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

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Dated: 31.03.2022

# MINUTES OF THE 28<sup>th</sup> EXPERT APPRAISAL COMMITTEE (INDUSTRY-3 SECTOR) MEETING HELD ON MARCH 24-25, 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 24, 2022 [THURSDAY]

### (i) Opening Remarks by the Chairman, EAC

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

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

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

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

# (iii) Confirmation of the Minutes of the 27<sup>th</sup> Meeting of the EAC (Industry-3 Sector) held during March 7-8, 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 **27<sup>th</sup> Meeting of the EAC (Industry-3 Sector) held during March 7-8, 2022** conducted through Video Conferencing (VC), and as such no request has been received for modifications/corrections in the minutes of the 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. 28.1

Proposed Maize Processing Unit of 70000 TPA (200 TPD) and Manufacturing of Starch 18550 TPA (53 TPD) and Sorbitol 35000 TPA (100 TPD) Plant at Village Saguni and Bherwa, Circle- Dharsiwa-I, Tehsil Tilda and Raipur, District- Raipur (C.G.)- 493221 by M/s. Vistaar Agri Foods Private Limited- Environmental Clearance- regarding

# [Proposal No. IA/CG/IND3/207977/2021; File No. IA-J-11011/146/2021-IA-II(I)]

The Project Proponent and the accredited Consultant [M/s. Anacon Laboratories Pvt. Ltd., Nagpur, having accreditation number NABET/EIA/1922/RA0150 valid till 30.09.2022] made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project Proposed Maize Processing Unit of 70000 TPA (200 TPD) and Manufacturing of Starch 18550 TPA (53 TPD) and Sorbitol 35000 TPA (100 TPD) Plant at Village Saguni and Bherwa, Circle- Dharsiwa-I, Tehsil Tilda and Raipur, District- Raipur (C.G.)- 493221 by M/s. Vistaar Agri Foods Private Limited.

The details of products and capacity are as under:

S.	Product	CAS	Proposed	Total	Uses
No.	Details	No.	Quantity	Quantity	
			[TPA]	[TPA]	
1.	Starch	9005-25-	18550	18550	Maize starch application in the food industries. also used as a diluent and moisture sorting medium to protect active powders from deleterious effects of moisture. as a diluent in baking powder and in confectioner's sugar. Dusting powder in bakery industry. as moulding beds as a processing aid in the manufacture of gum candies, centers and other cast pies. It is also used as a Thickening or gelling agent & processing aids and in Baking industry-involving starch as a component of flour. Used as an additive to modify the textural properties of wheat flour, sweet goods and crackers. As a stabilizers in salad dressings. Used in the manufacture of gum candies.

2.	Sorbitol	50-70-4	35000	35000	Sorbitol is often used in modern cosmetics, Sorbitol is widely utilized for diabetic foods. It is used to maintain the freshness in confectionary and bakery products, Sorbitol is used as an ingredient in a number of pharmaceutical preparations like syrups, olixirs, sulpha-drugs, tonics, vitamins and amino acids-complex preparations, laxatives and ointments d for hepatic and diabetic diseases, SORBITOL injections are used.
Co-pr	oducts				_
3.	Gluten	8002-80- 0	3500	3500	Maize gluten is the protein matter of Maize. It is a yellow granular powder that is characteristically free from rancidity and the fermented odor. Gluten which is present to the extent of about 8-10% consists of water soluble albumins, alkali soluble glutens, the globulins that are soluble in dilute salt solutions and prolamines which are soluble in aqueous alcohol. Colten consists of about 60-65% protein, 3-4% fat, 35% starch together with fiber and little mineral matter.
4.	Germ	68917- 73-7	4200	4200	Maize germ is primarily used for the extraction of Maize oil and also in the manufacture of feed supplements.
5.	Fiber	65997- 17-3	7700	7700	Protein rich , and used for cattle feed

The project/activity is covered under Category 'A' of item 5 (f) 'Synthetic Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at Central Level by Expert Appraisal Committee.

The Standard ToR has been issued by the Ministry vide letter No. IA-J-11011/146/2021-IA-II(I), dated 16.04.2021. Public Hearing for the proposed project has been conducted by the Chhattisgarh Environment Conservation Board on 17.11.2021. The Public Hearing was chaired by ADM. The main issues raised during the public hearing are related to Paddy cultivation; problem of drinking water due to pollution and water, air and noise pollution. The PP submitted the action plan on the issues raised during Public Hearing. The Committee deliberated the Action Plan and found in order.

The PP reported that the plot area is 15.52 ha, which is diverted for Industrial use, *via* letter number 202101111000361/A-2, 2020-21, dated 03.03.2021. Industry will develop greenbelt in an area of 35 % i.e. 5.432 ha, out of total area of the project. Total 13580 nos. of sapling (@ 2500/Ha) will be planted within area with local native species will be planted. Greenbelt will be maintained with regular sprinkling of water.

The estimated project cost is Rs.99.60 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.10.07 Crores and the Recurring cost (operation and maintenance) will be approx. Rs. 1.84 Crores per annum. Total Employment will be 197 persons during operation and 100 persons during construction. Industry proposes to allocate Rs. 99.60 Lakhs towards CorporateEnvironment Responsibility.

The PP reported that There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body Kharun River is flowing at a distance of 2.0 km in West direction. Bilari RF is 13.7 Km, in East direction.

The PP reported that the daily water requirement for the plant is estimated to be 575 KLD (including make-up water 74KLD). Water will be source from Kharun River, 2 km in West. Required permission and NOC will be obtained from WRD and State Government. Effluent of 507 KLD will be treated in ETP of 525 KLD. Condensate from MEE (70 KLD) is expected to have COD in the range 1200-1800 mg/l. Hence it is not Added to cooling tower and recycled to ETP inlet. This quantity will also help to reduce concentration of pollutants in wastewater. Domestic waste of 20 KLD will be treated in STP based on MBBR Technology. The plant will be based on Zero Liquid discharge system.

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:  $PM_{10}$  (43.4-86.7 µg/m<sup>3</sup>),  $PM_{2.5}$  (13.8-32.4 µg/m<sup>3</sup>),  $SO_2$  (14.2-28 µg/m<sup>3</sup>),  $NO_2$  (10.4-24.7 µg/m<sup>3</sup>). CO concentration was found to be 0.245-0.460mg/m3. Ozone in the range between 4.0-11 µg/m<sup>3</sup> and  $NH_3$  concentration was found to be 5.0-15.2 µg/m3. Heavy metals: Pb 0.18- 0.85 µg/m3, As and Ni in PM10 and Benzene & BaP were found below detectable limits. AAQ modeling study for point source emission indicated that the maximum incremental GLCs after the proposed project would be 0.85 µg/m<sup>3</sup>, 1.9 µg/m<sup>3</sup> and 5.6 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NOx. The resultant concentrations are within the national ambient air quality standards (NAAQS).

The PP reported that the power requirement for the proposed project is estimated as 3000 kVA, which will be sourced from Chhattisgarh state Electricity board by H.T Line. In addition to this 1 Nos. of 500 kVA DG set is proposed for emergency backup. Stack (height of 8 meters) will be provided as perCPCB norms to the proposed DG set. The unit proposes to install a 16 TPH Rice husk, / briquette boiler. Bag filters with a stack height of with a stack height of 30m to keep PM emission level to 150 mg/Nm<sup>3</sup>, SO<sub>2</sub> to 100 ppm, NO<sub>x</sub> to 50 ppm.

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.

Details of Process emissions generation and its management.

S.	Stack	Height	Тор	Exit	Exit	Volumetric	<b>PM</b> 10	SO <sub>2</sub>	NO <sub>2</sub>
No.	attached	(m)	Dia	Temp	Velocity	Flow		(gm/sec)	
	to		(m)	(°C)	(m/s)	(Nm³/hr)			
1.	16TPH	30	1	160	8	15559.3	0.43	1.1	0.40
	Boiler								
2.	DG set	8	0.2	260	15	948	0.02	0.0008	0.4
	1x500								

S.	Facilities	Air Pollution Control	Emission Level
No.		equipment	
1.	Thermic fluid heater	Dust collector	PM 150 mg/Nm <sup>3</sup>
	1000000 K Cal/hr	Scrubber	SO <sub>2</sub> ,100ppm,
			NOx.50ppm.
2	Rice husk, /	Back filter	PM 150 mg/Nm <sup>3</sup>
	briquette based 16	Mechanical dust collector	SO <sub>2</sub> ,100ppm,
	TPH boiler		NOx.50ppm.
3	DG set 500 KVA	DG set confirm to the	PM,
		requirements of emissions	SO <sub>2</sub> ,
		standards of the E.P. Act.	NOx and CO

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

S. No.	Type of waste	Proposed Quantity	Disposal Plan
1.	Spent Nickel (Schedule	20000 kg per	Sold to Nickel catalyst supplier
	I category-12.3)	annum	
2.	Boiler Ash	15 MTD	Land filling

#### **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 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, storage and handling of chemicals 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, number of trees should be increased. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found satisfactory. The Committee deliberated on mitigation of carbon emission, biofuels and socio economic study submitted by PP and found satisfactory. The EAC also deliberated the Action Plan on the issues raised during public hearing and socio-economic issues in the study area and found the plan is in order.

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, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the 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 Organic Chemical Industry as notified by the Ministry of Environment, Forest and Climate Change, *vide* GSR 608(E), dated 21.07.2010 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 575 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 vapor 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 35% 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. 13580 Number of Trees have to be planted with spacing of 2.0 m x 2.0 m 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 issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA 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.28.2

Setting up of technical grade Pesticides manufacturing unit of capacity 2385 MTPM located at Plot No. D-2/CH/396, Dahej-II Industrial Estate, Village: Galenda, Taluka: Vagra, District: Bharuch, Gujarat by M/s. NRA Pharmer Industries Pvt. Ltd.-Consideration of Environmental Clearance

#### [Proposal No. IA/GJ/IND3/247700/2021; File No. IA-J-11011/537/2021-IA-II(I)]

The Project Proponent and the accredited Consultant [M/s. Shree Green Consultants Accreditation Number NABET/EIA/2124/IA0072 valid till 24 Feb 2024], made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for setting up of technical grade Pesticides manufacturing unit of capacity 2385 MTPM located at Plot No. D-2/CH/396, Dahej-II Industrial Estate, Village: Galenda, Taluka: Vagra, District: Bharuch, Gujarat by M/s. NRA Pharmer Industries Pvt. Ltd.

The project/activity is covered under Category A of item 5(b) Pesticides industry and pesticide specific intermediates (excluding formulations)' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at Centre Level by the Expert Appraisal Committee.

S. No.	Products	Quantity (MT/M)	CAS No.
A. Herbi	cides		
1	2,-4, Dichlorophenoxy Acetic Acid (2, 4 -D acid)	150	94-75-7
2	2, 4 Dichloro Phenol	300	120-83-2
3	2, 6 Dichloro Phenol	100	87-65-0
4	2,4 -d Sodium salt	300	2702-72-9
5	2,4 -d ethyl ester	50	533-23-3
6	2,4 -d amine salt 58% solution	300	25168-26-7
7	Bispyribac Sodium	50	125401-92-5
8	Pretilachlor Technical	50	51218-49-6
9	Clodinafop- Propargyl Technical	50	105512-06-9
10	Atrazine	100	1912-24-9
11	Metribuzin	50	21087-64-9
12	Metolachlor	50	51218-45-2
13	Quizalofop	25	76578-14-8
14	Sulfosulfuron	100	141776-32-1
15	Imazethapyr	50	81335-77-5
16	Metasulfuron methyl	50	74223-64-6

The details of products and capacity as under:

S. No.	Products	Quantity (MT/M)	CAS No.
17	Nico Sulfuron	25	111991-09-4
18	Chlorimuron ethyl	25	10605-21-7
19	Glufosinate Ammonium	25	70033-13-5
20	Carfentrazone ethyl	50	128639-02-1
21	Fluroxypyr	25	69377-81-7
22	Triclopyr Acid	25	55335-06-3
23	Triclopyr Ester	25	64700-56-7
24	Clethodim (Tech)	25	99129-21-2
	Total (A)	2000	
B. Funç	gicide/Insecticide		
25	Thiophanate methyl	50	23564-05-8
26	Folpet	25	133-07-3
27	Myclobutanil	25	88671-89-0
28	Difenoconazole	50	119446-68-3
29	Chlorothalonil	25	1897-45-6
30	(E)-2 -methoxyimino-N-methyl-2-(2-	25	
	phenoxyphenyl) acetamide [SSF-126]		133408-50-1
31	Thiamethoxam	50	153719-23-4
32	Mono Chloro Acetic Acid	135	79-11-8
	Total (B)	385	
	Total (A+B)	2385	

The standard ToR has been issued by the Ministry vide letter no. IA-J-11011/537/2021-IA-II(I); dated 12<sup>th</sup> January, 2022. Public Hearing is exempted as the project is site is located inside the notified industrial area. The EC was already granted by the Ministry for the PCPIR on 14.09.2017. As informed by PP no litigation is pending against the proposal.

The PP reported that land area is 14914.48 m<sup>2</sup>. Industry will develop greenbelt in an area of 33 % i.e. 4928.95 m<sup>2</sup> out of total area of the project. The estimated project cost is Rs. 12.00 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 2.10 Crores and the Recurring cost (operation and maintenance) will be about Rs. 0.60 Crores per Annum. Total Employment will be of 365 persons. Industry proposes to allocate Rs. 24 lakhs towards CER.

The PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body Narmada river is flowing at a distance of 7.23 km in South direction.

The Ambient air quality monitoring was carried out at 8 locations during 1<sup>st</sup> October 2021 to  $31^{st}$  December 2021 to and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (44.18 –82.75 µg/m<sup>3</sup>), PM<sub>2.5</sub> (21.47 – 46.17 µg/m<sup>3</sup>), SO<sub>2</sub> (19.48 – 55.29 µg/m<sup>3</sup>) and NOx (24.04 – 65.08 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.79 µg/m<sup>3</sup>, 4.43 µg/m<sup>3</sup> and 1.59 µg/m<sup>3</sup>

with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The PP reported that the total water requirement will be 749.00 m<sup>3</sup>/day of which fresh water requirement of 436.00 m<sup>3</sup>/day will be met from Dahej GIDC water Supply. Effluent of 571.00 m<sup>3</sup>/day quantity will be treated through proposed in house ETP, MEE, RO & STP. Approximately 571.00 KLD (8.50 KLD Domestic waste water + 562.50 KLD Industrial Effluent) waste water will be generated from proposed project. Process waste water (320.00 KLD) will be segregated into two streams having HTDS & LTDS stream.135.00 KLD HTDS process waste water shall be sent to stripper followed by MEE for further treatment along with RO reject 69.22 KLD. MEE condensate will be sent to ETP for further treatment. MEE salt will be send to TSDF site. 591.5 KLD Low TDS effluent (Process 185 KLD + MEE Condensate 164 KLD + Washing 200 KLD + Cooling 2 KLD + Other 36 KLD + Boiler 4.5 KLD) will be treated in inhouse ETP. 502.77 KLD ETP treated effluent will be send to two stage RO for further treatment. 304.5 KLD RO permeate will be reused in utilities & scrubber. Remaining 129.05 RO permeate, meeting the norms as per GIDC drainage/GPCB shall be sent for final disposal into GIDC underground drainage-Dahej vilayet pipeline/common disposal system up to the sea. Domestic effluent (8.50 KLD) shall be treated in STP and treated water (20 KLD) will be reused in Gardening.

