of 30 m will be installed on Boilers, HAG & TFHs for controlling the particulate emissions within the statutory limit of 150 mg/Nm^3 for the proposed utilities. Process emission generation will be from stack attached with Multipurpose Plant-1 (Sulphonation), Multipurpose Plant-2 (Sulphonation), Multipurpose Plant-3 (Other Products), one common vent of 2 nos. of Spin Flash Dryer (300 kg/hr. each) and one vent of Imported Coal/Briquette fired Spray Dryer for effluent (500 lit/hr.). Two stage Alkali Scrubber will be installed to control process emission from reactor. In built bag filter will be provided as APCM on vent of Spin Flash Dryer. In-built cyclone and water scrubber will be installed on Spray Dryer.

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

Sr. No.	Type of Waste	Category No. as per HW Rules, 2016	Quantity	Method of Disposal
1.	ETP Waste	35.3	100 MT/month	Collection, Storage, Transportation, Disposal at TSDF site.
2.	Salt of Spray Dryer	35.3	65 MT/month	Collection, Storage, Transportation, disposal at TSDF site.
3.	Iron Sludge	26.1	350 MT/month	Collection, Storage, Transportation, disposal at TSDF site or to Cement industries for co-processing.
4.	Gypsum Waste	26.1	225 MT/month	Collection, Storage, Transportation, disposal at TSDF site or to Cement industries for co-processing.
5.	Used Oil	5.1	1.0 KL/year	Collection, Storage, Transportation, sell to registered re-refiners or use for lubrication within premises.
6.	Discarded Containers/ Liners/Bag	33.1	10.0 MT/month	Collection, Storage, Transportation, Sell to registered recyclers.
7.	Spent Sulphuric Acid	26.3	885 MT/month	Collection, Storage and partly reuse in-house and partly will be sold to actual users under Rule-9.

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert 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 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 are in compliance of the ToR issued for the project, reflecting 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 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 on the water balance data submitted by PP and found it satisfactory. The Committee deliberated on the action plan and budget allocation for green

belt development and noted that as committed by the PP the green belt development shall be completed within one year. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considered 2m x 2m ratio, accordingly, PP committed to plant 800 trees. The Committee deliberated on mitigation of carbon emission, biofuels and socio economic study submitted by PP and found satisfactory. The committee suggested for separate entry and exit gate at the unit and PP welcomed the suggestion of the committee and committed for the same. The committee deliberated Ecological biodiversity impact assessment report and found satisfactory.

The Committee deliberated the Onsite and Offsite Emergency plan and various mitigation measures to be proposed during implementation of the project and advised the PP to implement the provisions of the Rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and 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, **recommended the project for grant of environmental clearance, subject to compliance of terms and conditions 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 EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). No banned chemicals/dyes 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 in this regard.

(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). The project proponent shall comply with the environment norms for Dye and Dye Intermediate Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 325(E), dated 07.05.2014 under the provisions of the Environment (Protection) Rules, 1986.

(v). Necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The Project proponent shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

(vi). The 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.

(vii). The project proponent shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.

(viii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no treated/untreated wastewater 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.

(ix). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

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

(xi). The 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.

(xii). 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. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.

(xiii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(xiv). The solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be

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

(xv). Total fresh water requirement, sourced from Ground Water, shall not exceed 120 m^3/day. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA and renewed from time to time.

(xvi). The 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.

(xvii). The PP 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.

(xviii). 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. 800 Number of Trees have to be planted with spacing of 2m x 2m ratio and as in first year itself and subsequent years the green belt shall be monitored. The plant species can be selected that will give better carbon sequestration.

(xix). 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 EIA/ EMP report in letter and spirit.

(xx). 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. 27.5

Amendment of Existing Environmental Clearance for Bulk Drug Unit by Addition of Plot No. 124 & CP-173 SIPCOT of admeasuring 0.87 ha., to the Land Area of 2.32 ha., (Plot No. 125 & 126) of M/s Global Calcium Private Limited, located at 125 & 126, Sipcot Industrial Complex, Hosur, Tamil Nadu- Amendment of Environmental Clearance

[Proposal No. IA/TN/IND3/255576/2022; File No.J-11011/411/2006-IA-II (I)]

The PP requested for amendment in existing Environmental Clearance issued by the Ministry vide letter No. J-11011/411/2006-IA II (I) dated 16.08.2016 for Bulk Drug Unit by Addition of

Plot No. 124 & CP-173 SIPCOT of admeasuring 0.87 ha., to the Land Area of 2.32 ha., (Plot No. 125 & 126) of M/s Global Calcium Private Limited, Located at 125 & 126, Sipcot Industrial Complex, Hosur, TamilNadu. The PP informed that after the additional of the new plot total Green Belt will be developed in Area of 1.08 ha.

