GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-3 SECTOR)
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Dated: 20.05.2022

MINUTES OF THE 31st EXPERT APPRAISAL COMMITTEE (INDUSTRY-3 SECTOR) MEETING HELD ON MAY11-12, 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: MAY 11, 2022 [WEDNESDAY]

(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.

The Chairman and other members thanked the outgoing Member Secretary, Dr. R. B. Lal, Scientist 'E', MoEF&CC for his able contribution towards the EAC meetings and also welcomed the new Member Secretary, Dr. M. Ramesh, Scientist 'E', MoEF&CC and Shri Amit Vashishtha, Scientist 'D', MoEF&CC.

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

The Member Secretary appraised to the Committee about the details of Agenda items to be discussed during this EAC meeting.

(iii) Confirmation of Minutes of the 30th Meeting of the EAC (Industry-3 Sector) held during April 26-27, 2022 at MoEF&CC through VC.

The EAC noted that the final minutes were issued after incorporating the comments offered by the members and approved by the Chairman on 05.05.2022. Based on the requests received from the project proponents for factual corrections, the EAC confirmed the minutes of meeting with the following corrections:

Corrections in minutes of the 30th EAC meeting

Agenda No. 30.5

Proposed Expansion of Agrochemicals Manufacturing from existing capacity of 9400 TPA to 12650 TPA, located at Survey No. 28/1-A, Corlim village, Tehsil-Tiswadi, Dist.-North Goa, Goa by M/s Deccan Fine Chemicals (India) Private Limited - Consideration of Environmental Clearance

[Consultant: Aditya Environmental Services Pvt. Ltd.; valid upto 01.05.2022]

[Proposal No. IA/GA/IND3/261535/2018; File No. J-11011/616/2007-IA -II (I)]

1. The proposal was considered in 30th EAC Meeting held on 26-27th April, 2022 wherein the Committee recommended the proposal. The Minutes of Meeting (MoM) were published on 55.2022 The PP vide their e-mail dated 18.5.2022 requested the following corrections in approved MoM.

S. No	Condition stated in the minutes of Meeting in serial no: XV	Revised condition to be incorporated in the minutes in serial no. XV	Justification
1.	Total fresh water requirement, sourced from GIDC water Supply, shall not exceed 5475 KLD. Prior permission in this regard shall be obtained from the concerned regulatory authority / CGWA and renewed from time to time.	Total fresh water requirement, sourced from Public Works Department supply, desalination, rain water harvesting shall not be exceeding 5475 KLD. Prior permission in this regard shall be obtained from the concerned regulatory authority and renewed from time to time	During the EAC meeting we have informed to the committee that the source for water is Public Works Department supply, Rain water harvesting and Desalinated seawater only. Hence there is no GIDC supply source and we don't draw ground water. Details on source of fresh supply is given in the EIA report as well.
	Point stated in the minutes in Paragraph no.9	**Revised point to be incorporated in paragraph no 9 of the minutes**	**Justification**
2.	The PP deliberated on the report of GHG emission from 2018 to 2021 due to direct and indirect emissions as computed by PP and carbon footprints calculations (MT CO2 per MT of product). Total annual GHG emissions have reduced from 59,515 MT Coz to 50,891 MT CO2. The specific GHG emissions (TCO /T of product) were at 681 MT/T in 2018 which has been reduced to 5.14 MT/T in 2021.This reduction of 25 % from	The PP deliberated on the report of GHG emission from 2018 to 2021 due to direct and indirect emissions as computed by PP and carbon footprints calculations (MT CO per MT of product). Total annual GHG emissions have reduced from 59,515 MT C 2 50,891 MT Coz The specific GHG emissions (TCO2/T of product) were at 6.81 MT/Tin 2018 which has been reduced to 5.14 MT/T in 2021. This reduction of 25 % from 2018 to 2022 in specific emissions of GHG gases has been possible through implementation of various CO reduction projects. Details of the various projects executed	During the EAC meeting we have informed to the committee about reduction in carbon footprint from 59515 MT of CO_2 to 50891 MT of CO_2 through implementation of various projects. Also specific CO_2 emission per MT of product was 6.81 in 2018 and it is reduced to 5.14 MT per MT of product in 2022.

	2018 to 2022 in specific emissions of GHG gases hasbeen possible through implementation of various CO reduction projects. Details of the various projects executed during 2018 to 2021.	during 2018 to 2021 has been presented during the EAC meeting	Hence the typo errors need to be corrected.

2. Deliberations by the EAC:

The EAC deliberated the issues and noted that that these are typographical errors and factual in nature and recommended for corrections in the minutes.

Agenda No. 30.8

Setting up of API Manufacturing unit of production capacity 49,500 MTPA located at F-112, Chicholi MIDC, Taluka- Mohol, District- Solapur Maharashtra by M/s-Glenmark Life Sciences Limited - Consideration of Environmental Clearance

[Consultant: Perfact Enviro Solutions Pvt. Ltd., Valid upto 26.11.2022]

[Proposal No. IA/MH/IND3/244471/2021; File no. J-11011/ 516/2021-IAII (I)]

The proposal was considered in 30th EAC Meeting held on 26-27th April, 2022, wherein the Committee recommended the proposal. The MoM were published on 6.5.2022. The PP vide their e-mail dated 7.5.2022 requested following corrections in approved MoM.

Sl. No.	Details Mentioned in Published MoM dated 05-05-2022 (EAC - Industry 3 Sector)		Corrigendum requested	Recommendation of EAC
	Page No.	Details		
1	71 & 73	Project name and location mentioned as "Setting up of API Manufacturing unit of production capacity 49,500 MTPA" located at F- 112, Chicholi MIDC, Taluka- Mohol, District- Solapur Maharashtra by M/s-Glenmark Life Sciences Limited.	The name and location of the project is "Setting up of API Manufacturing unit of production capacity 999.70 TPA" located at F-112, Chincholi MIDC, Taluka Mohol, District Solapur, Maharashtra	EAC deliberated the issue and noted that the error is factual in nature and recommended for the correction in minutes. The production capacity to be considered as 999.70 TPA.
2	72	At S. No. 4 of table, it is mentioned that the Consultant provides a copy of valid category accreditation	We have provided the details of the appointed	EAC deliberated the issue and noted that the error is factual in nature

		certificate from the QCI/NABET, for preparation of the EMP report and its various mitigation measures as per provisions of the EIA Notification, 2006. The remarks by EAC is given as "The EAC deliberated the matter and found the reply to be satisfactory. EAC recommended that there shall be a specific condition on this aspect and accordingly condition is added in safeguard"	consultant M/s Perfact Enviro Solutions Pvt. Ltd as our consultant. M/s Perfact Enviro Solutions Pvt. Ltd. New Delhi is an accredited consultant organization for sector 5(f), Cat A. As there is no specific condition applicable for this aspect, this point be dropped	and recommended for the correction in minutes to drop this point.
3	73	At S. No. 7 of table it is mentioned: As per the Ministry OM No. 22- 23/2019-IA.III, dated 28.01.2021, the PP/Consultant needs to submit the details of pollution load i.e. quantity and quality, including composition, of emissions, discharges and waste (hazardous, solid & industrial) generation from the activities for further deliberations before the EAC.	We have submitted the details of the pollution load summary. Committee has not recorded any remark in this regard ; a satisfactory remark be recorded	EAC deliberated the issue and recommended to consider the reply submitted by PP as satisfactory.
4	78	PP also requested that EC may include the name of products also otherwise PP will face difficulty in obtaining the CTE/CTO from concerned SPCB.	The list of products is not mentioned in the MOM. We request the ministry to incorporate the list of products in the minutes of the meeting. The list of the products are attached in Annexure 1	EAC deliberated the issue and noted that the error is factual in nature and recommended for the correction in minutes for inclusion of product list as mentioned below.
5	82	At xvii point, it is mentioned that the total fresh water requirement, sourced from	The fresh water requirement for the proposed	EAC deliberated the issue and noted that the error

		private tankers shall not exceed 9.95 KLD. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA and renewed from time to time.	project during installation phase is @11.25 KLD & during operation phase is @1154 KLD which will be sourced from MIDC Chincholi	is factual in nature and recommended for the correction in minutes.

list of the products is as follows:

S. No.	Products Name	CAS No.	Proposed quantity(TPA)	End Use of the Product
1	PERINDOPRIL ARGININE	612548-45-5	3.00	Antihypertensive
2	AMIODARONE	19774-82-4OB1361000	100.00	Antiarrhythmic
3	AZELAIC ACID	123-99-9	85.375	Acne Therapy
4	OLMESARTAN MEDOXOMIL	144689-63-4	16.6	Anti-Hypertensive
5	ETORICOXIB	202409-33-4	47.00	Anti-inflammatory agent; Analgesic
6	TADALAFIL	171596-29-5	2.305	Treatment of hypertension; Treatment of erectile dysfunction; Treatment of female sexual dysfunction
7	LITHIUM CARBONATE	554-13-2	36.00	Bipolar Disorder
8	DEFERASIROX	201530-41-8	6.348	Chelators Antidotes
9	GABAPENTIN ENACARBIL	478296-72-9	8.3	Treatment of Restless legs Syndrome
10	ESOMEPRAZOLE MAGNESIUM TRIHYDRATE	217087-09-7	2.4	Antiulcer agent
11	DABIGATRAN	53282-20-30	18.9	Anticoagulant
12	URSODIOL	128-13-2	8.8	For the treatment of primary biliary cirrhosis(PBC)
13	DIMETHYL FUMARATE	624-49-7	3.5	Multiple Sclerosis.
14	PERINDOPRIL ERBUMINE	107133-36-8	1.428	Antihypertensive
15	TICAGRELOR	274693-27-5	2.06	Anti thrombotic

16	SERTACONAZOLE NITRATE	99592-39-9	1.193	Antifungal
17	MIRABEGRON	223673-61-8	0.83	For treatment of overactive bladder
18	DESLORATADINE	100643-71-8	1.2	Antihistaminic
19	SOLRIAMFETOL HCL	178429-65-7	0.24	Narcolepsy
20	DEFERASIROX	201530-41-8	0.002	Chelators Antidotes
21	RIVAROXABAN	366789-02-8	2.175	Anti plasmodic
22	ROSUVASTATIN	147098-20-2	48.00	Antilipemic drug
23	EZETIMIBE	163222-33-1	4.2	Antihyper Lipoprotein Mic
24	EFINACONAZOLE	164650-44-6	0.14	Antifungal.
25	COLISTIMETHATE SODIUM	8068-28-8	1.25	Antibacterial
26	ELAGOLIX	832720-36-2	2.00	Gynecological disorders, Treatment of endometriosis
27	NINTEDANIB ESYLATE	656247-18-6	2.00	Pulmonary fibrosis
28	TELMISARTAN	144701-48-4	10.00	Antihypertensive
29	LIFITEGRAST	1025967-78-5	0.032	Treatment of the signs and symptoms of dry eye disease
30	APREMILAST	608141-41-9	0.2	Anti-inflammatory
31	DAPAGLIFLOZIN AMORPHOUS	461432-26-8	0.173	Antidiabetic
32	SUCRALFATE	54182-58-0	500	Treatment of Gastric and Duodenal Ulcer
33	VORICONAZOLE	137234-62-9	1.00	Antifungal agent
34	BRIVARACETAM	357336-20-0	0.15	Anticonvulsants
35	TAVABOROLE	174671-46-6	0.025	Antifungal.
36	OSPEMIFENE	128607-22-7	0.015	It is an estrogen agonist/antagonist indicated for the treatment of moderate to severe dyspareunia, a symptom of vulvar and vaginal atrophy, due to menopause.
37	DIPYRIDAMOLE	58-32-2	0.705	Antiplatelet Agent
38	VERAPAMIL	152-11-4	3.5	Calcium Channel blocker
39	TERIFLUNOMIDE	108605-62-5	0.028	Antirheumatic
40	OMEPRAZOLE	73590-58-6	61.45	Antiulcer agent

41	TENELIGLIPTIN	1572583-2-9	0.09	Antidiabetics
42	IMIQUIMOD	99011-02-6	0.055	Antiviral agent
43	POTASSIUM CHLORIDE	7447-40-7	10.00	Hypokalemia
44	FLUCONAZOLE	86386-73-4	7.00	Anti-Fungal
Total			**999.70 TPA**	

Agenda No. 30.11

Expansion of Synthetic Rubber and Lattices Manufacturing Plant of capacity upto75600 MTPA located at Survey No. 27, 103, 104, 105 & 131 to 137 & Survey No. 20, 22, 24, 26, 26A, 26B, 30, 31, 32, 130, 138, Village Dungari, TalukaValia, District Bharuch, Gujarat by M/s Apcotex Industries Limited – Consideration of Environmental Clearance

[Proposal No. IA/GJ/IND3/268140/2005; File No. J-11011/242/2005-IA-II(I)]

The proposal was considered in 30th EAC Meeting held on 26-27th April,2022 wherein the Committee recommended the proposal. The MoM were published on 6.5.2022. The PP vide their e-mail dated 9.5.2022 requested following corrections in approved MoM.

Clause Number	Mentioned in MoM	Correction required	Details Presented in Documents	Recommendation of EAC
Clause No. (ix)	As 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/ greenbe4lt development/ horticulture.	As already committed by the project proponent ➢ Zero liquid discharge shall be ensured and no treated/ untreated wastewater shall be discharged outside the premises during monsoon months. ➢ Treated effluent meeting on land irrigation norms will be used for greenbelt development in non-	➢ Annexure – is submitted as Annexure -2 ➢ EC Presentation slide No 14 is attached as Annexure -3 ➢ In EIA report section 2.12 , water consumption and wastewater generation during monsoon and non-monsoon period is given and attached as Annexure -4	EAC deliberated the issues and noted that the error is factual in nature and recommended for the correction in minutes.

		monsoon months. ➢ Treated effluent shall be reused in the process/ utilities.		
Clause no. XVI	Total fresh water requirement, sourced from Ground Water, shall not exceed 2729 KLD Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA and renewed from time to time.	Total fresh water shall not be exceeding 2729 KLD. Prior permission in this regard shall be obtained from the concerned regulatory authority and renewed from time to time.	➢ Annexure – is submitted as Annexure -2 ➢ EC Presentation slide No 12 is attached as Annexure -5 ➢ **Note-** It may be noted that groundwater is not extracted for the project and surface water is sourced from Valia Industrial Association for which necessary proof is submitted in Annexure 6.	EAC deliberated the issue and noted that the error is factual in nature and recommended for the correction in minutes.

<u>Agenda No. 30.12</u>

Expansion of Fertilizer Plant located at Durgachak, Haldia, Purba Medinipur, PO + PS-Durgachak, West Bengal by M/s Indorama India Pvt. Ltd – Consideration of Environmental Clearance

[Proposal No. IA/WB/IND3/261808/2006; File No. J-11011/136/2017-IA-II(I)]

1. The proposal was considered in 30th EAC Meeting held on 26-27th April, 2022 wherein the Committee recommended the proposal. The MoM were published on 6.5.2022. The PP vide their e-mail dated 9.5.2022 requested following corrections in approved MoM.