The PP reported that the Power requirement for proposed project will be 500 kVA and will be met from GEB Power Supply. Two D.G set of 200 kVA will be used as standby during power failure. Stack height 15 meter will be provided as per CPCB norms to the proposed DG sets.

The PP reported that 2 Nos. of Steam Boiler (3 TPH each) will be installed. Alkali Scrubber followed by Bag filter will be provided for controlling particulate emission.

S. No.	Stack Attached to	Fuel	Stack Height (m)	Parameter	АРСМ
1	Steam Boiler- 1 (3 TPH)	Briquettes/Coal	30 m	PM <150 mg/Nm <sup>3</sup> SO2 < 100 ppm NOx < 50 ppm	Alkali scrubber followed by Bag filter
2	Steam Boiler- 2 (3 TPH)	25 Ton/Day	30 m	PM <150 mg/Nm <sup>3</sup> SO2 < 100 ppm NOx < 50 ppm	Alkali scrubber followed by Bag filter
3	D. G. Set (200 kVA)	Diesel	15 m	PM <150 mg/Nm <sup>3</sup> SO2 < 100 ppm NOx < 50 ppm	Adequate Stack Height
4	D. G. Set (200 kVA)	60 lit/hr	15 m	PM <150 mg/Nm <sup>3</sup> SO2 < 100 ppm NOx < 50 ppm	Adequate Stack Height

### Details of utility required are given as below.

S. No.	Stack Attached to	Fuel	Stack Height (m)	Parameter	АРСМ	
Note: D.G set will be used for only emergency purpose						

# Details of Process emissions generation and its management:

S. No.	Plant	Stack Height (m)	Type of Pollutant	Permissible Limit	АРСМ	
			HCI	20 mg/Nm <sup>3</sup>	Two stago alkali	
1.	MPP-1	15	SO <sub>2</sub>	100 ppm		
			Cl <sub>2</sub>	5 mg/Nm <sup>3</sup>	Scrubber	
			HCI	20 mg/Nm <sup>3</sup>	Two stago alkali	
2.	MPP-2	1PP-2 15	SO <sub>2</sub>	100 ppm		
			Cl <sub>2</sub>	5 mg/Nm³	scrubber	
			HCI	20 mg/Nm <sup>3</sup>	Two stago alkali	
3. MPP-3		15	SO <sub>2</sub>	100 ppm		
			Cl <sub>2</sub>	5 mg/Nm <sup>3</sup>	Scrubber	

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

S. No.	Type of Waste	Source	Category No.	Total Quantity in (MT/Month)	Mode of Disposal
					Collection, Storage,
1	E I P sludge	EIP Plant	I -35.3	1384	I ransportation and final disposal at common TSDF site
					Collection, Storage,
2.	MEE Salt	MEE	I -35.3	627.5	Transportation and final
	<u>.</u>				disposal at common TSDF site
	Discarded	0			Collection, Storage,
3.	containers /	Storage	I-33.1	30000 No.	Decontamination,
	Barrole/Bage	Facility			authorized vendor
	Darreis/ Days				Collection Storage
			I-5.1	0.1	Transportation disposal by
	Spent Oil/Used Oil				selling to GPCB authorized &
4		Process Unit			registered recyclers or reuse
					as lubricants in Plant
					machinery within unit.
					Collection, Storage,
	Process				Transportation and final
5	residue	Manufacturing	I-20 1	330.10	disposal at common TSDF site
5	& Distillation	process	120.1	000.10	or incineration at common
	residue				incineration facility or sent for
	-				Co-Processing unit.
6	Spent catalyst	Manufacturing	I-29.5	20.0	Collection, storage and send

S. No.	Type of Waste	Source	Category No.	Total Quantity in (MT/Month)	Mode of Disposal
		process			for regeneration to supplier
7	Date-expired and off- specification pesticides/ Products / RMs	Process Unit	l -29.3	50.0	Collection, Storage, Transportation, Disposal by incineration at common incineration facility or Co- Processing for cement industries
8	Bromate, (Hypo- Bromates) Aq. & solid Sodium Bromide sol./ HBr	Manufacturing process	II-B6	210	Aq. & solid Sodium Bromidesol./ Aq. HBr Sol. Recovery:Collection,Disposal,Recovery,Storage,Transportation,Disposal bysell out to authorized userswho is having authorizationwith valid CCA and rule 9permission to receive thiswaste.
9	Bromate, (Hypo- Bromates) Aq. KBr Solution	Manufacturing process	II-B6	37	Aq. KBr Solution: Collection, Disposal, Recovery, Storage, Transportation, Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
10	Inorganic Acid (Spent Acids)	Manufacturing process	B-15	2580	Spent Sulphuric Acid (inorganic acid): Collection, Disposal, Reuse, Storage, Transportation, Disposal by reused within plant.
11	Spent HCI	Manufacturing process	I-29.6	781.65	Collection, Disposal, Recovery, Storage, Transportation, Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
12	Spent Solvent	Manufacturing process	l 29.4	201.50	Collection, Disposal, Recovery, Storage, Transportation, Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9

S. No.	Type of Waste	Source	Category No.	Total Quantity in (MT/Month)	Mode of Disposal
					permission to receive this waste or sent to Common incineration facility or sent for Co-Processing
13	Aq. AlCl₃ Solution	Manufacturing process	I-29.1	56.25	Collection, Disposal, Recovery, Storage, Transportation, Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
14	Process Solid waste	Manufacturing process	I-29.1	68	Collection, Storage, Transportation and final disposal at common TSDF site
15	NaCl	Manufacturing process	I-35.3	7.00	Collection, Storage, Transportation and final disposal at common TSDF site
16	CuCl	Manufacturing process	I-29.1	3.10	Collection, Disposal, Recovery, Storage, Transportation, Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
17	KCI	Manufacturing process	I-29.1	5.00	Collection, Disposal, Recovery, Storage, Transportation, Disposal by sell out to authorized users who is having authorization with valid CCA and rule 9 permission to receive this waste.
18	Fly ash	From Boiler		3.25	Collection, storage, transportation & disposal by send to Brick manufacturing /cement industry.

#### **Deliberations by 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, no. of trees should be increased. The Committee deliberated on use of briquette and socio economic study submitted by PP and found satisfactory. The committee suggested to carry out the study on the impact of the products on microbes and fungus during their end use. The PP committee to carry out the same. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project 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, <u>recommended the project for grant of</u> environmental clearance, <u>subject to compliance of terms and conditions</u> as under, and general terms and conditions in Annexure: -

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). No banned pesticide 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 Pesticide Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 446 (E), dated 13<sup>th</sup> June 2011 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. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (viii). 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.
- (ix). 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.

- (x). 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.
- (xi). 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.
- (xii). 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.
- (xiii). 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.
- (xiv). Total fresh water requirement, sourced from Dahej GIDC water Supply, shall not exceed 436.00 m<sup>3</sup>/day. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA and renewed from time to time.
- (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 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.
- (xviii). 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.

(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. 28.3

Expansion of Chlorinated Paraffin Plasticizer (50 TPD to 125 TPD) and Hydrochloric Acid (100 TPD to 250 TPD) Manufacturing Unit by M/s Shivtek Industries Private Limited, located at Survey No. 62/A, Part II inside the Industrial Complex of SAARC at Village Gondiparla, District Kurnool, Andhra Pradesh- Consideration of Environmental Clearance under Violation category as per Notification dated 14.03.2017.

# [Proposal No. IA/AP/IND3/259354/2018; File No. IA-J-11011/21/2018-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Gaurang Environmental Solutions Pvt. Ltd. [Accreditation Number NABET/EIA/2023/RA 0192, valid up to 19.01.2023], made a 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 Chlorinated Paraffin Plasticizer (50 TPD to 125 TPD) and Hydrochloric Acid (100 TPD to 250 TPD) Manufacturing Unit by M/s Shivtek Industries Private Limited, located at Survey No. 62/A, Part II inside the Industrial Complex of M/s Sree Rayalaseema Alkali & Allied Chemicals Ltd. SAARC at Village Gondiparla, District Kurnool, Andhra Pradesh.

S.	Product	CAS	Existing	Proposed	Total	Uses
No.	Details	No.	quantity	quantity	quantity	
1	Chlorinated Paraffin Plasticizer	106232- 86-4	50 TPD	75 TPD	125 TPD	For polyvinyl chloride, as extreme-pressure additives in metal- machining fluids, as additives to paints, coatings and sealants to improve their resistance to chemicals and to water, and as flame retardants for plastics, fabrics, paints and coatings
2	Hydrochloric Acid (By- product)	7647- 01-0	100 TPD	150 TPD	250 TPD	production of batteries, photoflash bulbs and fireworks. It is also used in leather processing, building and construction, oil well

The details of product and by product with their quantities are as under:

			acidizing and producing
			gelatin products

The project/activity is covered under Category 'A" of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. and its subsequent amendments and, therefore requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.

The PP reported that the project was operational since the year 2011 without obtaining prior environmental clearance hence it is violation case in respect to EIA Notification dated 14th March 2017.

The Ministry's Notification dated 14th March, 2017 provides 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 the EIA Notification, 2006.

The Standard ToR has been issued by the Ministry vide letter No. No. IA-J-11011/21/2018-IA-II(I) dated 15.02.2018 as per Violation Notification dated 14.03.2017. The Public Hearing for the proposed project was conducted by the Andhra Pradesh Pollution Control Board on 05.11.2021. The main issues raised during the public hearing are related to drinking water problem, employment opportunities, development of greenbelt, 10-15 hospital beds and ambulance.

The PP reported that the existing land area is 10117.1m<sup>2</sup> and no additional land will be acquired for proposed expansion. The estimated project cost is Rs.7 Crore (Existing 4 Cr. + proposed 3 Cr.) including existing investment of Rs. 3 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 56.5 Lakh and the Recurring cost (operation and maintenance) will be about Rs. 12 Lakh per annum. Total Employment will be 45 persons after expansion. Industry proposes to allocate Rs. 22 Lakh @ of 1 % towards CER.

The PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Tungabhadra River is flowing at a distance of 1.3 km in WSW direction.

PP reported that the Ambient air quality monitoring was carried out at 8 locations during Dec 2018-Feb 2019 to and the baseline data indicates the ranges of concentrations as: PM10 (35  $\mu$ g/m3 - 64  $\mu$ g/m3), PM2.5 (14  $\mu$ g/m3 - 33  $\mu$ g/m3), SO2 (9  $\mu$ g/m3 - 17  $\mu$ g/m3) and NO2 (9  $\mu$ g/m3 - 16  $\mu$ g/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.70  $\mu$ g/m3, 0.35  $\mu$ g/m3 and 0.17  $\mu$ g/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). Total water requirement is 200 m3/day of which fresh water requirement of 198.47 m3/day will be met from M/s SRAAC Ltd. Domestic effluent of 1.8 KLD will be treated through modular STP of 2 KLD capacity. 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 installe will be 400 kVA including existing 210 kVA and will be met from Andhra Pradesh Power Corporation Limited; supplied to Shivtek Industries Pvt. Ltd by SAARC Ltd. Existing unit has 2 DG sets 160 kVA & 320 kVA capacity, additionally DG sets are used as standby during power failure. Stack (5 mt above roof) has been provided as per CPCB norms to the proposed DG sets. Existing unit has 0.1 TPH HSD fired boiler. Multi cyclone separator/ bag filter with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

Details of Process	s emissions	generation	and its	management:
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n	rocess								
P1	100033	carried HCL vap	away ors	with	•	condenser equipment	systems	for	process
						be implemer	ion and rep ited.	Jan Sy	
Process emission					•   •   • ' • ' • '	Leak free pu will be used storage tank Will ensure joints and va pipelines. Container of during the tra	I for transfe to reactor. minimum lves to avo liquids will t	echani er solv no. of id leak be tigh n and s	cal seals rent from flanges, age from tly closed storage of

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

Particulars	Detail	Basis	Quantity of waste generated (Kg/day)
Workers	45 nos.	@0.55 kg/day	24.75 Say 25
Landscaping	0.82	@0.2kg/acre/day	0.164
	acre		
		Total	25.16 say 25 kg/day

#### **Solid Waste Generation & Disposal**

Waste	Quantity	Cat.	Mode of disposal
Used/	100	5.1 of	Re-Processors/ Recyclers of waste oil authorized by
spent oil	lt/year	schedule I	APPCB/SPCBs

#### **Deliberations in the EAC**

The proposal submitted under the Ministry's Notification S.O. 804 (E), dated 14.03.2017. After detailed presentation the EAC noted that the plant/unit was constructed/operated without obtaining prior EC hence violating the provisions of EIA Notification, 2006. The unit was

operational and complete civil construction has been done as reported by the Project proponent.

As per information the Standard ToR has been issued by the Ministry vide letter dated 15.02.2018 and the Public Hearing for the proposed project was conducted by the Andhra Pradesh Pollution Control Board on 05.11.2021.

The Committee noted that PP has not submitted the certified compliance report of CTO as per the TOR issued to the project. The EAC also observed that credible action u/s 19 of the E(P) Act has not yet been filed by the State PCB. EAC deliberated observed that the damage assessment cost and activities proposed under RP, NRA and CRA are vogue. EAC advised PP to revise the activities separately under RP, NRA and CRAP.

The EAC further noted that the baseline data was collected during the December, 2018-February, 2019 which is three-year-old data. The application was submitted on 09.03.2022. PP informed the EAC that they have conducted one-month more data but overlook to upload on Parivesh portal in Form-2. PP informed that the Unit was in operation after grant of TOR in violation. This needs proper justification/approvals which obtained by the PP.

The PP/Consultant has requested the EAC that they will revise the application based on the TOR granted to the project and resubmit the same along with all details/compliances on the Parivesh portal.

After detailed deliberation, the EAC observed that there are various deficiencies in the application/EIA/EMP Report and Form-2 and accordingly the EAC advised the PP to revise the application as the whole process is online on Parivesh portal for further consideration by the EAC and accordingly the EAC **returned** the proposal in its present form for its revision of the application.

# Agenda No.28.4

Manufacturing of Resins (Phenol Formaldehyde Resin, Melamine Formaldehyde Resin & Urea Formaldehyde Resin) with production capacity of 1000 MTPM, located at Survey No. 286 P-1, Village Dadashreenagar, Morbi Maliya (Kandla Road) District Morbi, Gujarat by M/s. Sarvottam Decor Pvt. Ltd.– Reconsideration of Environmental Clearance

# [Proposal no: IA/GJ/IND3/212102/2021, F.No: IA-J-11011/203/2021-IA-II(I)

The Project Proponent and the accredited Consultant [M/s. T. R Associates, Accreditation Number NABET/EIA/1922/RA 0142 (Rev.01) valid till 09.10.2022], made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion of different types of Resins (Phenol Formaldehyde Resin, Melamine Formaldehyde Resin & Urea Formaldehyde Resin) manufacturing unit of capacity upto 1000 MTPM located at Survey No. 286 P-1, Village

Dadashreenagar, Morbi Maliya (Kandla Road) District Morbi, Gujarat by M/s. Sarvottam Decor Pvt. Ltd.