Deliberations in the EAC:

The Committee was informed that PP has uploaded the EIA report of 2015 on Parivesh portal. Present status of the project has not been submitted. The Committee deliberated on the compliance status of the project and found that some major conditions related to environmental conservation were partially complied.

Also, the PP requested to the Committee that they will revise the application and will apply under para 7 (ii) of the EIA Notification, 2006 (modernization). The proposal was accordingly **returned** in its present form for revision of the application for the needful.

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Day 2: March 8, 2022 (TUESDAY)

Agenda No. 27.6

Expansion of Synthetic Organic Chemicals (Dyes Intermediate) Manufacturing unit of production capacity 4,244.48 TPA to 4,604.48TPA, located at plot F-94 & F-95 RIICO growth Centre, PHASE II ABU ROAD, Sirohi, Rajasthan by M/s Arbuda Industries – Consideration of Environmental Clearance

[Proposal No. IA/RJ/IND3/256958/2021; File No. IA-J-11011/61/2019-IA-II(I)]

The project proponent and the accredited consultant M/s Perfact Enviro Solutions Pvt. Ltd. having accreditation number NABET/EIA/1922/RA0184 valid till 27-05-2022 has made a detailed presentation on the salient features of the project and informed that:

The proposal is for consideration of the environmental clearance for the Expansion of Synthetic Organic Chemicals (Dyes Intermediate) Manufacturing unit of production capacity 4,244.48 TPA to 4,604.48TPA, located at plot F-94 & F-95 RIICO growth Centre, PHASE II ABU ROAD, Sirohi, Rajasthan by M/s Arbuda Industries.

The details of existing and expansion products and their capacity, as under:

S. No.	Particulars	CAS No.	Unit	Production Capacity as per EC dated 11.03.2020	Proposed Production Capacity	Total after Expansion Production Capacity
1	Sulpho Vinyl Sulphone (SVS)	42986-22-1	TPA	48.00	600.00	648.00
2	2,Naphthol 6,8 Di-Sulphonic Acid (G-salt)	118-32-1	TPA	72.00	0.00	72.00
3	4, Sulpho Ortho Aminobenzoic acid	98-43-1	TPA	60.00	0.00	60.00
4	4,4 Dinitro Stilbene 2,2, Disulphonic Acid (DNSDA)	128-42-7	TPA	60.00	0.00	60.00
5	Metanilic Acid	121-47-1	TPA	60.00	0.00	60.00
6	MPDSA (Meta Pheny Di Amine Sulphonic Acid)	88-63-1	TPA	60.00	0.00	60.00
7	Dil Sulphuric acid(25-30%)	7664-93-9	TPA	0.00	3,461.40	3,461.40

8	Dil Sulphuric acid(50-70%)	7664-93-9	TPA	0.00	183.08	183.08
	Total		**TPA**	**360**	**4,244.48**	**4,604.48**

The project is covered under the category 'B' of item 5(f) – Synthetic organic chemical Industry of the Schedule to the Environment Impact Assessment (EIA) Notification, 2006 and its subsequent amendments. Due to the applicability of General Condition (interstate Boundary of Gujarat and Rajasthan within 5 km (1.31 Km WSW); the case is appraised at Central Level by the Expert Appraisal Committee (EAC).

The Ministry had granted earlier EC to the existing project vide letter no. F.No. J-11011/61/2019-IA II(I) dated 11.03.2020 for Manufacturing Synthetic Organic Chemical (dyes Intermediates) of capacity 30 TPM at plot no F-95, RIICO growth center, Phase-II, village Maval, Tehsil Abu Road, District Sirohi, Rajasthan in favour of M/s Arbuda Industries. The Certified compliance certificate vides F.No.IV/Env/Raj/IND-189/1023/2020 dated 23.02.2022 was obtained from the Integrated Regional Office, MoEFCC Jaipur.

The Standard ToR has been issued by the Ministry vide letter No. IA-J-11011/61/2019-IA-II(I) dated 05.01.2022. The Public Hearing for the proposed project is exempted as per clause 7 (i) (iii) stage (3)(i)(b) of EIA notification 2006 (as per OM J-11011/321/2016-IA. II(I) dated 27th April 2018) amended to date as the project lies in the Notified Industrial Area, RIICO Growth Center Phase II, Maval, Rajasthan. The EAC deliberated all the issues and found in order.