Page No. of Minutes	**Specific Points**	**Information as per MoM**	**Details to be corrected**	**Justification on/Remarks**
Page 98	Paragraph ; Details of products and Capacity"	The project was initially established by M/s TATA Chemicals ltd. at Durgachak,Haldia,	The project was initially Haldia, Purba Medinipur, PO +PS-Durgachak, West	

		PurbaMedinipur, PO +PS-Durgachak, West Bengal, in1979 for manufacturing of DAP/NPK Complex, Single Super Phosphate & Sulphuric Acid. Since the project was established before the purview of EIA Notification, 1994 and its subsequent amendments, Environmental Clearance was not applicable.	Bengal, in1979 for manufacturing of DAP/NPK Complex, Single Super Phosphate & Sulphuric Acid. Since the project was established before the purview of EIA Notification, 1994 and its subsequent amendments, Environmental Clearance was not applicable.	
Page No. 98	Paragraph 3; "Details of Products and Capacity"	Further, the TOR for expansion has been issued by the Ministry, vide letter No. J-11011/136/2007-IA.II(I) dated 08.09.2020. Public Hearing has been exempted as the project is located in GIDC industrial area. The Unit has obtained earlier EC, vide letter No. J-11011/7/2016-IAII (I), dated 22.01.2019 for setting up Pesticide Technical Manufacturing unit of capacity3175 TPA. The Unit has got CTE from SPCB vide no.15783, dated25.06.2020 and valid up to 7Years from the date of issue. PP has yet to obtain the CTO from SPCB. PP reported that the certified EC compliance Report was obtained from	Deletion of this point	The details mentioned in the paragraph are not a part of plant owned by M/s Indorama India Pvt. Ltd. (Formerly known as IRC Agrochemicals Pvt. Ltd.). Terms of Reference and Public Hearing have already been described in the details of the project. It is hereby requested to kindly delete this paragraph

		IRO, MOEFCC, Bhopal vide file no. 544/2020/Env)/212 dated 7thOctober 2021. PP further reported that as on date out of total 37 EC conditions. 36 EC conditions are compiled and 01condition is in progress. The EAC deliberated the compliance status of earlier EC conditions and present status of the project and found in order.		
Page No. 99	Paragraph No. 5; Line 4 "Deliberations by the EAC"	The PP reported that the power requirement of the plant will be 10.5 MW which will be met through Captive Power Plant (10.17 MW) and WBSEDCL. DG sets of capacity 3xl250 kW (with appropriate stack height as per CPCB norms) are installed as power backup. 2 no. of package boilers of capacity 7.8 TPH & 10 TPH have been installed in the plant with stack height of 35 m(common) for controlling emissions within statutory limit.	The PP reported that the power requirement of the plant will be 10.5 MW which will be met through Captive Power Plant (10.17 MW) and WBSEDCL. DG sets of capacity 3xl250 kW (with appropriate stack height as per CPCB norms) are installed as power backup. 2 no. of package boilers of capacity 7.8 TPH & 10 TPH have been installed in the plant with stack height of 35 m(common) for controlling emissions within statutory limit.	Kindly delete "Waste Heat Recovery Boilers" as Furnace Oil is being used as fuel for the package boilers. However, package boilers are used in emergency only.
Page No. 105	Condition No. (xii)	As committed by PP, the Industry will use Briquettes- as a first priority (Primary Fuel} and in case of unavailability, the Unit will use	As committed by PP, the Industry will use Briquettes- as a first priority (Primary Fuel) and in case of unavailability, the Unit will use	As per discussions held during 30th EAC (Industry-3), it was instructed by EAC for use of bio-briquette (as a primary fuel) and incase of

		Imported coal- as an alternative fuel.	Indigenous/imported coal as available as alternative fuel.	unavailability, indigenous/Imported coal to be used.
Page No. 106	Condition No. (xix)	The green belt of at least 5-10 m width shall be developed in at least 33% of the total project area (@2500 Tress per ha), mainly along the plant periphery/additional land and additional5000 trees shall be planted within 1 Year around the Project site or at additional land, nearby village. 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. The Trees have tobe planted with spacing of 2m x 2m ratio and as in first year itself and subsequent years the greenbelt shall be monitored. ***Further,* as *committed by PP,additionally1000 nos.* of *trees will* be *developing inside, and 1000* nos. *of trees will be developing outside premises.*** The Plant species can be selected that will give better	The green belt of at least 5- 10 m width shall be developed in at least 33% of the total project area (@2500 Trees per ha), mainly along the plant periphery/additional land and additional 5000 trees shall be planted outside the plant. 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. The Trees have to be planted with spacing of 2m x 2m ratio and as in first year itself and subsequent years the greenbelt shall be monitored. The plant species can be selected that will give better carbon sequestration.	Kindly delete "Further as committed by PP, additionally1000 nos. of trees will be developing inside, and 1000 nos of trees will be developing outside premises". As per discussions held during 30th EAC(industry-3) Meeting, it was instructed by EAC to plant 5000 no. of trees outside the plant. PP had committed for the same. (Affidavit has been attached for your kind reference in ***Annexure-1).***

		carbon sequestration.		

2. Deliberations by the EAC:

The EAC deliberated the issues and noted that that these are typographical errors and factual in nature and recommended for corrections in the minutes.

Agenda No. 30.13

Expansion of "Pesticide Technical, Pesticide Specific Intermediates and Speciality Chemicals Products Integrated with Chlor Alkali and Captive Power Plant", located at Plot No. 746/750, Jhagadia GIDC Industrial Estate, District Bharuch Gujarat by M/s. UPL LTD(Unit -5). – Consideration of Environmental Clearance

[Proposal No. IA/GJ/IND3/268348/2022; File No. J-11011/80/2015-IA-II(I)]

1. The proposal was considered in 30th EAC Meeting held on 26-27th April,2022 wherein the Committee recommended the proposal. The MoM were published on 6.5.2022 The PP vide their e-mail dated 7.5.2022 requested following corrections in approved MoM.

S. No.	Details Mentioned in Published MoM dated 05-05-2022 (EAC - Industry 3 Sector)		Requested Corrigendum by UPL Limited
	Page No.	Details	
1	108	Sr. No 6C of Table - Product List Under Pesticide Technical Group A Product Name Mentioned as **"Clethodim (CM 257) OR"**	The Product Name is **"Clethodim (CM 257)"**
2	109	Sr. No 14 of Table - Product List Under Pesticide Intermediates Group B Product Name Mentioned as **"Tri Ethyl Phosphate"**	The Product Name is "**Tri Ethyl Phosphite"**
3	116	Para No 03: The PP reported that land area is 886286.42 m^2. Industry has already developed greenbelt in an area of 206990 m^2 (20.69 Ha) …… …… ……... "**Total capital cost earmarked towards environmental pollution control**	Para No 03: The PP reported that land area is 886286.42 m^2. Industry has already developed greenbelt in an area of 206990 m^2 (20.69 Ha) …… …… ……... "**Total capital cost earmarked towards environmental pollution control**

		measures is Rs 32.11 Crores and the Recurring cost (operation and maintenance) will be about Rs 3.84 Crores per annum". Additional Employment will be 640 persons as direct & 230 persons indirect for proposed expansion. Industry proposes to allocate additional Rs 4.54 Crores towards Corporate Environment Responsibility (CER) for next 5 years.	**measures is Rs 32.29 Crores and the Recurring cost (operation and maintenance) will be about Rs 27.74 Crores per annum".** Additional Employment will be 640 persons as direct & 230 persons indirect for proposed expansion. Industry proposes to allocate additional Rs 4.54 Crores towards Corporate Environment Responsibility (CER) for next 5 years.
4	117-118	Details of existing flue gas stack At Colum UOM for Fuel is Mentioned as **"Sm3/Day"** at Sr. No 1, 2, 6,7,8,9 in a Table	Details of existing flue gas stack At Colum UOM for Fuel is **"Sm3/Hr "**at Sr. No 1, 2, 6,7,8,9 in a Table
5	147	Condition No (X) **"The Sodium Cyanide manufactured by the unit shall not be used as insecticidal purpose nor it shall be used for manufacturing of banned pesticide mentioned in the Notification issued on 18th August, 2018 by the Ministry of Agriculture & Farmers Welfare"**	**We have not proposed Production of "Sodium Cyanide at Site and We are Not Proposing to use / produce Sodium Cyanide in manufacturing of banned pesticide mentioned in the Notification issued on 18th August, 2018 by the Ministry of Agriculture & Farmers Welfare**
6	147	Condition No (XI) **"**Total fresh water requirement shall not exceed **70 KLD,** proposed to be met from **groundwater. Necessary permission obtained in this regard shall be renewed from time to time."**	Condition No (XI) **"**Total freshwater requirement shall not exceed **13000 KLD,** proposed to be met from **Supply water from GIDC". No Ground Water shall be used.**

2. Deliberations by the EAC:

The EAC deliberated the issues and noted that that these are typographical errors and factual in nature and recommended for corrections in the minutes.