The EC proposal was earlier placed before the EAC in its meeting held during 27-28 January, 2022 wherein EAC sought certain requisite information/inputs. In this context, PP vide letter dated 28.02.2022, has uploaded the requisite information and accordingly the proposal is placed in this instant meeting. Information desired by the EAC and response submitted by the project proponent is as under:

S.	Queries Raised by EAC	Reply by PP	Observation of EAC
No.			
1.	The PP should revise water balance as suggested by the EAC	EAC has informed PP to provide STP instead of Soak pit system. So, PP have corrected domestic waste water treatment system in water balance diagram. Due to addition of STP; water balance diagram is changed. Revise water balance diagram as suggested by EAC is submitted.	The EAC deliberated the matter and found the reply to be satisfactory.
2.	The PP should submit data of BOD, COD, DO etc. of the near water body as in many places the surface water quality having high COD and low DO; PP needs to recheck the surface water analysis data and resubmit the report after verification	Surface water analysis report in connection with High COD and Low DO is submitted.	The EAC deliberated the matter and found the reply to be satisfactory.
3.	Revised Conservation plan of Schedule–I species needs to be submitted. The same plan need to be submitted to CWLW for approval as per instant guidelines	Conservation plan of Schedule -1 species (Peacock, Shikra & Pallid Harrier) was submitted to concern authority (CWLW) dated on 23/10/2021 PP has also uploaded on parivesh portal.	The EAC deliberated the matter and found the reply to be satisfactory.
4.	The PP need to revise the baseline data results in Form-2 and updated form 2 needs to be uploaded on the Parivesh portal as the whole process is online on Parivesh portal	PP has noted the suggestion and accepted that during filling online Form-2, it is typographically error in Serial no. 14,14.1 and 18.1 Correct details are resubmitted on parivesh portal.	The EAC deliberated the matter and found the reply to be satisfactory.

5.	The PP needs to conduct study to check the reasons for contamination of nearby water bodies and detailed report needs to be submitted before the EAC	PP has revisited the location to find out the reasons for contamination of nearby water bodies and collected the water sample. PP has also performed elemental analysis. Report of the same is submitted.	The EAC deliberated the matter and found the reply to be satisfactory.
6.	The PP needs to commit to use bio fuel; In this context, PP needs to be submitted the undertaken on the issue	Commitment stated that only Briquettes will be used for proposed Resin Project.	The EAC deliberated the matter and found the reply to be satisfactory.
7.	The PP needs to submit the revised green belt design and its updated budget allocation and timelines	PP has attached revised Green belt development plan along with budget allocation.	The EAC deliberated the matter and found the reply to be satisfactory.
8.	During the discussion on the issues raised during PH the EAC noted that one of the participants mentioned that the fishes would die and accordingly the EAC is of the view that reason needs to be identified and the PP shall analyse the upstream and downstream sample and submit the report the EAC.	PP has identified the probable reason in connection with the issues raised during PH. PP has also analysed the upstream and downstream sample and report of the same is submitted.	The EAC deliberated the matter and found the reply to be satisfactory.
9.	Action Plan with budgetary plan needs to be submitted in reply of Public complaint raised during the public hearing and other public complaint submitted in Gujarat Pollution Control Board.	PP has prepared public hearing action plan based on Public complaint raised during the public hearing and other public complaint submitted in Gujarat Pollution Control Board.	The EAC deliberated the matter and found the reply to be satisfactory.

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, 2006 under Category 'A' and requires appraisal at Central Level by Expert Appraisal Committee (EAC).

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

S. No.	Name of the Product	Production Capacity (MT/Month)	CAS Number
1	Phenol Formaldehyde Resin	400	9003-35-4
2	Melamine Formaldehyde Resin	300	9011-05-6
3	Urea Formaldehyde Resin	300	9003-08-1
	Total Production Capacity	1000	

The standard ToR has been issued by the Ministry vide letter no. IA-J-11011/203/2021-IA-II(I), dated 21<sup>st</sup> May, 2021. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 27/10/2021 which was presided over by District Collector and District Magistrate. The main issues raised during the public hearing are related to effect on surrounding water bodies. The EAC deliberated the action plan on the issues raised during PH and found in order. The PP reported that no litigation is pending against the project.

The unit has already obtained consent from GPCB for manufacturing of laminated sheets. Currently Unit is in the process of installation of laminate sheet's Plant & machineries, once installation is completed then unit will apply for CTO (Consent to Operate) for Laminated sheet production. The EAC deliberated the issues and found in order.

The PP reported that land area is 13557 m<sup>2</sup>; no additional land will be used for expansion of proposed project. Industry will develop greenbelt in an area of 33 % i.e. 4475 m<sup>2</sup> out of total area of the project. The estimated project cost is Rs. 55.6 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 5.6 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 29.38 lakh per Annum. Total Employment will be 20 persons as direct. Industry proposes to allocate Rs. 1.112 Lakhs towards Corporate Environment Responsibility (CER).

The PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. The Macchu River is flowing at a distance 4.40 km in SW direction.

The Ambient Air Quality monitoring was carried out at 8 locations during December 2020 to February 2021 and additional one-month monitoring was carried out in October 2021 to validate the baseline data. December 2020 to February 20121 baseline data indicates the ranges of concentrations as:  $PM_{10}$  (56.31 µg/m<sup>3</sup> to 86.60 µg/m<sup>3</sup>),  $PM_{2.5}$  (27.14 µg/m<sup>3</sup> to 51.42 µg/m<sup>3</sup>),  $SO_2$  (6.22 µg/m<sup>3</sup> to 22.93 µg/m<sup>3</sup>) and  $NO_2$  (15.51 µg/m<sup>3</sup> to 40.50 µg/m<sup>3</sup>). October 2021 baseline data indicates the ranges of concentrations as:  $PM_{10}$  (56.90 µg/m<sup>3</sup> to 88.14 µg/m<sup>3</sup>),  $PM_{2.5}$  (28.62 µg/m<sup>3</sup> to 53.25 µg/m<sup>3</sup>),  $SO_2$  (6.05 µg/m<sup>3</sup> to 23.64 µg/m<sup>3</sup>) and  $NO_2$  (16.50 µg/m<sup>3</sup> to 37.53 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 0.7 µg/m<sup>3</sup>, 0.04 µg/m<sup>3</sup> and 0.002 µg/m<sup>3</sup> with respect to  $PM_{10}$ ,  $SO_2$  and  $NO_2$ . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total water requirement will be 22.11 m<sup>3</sup>/day (Fresh – 19.3 m<sup>3</sup>/day + reuse – 2.81 m<sup>3</sup>/day) which will be met from Bore Well. Effluent of 3.52 m<sup>3</sup>/day quantity will be treated through Effluent Treatment Plant. The plant will be based on Zero Liquid Discharge System.

The PP reported that the Power requirement for proposed project will be 250 kVA and will be met from Paschim Gujarat Vij Company Ltd. (PGVCL). 250 kVA D. G. Set [Fuel : HSD (160 Lit./hr.)] will be provided and used only in case of power failure. Stack (11 meter) will be provided as per CPCB norms to the DG set.

The PP reported that one steam boiler of 4 TPH [Fuel: Indonesian coal (4 Ton/day) / Briquettes (5.49Ton/day)]. Multicyclone Dust Collector followed by Bag filter followed by Water Scrubber with stack height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm<sup>3</sup> for the proposed boilers.

S. No.	Description	Category as per HW Rules 2016	Quantity (MT/Annum)	Mode of Disposal
1	ETP Sludge / Evaporation Residue	35.3	53.64	Collection, storage and disposal at approved TSDF site
2	Used Oil	5.1	0.024	Collection, storage and used within premises as a lubricant / sold to registered recycler
3	Discarded Plastic Bags /Barrels	33.1	6.06	Collection, storage & sold to authorized vendor
4	Spent Carbon	35.1	38.4	Collection, storage and disposal at approved CHWIF site
5	Resin Residue	23.1	60	Collection, storage and disposal at approved CHWIF site

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

# **Deliberations by 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, no. of trees should be increased accordingly. The Committee deliberated on use of briquette and socio economic study submitted by PP and found satisfactory. The committee deliberated on revised conservation plan and found satisfactory. The committee also deliberated the additional study conducted by PP with respect to contamination in near water bodies. The committee deliberated the action plan of PP to resolve the issues raised during the Public Hearing and found the same 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, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

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

- (ii). No banned chemical 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 Organic Chemical Industry as notified by the Ministry of Environment, Forest and Climate Change, *vide* GSR 608(E), dated 21.07.2010 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 waste water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (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 Bore-well, shall not exceed 19.3 m<sup>3</sup>/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 issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the 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.

#### Consideration of Terms of Reference

#### Agenda No. 28.5

Proposed manufacturing unit of Formaldehyde (200 TPD) and Melamine Formaldehyde Resin (100 TPD), by M/s Kuber Industries, Located at Khewat no. 124, Khasra no. 51/2/2, 51/9/2, 51/12/2, VPO Kohli, Tehsil- Mandi Adampur, District- Hisar, Haryana – Consideration of TOR

#### [Proposal no. IA/HR/IND3/258868/2022; File No. IA-J-11011/78/2022-IA-II(I)]

The project proponent and their accredited Consultant [M/s. Vardan EnviroNet, Gurugram Haryana, having accreditation number NABET/EIA/1922/RA 0166 valid till 06.11.2022] made a detailed presentation on the salient features of the project and informed that:

The proposal is for Term of Reference to the project for manufacturing unit of Formaldehyde (200 TPD) and Melamine Formaldehyde Resin (100 TPD), Located at Khewat no. 124, Khasra no. 51/2/2, 51/9/2, 51/12/2, VPO Kohli, Tehsil- Mandi Adampur, District- Hisar, Haryana by M/s Kuber Industries.

The details of products and capacity as under:

S.	Proposed	CAS No.	Capacity	Uses
No.	Products		(TPD)	
1	Formaldehyde	50-00-0	200	<ul> <li>It is used in pressed-wood products, such as particleboard, plywood, and fiber board; glues and adhesives; permanent-press fabrics; paper product coatings; and certain insulation materials.</li> <li>It will also use in-house for the production of Melamine Formaldehyde Resin</li> </ul>
2	Melamine Formaldehyde Resin	9003-08-1	100	<ul> <li>It is used in plywood and particleboard adhesives, laminated countertops and table-tops, dishwasher-safe tableware, and automotive surface coatings.</li> </ul>

As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amendments thereto; the proposed project is listed at S.No. 5 (f) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC) as the proposed Unit is located outside the Industrial area.

The PP reported that the project is green field and no activity in the site has started. The activity will start only after taking necessary clearances under the various Acts/Rule. The PP reported that the proposed land required for the proposed project is 8346.83 sq.m, which is already allotted to the proponent. Industry will develop greenbelt in an area 37.24 % i.e. 3108 sq.m of total area of the project. The estimated project cost is Rs 10 crores. CER which will include

social development work as per issues to be raided during public hearing. Approx. 2.0% of total project cost will be incurred for CER activities and 5% will be incurred for EMP.

The PP reported that there are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. falling within 10 km distance from the project site. Kishangarh Sub-Branch canal is flowing at 2.61 km in SE direction. Total water requirement is 160 KLD which will be met from Ground Water source for which application to HWRA will be submitted The plant will be based on Zero Liquid discharge system. Domestic waste water will be treated in Septic tank followed by Soak Pit.

The Power requirement for the proposed project is 400 KVA and will be met from Uttar Haryana Bijli Vitran Nigam Ltd. (UHBVNL). DG sets of (1 no.) 500 KVA will be used as standby during power failure. Stack of (6 m above building) will be provided as per CPCB norms to the proposed DG sets. The proposed unit will install 1.0 TPH &0.5 TPH HSD fired boiler. Boiler with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm3 for the proposed boilers.

**Details of Process emissions generation and its management:** PP reported that Main source of air pollution is from DG set of capacity (1 no.) 500 KVA and Boiler 1.0 TPH & 0.5 TPH. DG set will be enclosed in acoustic enclosure and stack height of 6 m. above roof top will be maintained as per the CPCB guidelines and stack height of 30 m. will be provided at boiler to control emissions. Scrubber will be provided to trap the process residue and emission.

**Details of Solid waste/ Hazardous waste generation and its management:** PP reported that Hazardous wastes, process residue will be generated from the process & utilities mainly like Used Oil, Salts from evaporator and discarded containers or empty barrels. The hazardous waste generated from different process shall be disposed to the TSDF, while the waste oil shall be sent to HSPCB authorize recyclers. All hazardous waste shall be strictly disposed of as per Hazardous and Other Waste (Management & Trans-boundary Movement) Rule, 2016.

#### **Deliberations in the EAC:**

The EAC deliberated on the proposal. The Committee noted that the geocoordinates of the proposed site as uploaded on PARIVESH portal are inaccurate and mismatching from the PFR. The Consultant has agreed that they had made mistake while uploading the documents on Parivesh portal.

After detailed deliberations, the EAC warned the Consultant [M/s. Vardan EnviroNet, Gurugram] and advised the Consultant to read and check the documents/reports before uploading/submission on Parivesh portal as the whole process is online for granting of the prior environmental clearance as per provisions of the EIA Notification, 2006.

#### Agenda No. 28.6

Existing Formaldehyde manufacturing unit with capacity of 60 TPD by M/s NMR Phyrochem Pvt. Ltd., located at village Pundri, Tehsil - Gharaunda, District: Karnal, Haryana – Consideration of TOR- Violation Case submitted by Project Proponent on Parivesh Portal on 28.02.2022.

#### [Proposal No. IA/HR/IND3/255830/2022I; File No. IA-J-11011/47/2022-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 Existing Formaldehyde manufacturing unit with capacity of 60 TPD, located at village Pundri, Tehsil - Gharaunda, District: Karnal, Haryana by M/s NMR Phyrochem Pvt. Ltd. This is violation case.

The PP reported that the existing plant was established based on CTE granted vide File No. HSPCB/Consent/313282118KARCTE5150340, dated 05.04.2018. The Haryana State Pollution Control Board has issued a closure order to the unit vide letter no HSPCB/YMN/2020/175 dated 22.01.2020 to close down the operation, for violating the section 31A of Air (Prevention & Control of Pollution) Act, 1981 and 33-A of Water (Prevention & Control of Pollution) Act, 1981 and 33-A of Water (Prevention & Control of Pollution) Act 1974 by manufacturing Formaldehyde unit without obtaining prior Environmental Clearance under EIA Notification 2006.

#### **Production Capacity**

Product	Existing Capacity	Proposed Capacity	Total Capacity
Formaldehyde	60 TPD	60 TPD	60 TPD

#### **Raw Material Detail**

Raw Material	Requirement
Methanol	30 TPD
Water	37.5 KLD

The project/activity is covered under Category 'A" of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and its subsequent amendments and, therefore requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.