The PP reported that the existing land area is 1,977.30 m^2 and an additional 1,977.30 m^2 land will be used for proposed expansion for a total plot area 3954.6 m^2. The proponent committed that they will develop a greenbelt in an area of 40% i.e., 1582 m^2 out of the total area of the project. The estimated project cost is Rs 6.7 Crores including existing investment of Rs 6.0 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 1.17 Crores and the Recurring cost (operation and maintenance) will be about Rs 0.40 Crores per annum.

The PP reported that there is notified (November 2020) ESZ of Jessore Sloth Bear Sanctuary at a distance of 6.92 Km in North-west direction and Mount Abu Wildlife Sanctuary at a distance of 8.05 km North from the project site. River/ water body Banas River is flowing at a distance of 1.68 Km WNW direction. Conservation plan for seven schedule I species has been duly prepared and a budget of Rs 0.12 crores has been allocated for the same. The Committee deliberated the Action Plan with mitigation measures and found in order.

Total Employment generation will be 30 persons. Industry proposes to allocate Rs 12 lakhs for social activities like development of smart classes in govt school and construction of community toilets in nearby villages with Rs. 5 lakhs in first year, Rs. 3.5 lakhs for 2nd year and Rs. 3.5 Lakhs towards social welfare.

The PP reported that the Ambient air quality monitoring was carried out at 8 locations during winter season from October 2021 to December 2021 and the baseline data indicates the ranges of concentrations as: PM10 (107.4 µg/m3 to 57.46 µg/m3), PM2.5 (63.55 µg/m3 to

32.61 µg/m3), SO2 (13.82 µg/m3 to 7.13 µg/m3) and NOx (37.47 µg/m3 to 17.74 µg/m3). AAQ modelling study for point source emissions indicates that the maximum GLCs after the proposed project would be 0.300 µg/m3, 0.264 µg/m3 ,0.300µg/m3,1 µg/m3 and 0.002 mg/m3 with respect to PM10, PM2.5, SOx and NOx and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS) except PM10 at one location at Chandravati is found to be at 107.4 µg/m3. The main reason for the increase in PM10 value is due to kutcha road. The PP committed for better Air Quality in the Village Chandravati to control the PM10 and other AAQ emission values within the limits. M/s Arbuda Industries commit nearby to undertake the tree sapling plantation alongside the road in consultation with the local body. The PP also committed that the plantation of indigenous tree species that can reduce particulate matter and fugitive emissions with the scope for vertical gardening as much as feasible.

The PP reported that the Total water requirement is 13.70 m3/day of which fresh water requirement of 6.0 $m^{3/}$day will be met from RIICO water supply/ Standby CGWB connection. Effluent of 9.2 m3/day quantity will be treated through ETP, MEE/MVR system and RO. The plant will be based on the Zero Liquid discharge system. Water is being supplied from the RIICO water supply. Standby connection from CGWB is also taken.

The total Power requirement after expansion will be 250 kVA and will be sourced from Jodhpur Vidyut Vitran Nigam Limited (JVVNL). Existing unit has DG sets with capacity of 125 kVA. Stack (5 m) will be provided as per CPCB norms to the proposed DG sets. Existing unit has 1 No. of 3 TPH Boiler with Multi cyclone separator/ wet scrubber with a stack of height of 30 m for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the boilers. Existing unit has a Thermic fluid heater with capacity of 1 No. of 6 Lac kcal/hr and now the PP is proposing an increase in capacity from 6 Lac kcal/hr to 8 Lac kcal/hr. Stack of height 30 m will be installed for controlling the particulate emissions.

The Project proponent will 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. The Onsite and Offsite Emergency plan will be implemented as cited in the provisions of the Rules.

Details of Process emissions generation and its management

Stack No	Name of Stack	Pollution Control Measure	Height above ground(m)	Stack Dia (m)	Parameter	Emission standard	Fuel used
1	Thermic Fluid Heater (8 Lac kcal)	Multi Cyclone And wet scrubber	30	-	PM	115 mg/Nm^3	Agro Waste
2	Boiler (3 TPH)	Multi Cyclone And wet scrubber	30	0.8	PM	115 mg/Nm^3	Agro Waste

3	DG sets 125 kVA (Standby)	Chimney	5	0.3	-	-	Diesel
4	Process Reactor	Adequate Stack Height, Three Stage Common Venturi Scrubber	30	-	Sulphuric Acid Mist Chlorine	35 mg/Nm^3 15 mg/Nm^3	-