Agenda No. 30.15

Expansion of Formaldehyde Manufacturing Unit with the existing production capacity 1000 Ton per Month to 2500 Ton per Month, located at Plot No. G-1-788, Phase-2, RIICO Industrial Area, Bhiwadi, Tehsil Tijara, District Alwar, Rajasthan month by M/s Suchem Organics Pvt. Ltd. – Consideration of TOR Violation Case

[Proposal No. IA/RJ/IND3/268773/2022; File No. IA-J-11011/319/2019-IA-II(I)]

[Consultant: Vardan Environment)

The proposal was considered in 30th EAC Meeting held on 26-27th April,2022 wherein the Committee recommended the proposal. The MoM were published on 6.5.2022. The Member secretary informed the Committee to review the total capacity whether it is to be considered as 2500 TPD or 2500 TPM as the capacity mentioned in Form-1 and PPT is not matching. The Committee is of the view that Form-1 is the basic document and capacity mentioned in the same, PFR etc. is 2500 TPM. Therefore, the capacity of ToR may be considered as 2500 TPM.

Agenda No. 30.16

Existing Formaldehyde Manufacturing Unit with Production Capacity of 60 TPD, located at Khasra No. 56//1 Village: Ramnagar, Tehsil: Ganaur, Dist.: Sonipat, Haryana by M/s ShriLaxmi Chemical – Consideration of TOR Violation Case

[Consultant: VardanEnviroNet] [Proposal No. IA/HR/IND3/267199/2022; File No. IA-J-11011/258/2021-IA-II(I)]

1. The proposal was considered in 30th EAC Meeting held on 26-27th April,2022 wherein the Committee recommended the proposal. The MoM were published on 6.5.2022. The Member Secretary informed the Committee that inadvertently following para was mentioned in MoM:

Production Capacity given in approved minutes are-

The plant was established in 1994 after obtaining CTE from RSPCB for 300 ton per month production capacity but PP has enhanced its production capacity from 300 ton per month to 1000 ton per month in the year 2008 i.e., after EIA Notification 2006, without obtaining prior Environmental Clearance. Hence the project has violated the conditions of said Notification.

Product	***Capacity (1995-2008)***	***Capacity (2008-till date)***	***Proposed Capacity***	***Total Capacity after Expansion***
Formaldehyde	*300 ton per day*	*1000 ton per day*	*1500 ton per day*	*2500 ton per day*

2. The Committee noted that this is a typographical error and recommended that above para may be omitted from MoM and production capacity may be considered as 60 TPD.

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After confirmation of the minutes of last meeting, 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 detailed in the respective agenda items as under:

Consideration of Environmental Clearance Proposals

Agenda No. 31.1

Proposed project for manufacturing of Agro Chemicals located at Plot No. 1, Survey No. 333, Village Devaliya, Taluka Anjar, District Kutch, Gujarat by M/s. Chemster India Pvt. Ltd. - Consideration of Environment Clearance

[Proposal No. IA/GJ/IND3/198836/2021; File No. IA-J-11011/58/2021-IA-II(I)]

1. The proposal is for environmental clearance for manufacturing of Agro Chemicals located at Plot No. 1, Survey No. 333, Village: Devaliya, Taluka: Anjar, District Kutch, Gujarat by M/s. Chemster India Pvt. Ltd.

2. The project/activity is covered under Category 'A' of item 5(b) (Pesticide Industry and pesticide specific intermediates excluding formations) of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended) and requires appraisal at Central Level by Expert Appraisal Committee (EAC).

3. The standard ToR has been issued by Ministry vide letter no. IA-J-11011/58/2021-IA-II (I) dated 05.03.2021 and the Public Hearing for the project was conducted by the Gujarat Pollution Control Board on 28.01.2022, which was presided by Additional District Collector & Additional District Magistrate, Bhuj-Kutch in the presence of Regional Officer, GPCB, Kutch-East.

4. The PP vide proposal no. IA/GJ/IND3/198836/2021 applied for grant of EC in Form-2 on 22.04.2022 and due to some shortcomings, the proposal was referred back to PP. The reply to the same was submitted by PP on 22.04.2022 and the proposal is now placed in 31st EAC meeting held on May 11-12, 2022, wherein the project proponent and the accredited Consultant M/s. San Envirotech Pvt. Ltd., Ahmedabad, having an accreditation number NABET/EIA/1922/RA0216 valid till 23.12.2022 made a detailed presentation on the salient features of the project and informed that:

5. The details of products and capacity is as under:

Sr. No.	Name of Product	CAS No.	Capacity (MT/Month)	End use
Technical Products (EC products)				
1	Aluminum Phosphide Technical	20859-73-8	150	Used as a quarantine fumigant to protect
2	Zinc Phosphide Technical	1314-84-7	100	

				stored grain from insects and rodents
3	Phosphoric Acid (H_3PO_4) (56-60%)	7664-38-2	40	Phosphate salts for fertilizers
Formulation Products (Non-EC products)				
1	Aluminium Phosphide (56-60% TC)	20859-73-8	205	Used as a quarantine fumigant to protect stored grain from insects and rodents
2	Aluminium phosphide (15% TC)	20859-73-8	200	
3	Zinc Phosphide (80% TC)	1314-84-7	120	

6. The PP reported that proposed land area of the project is 4003.15 m2. Industry will develop greenbelt in an area of 33% i.e. 1321 m2, out of total area of the project. The estimated project cost is ₹ 4.5 Crore. Total capital cost earmarked towards environmental pollution control measures is ₹ 0.46 Crore and the Recurring cost (operation and maintenance) will be about ₹ 0.117 Crore per annum.The direct employment from the project will be 20 persons. Industry proposes to allocate ₹ 9.0 Lakhs towards Corporate Social Responsibility which include ₹ 6.0 Lakh for Drinking water and sanitation facilities (₹ 3.0 Lakh in 1st and 2nd Year) and ₹ 3.0 Lakh for Women Empowerment & children Development activities (₹ 1.5 Lakh in 1st and 2nd Year)

7. The PP reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance of the project site. Pond of Kumbhariya Village is at a distance of 1.5 km in SW direction. PP reported that there is one Schedule-I species i.e. Peacock (Indian peafowl) and the conservation plan with budgetary provision of ₹ 5.5 Lakh has been prepared and submitted to DCF, Bhuj-Kutch on 15.04.2022. PP committed to implement the plan in one year.

8. The Ambient air quality monitoring was carried out at 8 locations during December, 2020 to February, 2021 and the baseline data indicates the ranges of concentration as: PM10 (59.8 - 68.5 µg/m^3), PM2.5 (35.1 - 38.0 µg/m^3), SO2 (12.1 - 13.7 µg/m^3), NO_x (15.6 - 18.3 µg/m^3). AAQ modelling study for point source emissions indicated that the maximum incremental GLCs after the proposed project would be 0.889 g/m^3, 0.296 g/m^3 and 0.346 g/m^3 with respect to PM_{10}, SO_2 and NO_x respectively. The resultant concentrations are well within the national ambient air quality standards (NAAQS). The noise levels are within the prescribed standard during day and night time. The ground water monitoring was carried out at 8 locations for water levels, PH, TDS, Chlorides, Fluoride, Heavy metals & Total Hardness and are within the prescribed standards. The surface water monitoring was carried out at 7 locations for DO, COD, pH, BOD and are within the prescribed standards. The monitoring of soil sampling was carried out at 8 locations and found to be within prescribed standards

9. The PP reported that the total water requirement is 19.5 KLD, of which fresh water requirement of 17.5 KLD will be met from Ground Water Source – Bore well. 2.0 KLD will be recycled/treated water. Application for Abstraction of Ground water has been submitted vide application code 73791 dated 15.4.2022. Sources of industrial effluent generation will be from cooling tower bleed off and water treatment. Total trade effluent (3.0 KLD) will be

collected in collection tank; pH will be balanced, if required. Effluent will be passed through RO; RO reject will be evaporated into kettle type evaporator operated by electricity. RO Permeate (2.0 KLD) will be recycled in utilities. Thus, unit will achieve Zero Liquid Discharge (ZLD). Sewage (3.0 KLD) will be disposed into soak pit through septic tank.

10. The PP reported that Power requirement will be 350 kVA and will be met from Paschim Gujarat Vij Company Ltd. (PGVCL). Unit proposed to install one D.G. Set (150 kVA capacity) and will be used as standby during power failure. Stack (height 11 meters) will be provided as per CPCB norms to the proposed D.G. Set. There will be no flue gas stack except stack of standby D G Set. HSD will be used as fuel and no APCM is required except adequate stack height.