The PP reported that the existing land area is 2000 sq.m and the existing estimated project cost is Rs 281 lacs which include land, building plant and machinery. The PP reported that the total water requirement is 40.0 KLD for the production 60 TPD Formaldehyde, 39.5 KLD for industrial use which include 38 KLD for process & 1.5 KLD for cooling tower, 0.5 KLD for domestic purpose. NOC for Groundwater abstraction from HWRA is yet to be obtained.

The PP reported that the total power requirement will be 150 kVA (Total sanctioned load) and Average running load power requirement for the project is 112 KVA. The power is supplied

from UHBVN (Uttar Haryana Bijli Vitran Nigam). DG set of capacity 160 KVA also exists as the backup power supply.

#### Details of Violation:

Period	Production	Remarks
April, 2018-	Formaldehyde	Prior EC was not taken before setting up and
Janruary,	Manufacturing (60	operating the Unit, hence covered under violation
2020	TPD)	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 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 guestion 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.

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.

After detailed deliberations, the committee examined that the instant application in Form-I, PFR & other reports, and it is emerged that the instant application is not as per the Standard Operating Procedure (SOP) dated 07.07.2021 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. PP has submitted the incomplete and inadequate 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 warned the Consultant [M/s SBA Enviro Systems Pvt. Ltd.] to read and check the documents/reports before uploading/submission on Parivesh portal as the whole process is online for granting of the prior environmental clearance as per provisions of the EIA Notification, 2006.

After, detailed deliberations, the EAC accepted the request of PP for revision of application on Parivesh portal. Accordingly, the EAC **returned** the proposal for revision of application as per SOP dated 07.07.2021 on Parivesh Portal as the whole process for granting of EC is online on portal.

#### Agenda No. 28.7

Existing Formaldehyde Manufacturing Unit with capacity of 60 TPD of Decent Drugs by M/s Decent Drugs Pvt. Ltd., located at Salempur Bangar road, Village- Chhachhrauli, District Yamuna Nagar, Haryana– Consideration of TOR- Violation Case submitted by Project Proponent on Parivesh Portal on 07.03.2022.

#### [Proposal No. IA/HR/IND3/255842/2022; File No. IA-J-11011/48/2022-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 Existing Formaldehyde manufacturing unit with capacity of 60 TPD, located at Salempur Bangar road, Village- Chhachhrauli, District Yamuna Nagar, Haryana by Decent Drugs Pvt. Ltd. This is a violation case.

The PP reported that the existing plant was established based on CTE granted E granted vide File No. HSPCB/YMN/2009/10901, Dated- 21.01.2009. The Haryana State Pollution Control Board has issued closure order vide no HSPCB/PC/2019/2305-2308 dated 9.09.2019 under section 33-A of the Water Act, 1974 & under section 31-A of Air (Prevention & Control of Pollution) Act, 1981 due to not obtaining Environmental clearance and violated the provisions of consent policy of Board. Thereafter, HSPCB has passed an order vide no. File No. HSPCB-070001/90/2020- HAZARDOUS WASTE MANAGEMENT CELL-HSPCB dated 12.03.2021 suspended the closure order with the following conditions:

(i) That the unit will obtain the CTO under Water Act and Air Act before starting the production.

- (ii) That the unit will comply with the provisions of Water Act 1974, Air Act,1981 & HWM Rules, 2016 and Environment Protection Act,1986 and the directions issued by the HSPCB from time to time.
- (iii) That Unit will be bound to close its operation after expiry of six months' period allowed for operation if they failed to obtain the Environment Clearance as per requirement of Environment Impact Assessment Notification dated 14 September, 2006, before the expiry of six months period.
- (iv) That unit will be bound to close the operation within six months' period if such orders dated 10.11.2020 issued by the Govt. withdrawn or cancelled or any adverse directions issued by the Hon'ble NGT or any other court of law.
- (v) That the Haryana State Pollution Control Board shall be at liberty to review consent to operate and closure order issued under Water Act and Air Act, anytime during the period of six months granted for operation.

#### **Production Capacity**

Product	Existing Capacity	Proposed Capacity	Total Capacity
Formaldehyde	60 TPD	60 TPD	60 TPD

The project/activity is covered under Category 'A" of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and its subsequent amendments and, therefore requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.

The PP reported that the existing land area is 4046.86 sq.m, out of which 2023.43 sq. m. of area is covered with manufacturing and other utility facilities. The existing estimated project cost is Rs. 1.23 Crores which include land, building plant and machinery. The PP reported that the total water requirement is 40.0 KLD for the production 60 TPD Formaldehyde, 39.5 KLD for industrial use which include 38 KLD for process & 1.5 KLD for cooling tower, 0.5 KLD for domestic purpose.

The PP reported that the total power requirement will be 169 KVA (Total sanctioned load) The power is supplied from UHBVN (Uttar Haryana Bijli Vitran Nigam Limited). Two DG set of capacity 125 KVA and 82.5 KVA also exist as the backup power supply.

#### **Details of Violation:**

Period	Production	Remarks
January,	Formaldehyde	Prior EC was not taken before setting up and
2009- April,	Manufacturing (60	operating the Unit, hence covered under violation
2021	TPD)	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:

- (vi) For past Violations, the concerned Authorities are free to take appropriate action in accordance with polluter pays principle, following due process.
- (vii) 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.
- (viii) State PCB may assess and recover compensation for illegal operation of the Units on 'Polluter Pays' principle.
- (ix) State PCB may ensure that the unit does not re-start functioning without requisite Statutory Clearance.
- (x) 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 guestion 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.

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.

After detailed deliberations, the committee examined that the instant application in Form-I, PFR & other reports, and it is emerged that the instant application is not as per the Standard Operating Procedure (SOP) dated 07.07.2021 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. PP has submitted the incomplete and inadequate 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 warned the Consultant [M/s SBA Enviro Systems Pvt. Ltd.] to read and check the documents/reports before uploading/submission on Parivesh portal as the whole process is online for granting of the prior environmental clearance as per provisions of the EIA Notification, 2006.

After, detailed deliberations, the EAC accepted the request of PP for revision of application on Parivesh portal. Accordingly, the EAC returned the proposal for revision of

application as per SOP dated 07.07.2021 on Parivesh Portal as the whole process for granting of EC is online on portal.

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# DAY-2: MARCH 25, 2022 [FRIDAY]

#### Agenda No. 28.8

Expansion of different types of Resins (Phenol Formaldehyde Resin, Melamine Formaldehyde Resin & Urea Formaldehyde Resin) manufacturing unit of capacity upto 9000 MTPM located at Survey No.: 357 Paiki, 358 Paiki, Village: Kadadra, Taluka : Dahegam. District: Gandhinagar, Gujarat by M/s. Abhiyan Panel India LLP – Consideration of Environment Clearance

#### [Proposal no: IA/GJ/IND3/202188/2021, F.No IA-J-11011/85/2021-IA-II(I)

The Project Proponent and the accredited Consultant [M/s. T. R Associates having accreditation number NABET/EIA/1922/RA 0142 (Rev.01) valid till 09 Oct 2022] has made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion of different types of Resins (Phenol Formaldehyde Resin, Melamine Formaldehyde Resin & Urea Formaldehyde Resin) manufacturing unit of capacity upto 9000 MTPM located at Survey No. : 357 Paiki , 358 Paiki , Village : Kadadra, Taluka : Dahegam. District: Gandhinagar, Gujarat by M/s. Abhiyan Panel India LLP.

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, 2006 under Category 'A' and requires appraisal at Central Level by Expert Appraisal Committee (EAC).

S. No.	Name of the Product	Production Capacity (MT/Month)	CAS Number
1	Phenol Formaldehyde Resin	3000	9003-35-4
2	Urea Formaldehyde Resin	3000	9011-05-6
3 Melamine Formaldehyde Resin		3000	9003-08-1
T	otal Production Capacity	9000	

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

The standard ToR has been issued by the Ministry vide letter no. IA-J-11011/85/2021-IA-II(I), dated 17<sup>th</sup> March, 2021. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 30/10/2021 which was presided over by the Additional District Magistrate. The main issues raised during the public hearing are related to precautionary measures for workers & preventive measures for air emissions. The PP reported that no litigation is pending against the proposal.

The unit has obtained CTO from GPCB for manufacturing of laminate sheet and various types of Plywood/Veneered Decorative plywood and/or Various Types of Block Board and/or various types of Flush Doors. Unit has obtained CTO compliance report from GPCB. The Committee

The PP reported that land area is 18485 m<sup>2</sup>; no additional land will be used for this Resin

project. Industry will develop greenbelt in an area of 33 % i.e. 6108.20 m<sup>2</sup> out of total area of the project. The estimated project cost is Rs. 234 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 51.97 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 52.73 lakh per Annum. Total Employment will be of 5 persons. Industry proposes to allocate Rs. 4.68 Lakhs towards Corporate Environment Responsibility (CER).

The PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Meshwo River is flowing at a distance 4.95 km in East direction.

The Ambient Air Quality monitoring was carried out at 8 locations during October 2020 to December 2020. October 2020 to December 2020 baseline data indicates the ranges of concentrations as:  $PM_{10}$  (56.29 µg/m<sup>3</sup> to 86.97 µg/m<sup>3</sup>),  $PM_{2.5}$  (27.67 µg/m<sup>3</sup> to 51.86 µg/m<sup>3</sup>),  $SO_2$  (6.02 µg/m<sup>3</sup> to 23.28 µg/m<sup>3</sup>) and NO<sub>2</sub> (16.22 µg/m<sup>3</sup> to 40.23 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 0.4 µg/m<sup>3</sup>, 0.5 µg/m<sup>3</sup> and 0.002 µg/m<sup>3</sup> with respect to  $PM_{10}$ ,  $SO_2$  and NO<sub>2</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The PP reported that the total water requirement will be 29.76 m<sup>3</sup>/day (Fresh – 21.0 m<sup>3</sup>/day + reuse – 8.76 m<sup>3</sup>/day) which will be met from Bore Well. Effluent of 10.08 m<sup>3</sup>/day quantity will be treated through Effluent Treatment Plant. The plant will be based on Zero Liquid Discharge System.

The PP reported that the Power requirement for proposed project will be 450 kVA and will be met from UGVCL (PGVCL). 320 kVA D. G. Set [Fuel: Diesel (100 Lit./hr.)] has been provided and used only in case of power failure. Stack (11 meter) has provided as per CPCB norms to the DG set.

The PP reported that industry have one steam boiler of 3 TPH [Fuel: Briquettes (4.12 Ton/day) / Imported coal (2.99 Ton/day)/ Agrowaste (4.71 ton/day) ]. Imported coal will only be used when unavailability of briquettes. Unit will increase working hours of steam boiler (3 TPH) for proposed resin manufacturing (working for 8 hours). Cyclone separator followed by bag filter followed by alkaline scrubber with stack height of 30 m has been installed for controlling the particulate emissions within the statutory limit. Additionally, Steam boiler-2 TPH [Fuel: Briquettes (3.92 Ton/day) / Imported coal (2.49 Ton/day)] will be installed. Cyclone separator followed by bag filter with stack height of 30 m will be installed for controlling the particulate emissions within the statutory limit.

	Details of Sc	olid waste/ Haza	rdous waste gen	eration and its	management:
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S. No.	Description	Category as per HW Rules 2016	<b>Total</b> Quantity MT/Annum	Mode of Disposal
1.	Used oil / Spent Oil	5.1	0.05	Collection, storage and use within premises as a

				lubricant/ sell to registered recycler
2.	Discarded Plastic Bags / Drums / Barrels	33.1	60	Collection, storage and sell to authorized vendor.
3.	ETP Sludge	35.3	76.08	Collection, storage and disposal at Approved TSDF site
4.	Evaporation Residue	35.3	57.06	Collection, storage and disposal at Approved TSDF site
5.	Resin Residue	23.1	54	Collection, storage and disposal at Approved CHWIF site

### **Deliberations by 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 Committee noted during the appraisal that Green belt was not developed as per the norms specified by CPCB as this is an existing Unit. The committee noted that PP had not adequately prepared onsite/offsite emergency plan and mitigation measures to be adopted during implementation of the project. The carbon sink/carbon sequestration data was not satisfactory.

The Committee, after detailed deliberations, <u>deferred</u> the proposal and desired for requisite information/inputs in respect of the following:

- (i) The PP should revise the greenbelt plan (with ~2500 trees/ha) along with budgetary allocations and timelines. EAC noted that since this is an existing Unit and PP shall come for appraisal of the instant project after development of green belt.
- (ii) The EAC noted that total lease of land is 21485 s.qm, however PP has taken land conversion only for 18485 sq.m. PP should submit clarification regarding why conversion of land was done partially.
- (iii) The CTO compliance report shows that compliance status of various conditions as "GPCB will keep watch". Therefore, Action Plan along with timelines and budgetary allocations for self-compliance of the CTO conditions needs to be submitted.
- (iv) The Project proponent shall prepare 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.

- (v) The PP should submit the revised water balance with improvement in recycle/reuse and revise water scheme accordingly.
- (vi) The PP shall submit the details of carbon foot prints and carbon sequestration study w.r.t. proposed project. Proposed mitigation measures also needs to be submitted for further appraisal of the EAC.

#### Agenda No.28.9

Amalgamation and expansion of pesticide intermediates & technical production capacity from 1195 TPM to 2193 TPM along with Synthetic Organic chemical exiting production capacity of 1000 TPM, within the existing premises located at Plot No. 2901 to 2906 and 2806, GIDC Panoli, Taluka - Ankleshwar, District: Bharuch Gujarat by M/s. Tagros Chemicals India Pvt. Ltd.-Consideration of Environmental Clearance

### [Proposal No. IA/GJ/IND3/254568/2017, F.NO IA-J-11011/82/2017-IA-II(I)]

The Project Proponent and the accredited Consultant [M/s. Shree Green Consultants [Accreditation Number NABET/EIA/2124/IA0072 valid till 24 Feb 2024], made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Amalgamation and expansion of pesticide intermediates & technical production capacity from 1195 TPM to 2193 TPM along with Synthetic Organic chemical exiting production capacity of 1000 TPM, within the existing premises located at Plot No. 2901 to 2906 and 2806, GIDC Panoli, Taluka - Ankleshwar, District: Bharuch Gujarat by M/s. Tagros Chemicals India Pvt. Ltd.

The project is covered under 5(b) Pesticides industry and pesticide specific intermediates (excluding formulations) & 5 (f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are requires appraisal at Central Level by Expert Appraisal Committee (EAC).