Details of Solid waste/ Hazardous waste generation and its management

Category	Type of Waste	After Expansion (kg/day)	Treatment Method
Biodegradable	Organic Waste	1.82	Will be sent to MSW disposal site
Non-Biodegradable	Recyclable Waste (Plastic, paper, wood, glass, etc)	2.98	Will be sold to Authorised Recycler
Total		**4.80**	
NON-HAZARDOUS WASTE MANAGEMENT (PROCESS)			
Process Waste	**Unit**	**Total after expansion**	**Treatment/Disposal**
Boiler Ash	TPM	0.2	Will be sold to the brick manufacturer.
HAZARDOUS WASTE MANAGEMENT (PROCESS)			
Waste/ Category as per HW Rules 2016	**Unit**	**Total after expansion**	**Disposal**
Used Oil (Hazardous Waste)	TPA	0.0012	Will be sold to an Authorised recycler/TSDF site, Udaipur (Rajasthan) .
Chemical sludge	TPA	159	Will be sent to the TSDF site, Udaipur (Rajasthan) .
Discarded chemical containers	TPA	6	Will be sold to an approved recycler or trader.
Iron Sludge	TPA	293	Will be Sold to the recycler/Co-processor having registration under rule 9 of HoWM rules 2016.
Salt from MEE/MVR	TPA	25	Will be sent to the TSDF site, Udaipur (Rajasthan) .
Spent carbon	TPA	2	Will be sold to the recycler/Co-processor having registration under rule 9 of HoWM rules 2016.

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 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 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, after detailed deliberations, noted that the Ministry had issued EC earlier vide letter no. J-11011/61/2019-IA II(I) dated 11.03.2020 for Manufacturing Synthetic Organic Chemical (dyes Intermediates) of capacity 30 TPM (360 TPA) at plot no F-95, RIICO growth center, Phase-II, village Maval, Tehsil Abu Road, District Sirohi, Rajasthan in favour of M/s Arbuda Industries. The Unit has obtained certified compliance report of EC conditions by obtained from the Integrated Regional Office, MoEFCC Jaipur. The Committee deliberated the Certified Compliance Report and found in order.

The Committee also noted that the Ambient Air quality at Village Chandravati is found to be 107.4 µg/m3 which is more than the prescribed standard. The main reason behind the increase in value of PM10 is due to the kutcha road which cause more pollution as comparison to Pakka road. The PP committed for better Air Quality in the Chandravati Village to control the emission of PM10 and other AAQ emission values within the prescribed standards. PP also committed for the plantation in the adjoining areas in consultation with the local authorities. The PP also committed that the plantation is of indigenous tree species that can reduce particulate matter and fugitive emissions with the scope for vertical gardening.

The Committee also deliberated the Onsite and Offsite Emergency plan and various mitigation measures to be proposed during implementation of the project and advised the PP to implement the provisions of the Rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and 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 amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

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

(ii). The project proponent 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.

(iii). No banned chemicals/dyes 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 in this regard.

(iv). The project proponent shall comply with the environment norms for Dye and Dye Intermediate Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 325(E), dated 07.05.2014 under the provisions of the Environment (Protection) Rules, 1986.

(v). All Necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The Project proponent shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

(vi). The continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

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

(viii). The 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.

(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). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

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

(xii). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97% with effective chillers/modern technology.

(xiii). Total fresh water requirement shall not exceed 6.0 m^3/day Prior permissions in this regard shall be obtained from the concerned regulatory authority.

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

(xv). The 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.

(xvi). The PP 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.

(xvii). The green belt of at least 5-10 m width shall be developed in nearly 40% of the total project area mainly along the plant periphery/adjacent areas, as committed by the PP. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Trees have to be planted with spacing of 2m x 2m and number of trees have to be increased accordingly. The plant species can be selected that will give better carbon sequestration and plantation shall be completed within six months.

(xviii). The activities and the action plan of the issues raised during public hearing 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. The compliances report shall be submitted to IRO, MoEFCC Lucknow.

(xix). 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. 27.7

Setting up of Pesticides Manufacturing Unit with proposed capacity of 3500 MTPA (excluding formulation), located at 529/2 3-15, 530/2 5-15, 531/1 0-10, Village- Hassanpur Tehsil- Rajpura, District- Patiala, Punjab by M/s. Safe Agrochemicals LLP – Re- Consideration of Environmental Clearance-regarding.