11. The PP reported that process emission generation will be from stack of 11-meter height attached with Reaction vessel of Aluminium Phosphide and Reaction vessel of Zinc Phosphide. Water Scrubber will be installed to control process emission from reactor.

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

S. No.	Name of waste	Category as per MSHIC rules 2016	Qty.	Disposal method
1.	Salt from Evaporator	35.3	3.0 MT/Annum	Collection, storage, transportation & disposal at TSDF site approved by GPCB.
2.	Used oil	5.1	0.2 KL/Yr.	Collection, storage, transportation &disposal by selling to registered re-refiners.
3.	Discarded containers/ Drums/liners	33.1	1000 nos./month 2.0 MT/month	Collection, storage, transportation & disposal by selling to registered recyclers.
4.	Phosphoric Acid (H_3PO_4) (56-60%)	--	40 MT/month	Collection, storage, sell to actual users having Rule 9 permission

13. Total Carbon Footprint: The PP reported that no fuel is being used in the process and operations, the usage of diesel will be limited to the standby D.G set and vehicular transportation of manpower and materials only. It is estimated that 1252 kg CO_2 and 88 kg CO_2 will be emitted due to the transportation of materials and manpower, respectively. It will result in 16 tons per annum of CO_2 emissions. The EAC deliberated the details and found in order.

14. Action Plan of Carbon Footprint: The PP reported that, Unit proposes the Greenbelt: 1321 m2. 330 large trees are proposed to be planted (having 50 ft height and trunk dia of 20 inches. The Carbon captured and sequestered by trees: 51 tons per annum (about 3 times the carbon emitted), and thus the project will have no negative impact on the Environment in terms of the CO_2 emissions.

15. 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.

16. The PP submitted that advertisement was published in Gujarati "Gujarat Samachar - Kutch Avruti" Kutch edition, dated 15.12.2021 and in English -"The Indian Express" dated 15.12.2021 and the Public Hearing for the project was conducted by the Gujarat Pollution Control Board on 28.01.2022, which was presided by Additional District Collector & Additional District Magistrate, Bhuj-Kutch in the presence of Regional Officer, GPCB, Kutch-East. The main issues raised during the public hearing were related to pollution control measures, local employment and EMS operation. As informed by PP, no Litigation is pending against the proposal.

17. The PP submitted an undertaking that i) commits not to manufacture any banned pesticides in their plant, ii) the data & information given in the application and enclosures are true and we will be responsible for any factual discrepancy in EIA report, iii) the ownership of EIA report remain with PP, iv) the content including information & data of EIA report is owned by us and data or information are not taken from any other EIA report.

18. The Consultant also submitted an undertaking that the prescribed TORs have been complied with and the data submitted is factually correct.

19. <u>Deliberations by the EAC:</u>

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 clarification regarding Aluminum Phosphide considered as banned pesticide. According to the PP, the Central Insecticide Board released a list of pesticides that are banned, refused registration, or limited in use in OM dated

1.4.2022 (CIB). Pest Control Operations usage of Aluminum Phosphide may be undertaken / government organizations / pest control operators under the careful supervision of the government. The information provided by PP on the banned herbicide was deemed to be adequate. The EAC also deliberated on the Life cycle assessment submitted by the PP. The EAC suggested to adopt latest design for soak pit for maximum water utilization. In addition to this necessary provisions will be made to collect rain water from rooftop during rainy days and collect the same in underground storage tank so that water will be used after filtration for utility purpose. PP committed for the same, in addition to this, PP also committed to develop one village pond in Devaliya village as a part of rain water harvesting.

The EAC discussed on energy consumption by the project and suggested that solar panels be installed on the rooftop area for optimizing the energy requirement, PP committed for the same. The EAC also deliberated on the Handling and Management of Aluminum Phosphide and Zinc Phosphide, PP submitted the information regarding the Hazardous materials storage and handling, EAC found it to be satisfactory. The committee discussed on carbon footprints and carbon sequestration study submitted by the PP and found it to be 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.

The Committee is also of the view that the environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments 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.

20. The EAC, after detailed deliberations, **recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms and conditions as per 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 13th 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 Ground Water Source- Borewell, shall not exceed 17.5 KLD. 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. Number of Trees has 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.

(xx). 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.

(xxi). As committed by the project proponent, shall install soak pit of latest design where sewage can be recycled for Greenbelt development.

(xxii). As committed by the project proponent, shall install solar PV panels on roof top for energy consumption.

Agenda No. 31.2

Proposed Expansion of Agrochemicals from 36300 MTPA to 37400 MTPA in existing Agrochemicals and Agrochemicals Intermediate Manufacturing Unit located at Plot No. DP 53-55, Saykha - I, GIDC Industrial Estate, Saykha, Taluka- Vagra, District Bharuch, Gujarat, by M/s. Nissan Bharat Rasayan Pvt. Ltd. - Consideration of Environmental Clearance

[Proposal No. IA/GJ/IND2/102692/2019; File No. IA-J-11011/170/2019-IA-II(I)]

1. The proposal is for environmental clearance for expansion in production capacity of Agrochemicals Product from 36300 MTPA to 37400 MTPA in existing Agrochemicals and Agrochemicals Intermediate Manufacturing Unit located at Plot No. DP 53-55, Saykha - I, GIDC Industrial Estate, Saykha, Tal-Vagra, Dist-Bharuch, Gujarat, by M/s. Nissan Bharat Rasayan Pvt. Ltd.

2. The project/activity is covered under Category 'A' of item 5(b) (Pesticide Industry and pesticide specific intermediates excluding formations) of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended) and requires appraisal at Central Level by Expert Appraisal Committee (EAC). The project is also located inside the notified industrial area/estate. The Unit had earlier obtained EC, vide letter No. J-11011/170/2019-IA II (I), dated 7.1.2020 & corrigendum and transfer of EC vide letter No. J-11011/170/2019-IA II (I), dated 19.01.2021.

3. The ToR has been issued by the Ministry, vide letter No. IA-J-11011/308/2021-IA-II(I) dated 11/10/2021 for this expansion proposal. Project site is located at Saykha-I GIDC Industrial Estate which is covered within PCPIR (Petroleum, Chemical & Petrochemical Investment Region) and hence the Public Hearing is exempted in pursuant to Ministry's OM No. J-11011/321/2016-IA.II (I) dated 27.4.2018.

4. The PP vide proposal no. IA/GJ/IND2/102692/2019 applied for grant of EC in Form-2 on 28.4.2022 and submitted the EIA/EMP Report. The Project Proponent and the accredited Consultant M/s. Aqua-Air Environmental Engineers Pvt. Ltd. [Accreditation number NABET/EIA/2023/IA0062 (Rev. 02) Valid up to October 7, 2023] made a detailed presentation on the salient features of the project and informed the following:

5. The details of products and capacity are as under:

S. NO.	NAME OF PRODUCT	CAS NO.	PRODUCTION CAPACITY (TPA)			LD50 – ORAL
			EXISTING	PROPOSED	TOTAL	

						(RAT) MG/KG
1.	1,2,4 –Triazole	288-88-0	600	0	600	1648
2.	2,4-D-Ethyl Ester	533-23-3	700	0	700	650 – 800
3.	2-[2-(4-Chlorophenyl)Ethyl]-2-(1,1-Dimethylethyl)-Oxirane	80443-63-6	600	0	600	2500
4.	(2,6-Diisopropyl-4-Phenoxy) Phenylthiourea (DIPPT)	135252-10-7	900	0	900	>500
5.	2-Chloro-5-Chloromethyl Thiazole (CCMT)	105827-91-6	1500	0	1500	>2000
6.	3-Methyl-4-Nitroiminoperhydro-1,3,5-oxidiazine	153719-38-1	1500	0	1500	>500
7.	4-Amino-6-(Tert-Butyl)-3-Mercapto-1,2,4-Triazin-5(4H) One	33509-43-2	600	0	600	1100
8.	5-amino-1-(2,6-Dichloro-4-Trifluoromethyl)-Phenyl-1H-Pyrazole-3-Carbonitrile	120068-79-3	600	0	600	530
9.	5-Chloro-2,3-Difluoropyridine	89402-43-7	250	0	250	342
10.	Aluminium Chloride	7446-07-0	2200	0	2200	3470
11.	4-acetyl-2-methylbenzoic acid (AMBA)	55860-35-0	50	0	50	>300 (Mouse)
12.	4-acetyl-2-methylbenzamide (AMBAD)	1095275-06-1	100	0	100	>300 (Mouse)
13.	Amitraz Technical	33089-61-1	60	0	60	400
14.	Atrazine	1912-24-9	900	0	900	2220
15.	Azoxystrobin Technical	131860-33-8	200	0	200	>2000
16.	Benzaldehyde	100-52-7	1800	0	1800	1300