S.		Products	Category	Production	on Capacity (TPM)			
No.	CAS NO.	FIGUUCIS		Existing**	Proposed	Total		
Pest	Pesticides Intermediates & Technical							
1	52314-67-7	DV Acid Chloride	5(b)	250	100	350		
2	39515-51-0	Meta Phenoxy	5(b)	250	250	600		
2		Benzaldehyde		230	550			
3	120068-37-3	Fipronil	5(b)	00	100	100		
4	463-71-8	Thiophosgene	5(b)	00	100			

The details of products and capacity as under:

	-	Ortho Chloro	5(b)			
		Benzyl				
5		Trifluromethyl				
		sulphide				
	52315-07-8	Cypermethrin	5(b)			
6		(Tech.) or		200	200	400
		intermediates				
	52645-53-1	Permethrin (Tech.)	5(b)			
7		or intermediates		100	30	130
	67375-30-8	Alphamethrin	5(b)			
8		(Tech.) or		50	30	80
		intermediates				
9	41394-05-2	Metamitron (Tech.)	5(b)	150	0	150
10	-	MBB Forcut	5(b)	45	108	153
11	26225-79-6	Ethofumesate	5(b)			
		(Tech.)				
12	7473-98-5	Hydroxy Benzo	5(b)			
		Furan (HBF)				
13	91465-08-6	Lambda	5(b)	100		
		Cyhalothrin		100		
		(Lambamethrin)			50	150
14	2431-96-1	Diethyl Phenyl	5(b)			
		Acetamide (Tech.)				
		(DEPA)				
15	210880-92-5	Clothainidin	5(b)	0		
16	1224510-29-	BETA	5(b)	0		
	5	Cypermethrin*		0		
17	95737-68-1	Pyriproxypane	5(b)			
18	79538-32-2	Tefluthrin or	5(b)	50	30	80
		Mepafluthrin		50	30	80
19	118712-89-3	TransFluthrin	5(b)			
		Total (A)		1195	998	2193
Synt	hetic Organic	Products	1			
20	100-44-7	Benzyl Chloride	5(f)	500	0	500
21	100-52-7	Benzaldehyde	5(f)	250	0	250
22	98-88-4	Benzal Chloride	5(f)	50	0	50
23	98-07-7	Benzo trichloride	5(f)	100	0	100
24	100-51-6	Benzyl alcohol	5(f)	100	0	100
		Total (B)		1000	0	1000
		Grand Total (A+B)		2195	998	3193
Inor	ganic Products	not requiring EC	Γ	Γ		
	7757-83-7	Sodium Sulfite or	-	487	275	762
1		Sodium				
		Metabisulfite				
2	12125-02-9	Ammonium	-	217	111	328
<sup>-</sup>		Chloride				

2	7447-40-7	Potassium	-	140	1398	1538	
3		Chloride					
Λ	1327-41-9	PAC / Aluminium	-	1031	1604	2635	
4		Chloride (30%)					
Tota	Total 1875 3388 5263						
Note: * The above-mentioned products as per CCA amendment No: AWH- 108252 issue							
vide	Letter No: GPC	B/ANK/CCA-110(16)/	ID- 15129/5	63021 dated 2	26/06/2020		

Public Hearing is exempted because the project is located inside the notified industrial area. The PP reported that No Litigation pending against the proposal.

The Ministry had issued EC earlier vide letter no. F. No J-11011/82/2017-IA II(I); dated 13th April 2018 to the existing project of expansion of pesticide technical & intermediates manufacturing unit in favour of M/s. Gujrat Agrochem Pvt. LTD. Further, this EC got transferred in the name of M/s. Tagros Chemicals India Pvt. Ltd., vide Letter no. F. No J-11011/82/2017-IA II(I); dated 26th April 2020. M/s. Micro Chemtech Pvt. Ltd has obtained EC vide Letter no. F. No. J-11011/175/2009-IA II (I), dated 10th June, 2009 for setting up 1000 TPM of synthetic organic chemicals at Plot No. 2806 GIDC Panoli, District- Bharuch, Gujarat. Further this EC got transferred in the name of M/s. Tagros Chemicals India Pvt. Ltd., vide File No. J-11011/175/2009-IA II (I); dated 2<sup>nd</sup> February, 2022. Based on this the standard ToR for amalgamation and expansion has been issued by the Ministry vide letter no. J-11011/82/2017-IA-II(I); dated 11<sup>th</sup> January 2022.

The Certified EC Compliance Report has been obtained from IRO, MoEFCC Gandhinagar vide File No. J-11/4-2022-IROGNR dated 28<sup>th</sup> February, 2022. Out of total 40 conditions, 27 are complied, 7 are partly complied, 5 are agreed to comply and 1 is not complied. IRO, MoEFCC has asked PP to take necessary and time bound action for early compliance in respect of the relevant conditions.

The PP reported that land area is 40000 m<sup>2</sup>; no additional land will be used for expansion project. Industry has developed greenbelt in an area of 15% i.e. 5973.60 m<sup>2</sup> out of total area of the project also industry has proposed to develop Green Belt (Remaining Green Belt 18.06% + Additional 6.93%) in 24.99% outside the industry. The estimated project cost is Rs. 200 crores Total capital cost earmarked towards environmental pollution control measures is Rs. 23.50 Crores and the Recurring cost (operation and maintenance) will be about Rs. 6.909 Crores per Annum. Total Employment will be 67 persons as direct & 112 persons as indirect during construction phase and 200 persons as direct & 330 persons as indirect during operation phase after proposed expansion project Industry proposes to allocate Rs. 1.50 crores towards CER.

The PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body Narmada river is flowing at a distance of 14.26 km in North direction.

The Ambient air quality monitoring was carried out at 8 locations during 1<sup>st</sup> October 2021 to  $31^{st}$  December 2021 to and the baseline data indicates the average ranges of concentrations as: PM<sub>10</sub> (51.5–92.94 µg/m<sup>3</sup>), PM<sub>2.5</sub> (29.1 – 41.3 µg/m<sup>3</sup>), SO<sub>2</sub> (23.6- 52.1 µg/m<sup>3</sup>) and NOx (28.50-57.0 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the

maximum incremental GLCs after the proposed project would be 7.180  $\mu$ g/m<sup>3</sup>, 9.676  $\mu$ g/m<sup>3</sup> and 0.895  $\mu$ g/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 1056.04 m<sup>3</sup>/day of which fresh water requirement of 727.24 m<sup>3</sup>/day will be met from Panoli GIDC water Supply. Effluent of 635.41 m<sup>3</sup>/day quantity will be treated through proposed in house ETP, MEE, RO.Total waste water will be 635.41 KLD (Industrial 600.41 KLD + Domestic 35 KLD).Process & washing waste water 508.41 KLD and RO reject 61.66 KL/day will be treated in MEE and MEE condensate (468.47 KLD) will be sent to ETP.MEE condensate along with waste water from Boiler and cooling (92 KLD) & Domestic effluent (35KLD), Total: 595.5 KLD will be treated in ETP. Treated waste water (150 KLD out of 540.47 KLD) will be sent to FETP of M/s. NCT for further treatment and final disposal into dep sea and remaining treated waste water 390.47 KLD will be sent to RO. RO permeate (328.8 KLD) will be reused in utility & process and RO Reject (61.66 KLD) will be sent to MEE.

The PP reported that Power requirement for proposed project will be 5000 kVA and will be met from Daksin Gujarat Vij Company Limited (DGVCL) Power Supply. Seven D.G set (725 KVA  $\times$  3) (625 KVA  $\times$  1) (1010 KVA  $\times$  3) will be used as standby during power failure. Stack height 11 meter will be provided as per CPCB norms to the proposed DG sets.

The PP reported that 4 No. of Boiler (20 TPH, 20 TPH, 20 TPH & 16 TPH as Stand By) & 2 Nos. of Thermos pack (5 & 2.5 million Kcal/hr) will be installed. Electrostatic precipitator (ESP), Alkali scrubber, Dust collector bag filter with adequate stack height will be installed for controlling particulate emission.

S.	Plant	Stack	Type of	Permissible	APCM
No.		Height	Pollutant	Limit	
		(m)			
	Existing Scenario			1	1
1	Boiler-I (8 TPH)**				
2	Boiler-II (8 TPH)**				
3	Boiler-III (10 TPH)**				Bag Filter/ESP
	(2 Nos.)	30		$150 \text{ mg/Nm}^3$	Dag i iitei/LOI
4	Boiler – VI	50	F M SOc	100 npm	
	(16 TPH –Stand by)		NO <sub>2</sub>	50 ppm	
5	Thermo Pack (2 No.)		NOA	Jo ppm	
	(10 million kcal/hr)				
6	D.G. Set (1010 KVA × 3)	11			Adoquato stack
7	D.G. Set (725 KVA × 3)	11			height
8	D.G. Set (625 KVA × 1)	11			neigin
After	Proposed Expansion				
1	Boiler-I (20 TPH)		DM	150 mg/Nm <sup>3</sup>	Dust collector +
	Boiler-II 20 TPH)	46.5		100 ppm	bag filter +
	Thermo Pack (2 No.)	-0.0		50 ppm	ESP+ Alkali
	(5 & 2.5 million Kcal/hr)				scrubber

# Details of utility:

2	Boiler-III (16 TPH)				ESP followed by		
	Boiler-IV	30					
	(20 TPH – Stand By)				Alkali Scrubbel		
3	D.G. Set (1010 KVA × 3)	11			Adequate stack		
					height		
4	D.G. Set (725 KVA × 3)	11			Adequate stack		
					height		
5	D.G. Set (625 KVA × 1)	11			Adequate stack		
					height		
Note: *Existing scenario as per EC vide F. No. J-11011/82/2017-IA II (I) dated 13/04/2018.							
**3 N	los of Boilers will be removed. (2 x	8 TPH & 2	k 10 TPH) and	2 Thermo pac	k having capacity		
10 m	10 million kcal/hr will be removed.						

# Details of Process emissions generation and its management

S. No.	Plant	Stack Height	Type of Pollutant	Permissible Limit	APCM				
		(m)							
Exis	Existing*								
			SO <sub>2</sub>	40 mg/Nm <sup>3</sup>	Water				
1	MPP-(1,2,3) vent attached in	20	HCI	20 mg/Nm <sup>3</sup>	scrubber +				
	recovery plant	20	NH3	175 mg/Nm <sup>3</sup>	caustic				
					scrubber				
			Cl <sub>2</sub>	5 mg/Nm <sup>3</sup>	Water				
2	MPP-4 vents attached in	20	HBr	5 mg/Nm <sup>3</sup>	scrubber +				
2	Bromine recovery plant	20	HCI	20 mg/Nm <sup>3</sup>	caustic				
					scrubber				
Prop	osed								
			Cl <sub>2</sub>	5 mg/Nm <sup>3</sup>	Water				
1		20	HBr	5 mg/Nm <sup>3</sup>	scrubber +				
	MFF-5	20	HCI	20 mg/Nm <sup>3</sup>	caustic				
	scrubber								
Note	: **As per CCA order no. AW	H-107891	issued vid	le letter no. Gl	PCB/ANK/CCA-				
110(	16)/ID- 15129/563014 dated 26/0	6/2020							

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

S.	Hazardous	Cat. As per	Quantity			Mode of Disposal
No.	Waste	HW Rules	Existing	Proposed	Total	
		2016				
1.	Used Lube Oil	I-5.1	50	12	62	Collection, Storage,
			Liters/	Liters/	Liters/	transportation and disposal
			Month	Month	Month	by reused in plant &
						machinery as lubricant or
						sell it to authorized refiners
						/recycler.

S.	Hazardous	Cat. As per		Quantity		Mode of Disposal
No.	Waste	HW Rules	Existing	Proposed	Total	
		2016				
2.	Spent	I-20.2	200	362	562	Collection, Storage,
	Solvents		MT/Month	MT/Month	MT/	Transportation and reuse
					Month	within Factory Premises or
						co-processing in cement
						industries for AFR or
						incineration at CHWIF or
						sell out to authorized users
						who is having authorization
						with valid CCA and rule 9
						permission to receive this
						waste after making MOU.
3.	Process	I-29.1	73.3**	35	108.3	Collection, Storage,
	Distillation		M I /Month	MI/Month	MT/	I ransportation &
	Residue &		450		Month	Incineration at CHWIF or
	Residual		15U		205 MAT/	Sent to for AFR cement
	VVasie		IVI I / IVIONTN	IVI I / IVIONTN	IVI I / Month	industries & other
	(Aller Elliueni Treatment)				MONUN	processing
1	MEE Solt	1 25 2	1200	750	1050	Collection Storage
4.		1-35.5	1200 MT/Month	750 MT/Month	1950 MT/	Transportation & disposal
					Month	to common TSDE site
5	NaCl	1-35.3	1001	Nii	1001	Collection Storage
5.	Naci	1-00.0	MT/Month		MT/	Transportation & disposal
					Month	to common TSDE site
6	Packing	1-33.3	1100	150 Nos /	1250	Collection Storage
0.	Materials	100.0	Nos./	Month	Nos./	decontamination.
	(a)Empty Bags		Month	moriai	Month	Transportation and
	(			150		disposal by reuse after in-
	(b) Barrels		1350	Nos./Mont	1500	house decontamination or
	<		Nos./Mont	h	Nos./Mo	send it to authorized
			h		nth	decontamination facility/
						recycler or send back to
						supplier.
7.	ETP Sludge	I-35.3	10	12	22	Collection, Storage,
			MT/Day	MT/Day	MT/Day	Transportation and Final
						Disposal at common TSDF
						site.
8.	Spent Carbon	I-36.2	0.6**	1.5	2.1	Collection, Storage,
	from ETP		MT/Month	MT/Month	MT/Mont	Transportation and Final
					h	Disposal at common TSDF
						site or Sent to cement
						Industries for Co-
						Processing.

g Proposed 36 th MT/Month 961.60	<b>Total</b> 156 MT/Mont h	Collection, Storage, Transportation and Final Disposal at bricks			
36 th MT/Month	156 MT/Mont h	Collection, Storage, Transportation and Final Disposal at bricks			
36 th MT/Month	156 MT/Mont h	Collection, Storage, Transportation and Final Disposal at bricks			
th MT/Month	MT/Mont h	Transportation and Final Disposal at bricks			
<sup>*</sup> 961.60	h	Disposal at bricks			
<sup>*</sup> 961.60					
<sup>*</sup> 961.60		manufacturers or common			
<sup>•</sup> 961.60		TSDF site.			
	1300	Collection, Storage, reuse,			
h KL/month	KL/Mont	Transportation and			
	h	Disposal by sell out to			
1.05	3.68	authorized users who is			
th MT/Month	MT/Mont	having authorization with			
	h	valid CCA and rule 9			
-	528	permission to receive this			
th	MT/Mont	waste after making MOU.			
	h				
758	758	Collection, Storage,			
MT/Month	MT/Mont	Transportation & Sent to			
	h	cement Industries for Co-			
		processing or sell out to			
		authorized users who is			
		having authorization with			
		valid CCA and rule 9			
		permission to receive this			
1					
Note: * The above-mentioned products as per CCA amendment No: AWH- 108252 issue					
1	1.05 th MT/Month - th 758 MT/Month	h 1.05 3.68 th MT/Month MT/Mont h - 528 MT/Mont h 758 758 MT/Month MT/Mont h			

#### Deliberations by 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 Committee noted during the appraisal that Green belt was not developed as per the norms specified in the earlier ECs. The EAC noted that the Industry has developed greenbelt only in an area of 15% i.e. 5973.60 m<sup>2</sup> out of total area of the project. Further, PP has proposed to develop Green Belt (Remaining Green Belt 18.06% + Additional 6.93%) in 24.99% outside the industry i.e. GIDC plot. In this regard a letter also received from the GIDC for green belt development. The PP submitted that this is the old Unit and does not have adequate space for the green belt. In view of the above, the EAC is of the view that PP shall first do the preparatory work for the implementation of green belt development <u>or</u> to explore the adjacent plots for the green belt development.