[Proposal No. IA/PB/IND3/214382/2021; File No. IA-J-11011/239/2021-IA-II(I)]

The proposal was earlier placed before the EAC in its 24th meeting held during 12-13 January, 2022 wherein EAC recommended the project. During the file processing, competent authority sought certain requisite information/inputs regarding onsite and offsite emergency plan. The Information submitted by the project proponent was not satisfactory.

Deliberations in the EAC:

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

The EAC noted that the project was considered earlier in the 24th EAC meeting wherein EAC recommended the project. During processing of the project for grant of EC the Ministry has sought a clarification that, “Since this is a Pesticide Manufacturing Unit, it would be appropriate that the Project Proponent is called upon to submit the Disaster Management Plan as well which may be deliberated by the EAC and timeline for completion of the various activities related to it is also clearly specified so that Response to various Disasters is in place before the Plant becomes operational.” Accordingly, the PP was submitted the ADS reply and the proposal is placed in this instant meeting.

The EAC noted that the requisite information/inputs regarding onsite and offsite emergency plan was not satisfactory.

The EAC, after detailed deliberations, **suggested to resubmit the revised On-site, Off-Site Emergency Disaster Management Plan and various mitigation measures** to be proposed during implementation of the project.

Agenda No. 27.8

Extension of environmental Clearance for expansion of dyes & dye intermediates unit {60 MTPM to 2355 MT/month and coal based power plant: 5 MW/month at Survey No 637, nr. Kalamsar Village, Khambhat, Anand, Gujarat by M/s ROHAN DYES AND INTERMEDIATES UNIT 1 – Consideration in Validity of extension in Environmental

Clearance

[Proposal No. IA/GJ/IND3/257657/2022; File No. J-1101/467/2008-IA-II(I)]

The PP did not attend the meeting; however, the Committee deliberated the request of PP as submitted on the Parivesh portal.

It was informed to the Committee that the EC was issued by the Ministry to the project vide letter No. J-11011/467/2008-IA II (I) dated 4th October, 2010. Extension in validity of Environmental Clearance was also issued to the project vide letter dated 19.07.2017.

The committee was also informed that as per para 9 of EIA Notification, 2006 "*validity may be extended by the regulatory authority concerned by a maximum period of three years if an application is made to the regulatory authority by the applicant within the validity period, together with an updated Form I, and Supplementary Form IA, for Construction projects or activities (item 8 of the Schedule)"*

The committee was of the view that for the calculation of validity of EC, EC dated 4th October, 2010 should be considered. The committee recommended that as the EC was not implemented by the PP even after taking extension of three years, therefore no scope for further extension left as per the provision of EIA, Notification, 2006.

The Committee **returned** the proposal in the present form.

Agenda No. 27.9

Extension of environmental Clearance for Adhesive Manufacturing Plant at Plot No. 770/2 & 770/3, Village Jhagadia GIDC, Taluka Jhagadia, District Bharuch, Gujarat by M/s Bostik India Private Limited – Consideration in Validity of extension in Environmental Clearance

[Proposal No. IA/GJ/IND3/258604/2022; File No. J-11011/78/2013-IA-II(I)]

The proposal is for validity extension in the Environmental Clearance granted by the Ministry vide letter No. J-11011/78/2013-IA II (I) dated 13th April 2015 for the project Adhesive Manufacturing Plant located at plot number 770/2 and 770/3 of GIDC Jhagadia, Taluka Jhagadia, District Bharuch in Gujarat in favour of M/s. Bostik India Private Limited.

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

<table>
<tr><th>S. No.</th><th>Para of EC issued by MoEF&CC</th><th>Details as per the ~~ToR~~/EC</th><th>To be revised/ read as</th><th colspan="3">Justification/reasons</th></tr>
<tr><td>1</td><td>EC received dated 13th</td><td>• Validity period as per EC 5 years.</td><td>Extension for 3</td><td>S.</td><td>EC</td><td>Date</td></tr>
</table>

	April 2015	• As per Gazettee Notification by MoEF&CC Delhi dated 29th April 2015, validity of Environment Clearance shall be 7 years from the date of issue instead of 5 years. • Hence, EC is valid till 12th April 2022 • Because of COVID-19 situation, MoEF released one notification dated 18th January, 2021 regarding validity of EC. "The period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Prior Environmental Clearances" Hence, Hence Our EC is valid up to 12th April 2023.	years	

No.	Extension Process till date	
1	EC Received	13th April 2015
2	Validity of EC for 7 years	12th April 2022
3	One year EC validity extension due to COVID-19	12th April 2023
4	Application for EC Validity Extension	21st February 2022
5	Acceptance of Application by MoEF&CC, Delhi	28th February 2022
9	EC Extension Presentation at MoEF&CC, Delhi	08th March 2022

Deliberations in the EAC:

The Member Secretary informed the Committee that the PP has got EC on 13th April 2015 but still there are non-compliances of EC conditions as reported by the IRO, MoEFCC. EAC observed that compliance of EC conditions should be the primary objective of PP. Accordingly, the committee was of the opinion that without complete compliances of existing EC condition this instant project may not be considered by the EAC for further extension.