17.	Bifenthrin Alcohol	76350-90-8	500	0	500	2219
18.	Bispyribac sodium salt	125401-92-5	300	0	300	2635
19.	Bromobenzene	108-86-1	700	0	700	2383
20.	Butachlor Technical	23184-66-9	1500	0	1500	1740
21.	Carfentrazone-ethyl	128639-02-1	200	0	200	5143
22.	Cartap Hydrochloride	15263-52-2	500	0	500	250
23.	Cypermethric acid chloride (CMAC)	52314-67-7	2000	0	2000	>600
24.	Isopropyl 5-chloro-4-Methyl-2-nitrobenzoate (CMNBP)	1204518-43-3	150	0	150	>500
25.	Cymoxanil Technical (98%)	57966-95-7	300	0	300	1100
26.	Chlorpyrifos-methyl Technical	5598-13-0	500	0	500	3000
27.	3',5'-Dichloro-2,2,2-trifluoroacetophenone (DCAP)	130336-16-2	100	0	100	>300 (Mouse)
28.	3,6-dichloropyridazin-4-ol (DCHD)	2779-81-9	100	0	100	>200 (Fish)
29.	Deltamethrin Technical	52918-63-5	300	0	300	>5000
30.	[(R)-(+))-2-(4-Hydroxyphenoxy)-Propionic Acid] (D-HPPA)	94050-90-5	300	0	300	2000
31.	Diafenthiuron Technical	80060-09-9	800	0	800	2068
32.	Difenoconazole Technical	119446-68-3	200	0	200	1453
33.	Ethephon Technical (75%)	16672-87-0	200	0	200	4229
34.	Fenoxaprop-P-ethyl	71283-80-2	200	0	200	3150 – 4000

35.	Fenpropathrin Technical (90% min)	64257-84-7	150	0	150	1000 (Skin & Eye)
36.	Fenpyroximate Technical	134098-61-6	25	0	25	245
37.	Fipronil Technical	120068-37-3	600	0	600	>2000 (Skin & Eye)
38.	Halosulfuron-methyl	100784-20-1	50	0	50	8866
39.	Hexaconazole Technical	79983-71-4	400	0	400	>2000 (Dermal)
40.	2-Hydroxy Propyloxymine Hydrochloride (HPOA HCl)	950595-72-9	100	0	100	>300 (Mouse)
41.	Imazethapyr Technical (97%)	81335-77-5	100	0	100	>5000
42.	Imibenconazole	86598-92-7	100	0	100	2800
43.	Imidacloprid Technical	138261-41-3	600	0	600	410
44.	Imiprothrin Technical	72963-72-5	15	0	15	2400
45.	Indoxacarb Technical	144171-61-9	100	0	100	268
46.	Isofetamid	875915-78-9	100	0	100	1302 – 6690
47.	Isoprothiolane Technical (96%)	50512-35-1	150	0	150	1190
48.	Lambda Cyhalothric Acid	72748-35-7	1200	0	1200	980
49.	Lambda Cyhalothrin Technical	91465-08-6	1000	0	1000	632 – 696 (Skin & Eye)
50.	M,N,O-1,2 dimethyl-N-nitroso urea	255708-80-8	600	0	600	>500
51.	Metalaxyl Technical (90%)	57837-19-1	300	0	300	566

52.	m-Phenoxybenzaldehyde	39515-51-0	2000	0	2000	1222
53.	Novaluron Technical	116714-46-6	100	0	100	>5000
54.	Paclobutrazol	76738-62-0	100	0	100	1300
55.	4-Chlorophenylacetic acid	1878-66-6	500	0	500	1350
56.	Penoxsulam	219714-96-2	100	0	100	>5000
57.	Picoxystrobin Technical	117428-22-5	100	0	100	>5000
58.	Prallethrin Technical	23031-36-9	100	0	100	640
59.	Pretilachlor Technical	51218-49-6	600	0	600	2200
60.	Probenazole	27605-76-1	1000	0	1000	2030
61.	Profenofos Technical	41198-08-7	400	0	400	358
62.	Propanil Technical	709-98-8	400	0	400	367
63.	Propargite Technical	2312-35-8	100	0	100	2800
64.	Propiconazole Technical	60207-90-1	300	0	300	1517
65.	Propineb Technical (80%)	12071-83-9	400	0	400	8500
66.	Propoxy Ethyl Chloride	42149-74-6	300	0	300	204
67.	Pymetrozine	123312-89-0	100	0	100	>5000
68.	Pyrazosulfuron-ethyl Technical (97%)	93697-74-6	50	0	50	>5000
69.	Pyrithiobac Sodium	123343-16-8	50	0	50	3300
70.	Quizalofop-p-ethyl	100646-51-3	200	0	200	1670

74.	Thiodicarb Technical (94%)	59669-26-0	150	0	150	120
75.	Thiophanate-methyl	23564-05-8	200	0	200	6640
76.	Tolfenpyrad	129558-76-5	50	0	50	260 – 386
77.	Topramezone	210631-68-8	50	0	50	>2000
78.	Transfluthrin Technical	118712-89-3	200	0	200	>5000
79.	Tricyclazole Technical	41814-78-2	300	0	300	250
80.	Trifluoromethanesulfinyl chloride	20621-29-8	300	0	300	250
81.	Zeta Cypermethrin	52315-07-8	500	0	500	>5000
82.	Zineb	12122-67-7	200	0	200	1850 – 8900
83.	Amisulbrom	348635-87-0	0	600	600	>5
84.	Fluxametamide	928783-29-3	0	300	300	1035
85.	Quinoxyfen	124495-18-7	0	200	200	>2000
86.	Pilot Products #	--	100	0	100	
	Total		**36300**	**1100**	**37400**	
1.	Pesticide Formulation (Solid)	--	6000	0	6000	--
2.	Pesticide Formulation (Liquid)	--	6000	0	6000	--
3.	Bio-Pesticides	--	0	55	55	
Pilot products shall be carried out for the betterment of products (Sr. No.1 to 85) only. Total pollution load from Pilot products shall be disposed to common incinerator. **NOTE: - Existing EC is not in operation. Plant is under construction stage**						

6. The PP reported that proposed land area of the project is 8.6019 ha. Industry Unit has already developed green belt in 15486 sq. meter (18%) area and remaining 12900 sq. meters (15%) will be developed within premises. The estimated project cost is ₹ 310.0 Crores. Total capital cost earmarked towards environmental pollution control measures is

₹ 39.23 Crore and Recurring cost is ₹ 47.58 Crores per annum Total direct employment will be of 1200 persons. Industry proposes to allocate ₹ 10 Crore towards CER which include ₹ 2.25 Cr for providing Medical Equipment at Saykha Primary Health Centre, ₹ 0.75 Cr for Greenbelt enhancement and maintenance [Medical Equipment at Saykha Primary Health Centre], and ₹ 7.0 Cr for Occupational health and safety / environmental responsibility for the activities proposed under EIA/EMP.

7. 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 Bhadra River is flowing at a distance of 1.9 km, Narmada Canal at a distance of 1.6 Km, Saykha Pond is at a distance of 1.9 Km, Bhuki River at a distance of 4.3 Km.PP reported that there is one Schedule-I species i.e. Peacock (*Indian peafowl*) and the conservation plan with budgetary provision of ₹ 2.02 Lakhs has been prepared and submitted to PCCF and Chief wildlife warden , Gandhi Nagar on 30.11.2021 and proposed to implement the plan in two years.