The Committee, after detailed deliberations, deferred the proposal and desired for

requisite information/inputs in respect of the following:

- (i) The PP shall first do the preparatory work for the implementation of green belt development <u>or</u> to explore the adjacent plots for the green belt development. PP should revise greenbelt plan (with ~2500 trees/ha) along with budgetary allocations and timelines.
- (ii) The GIDC Panoli having the CEPI score of 80.21 and comes under critically polluted area. In this regard the PP shall submit the additional mitigation measures to safeguard to the environment and also to explain how carbon foot print to be minimized?
- (iii) Since the instant project is amalgamation and expansion case. The PP should submit product details in tabular format mentioning the earlier ECs, CTOs, Product mix details vis-à-vis existing and proposed products of both the Units.
- (iv) The PP shall submit the treated effluent details for Pesticides and synthetic organic chemical separately. Detailed effluent management plan needs to be submitted.
- (v) The PP shall submit the undertaking for the banned pesticide/chemical shall not be manufactured by the project proponent.
- (vi) The Certified compliance report shows that some conditions are partially complied, therefore, Action Plan along with timelines and budgetary allocations for compliance of the EC conditions needs to be submitted.

#### Agenda No. 28.10

Expansion of different types of Resins (Phenol Formaldehyde Resin (3000 MT/Month), Melamine Formaldehyde Resin (3000 MT/Month), Urea Formaldehyde Resin (5000 MT/Month)), Formaldehyde (37%) (10000 MT/Month), Ceramic Binder (1000 MT/Month) at Survey No. 79 p1, p4, p5 Village Lalpar, Taluka & District- Morbi, Gujarat by M/s. Weldecore Industries LLP- Consideration of Environmental Clearance

The Project Proponent and the accredited Consultant M/s. T. R Associates, [Accreditation Number NABET/EIA/1922/RA 0142 (Rev.01) valid till 09.10.2022], made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion of different types of Resins (Phenol Formaldehyde Resin (3000 MT/Month), Melamine Formaldehyde Resin (3000 MT/Month), Urea Formaldehyde Resin (5000 MT/Month)), Formaldehyde (37%)(10000 MT/Month), Ceramic Binder (1000 MT/Month) at Survey No. 79 p1, p4, p5 Village Lalpar, Taluka & District- Morbi, Gujarat by M/s. Weldecore Industries LLP.

The project comes under Item 5(f) of the Schedule, "Synthetic Organic Chemical" 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 details of products and capacity as under:

S. No.	Name of the Product	Production Capacity (MT/Month)	CAS Number
1	Phenol Formaldehyde Resin	3000	9003-08-1
2	Urea Formaldehyde Resin	5000	9011-05-6
3	Melamine Formaldehyde Resin	3000	9003-35-4
4	Formaldehyde (37%)	10000	50-00-0
5	Ceramic Binder	1000	
	Total Production Capacity	22000	

The ToR has been issued by Ministry vide letter No. IA-J-11011/269/2021-IA-II(I) dated 9<sup>th</sup> July, 2021. Public Hearing for the project has been conducted by the State Pollution Control Board on 20/01/2022. The Public Hearing was presided over by the District Collector and District Magistrate. The main issues raised during the public hearing are related to precautionary measures for workers & preventive measures for air emissions. Currently Unit is in the process of installation of laminate sheet's Plant & machineries, once installation is completed then unit will apply for CTO (Consent to Operate) for Laminate sheet production. Unit has obtained CTE for laminate sheet unit. As informed no litigation is pending against the proposal.

The PP reported that total land area is 22562 m<sup>2</sup>; no additional land will be used for expansion for proposed project. Industry will develop greenbelt in an area of 33.13 % i.e, 7475.00 m<sup>2</sup> out of total area (22562m<sup>2</sup>) of the project. The estimated project cost is Rs 881.46 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 31.46 lakhs and the Recurring cost including total after expansion for proposed project (operation and maintenance) will be about Rs. 382.19 lakh per annum. Total Employment will be of 25 persons as direct. Industry proposes to allocate Rs. 17.28 Lakhs towards Corporate Environment Responsibility (CER).

The PP reported that there are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. The Machhu River is flowing at a distance 2.76 km in west direction.

The Ambient air quality monitoring was carried out at 8 locations during October 2019 to December 2019 and additional one0 month monitoring was carried out in October 2021 to validate the baseline data. October 2019 to December 2019 baseline data indicates the ranges of concentrations as:  $PM_{10}$  (60.23 µg/m<sup>3</sup> to 85.1 µg/m<sup>3</sup>),  $PM_{2.5}$  (28.19 µg/m<sup>3</sup> to 51.39 µg/m<sup>3</sup>),  $SO_2$  (6.24 µg/m<sup>3</sup> to 21.4 µg/m<sup>3</sup>) and NO<sub>2</sub> (16.25 µg/m<sup>3</sup> to 40.39 µg/m<sup>3</sup>). October 2021 baseline data indicates the ranges of concentrations as:  $PM_{10}$  (60.95 µg/m<sup>3</sup> to 84.55 µg/m<sup>3</sup>),  $PM_{2.5}$ (28.84 µg/m<sup>3</sup> to 51.02 µg/m<sup>3</sup>),  $SO_2$  (6.84 µg/m<sup>3</sup> to 22.25 µg/m<sup>3</sup>) and NO<sub>2</sub> (17.79 µg/m<sup>3</sup> to 36.54 µg/m<sup>3</sup>). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 0.4 µg/m<sup>3</sup>, 2 µg/m<sup>3</sup> and 0.004 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>2</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The PP reported that total water requirement for Resin Project will be 338.91 m<sup>3</sup>/Day (Fresh – 286.04 m<sup>3</sup>/day + reuse – 52.87 m<sup>3</sup>/day) which will be met from Bore Well. Effluent of 64.06 m<sup>3</sup>/day quantity will be treated through Effluent Treatment Plant. The plant will be based on Zero Liquid Discharge System.

The Power requirement after expansion for proposed will be 550 kVA and will be met from Paschim Gujarat Vij Company Ltd. (PGVCL). 200 kVA D. G. Set [Fuel -Diesel (40 Lit./hr.)] will be provided and used only in case of power failure. Stack (12 meter) will be provided as per CPCB norms to the DG set.

The Unit will be provided one steam boiler of 0.9 TPH [Fuel: Briquettes (0.93MT/day) / Indonesian coal (0.82 MT/day)]. (Indonesian coal will only be used when unavailability of briquettes). Multicyclone Dust Collector followed by Alkaline Scrubber with stack height of 30 m will be installed for controlling the particulate emissions within the statutory limit.

# Details of Process emissions generation and its management:

S. No.	Stack attached to	Height of the stack In meter	APC System	Expected Pollutant	GPCB Limit
1	Final scrubber	11	Activated	Traces of	As per GPCB
	(for		Carbon	Formaldehyde	Norms
	Formaldehyde		Column	and CO	
	unit)				

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

S. No.	Description	Category as per HW Rules 2016	Quantity (MT/Annum)	Mode of Disposal
1	ETP Sludge / Evaporation Residue	35.3	462	Collection, storage and disposal at approved TSDF site
2	Used Oil	5.1	0.05	Collection, storage and used within premises as a lubricant / sold to registered recycler
3	Discarded Plastic Bags /Barrels	33.1	258	Collection, storage & sold to authorized vendor
4	Resin Residue	23.1	660	Collection, storage and disposal at approved CHWIF site
5	Spent Carbon (APCM)	35.1	400	Collection, storage and disposal at approved CHWIF.
6	Formaldehyde Neutralization waste	33.2	6	Collection, storage and disposal at Approved TSDF site.

#### **Deliberations by 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 Committee noted during the appraisal that Green belt was not developed as per the norms specified by CPCB. The committee noted that PP had not prepared onsite/offsite emergency plan and mitigation measures to be adopted during implementation of the project. The carbon sink/carbon sequestration study was not satisfactory.

The Committee, after detailed deliberations and on the basis of the certified compliance report, **<u>deferred</u>** the proposal and desired for requisite information/inputs in respect of the following:

- (i) PP should revise greenbelt plan (with ~2500 trees/ha) along with budgetary allocations and timelines. EAC noted that since this is an existing Unit and PP shall come for appraisal of the instant project after development of green belt as per norms specified by CPCB.
- (ii) The PP shall submit the details of carbon foot prints and carbon sequestration study w.r.t. proposed project. Proposed mitigation measures also needs to be submitted for further appraisal of the EAC.
- (iii) PP shall submit detailed effluent management plan.
- (iv) PP shall submit the undertaking for the chemical shall not be manufactured by the project proponent.
- (v) The certified compliance of CTE/CTO shall be submitted.
- (vi) The Project proponent shall revise 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.

#### **Re-Consideration of Environmental Clearance**

#### Agenda No. 28.11

Expansion of Agrochemicals Manufacturing Unit (From 30 TPD to 70.1 TPD) and inclusion of Bio-based agrochemicals and Captive Cogeneration Power Plant 6 MW at Sy. No. 177, Arinama Akkivalasa village, Etcherla mandal, Srikakulam District, Andhra Pradesh by M/s. NACL Industries Limited-Re-Consideration of Environmental Clearance

#### [Proposal No. IA/AP/IND3/232281/2020; File No. J-11011/75/2007-IA II (I)]

The Project Proponent and the accredited Consultant [M/s. Team Labs and Consultants, [Accreditation Number QCI/NABET/ENV/ACO/22/2198, valid till 04.04.2022], made a detailed presentation on the salient features of the project and informed that:

The proposal is for consideration of environmental clearance (EC) to the project for Expansion of Agrochemicals Manufacturing Unit (From 30 TPD to 70.1 TPD) and inclusion of Bio-based agrochemicals and Captive Cogeneration Power Plant 6 MW at Sy. No. 177, Arinama Akkivalasa village Etcherla mandal, Srikakulam district, Andhra Pradesh by M/s. NACL Industries Limited.

S. No.	Name of Product	CAS No	Existing Capacity permitted as per CTO/EC (TPD)	Proposed (TPD)	Total Proposed Capacity after Expansion (TPD)
1	Cloquintocet Mexyl	99607-70-2	0.5		0.5
2	Triazinone / Thiocarbohydrazide/ Dichloro Pinacolone /Pinacolone	2231-57-4	2	8	10
3	2,3 Di chloro Pyridine	2402-77-9	0.5		0.5
4	Profenofos	41198-08-7	15		15
5	Thiamethoxam	153719-23- 4	1.5	-0.5	1
6	Fipronil	120068-37- 3	0.5	0.5	1
7	Imidachloprid	138261-41- 3	0.5		0.5
8	Acetamiprid	135410-20- 7		0.5	0.5
9	Lambda Cyhalothirin	91465-08-6	1.5	-0.5	1
10	Bifenthirin	82657-04-3	3	-2	1
11	Cypermethrin	52315-07-8	1	-0.5	0.5
12	Carbendazim	10605-21-7	0.5		0.5

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

13	Pymetrozine	123312-89-		0.5	0.5
		0			
14	Telfluthrin	79538-32-2	2	-1.5	0.5
15	Pyriproxyfen	95737-68-1		1	1
16	Emamactin Benzoate	155569-91- 8		1	1
17	Diafenthiuron	80060-09-9	1		1
18	Propiconazole /	60207-90-1	7.5	-4.5	3
10	Bromoketal (Intermediate)	44044 70.0			0.5
19		41814-78-2	6	-3.5	2.5
20	Fenduconazole	114369-43- 6		1	1
21	Myclobutanil	88671-89-0	0.3	0.7	1
22	Thifluzomide	130000-40- 7	0.8		0.8
23	Hexaconazole	79983-71-4	0.2	0.8	1
24	Tebuconazole / Oxirane	107534-96-	2	-1	1
- 25		3	0.0	0.2	0.5
25	Direnconazoie	119440-08- 3	0.2	0.3	0.5
26	Epoxiconazole	135319-73- 2	0.5		0.5
27	Cvproconazole	94361-06-5	0.5		0.5
28	Thiophanate-methyl	23564-05-8	1.75	-0.75	1
29	Azoxystrobin	131860-33-	1		1
		8			
30	Trifloxystrobin	141517-21-	0.15	0.85	1
		7			
31	Pendimethalin	40487-42-1	1	0.5	1.5
32	Pretilachlor	51218-49-6	4.7	-0.7	4
33	Metribuzin	21087-64-9	1.25	0.35	1.6
34	Dimethomorph	110488-70- 5		2	2
35	Clodinofop-Propargyl	105512-06- 9	1.2	-0.2	1
36	Bispyribec Sodium	125401-92-	0.5	0.5	1
07		5			
37	Bensulfuron Metnyl	83055-99-6		1	1
38	Giufosinate Ammonium	77182-82-2	1		1
39	Quizalolop-p-etnyl	3	1.25	-0.25	Ĩ
40	Tribenuron Methyl	101200-48- 0	1	-0.5	0.5
41	Clethodim	99129-21-2	1		1
42	Pinoxsulam	219714-96-		1	1
		2			

43	S-Metolachlor	87392-12-9	1		1
44	Verbinone	1196-01-6	0.15	0.05	0.2
45	(Z)-hezatec – 11-en-1-yl	34010-21-4	0.15	0.05	0.2
	acetate				
46	(Z)-hezatec – 9-enal	56219-04-6	0.15	0.05	0.2
47	(8E,10E) - Dodoca-8, 10-	76600-88-9	0.15	0.05	0.2
	dyen-1-ol				
48	7Z,11Z hexadeca dienyl	53042-81-2	0.15	0.05	0.2
	acetate				
49	7E, 9Z dodoca dienyl	54364-62-4	0.15	0.05	0.2
	acetate				
50	8Z Dodecinyl acetate	28079-04-1	0.15	0.05	0.2
51	(Z)-Octadeca – 13 – enyl	60037-58-3	0.15	0.05	0.2
	acetate				
52	R&D Products		0.05	0.05	0.1
53	MMT (*)	135302-13-	0.5		
		5			
54	1, 2 PDL (*)	5343-92-0	3		
55	Atrazine (*)	1912-24-9	5.5		
56	DIPPT (*)	135252-10-	1.3		
		7			
	Total				70.1

Note: 1. Permitted/existing products based on highest production from 10 groups. At any point of time one group will be manufactured.

2. (\*) indicates products included in CTO dated 08.10.2021 through change in product mix under no increase in pollution loads.