The EAC noted that while presentation the consultant addressed State Level Expert Appraisal Committee (SEAC) instead of Expert Appraisal Committee (EAC). The committee showed displeasure to the casual behavior of the consultant. The Consultant, however, apologize for the mistake and submitted apology letter vide letter dated 08.03.2022.

The Committee suggested PP to first comply with the existing EC conditions and then come before the Committee for validity extension as the EC is already valid till April, 2023.

The proposal was accordingly **returned** in its present form for the revision of the application.

Agenda No. 26.10

Formaldehyde manufacturing unit with Production capacity of 80 TPD, located at village Kohand, Tehsil - Gharaunda, District: Karnal, Haryana by M/s JRS Industries – Consideration in TOR- Violation Case submitted by Project Proponent on Parivesh Portal on 25.02.2022.

(Hon'ble Supreme Court order dated 07.02.2022 in the matter of CIVIL APPEAL NO. 448 OF 2022, JRS INDUSTRIES V/s VINEET NAGAR & ORS.)

[Proposal No. IA/HR/IND3/258480/2022; File No. IA-J-11011/172/2021-IA-II(I)]

The project proponent and the accredited consultant M/s SBA Enviro Systems Pvt. Ltd., Consultants having accreditation number NABET/EIA/2023/ RA0198 valid till 24.5.2023 has made a detailed presentation on the salient features of the project and informed that:

The proposal is for Terms of Reference (ToR) for Formaldehyde manufacturing unit with capacity of 80 TPD, located at village Kohand, Tehsil - Gharaunda, District: Karnal, Haryana by M/s JRS Industries. The Existing plant was established based on Consent to Establish granted vide file no. HSPCB/Consent/313096618KARCTE5628233 dated 14.9.2018 without prior Environmental clearance, thus the Project has violated the provisions of the EIA Notification, 2006.

Production Capacity

Product	Existing Capacity	Proposed Capacity	Total Capacity
Formaldehyde	80 TPD	80 TPD	80 TPD

Raw Material Detail:

Raw Material	Existing Requirement	Proposed Requirement	Total Requirement
Methanol	40 MT	40 MT	40 MT

The project comes under Item 5(f) of the Schedule, as Category A, as per EIA Notification 2006 and its subsequent amendments and, therefore requires appraisal at central level by Expert Appraisal Committee (EAC) in the Ministry.

The PP reported that the existing land area is 4375.62 sqm and built up area is 864.00 m2. The proponent informed that existing develop a greenbelt area is 1540.00 sqm and open area is 698sqm of the project. The estimated project cost is Rs 6.7 Crores including existing investment of Rs 3.25 Crores. The PP reported that the Total water requirement is 53 KLD, 52.5 KLD for industrial use & 0.5 KLD for domestic purpose. NOC for ground water abstraction from HWRA is yet to be obtained. The PP reported that the total power requirement will be 220 kVA (Total Connection load) and will be sourced from UHBVN (Uttar Haryana Bijli Vitran Nigam. Two DG set of capacity 180 KVA and 200 KVA also exist as the

backup power supply.

Details of Violation:

Period	Production	Remarks
August, 2018- October, 2020	Formaldehyde Manufacturing (80 TPD)	Prior EC was not taken before setting up and operating the Unit, hence covered under violation of the provisions of the EIA Notification, 2006

Deliberations by the EAC:

The Member Secretary has informed to the EAC that the Ministry had issued a Notification vide S.O. 804 (E) dated 14th March, 2017 for appraisal of projects for grant of terms of reference/ Environmental Clearance, which have started the work on site, expanded the production beyond the limit of Environmental Clearance, or changed the product mix without obtaining prior Environmental Clearance under EIA Notification, 2006. The above said notification i.e., Notification vide S.O. 804 (E) dated 14th March, 2017 was an open window for 6 months. The projects or activities which are in violation as on date of this notification only will be eligible to apply for environmental clearance under this notification and the project proponents can apply for environmental clearance under this notification only within six months from the date of this notification.