8. The ambient air quality monitoring was carried out at 10 locations during October, 2020 to December, 2020 and the baseline data indicates the ranges of concentrations as: PM_{10}(72.06 – 78.63 µg/m^3), $PM_{2.5}$ (41.41-47.41 µg/m^3), SO_2 (10.21- 14.38µg/m^3) and NO_2 (11.31-16.96µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.35µg/m^3, 0.22 µg/m^3 and 0.62µg/$m^3$with respect to PM_{10}, SOx and NOx respectively. The resultant concentrations are well within the National Ambient Air Quality Standards (NAAQS). The noise levels are within the standard norms prescribed by CPCB. The ground water quality in terms of various essential and desirable characteristics are found within the limits specified by IS 10500:2012.The porosity of soils varied from 48.31 % to 58.5 % and can be considered as moderate too good for air and water movement in the soil. The Water Holding Capacity varied from 60.19% to 88.21%. Bulk Density varied from 1.1 to 1.37 g/cm^3. The moisture content varied from 3.55 to 8.93%. pH varied from 6.76 to 7.81. Calcium varied from 692.1 to 1163.68 mg/kg. Chlorides varied from 24.16 to 635.65 mg/kg. Potassium was found 8.4 to 164.2 mg/kg. Organic matter varied from 1.43% to 4.24%.

9. Total water requirement is 3136 KLD of which fresh water requirement of 1283.7 KLD will be met from GIDC Supply. Effluent of 1435 KLD will be treated through ETP, Stripper, RO & MEE facility. **STREAM–I** High TDS & COD 776 KLD will be send to Solvent Stripper. Out of it, 760 KLD effluent along with RO Reject of Cooling 50 KLD will be treated in MEE. MEE Condensate 770 KLD will be sent to ETP of Primary, Secondary and tertiary Treatment facility. **STREAM–II** Low TDS Stream 569 KLD & 50 KLD of RO Reject of Boiler will be treated along with Steam – I of MEE Condensate 770 KLD. Total of 1389 KLD effluent will be treated in Primary, Secondary and tertiary Treatment facility. Out of which 8.25 MT/Day salt will be generated and it will be disposed to TSDF site. Treated effluent, 1380.75 KLD will be sent to RO. RO Permeate, 1008 KLD will be reused in Process, Boiler and Cooling and RO Reject,372.75 KLD will be sent to MEE. MEE Condensate, 354.3 KLD will be reused in Boiler and Cooling. **STREAM– III** 90 KLD Domestic Wastewater will be sent to In-house Sewage Treatment Plant and treated wastewater will be utilized in development of green belt. The plant will be based on Zero Liquid Discharge system**.**

10. The PP reported that Power requirement after expansion will be 6000 KVA including existing and will be met from Dakshin Gujarat Vij Company Limited (DGVCL). Existing unit has 4 Nos. of DG sets (2 No. of 750 KVA & 2 No. of 1500 KVA) capacity; DG sets are used as standby during power failure. Stack (height 11 m & 15 m) will be provided as per CPCB norms to the proposed DG sets. Existing unit has 3 No. of 18 TPH boilers and 4 No. of 4 Lakh Kcal/hr of Thermic Fluid Heater. Additionally, no fired boiler will be installed. Electrostatic Precipitator with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm3 for the boilers.

11. Details of Process emissions generation and its management:

STACK NO.	**STACK ATTACHED TO**	**NAME OF FUEL**	**QUANTITY OF FUEL**	**APCM**	**STACK HEIGHT FROM G.L (M)**	**PERMISSIBLE LIMIT**
1	Boiler – 1 (18 MT/hr)	Natural Gas OR HSD & Imported Coal	70000 SM^3/Day OR 80 KLD & 180 MT/DAY	ESP	30	PM - 150 mg/nm^3 SO2 - 100 PPM NO_X - 50 PPM
	Thermic Fluid Heater – 1 (4 Lakh Kcal/hr)					
	Thermic Fluid Heater – 2 (4 Lakh Kcal/hr)					
2	Boiler – 2 (18 MT/hr)			ESP	30	
	Boiler – 3 (18 MT/hr)					
	Thermic Fluid Heater – 3 (4 Lakh Kcal/hr)					
	Thermic Fluid Heater – 4 (4 Lakh Kcal/hr)					
3	DG Set - 1 (750 KVA) (Standby)	HSD	20 KLD	Adequate Stack Height	11	
4	DG Set - 2 (750 KVA) (Standby)				11	
5	DG Set - 3 (1500 KVA) (Standby)				15	
6	DG Set - 4 (1500 KVA) (Standby)				15	
NOTE: - No additional boiler will be installed after expansion. It will remain same as per existing EC.						

Process Gas Emission

STACK NO.	**STACK ATTACHED TO**	**STACK HEIGHT (M)**	**AIR POLLUTION CONTROL MEASURES (APCM)**	**PARAMETER**
1	Process Vent – 1	15	Primary Scrubber Secondary Scrubber Ventury Scrubber with caustic	HCl - 20 mg/nm^3 Cl_2 - 5 mg/nm^3 SO_2 - 40 mg/nm^3

2	Process Vent – 2	15	Primary water Scrubber Caustic Scrubber with Blower	HCl - 20 mg/nm^3 HBr - 5 mg/nm^3
3	Process Vent – 3	15	Primary Scrubber Secondary Scrubber Ventury Scrubber with caustic	HCl - 20 mg/nm^3 Cl_2 - 5 mg/nm^3 SO_2 - 40 mg/nm^3
4	Process Vent – 4	15	Primary Scrubber with Hypo Secondary Scrubber with caustic circulation	NO_X - 25 mg/nm^3
5	Process Vent – 5	15	Primary Scrubber Secondary Scrubber	NH_3 - 30 mg/nm^3
6	Process Vent – 6 / Stack attached to Dryer	15	Blower with Bag Filter	PM - 150 mg/nm^3
7	Process Vent – 7	15	Primary Scrubber Secondary Scrubber Ventury Scrubber with caustic	HCl - 20 mg/nm^3 Cl_2 - 5 mg/nm^3 SO_2 - 40 mg/nm^3
8	Process Vent – 8	15	Primary Scrubber Secondary Scrubber	NH_3 - 30 mg/nm^3
9	Process Vent – 9 / Stack attached to Dryer	15	Blower with Bag Filter	PM - 150 mg/nm^3
10	Process Vent – 10	15	Primary Scrubber Secondary Scrubber Ventury Scrubber with caustic	HCl - 20 mg/nm^3 Cl_2 - 5 mg/nm^3 SO_2 - 40 mg/nm^3
11	Process Vent – 11	15	Blower with Bag Filter	PM - 150 mg/nm^3
12	Process Vent – 12	15	Primary water Scrubber Caustic Scrubber with Blower	HCl - 20 mg/nm^3 Cl_2 - 5 mg/nm^3 SO_2 - 40 mg/nm^3
13	General Stack – 1	15	Primary Scrubber with Caustic Circulation	VOC
14	General Stack – 2	15	Primary Scrubber with Caustic Circulation	VOC
15	General Stack – 3	15	Primary & Secondary Scrubber Blower with Caustic circulation	NaCN
16	General Stack – 4	15	Primary Scrubber with Caustic Circulation	VOC
17	General Stack – 5	15	Primary Scrubber with Caustic Circulation	VOC
18	General Stack – 6	15	Primary Scrubber with Caustic Circulation	HCl - 20 mg/nm^3 Cl_2 - 5 mg/nm^3
19	General Stack – 7	15	Primary Scrubber with Caustic Circulation	VOC
20	General Stack – 8 / Stack attached to Dryer	15	Blower with Bag Filter	PM - 150 mg/nm^3
NOTE: - No additional process vent will be installed after expansion. It will remain same as per existing EC.				

12. Details of Solid waste/ Hazardous waste generation and its management: Categories of Hazardous/Solid Wastes shall be generated from this Unit.