II: Bio Based Agro Chemicals					
S.	Name of Product	Capacity (TPD)			
No.		Existing/	Proposed	After	
		Permitted		expansion	
		as per CTO			
1	Pseudomonas Fluorosense+ Bacillus		0.17	0.17	
	Subitilis				
2	Trichoderma Harzianum+Verticillium		0.17	0.17	
	chlamydosporium				
3	Ampelomyces		0.17	0.17	
	quisqualis+BeauveriaBassiana				
4	Beauveria bassiana+ Metarhizium		0.17	0.17	
	anisopliae				
5	Beauveria bassiana		0.17	0.17	
6	Metarhizium anisopliae		0.17	0.17	
7	Verticillium lecanii+Beauveria Bassiana		0.17	0.17	
8	Hirsutella thompsonii+Beauveria Bassiana		0.17	0.17	
9	Hirsutella thompsonii		0.17	0.17	
	Total	NIL	1.53	1.53	
III.	Captive Co-generation power plant			6 MW	

#### Table: Agrochemicals Formulations

S. No.	Name of Product	Unit	Capacity
1	Granules	MT/year	20000
2	Liquids	KI/Year	25000
3	Powders	MT/year	5000
	Total		50000

#### List of By-Products – After Expansion

S.	By-Product	Quantity (Kg/day)
No.		
1	Hydrochloric Acid (30%)	2470
	Sodium Hydrosulphide (NaSH) solution	1300
2	Sodium Bromide	1070
3	Potassium Chloride	183.5
	Potassium Bicarbonate	246.4
4	Ethanol	116.5
5	Dil. HCI (25%) from Scrubbers	5228.5
6	HBr (25%) from Scrubbers	1359.7

All Products are listed at S. No. 5(b) "Pesticides industry and pesticide specific intermediates" of Schedule of Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are requires appraises at Central Level by Expert Appraisal Committee (EAC) in the Ministry.

The Project proponent reported the chronology of unit is as follows:

Date	Details of EC/CTO	Remarks
30.07.2007	Environmental Clearance from MoEF for	J-11011/75/2007-IA. II (I)
	production capacity of 30 TPD in the name of	
	M/s. Nagarjuna Agrichem Ltd.	
30.06.2009	Consent for operation (CFO) from APPCB in	APPCB/VSP/VZN/53/H
	the name of M/s. Nagarjuna Agrichem Ltd.	O/ 2009-877
26.08.2011	Consent for operation (CFO) for Change in	APPCB/VSP/VZN/53/H
	Product Mix in the name of M/s. Nagarjuna	O/ 2011-1542
	Agrichem Ltd.	
17.06.2015	Consent for operation (CFO) for Change in	APPCB/VSP/VZN/53/H
	Product Mix in the name of M/s. Nagarjuna	O/ 2015-1783
	Agrichem Ltd.	
28.03.2018	Consent for Establishment for name change	APPCB/VSP/VZN/53/CF
	from Nagarjuna Agrichem Ltd to NACL	E/ HO/ 2010
	Industries Ltd.	
23.08.2018	Consent for operation (CFO) for Change in	APPCB/VSP/VZN/53/H
	Product Mix in the name of M/s. NACL	O/ 2018
	Industries Ltd.	

01.04.2019	Consent for Establishment for Change in	APPCB/VSP/VZN/53/CF	
	Product Mix in the name of M/s. NACL	E/HO/2010	
	Industries Ltd.		
04.10.2019	Consent for operation (CFO) for Change in	APPCB/VSP/VZN/53/H	
	Product Mix in the name of M/s. NACL	O/ 2019	
	Industries Ltd		
12.03.2021	Renewal of Consent for operation (CFO) for	or APPCB/VSP/VZN/53/H	
	Change in Product Mix in the name of M/s.	O/ 2021	
	NACL Industries Ltd		
08.10.2021	Consent for operation (CFO) for Change in	APPCB/VSP/VZN/53/CF	
	Product Mix in the name of M/s. NACL	O/HO/2021- Valid till	
	Industries Ltd.	28.02.2025	

The PP reported that the TOR was granted by the Ministry on 24.06.2020. The Public hearing for the proposed expansion project was conducted by the Andhra Pradesh Pollution Control Board on 25.08.2021, which was presided by Additional District Magistrate, Srikakulam. The main issues raised during the public hearing were related to employment, CER funds for village development, water pollution, implementation of pollution control measures, odour nuisance and air pollution. The Committee deliberated the action plan on the issues raised during PH and found in order.

The PP reported that the Ministry has granted earlier EC on 30.07.2007 to M/s. Nagarjuna Agrichem Ltd. Further, the EC was transferred to M/s. NACL Industries Ltd. The Integrated Regional Office, MoEFCC, vide letter no. IRO/VIJ/EPE/03-01/2021, dated 12.03.2021, submitted the certified compliance report. The report, inter-alia, mentioned some non-compliances, accordingly the PP submitted the Action Taken Report (ATR), vide letter dated 27.04.2021 to the Integrated Regional Office, MoEFCC. Further, Integrated Regional Office, MoEFCC, vide letter no. IRO/VIJ/EPA/MISC/111-01/2021, dated 13.12.2021, has again submitted the certified compliance report. The EAC deliberated Action Taken Report on the compliances and after detailed deliberations the same found in order.

The PP reported that the existing land area is of 100 acres and no additional land will be acquired for proposed expansion. Industry is already developed greenbelt in an area of 34% of the project area. The estimated project cost for proposed expansion is Rs. 65.0 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 21.98 crores. Total Employment will be 200 persons as direct and 60 persons indirect. Industry proposes to allocate Rs. 74 lakhs towards CER.

The PP reported that there are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Reserve forests etc. within 10 Km distance. The Narayan Sagaram tank is at a distance of 1.6 km in SW direction of plant site, Peddagedda seasonal stream is at a distance of 4.2 km in SW direction. Chittigedda a seasonal stream is at a distance of 4.7 km in SW direction.

The Ambient air quality monitoring was carried out at eight locations during October to December 2020. The submitted baseline data indicates that ranges of concentrations of PM10 (36-50  $\mu$ g/m3), PM2.5 (15-24  $\mu$ g/m3), SO2 (7-13  $\mu$ g/m<sup>3</sup>) and NO2 (8-16  $\mu$ g/m<sup>3</sup>) respectively.

The AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion would be 0.14  $\mu$ g/m<sup>3</sup>, 0.55  $\mu$ g/m<sup>3</sup>, and 0.67  $\mu$ g/m<sup>3</sup> with respect to PM10, SOX and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total water requirement after proposed expansion is 2340 m<sup>3</sup>/day out of which 1075 m<sup>3</sup>/day will be fresh water and 1265 m<sup>3</sup>/day is recycled. Water requirement will be met from ground water/surface water (Nagavali river). Total effluent of 1372 m<sup>3</sup>/day will be treated through "Zero Liquid Discharge" based effluent treatment system. The treated wastewater is reused for process, washings, scrubber's circulation and cooling towers make-up.

The Power requirement will be met by AP Transco. DG sets of capacity 2 x 2000 kVA are proposed in addition to existing 1 x 1000 kVA, 2 x 500 kVA to cater to the energy requirement during load shut down period. DG sets which will be used as standby during power failure. Stack (height 10 m) will be provided as per CPCB norms to the proposed DG set of 2 x 2000 kVA in addition to existing DG sets stack (height 7 m for 1000 kVA and 6.5m for 2 x 500 KVA) which will be used as standby during power failure.

The fuel (imported coal) consumption is 180 TPD for the proposed utilities. The imported coal contains 0.5% of sulphur and a maximum of 10% ash. However, PP undertake to utilize biomass/bio briquettes based on availability to reduce coal consumption. Accordingly, the boiler be designed for multi-fuel combustion

The Existing unit has 1 x 16 TPH, 1 x 10 coal fired boilers and 1 x 6 TPH furnace oil fired boilers. Additionally, 1 x 50 TPH coal fired boiler and 1 x 10 lakh k.cal/hr and 1 x 6 lakh k.cal/hr furnace oil fired thermic fluid heaters will be installed as part of expansion. Existing boilers will be kept as standby after expansion. Electro Static Precipitators (ESP) with a stack with height of 60 m will be installed for controlling the particulate emissions within statutory limit of 115 mg/Nm3 for the proposed boiler.

**Details of Process emissions generation and its management:** Process emissions contain ammonia, carbon dioxide, hydrogen, hydrogen bromide, bromine, chlorine, sulfur dioxide and hydrogen chloride. Ammonia, hydrogen chloride, hydrogen bromide is sent to scrubber in series. Sodium chloride from HCI scrubbing, sodium bromide from hydrogen bromide scrubbing, ammonium chloride from ammonia, sodium sulphate from sulfur dioxide scrubbing is sent to ETP. The other gas expected in the process is carbon dioxide is let out into atmosphere following a standard operating procedure, while hydrogen gas is let out into atmosphere through a water column.

**Details of Solid waste/ Hazardous waste generation and its management:** Solid wastes are generated from process, solvent distillation, wastewater treatment and utilities. The effluent treatment system generates stripper distillate, ATFD salts and ETP sludge. The process operations generate process residue and recycling operation of distillation generates solvent residue and spent mixed solvents. The utilities i.e., coal fired boiler generates ash while DG sets generate waste oil and used batteries. The stripper distillate, process residue and solvent residue are sent to cement plants for co-incineration based on acceptability. If these wastes are not suitable for co-incineration, the same is sent to TSDF facility at Visakhapatnam. The

evaporation salts and ETP sludge are sent to TSDF at Visakhapatnam. Waste oil and used batteries from the DG sets are sent to authorized recyclers. The other solid wastes expected from the unit are containers, empty drums which are returned to the product seller or sold to authorize buyers after detoxification

The proposal was earlier considered in its 26<sup>th</sup> EAC (Industry-3 Sector) meeting held on 16-17 February, 2022 wherein the EAC deferred the proposal and sought certain requisite information. In this context, the PP vide letter dated 11.03.2022 has uploaded the reply on parivesh portal and accordingly the project is placed before this present meeting. Details information is as below:

S.	Information		Respons	e by PP	Deliberatio
No.	Sought by the			, , , , , , , , , , , , , , , , , , ,	n by the
	EAC				EAC
1	The Integrated	S.	Non-Compliances	Action taken by	EAC
	Regional Office,	No.	as per CCR	Proponent	deliberated
	MoEFCC, vide	1	It is required to	The destruction and	the Report
	letter dated		submit the	removal efficiency (DRE)	and found
	12.03.2021 and		destructive	study was conducted by	in order.
	13.12.2021, has		efficiency of the	M/s. Vimta Labs Ltd.,	
	submitted the		incinerator which	which had conducted	
	certified		assessed by an	various destruction	
	compliance		agency like CPCB.	efficiency studies for	
	report. The			CPCB for co-incineration	
	report, inter-alia,			projects. The destruction	
	mentioned some			and removal efficiency of	
	non-			Incinerator -1 (Rotary	
	compliances.			Kiln) is 99.93% and	
	The EAC			Incinerator-2 is 99.95%	
	deliberated and	2	It is required to	Advertisement published	
	advised the PP		submit the copies of	in the local newspapers	
	to submit the		newspaper	(24.08.2007) regarding	
	comparative list		advertisements	grant of Environmental	
	of EC conditions,		regarding grant of	Clearance	
	vis-a-vis, non-		Environmental		
	compliances		Clearance to the		
	points as raised		expansion project		
	by IRO and their		to IRO, Vijayawada		
	Action Taken		for records		
	Report for further	3	It is required to	The total capitalized	
			submit the details	(gross block) during the	
	before the EAC		regarding the date of	tinancial years 2007-08,	
			tinancial closure and	2008-09 and 2009-10 is	
			tinal approval of the	Rs.47.31 crores.	
			project by the		
			concerned		
			authorities and the		

		date of start of land	
		development work	
2	The Committee	Action plan on the issues raised issues raised during	The Committee
	noted that the	the public consultation, along with detailed time bound	Committee
	Action Plan on	action plan and budgetary provision is submitted in ADS	deliberated
	during Dublic	response on TT.03.2022.	the action
	Logring is not	The total budget allocated for the action plan on the	
	adequate PP	issues raised during public bearing is Rs. 74 lakes	raised
	needs to submit		during PH
	the detailed		and found
	action plan with		in order.
	budgetary		
	provisions and		
	timelines on the		
	issues raised		
	during PH		
3	The PP could not	PP has conducted Life Cycle Analysis based on ISO	EAC
	explain the life	14040 and ISO 14044 to evaluate the Impacts on in	deliberated
	cycle analysis	holistic way by using Seema Pro 9.3 Software. Hot	the study
	study though it	spots mitigation measures implemented at a cost of Rs.	and found
	was a part of	represent in expansion enterling on expanditure of Re-	in order.
	issued by the	10 crores Detailed lifecycle analysis reports were	
	FAC in agenda	submitted as part of ADS response on 11 03 2022	
	PP needs to		
	submit details		
	reflecting		
	specific adverse		
	and harmful		
	impacts of		
	agrochemical on		
	microbiota of		
	flora and fauna.		
	PP needs to		
	submit all the		
	uetails on the		
4	The PP shall	The total fresh water requirement is reduced from 1125	FAC
	revise the water	KLD to 1075 KLD, by increasing recycling treated	deliberated
	balance and the	wastewater from 1160 KLD to 1265 KLD (50.7 % to	the revised
	same may be	57%) to process, washings, scrubbers and cooling	water
			balance

	resubmitted on Parivesh portal	towers make-up. The total water required after expansion is 2340 KLD.	and found in order.
5	The PP should revise greenbelt plan (with ~2500 trees/ha) along with timelines, species and budgetary allocations	Green belt with 25240 plants is developed in 13.76 ha (34 % of the site area) with a density of 1800 plants/ha, it is now proposed to enhance the density to 2500 plants/ha. The total number of plants after revised greenbelt is 34440 nos. The revised budget for additional plantation is Rs. 46 lakhs. Plantation of additional 9200 plants will be completed in the first year during construction phase itself.	EAC deliberated the revised green belt plan and found in order
6	The PP needs to submit the analysis report of effluents/emissio ns along with pollution control equipment's and their efficiency	Analysis reports of effluents/emissions along with pollution control equipment and their efficiency is submitted in ADS response on 11.03.2022. The destruction and removal efficiency of Incinerator -1 (Rotary Kiln) is 99.93% and Incinerator-2 is 99.95% Efficiency of existing boiler control equipment (Bag filer) is 95%, Scrubbers efficiency is 90-95% and efficiency of ZLD based effluent treatment plant is 90-92%	EAC deliberated the report and found in order
7	The PP needs to submit a list of products with production capacity (existing, expansion and total) and their EC/CTO details	PP has submitted the list of products with production capacity (existing, expansion and total) and their EC/CTO details.	EAC deliberated and found in order
8	The PP needs to explore the possibility to use of bio fuel in place of coal	The fuel (imported coal) consumption is 180 TPD for the proposed utilities. The imported coal contains 0.5% of sulphur and a maximum of 10% ash. However, PP undertake to utilize biomass/bio briquettes based on availability to reduce coal consumption. Accordingly the boiler shall be designed for multi-fuel combustion	EAC deliberated and found in order
9	PP needs to submit the details of onsite/offsite emergency plan and mitigation measures to be proposed during implementation of the project	<ul> <li>Emergencies Identified;</li> <li>Leak in storage tank (Pool fire); Leak in pipeline; Over pressure damage; toxic dispersion of chemicals</li> <li>Preparation of Emergency Plan based on Hazard Analysis and Risk Assessment (Spillage and Pool Fire), Mock Drill once in 3 months</li> <li>Assigning Roles and Responsibilities of key personnel to monitor emergency situation</li> <li>Providing Emergency Facilities [a. Emergency Control Centre, b. Assembly Points,</li> </ul>	EAC deliberated and found in order

	<ul> <li>c. Fire Fighting Facilities, d. Location of First Aid Boxes, e. Emergency Siren, f. Emergency escapes, and g. Wind Sock.]</li> <li>&gt; Establishing of Emergency Procedure [a. Procedure for raising emergency alarm, b. Control room staff, c. Emergency Communication, d. Earmarked areas for evacuation]</li> <li>&gt; Providing vital information such as Communication facilities, b. Emergency contact</li> </ul>
	<ul><li>Details of firefighting and other facilities.</li><li>Rescue, Transport and Rehabilitation; Facilities</li></ul>
	for rapid mode of transportation.
mi re:	etailed of Onsite/offsite emergency plan and itigation measures proposed are submitted in sponse on 11.03.2022.