The Member Secretary has also appraised to the EAC that there were three recent court cases in the Hon'ble NGT [viz. Dastak NGO vs Syncochem Prganics Pvt. Ltd. & ors in OA No. 287 of 2020, Vineet Nagar Vs. Central Ground Water Authority & Ors, in OA No. 298 of 2020, and Ayush Garg Vs Union of India & Ors. in OA No. 840 of 2019], which were disposed of by Hon'ble NGT vide its Order dated 03.06.2021 with the following directions:

(i) For past Violations, the concerned Authorities are free to take appropriate action in accordance with polluter pays principle, following due process.

(ii) Since having prior EC is statutory mandate, it has to be complied with by the formaldehyde producing industrial units barring which the units cannot be allowed to function.

(iii) State PCB may assess and recover compensation for illegal operation of the Units on 'Polluter Pays' principle.

(iv) State PCB may ensure that the unit does not re-start functioning without requisite Statutory Clearance.

(v) To be duly considered by the concerned regulatory authorities including MOEFCC on merits and in accordance with law.

It was informed to the Committee that the Hon'ble NGT(WZ) in the matter titled Appeal No. 34/2020 titled Tanaji B. Gambhire vs. Chief Secretary, Govt. of Maharashtra & Ors. vide order dated 24.05.2021 directed that a proper SoP (Standard Operating Procedure) be laid down for grant of EC in violation cases so as to address the gaps in binding law and practice being currently followed. The Hon'ble NGT further suggested MoEFCC to consider circulating such SoP to all SEIAAs in the country. Standard Operating Procedure (SOP) for identification

and handling of violation cases under EIA Notification, 2006 vide office memorandum dated 7th July, 2021 was issued.

It was further informed that the Hon'ble Supreme Court in another matter titled **Electrosteel Steels Ltd. Vs. Union of India & Ors** (Civil Appeal No. 7576-7577 of 2021) vide judgment dated 09/12/2021, inter-alia, held vide the following paragraphs that :

"……93. The interim order passed by the Madras High Court appears to be misconceived. However, this Court is not hearing an appeal from that interim order. The interim stay passed by the Madras High Court can have no application to operation of the Standard Operating Procedure to projects in territories beyond the territorial jurisdiction of Madras High Court. Moreover, final decision may have been taken in accordance with the Orders/Rules prevailing prior to 7th July, 2021.

94. In passing the impugned order the High Court overlooked the consequences of closure of an integrated steel plant with a work force of 300 regular and 700 contractual workers. The High Court also failed to appreciate that the judgment of this Court in Alembic Pharmaceuticals (supra) was distinguishable on facts. Furthermore, continuance of the interim orders allowing operation of an industrial establishment or even the grant of revised EC to the industrial establishment cannot stand in the way of action against that establishment for contraventions, including the imposition of penalty, on the principle 'polluter pays'. The scope and effect of Section 32A of the IBC is a different issue. This Court need not examine into the question of whether penal action can be initiated against the Appellant or, whether compensation can be recovered from the Appellant, at this stage. The issue may be decided by the appropriate authority at the appropriate stage when it adjudicates an action for penalization of the Appellant or recovery of compensation from the Appellant. The application of the Appellant for revised EC, CTO etc. shall be considered strictly in accordance with environmental norms.

95. The appeals are allowed. The impugned order is set aside. The Respondent No.1 shall take a decision on the application of the Appellant for revised EC in accordance with law, within three months from date. Pending such decision, the operation of the steel plant shall not be interfered with on the ground of want of EC, FC, CTE or CTO……"

Further, the Ministry has issued an OM on 25/08/2021 and forwarded the directions of the Hon'ble Supreme Court in the matter of Electrosteel Steels Ltd. Vs. Union of India & Ors (Civil Appeal No. 7576-7577 of 2021) vide judgment dated 09/12/2021 to regulatory authority.

The Member Secretary informed to Committee that the instant matter was placed before the EAC, in pursuance of the directions given by the Hon'ble Supreme Court order dated 07.02.2022 for the Original Application No. 4480f 2022 (JRS Industries Vs. Vineet Nagar & Ors.) concluded "the concerned authorities shall proceed with the applications, in accordance with law, at the earliest, preferably within two months from the date of communication of this order".

After detailed deliberations and examination of application in Form-I, PFR, other reports, by the Committee it is emerged that the instant application is not as per the Standard Operating Procedure (SOP) dated 7.7.2021 for identification and handling of violation cases under EIA Notification, 2006. Even PP has not proposed the violation TOR as per provisions of the SOP dated 07.07.2021 and PP has not submitted the correct application.