#### **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 is in compliance of the TOR and reflect the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measures towards Air, Water, Noise and Soil pollutions. The Committee also suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices. The committee also deliberated on the water balance data and found it satisfactory. The EAC also made detailed deliberations on the information which was sought by the EAC in its earlier meeting and found in order.

The Committee noted that the Ministry has granted earlier EC on 30.07.2007 to M/s. Nagarjuna Agrichem Ltd. Further, the EC was transferred to M/s. NACL Industries Ltd. The Integrated Regional Office, MoEFCC, vide letter dated 12.03.2021 & 13.12.2021, submitted the certified compliance report. The EAC deliberated the certified compliance status of the earlier EC and its action plan and found in order.

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, <u>recommended</u> the project for grant of environmental clearance, <u>subject to compliance of terms and conditions</u> 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/pesticide 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 Pesticide Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 446(E), dated 13.06.2011 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 1075 m<sup>3</sup>/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 34% of the total project area (2500 trees per ha i.e. 34440 nos.) 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 fullfledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

# Agenda No. 28.12

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 24<sup>th</sup> 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.

S. No.	Remarks by competent authority	Reply by project proponent	Observations of EAC
1	Detailed and	PP presented the revised plan and	EAC deliberated the
	more	emphasized on the following:	issues and found
	elaborateu		Unsite and Unsite

Project proponent submitted the following

onsite and	<b>On-site Emergency Disaster Management</b>	emergency	plan	in
offsite	Plan	order.		
emergency	<ul> <li>Fire and Safety Services</li> </ul>			
plan	Security Services			
	<ul> <li>Evacuation Aid and Medical Services</li> </ul>			
	<ul> <li>Provision of Assembly Points</li> </ul>			
	Mock Drills			
	Emergency Control Centre			
	Off-Site Emergency Disaster Management			
	Plan			
	<ul> <li>Liaison with the external agency</li> </ul>			
	District emergency authority			
	Factory Directorate			
	Chief Controller of explosives			
	State fire services			
	Government and private medical services			
	Resource person and institutions			
	Activities during Emergency			
	<ul> <li>Evacuation of factory</li> </ul>			
	<ul> <li>Emergency Shut Down of factory plant</li> </ul>			
	<ul> <li>Assistance of external authorities</li> </ul>			
	<ul> <li>Treatment of affected person</li> </ul>			
	Counting of persons			
	<ul> <li>Lodging of events</li> </ul>			
	Release of information to press and media			
	<ul> <li>Declaration of end of emergency</li> </ul>			
	Rehabilitation activities			

#### **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 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 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 is submitted the information and

the proposal is placed in this instant meeting.

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 noted that the requisite information/inputs regarding onsite and offsite emergency plan is satisfactory and in order.

The EAC, after detailed deliberations, **recommended** the proposal. The EAC also recommended the following additional specific conditions:

- (i) 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.
- (ii) The project proponent shall comply with the environment norms for Pesticide Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 446(E), dated 13.06.2011 under the provisions of the Environment (Protection) Rules, 1986.

#### Agenda No. 28.13

Extension validity of Environmental Clearance granted to M/s. Vision Pharmachem (India) Pvt. Ltd., located at Sy. No. 152, Village Rachalapally, Tehsil Midjil, District Mahabubnagar, Andhra Pradesh – Consideration of Extension of Validity of Environmental Clearance

#### [Proposal No. IA/TG/IND3/250291/2022; File No. IA-J11011/346/2010-IA-II(I)

The proposal of M/s. Vision Pharmachem (India) Pvt. is for Extension of validity of Environmental Clearance for the Organic Chemicals manufacturing unit (240 TPA), at Sy. No. 152, Village Rachalapally, Tehsil Midjil, District Mahabubnagar, Andhra Pradesh.

The Project Proponent made a detailed presentation on the salient features of the project and informed that:

The proposal is for extension of validity in Environmental Clearance granted. The Environmental Clearance for the Organic Chemicals manufacturing unit (240 TPA), at Sy. No. 152, Village Rachalapally, Tehsil Midjil, District Mahabubnagar, Andhra Pradesh, accorded on 13.07.2012, thereafter the extension of validity of Environmental Clearance was also issued to

the project vide letter dated 25.10.2019, and the validity of Environmental Clearance is up to 13.07.2022

The PP reported that they have completed 75 % of the project and the PP requested to further extend the validity of EC. Due to internal management related and financial constraint; the Unit was not able to start and commissioning. After that, due to Covid-19 Pandemic, the procedure slowed down and could not complete the same within the tenure of granted EC. Therefore, PP requested the validity of EC so that work can be completed on time as per Ministry's Notification dated 18<sup>th</sup> January, 2021

#### **Deliberations in the EAC:**

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

The Committee was 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 noted that the earlier EC was granted by the Ministry on 13.07.2012 which was valid for 7 years as per provisions of the EIA Notification, 2006. Further PP has got the extension of validity of EC by the Ministry vide letter dated 25.10.2019 (Valid up to 13.07.2022)

Further, the Ministry has amended the EIA Notification, 2006 on dated 18<sup>th</sup> January, 2021 and as per the provisions, *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 existing EC due to lockdown/pandemic situation. Therefore, the EC can be further extended upto 12.07.2023.* 

### The Committee deliberated the green belt status and noted that PP has planted only 1012 trees and the PP committed that they are further planting a total of 2000 number of trees within 4 months.

The Committee, after detailed deliberations, **recommended** for extension of validity of the EC dated 13<sup>th</sup> July, 2012 for further one year i.e. **up to 12th July 2023** as per provisions of the Notification dated 18<sup>th</sup> January, 2021 for completion of the project. All other terms and conditions as mentioned in the earlier EC shall remain unchanged.

#### Agenda No. 28.14

Manufacturing of Formaldehyde with the production capacity of 60 MT/Day at village Ramnagar, Tehsil- Ganaur, District: Sonipat, Haryana by Shri Laxmi Chemical – Consideration of TOR Proposal-Violation case

#### [Proposal No. IA/HR/IND3/256333/2022; File No. IA-J-11011/56/2022-IA-II(I)]

The project proponent **did not attend** the EAC meeting. EAC noted that PP has emailed the documents vide email dated 22.03.2022 wherein the presentation date of July 2021 submitted. The EAC waited but both the Consultant/PP have not attended the VC meeting. Neither PP nor Consultant is serious about the project, even no request for absence received from the PP/Consultant.

After detailed deliberations, the Committee examined that the instant application in Form-I, PFR & other reports, and it is emerged that the instant application is not as per the Standard Operating Procedure (SOP) dated 07.07.2021 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. PP has submitted the incomplete and inadequate application. **The EAC is of the view that Consultant shall submit the application with all the details for appraisal of the EAC.** 

After detailed deliberations, the EAC warned the Consultant [M/s SBA Enviro Systems Pvt. Ltd.] to read and check the documents/reports before uploading/submission on Parivesh portal as the whole process is online for granting of the prior environmental clearance as per provisions of the EIA Notification, 2006.

After, detailed deliberations, the EAC **returned** the proposal for revision of application as per SOP dated 07.07.2021 on Parivesh Portal as the whole process for granting of EC is online on portal.

#### Additional Item with the permission of Chair

#### Agenda No. 28.15

Setting up of technical grade Pesticides manufacturing unit of production capacity 400 MTPA, located at Plot No-C-32-33 Industrial Growth Center Mansa Road, District Bhatinda Punjab by M/s Hindustan Rasayan Private Limited – Re-Consideration of Environmental Clearance-Regarding.

#### [Proposal No. IA/PB/IND2/171090/2020; File no. J-11011/ 195/2020-IAII(I)]

The proposal was earlier placed before the EAC in its 24<sup>th</sup> 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.

Project proponent submitted the following requisite information:

S.	Remarks by	Reply by project proponent	Observations
No.	competent		of EAC
	authority		
1.	Detailed and more elaborated disaster management and onsite and offsite	PP presented the detailed disaster management and onsite and offsite emergency plan starting from raw material handling to finished product. PP identified following causes of emergency	EAC deliberated the issues and found onsite and offsite emergency plan
	emergency plan	<ul> <li>Fire and explosion: explosive, flammable material</li> <li>Hazards from Toxic Materials</li> <li>Material Hazards such as:         <ul> <li>Being stuck by falling objects</li> <li>Caught in/compressed</li> <li>Snapping of cables, ropes, chains slings</li> <li>Handling heavy objects</li> <li>Electrical Hazards</li> <li>Electrocution</li> <li>Short circuits and consequential fire</li> <li>Poor illumination etc.</li> <li>Other Hazards:</li> <li>Falls from height inside industrial units or on the ground</li> <li>Stuck by moving objects: Slipping on wet surfaces</li> <li>Sharp objects</li> <li>Oxygen Deficiency in confined spaces: Lack of personal Protective Equipment (PPE) housekeeping practices, Safety sign</li> </ul> </li> </ul>	in order.
		<ul> <li>sign.</li> <li>Consequential hazards due to extreme Temperature.</li> <li>Consequential hazards due to Vibration.</li> <li>Consequential hazards due to radiation.</li> <li>Many more hazards.</li> <li>Hazardous substances and wastes</li> <li>Heavy and toxic metals. (Leads, Mercury, Cadmium, Copper, Zinc etc.)</li> <li>Organometallic substances (tributyltin)</li> </ul>	

<ul> <li>Lack of Hazard Communication. (storage, labeling, material safety data sheets)</li> <li>Batteries, Fire-fighting liquids.</li> <li>PCBs and PVC (Combustion Products)</li> <li>Welding fumes.</li> <li>Volatile organic compounds (Solvents)</li> <li>Inhalation in confined and enclosed spaces.</li> <li>Ergonomic and Psychosocial hazards</li> </ul>	
PP designated the General Manager (Operations) will be the Chief Emergency Coordinator, and he shall be the main guiding person directing the emergency operations. He shall be assisted by other coordinators for the same.	
PP also assigned the role and responsibilities to each personnel designated.	
PP also presented that damage assessment and analysis will also be done.	

# **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 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 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 is submitted the information and the proposal is placed in this instant meeting.

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 noted that the requisite information/inputs regarding onsite and offsite emergency plan is satisfactory and in order.

The EAC, after detailed deliberations, **recommended** the proposal. The EAC also recommended the following additional specific conditions:

- (i) 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.
- (ii) The project proponent shall comply with the environment norms for Pesticide Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 446(E), dated 13.06.2011 under the provisions of the Environment (Protection) Rules, 1986.

#### The meeting ended with thanks to the Chair.

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### **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 31<sup>st</sup> 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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# List of the Expert Appraisal Committee (Industry-3) members participated during Video Conferencing (VC) meeting

S.	Name of Members	Designation
No.		
1.	Prof. (Dr.) A.B. Pandit	EAC
	Vice Chancellor, Institute of Chemical Technology,	Chairman
	Mumbai, Sir JC Bose Fellow, Government of India	
	Email: ab.pandit@ictmumbai.edu.in	
2.	Dr. Ashok Kumar Saxena, IFS	Member
	Bunglow No. 38, Sector-8A, Gandhinagar, Gujarat –	
	382008	
	E-mail: ashoksaxena1159@gmail.com	
3.	Prof. (Dr.) S. N. Upadhyay	Member
	Research Professor(Hon.),	
	Department of Chemical Engineering & Technology,	
	Indian Institute of Technology (Banaras Hindu University),	
	Varanasi	
4	E-mail: <u>snupadnyay.cne@illonu.ac.in</u>	Mambar
4.	Prof. (Dr.) Vijay S. Monoikar Drefessor in Department of Chemical Engineering	inemper
	Professor in Department of Chemical Engineering,	
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5	E-mail. Vinonoikai @ilig.ac.in	Mambar
5.	Shroo' Apartment Elat 401 Plat No. 22 Tukaram	Inemper
	Shiee Apartment, Flat 401, Flot No. 22, Tukaram	
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6	Dr. Suroch Banwar	Mombor
0.	House No.4 Government Green Society, NH 58 Bypass	Member
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7	Shri Tukaram M Karne	Member
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8.	Prof. (Dr.) Suneet Dwivedi.	Member
	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	

9.	Shri Sanjay Bisht	Member
	Scientist 'E', Room No. 517, Office of the Director General	
	of Meteorology, Indian Meteorological Department,	
	Musam Bhawan, Lodhi Road, New Delhi -110003	
	E-mail: <u>sanjay.bist@imd.gov.in</u>	
10.	Shri Dinabandhu Gouda	Member
	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	
11.	Dr. R. B. Lal	Member
	Scientist 'E'/Additional Director	Secretary
	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: <u>rb.lal@nic.in</u>	

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

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# Approval of EAC Chairman

## Email

# Additional Director MoEFCC Dr R B LAL

Re: Zero Draft Minutes of the 28th EAC (Industry 3 Sector) meeting held during March 24-25, 2022 (through Video Conferencing) for comments of the EAC and approval of the Chairman Sir.

From : ab pandit <ab.pandit@ictmumbai.edu.in> Subject : Re: Zero Draft Minutes of the 28th EAC (Industry 3 Sector) meeting held during March 24-25, 2022 (through Video Conferencing) for comments of the EAC and approval of the Chairman Sir.</ab.pandit@ictmumbai.edu.in>	Wed, Mar 30, 2022 06:31 PM <i>⊘</i> 1 attachment
To: Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in>, ashoksaxena1159@gmail.com, snupadhyay che <snupadhyay.che@iitbhu.ac.in>, dwivedisuneet@rediffmail.com, suneetdwivedi@gmail.com, santoshgo@gmail.com, pkmishra che <pkmishra.che@itbhu.ac.in>, drpkm18@gmail.com, spcppri@gmail.com, tmkarne@gmail.com, Dinabandhu Gouda <dinabandhu.cpcb@nic.in>, Sanjay Bist <sanjay.bist@imd.gov.in>, vmoholkar@iitg.ac.in, Rakesh kushwaha <kushwaha-cgwb@gov.in></kushwaha-cgwb@gov.in></sanjay.bist@imd.gov.in></dinabandhu.cpcb@nic.in></pkmishra.che@itbhu.ac.in></snupadhyay.che@iitbhu.ac.in></rb.lal@nic.in>	

Dear Dr. Lal,

Please find the signed minutes. I have also made the corrections as suggested by Dr Gouda in items 28.2 and 28.9, Thanking you, With Warm Regards

Pandit

### Minutes Approved by Prof A B Pandit

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