During the presentation the PP/Consultant has accepted that they had missed out some of the important details related to the project. They have requested the EAC to consider this one-time and allow us to furnish the requisite details about the proposed TOR as per SOP dated 07.07.2021 and other parameters in the PFR & Form-1 which is requisite documents as per provision of the EIA Notification, 2006.

The EAC has also advised that the Consultant to submit the application with all the details for appraisal of the EAC.

After, detailed deliberations, the EAC accepted the request of PP for revision of application on Parivesh portal. Accordingly, the EAC **deferred** the proposal for revision of application as per SOP dated 07.07.2021.

The meeting ended with thanks to the Chair.

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ANNEXURE

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.

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Annexure-II

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

S. No.	Name of Members	Designation
1.	**Prof. (Dr.) A.B. Pandit** Vice Chancellor, Institute of Chemical Technology, Mumbai, Sir JC Bose Fellow, Government of India Email: ab.pandit@ictmumbai.edu.in	EAC Chairman
2.	**Dr. Ashok Kumar Saxena, IFS** Bunglow No. 38, Sector-8A, Gandhinagar, Gujarat – 382008 E-mail: ashoksaxena1159@gmail.com	Member
3.	**Prof. (Dr.) S. N. Upadhyay** Research Professor(Hon.), Department of Chemical Engineering & Technology, Indian Institute of Technology (Banaras Hindu University), Varanasi E-mail:snupadhyay.che@iitbhu.ac.in	Member
4.	**Prof. (Dr.) Vijay S. Moholkar** Professor in Department of Chemical Engineering, Block-K (Academic complex), Room No. 111, Inidia Institute of Technology Gawahati, Gawahati – 781039 E-mail: vmoholkar@iitg.ac.in	Member
5.	**Shri Santosh Gondhalkar** 'Shree' Apartment, Flat 401, Plot No. 22, Tukaram Society, Santnagar, Pune- 411009 E-mail: santoshgo@gmail.com	Member
6.	**Dr. Suresh Panwar** House No.4, Gayateri Green Society, NH 58 Bypass, Kankerkhera, Meerut, Uttar Pradesh Email-spcppri@gmail.com	Member
7.	**Shri Tukaram M Karne** "SHREYAS ORNATE" F-1, 95-Tulasibagwale Colony, Sahakarnagar-2, PUNE: 411 009, Maharashtra E-mail: tmkarne@gmail.com	Member
8.	**Prof. (Dr.) Suneet Dwivedi,** Professor in K Banerjee Centre of Atmospheric and Ocean Studies, University of Allahabad, Allahabad - 02 Uttar Pradesh E-mail:dwivedisuneet@rediffmail.com /suneetdwivedi@gmail.com	Member

9.	**Shri Sanjay Bisht** Scientist 'E', Room No. 517, Office of the Director General of Meteorology, Indian Meteorological Department, Musam Bhawan, Lodhi Road, New Delhi -110003 E-mail: sanjay.bist@imd.gov.in	Member
10.	**Shri Dinabandhu Gouda** Additional Director, DH IPC-I, Room No. 309A, Third Floor, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi – 110032 E-mail: dinabandhu.cpcb@nic.in	Member
11.	**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: 011-20819346** E-mail: rb.lal@nic.in	Member Secretary

MoEFCC		
1.	**Dr. Abhilasha S Mathuriya** Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bag Road, New Delhi-110003	Scientist D
2.	**Dr. Bhawana K Negi** Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bag Road, New Delhi-110003	Technical Officer
3.	**Mr. Ritin Raj** Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bag Road, New Delhi-110003	Research Assistant

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Annexure-III

Approval of EAC Chairman

Email **Additional Director MoEFCC Dr R B LAL**

Re: Zero Draft Minutes of the 27th EAC (Industry 3 Sector) meeting held during March 7-8, 2022 (through Video Conferencing) for comments of the EAC and approval of the Chairman Sir.

From : ab pandit <ab.pandit@ictmumbai.edu.in> Mon, Mar 14, 2022 11:00 AM

Subject : Re: Zero Draft Minutes of the 27th EAC (Industry 3 Sector) meeting held during March 7-8, 2022 (through Video Conferencing) for comments of the EAC and approval of the Chairman Sir. 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>

Dear Dr. Lal,

Please find attached signed Minutes of the EC meeting,

With Warm Regards
Pandit

The Minutes of the meeting has been approved

Prof Aniruddha B Pandit