S.No	TYPE/NAME OF		CATEGORY AND SCHEDULE	EXISTING	PROPOSED	TOTAL	MANAGEMENT OF HW

	HAZARDOUS WASTE	SPECIFIC SOURCE OF GENERATION (NAME OF THE ACTIVITY, PRODUCT ETC.)	AS PER HW RULES.	QUANTITY (MT/ANNUM)			
1	Used Oil	From Machinery	Schedule - I - 5.1	42	0	42	Collection, Storage, Reuse & Transportation and Disposal by selling it to registered re-processors/ reuse as lubricant within premises.
2	Discarded Containers, barrels, liners contaminated with hazardous waste/ chemicals	From Raw material containers / barrels	Schedule - I - 33.1	2280	0	2280	Collection, Storage, Decontamination, Transportation and Disposal to Approved vendor or reuse within the premises.
3	ETP Sludge and MEE Sludge	From ETP and MEE	Schedule - I - 35.3	15000	675	15675	Collection, Storage, Transportation and Disposal at TSDF Site
4	Process Waste / Waste Residue containing Pesticides	From process	Schedule - I - 29.1	3810	170	3980	Collection, Storage, Transportation and Disposal by co-processing / Incineration at ICHWMF Site*
5	Date expired and off-specification on residues	From process	Schedule – I – 29.3	75	0	75	Collection, Storage, Transportation and Disposal by Incineration at ICHWMF Site
6	Distillation residues from Contaminate organic solvents	From process	Schedule – I – 36.1	215	0	215	Collection, Storage, Transportation and Disposal by co-processing / Incineration at ICHWMF Site*
7	Used Catalyst	From process	Schedule – I – 29.5	2	0	2	Collection, Storage,

	(Spent Catalyst)						Transportation and Disposal by Sent back to supplier for regeneration OR selling to Actual end users. **
8	Ammonia Solution	From process	Schedule – II – A10	1894	0	1894	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
9	Potassium Chloride Solution	From process	Schedule - II - B10	7130	0	7130	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
10	Potassium Chloride Solids	From process	Schedule - II - B10	284	291	575	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
11	Aq. Alum (Aqueous Aluminum Chloride Solution)	From process	Schedule - II - B10	12679	0	12679	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
12	Sodium Bromide Solution	From process	Schedule - II - B10	4205	151	4356	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
13	Potassium Bromide Solution	From process	Schedule - II - B10	2297	0	2297	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
14	Potassium bromide (Solid)	From process	Schedule - II - B10	226	0	226	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
15	Hydro bromic Acid	From process	Schedule - II - B10	2552	0	2552	Collection, Storage, Transportation and Disposal by selling to Actual end users. **

16	Ammonium chloride (Solid)	From process	Schedule - II - B10	1463	0	1463	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
17	Cupric chloride	From process	Schedule - II - B10	24	0	24	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
18	Spent acid (Dilute sulfuric Acid)	From process	Schedule - II - B15	2090	0	2090	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
19	Hydrochloric Acid	From process	Schedule - II - B15	35803	0	35803	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
20	Ammonium Sulphate solution	From process	Schedule - II - B15	5877	0	5877	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
21	Sodium Sulfite Solution (20%-25%)	From process	Schedule - II - B15	12897	0	12897	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
22	Sodium Sulfite Solids	From process	Schedule - II - B15	5947	0	5947	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
23	Phosphoric acid	From process	Schedule - II - B15	126	0	126	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
24	Mix solvents	From process	Schedule - II - B15	423	0	423	Collection, Storage, Transportation and Disposal by selling to Actual end users. **

25	Acetic Acid	From process	Schedule - II - B15	28	0	28	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
26	Methane sulfinic acid	From process	Schedule - II - B15	15	0	15	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
27	Sulfur (Solid)	From process	Schedule - II - B37	27	0	27	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
28	Potassium methane sulfinate salt	From process	--	333	0	333	Collection, Storage, Transportation and Disposal by selling to Actual end users. **
29	Sodium benzoate	From process	--	1746	0	1746	Collection, Storage, Transportation and Disposal by selling to Actual end users. **

13. DETAILS OF NON-HAZARDOUS WASTE

S. NO.	TYPE/NAME OF WASTE	SPECIFIC SOURCE OF GENERATION	QUANTITY (MT/ANNUM)	MANAGEMENT OF HW
1.	Coal Ash	From Coal Combustion	5200	Collection, Storage, Transportation and Disposal by selling to Actual end users.

14. Total Carbon Footprint: The PP reported that the process of CCUS can be classified into three stages: capture, transport, and utilization and/or storage. Carbon Capture, Utilization, and Storage (CCUS), main intent to reduce carbon emission by either storing or reusing it so that captured carbon dioxide does not enter the atmosphere. The capture phase separates CO_2 from other gases during production and can be further broadly categorized based on the technological approach used. Although CCS typically refers to the capture of carbon dioxide directly at the source of emission before it can be released into the atmosphere, it may also include techniques such as the use of scrubbing towers and "planting trees" to remove carbon dioxide from the surrounding air.

15. **Action Plan of Carbon Footprint with the Time Period:** The PP reported that, the rate of carbon sequestering depends on growth parameters of the plants. Density of wood of plants plays a major role. Trees act as sinks for carbon dioxide by fixing carbon during photosynthesis and storing carbon as biomass (Carbon sequestration). The net long-term carbon dioxide source/sink dynamics of green belt area change through time as trees grow, get pruned, die and decay. Trees in green belt areas sequester and store carbon as they grow. Thus, green belt influence local climate, carbon cycles, energy use and climate change. In order to reduce the footprint, alternative source of energy should be explored like Solar Power. Conventional energy usage choices are the primary source of greenhouse gas emissions, simply selecting solar energy can cut down the carbon footprint of a household by half. The generated power can be used to feed your energy demand, perfectly replacing conventional energy needs with green energy.

16. 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.

17. The Unit has valid CTE vide letter no.: GPCB/ (PCB ID. – 73393). PP reported that Certified EC Compliance Report from MoEFCC, IRO, Bhopal has been obtained vide letter no. 5-44/2020/(Env)/211 dated 07th October, 2021.

18. The PP submitted that Public Hearing for the project has been exempted as the Project site is located at Saykha-I GIDC Industrial Estate which is covered within PCPIR region (Petroleum, Chemical & Petrochemical Investment Region) & PCPIR has obtained Environmental and CRZ clearance vide file no. 21-49/2010-IA-III dated 14th September, 2017. As informed by PP, no Litigation is pending against the proposal.

19. The PP submitted an undertaking that M/s Nissan Baharat Rasayan Pvt. Ltd. own this EIA report for Proposed Expansion of Agrochemicals from 36300 MTPA to 37400 MTPA in existing Agrochemicals and Agrochemicals Intermediate Manufacturing Unit located at Plot No. DP 53-55, Saykha - I, GIDC Industrial Estate, Saykha, Tal-Vagra, Dist-Bharuch, Gujarat, by M/s. Nissan Bharat Rasayan Pvt. Ltd.

20. **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 Action taken report in reference to the certified compliance report, the information provided by PP was deemed to be adequate. Being an expansion project, the EAC is of the view that remaining green belt of 15% (12,900 sq.m) to be developed before the next monsoon i.e. August 2022 and the PP committed for the same. The PP also committed for developing additional green belt within Sakhya GIDC in an area of 6022 sq.m.

The EAC discussed on energy consumption by the Project and suggested to provide Solar Photovoltaic Electricity Generation system in the Surrounding villages for reducing the carbon foot print by the project. The EAC suggested to find out suitable software and carry out further calculation on the life cycle analysis of their products. PP committed for the same and EAC found it to be satisfactory. The committee discussed on carbon foot prints and carbon sequestration study submitted by the PP and found it to be 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.

The Committee is also of the view that the environmental clearance to be granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments 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.

21. The EAC, after detailed deliberations, **recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms and conditions as per 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.

(i). 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.

(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). 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 13th June 2011 under the provisions of the Environment (Protection) Rules, 1986.

(iv). 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.

(v). 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.

(vi). 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.

(vii). 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.

(viii). 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.

(ix). 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.

(x). 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.

(xi). 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.

(xii). 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.

(xiii). Total fresh water requirement, sourced from GIDC water supply, shall not exceed 1283.7 KLD. Prior permission in this regard shall be obtained from the concerned regulatory authority and renewed from time to time.

(xiv). 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.

(xv). 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.

(xvi). The green belt of at least 5-10 m width shall be developed in at least 33% of the total project area, mainly along the plant periphery/ 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. Number of Trees has 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. As committed, the balance green belt of 15% (12,900 sq.m) to be developed before August 2022 and also an additional green belt of 6022 sq.m. to be developed within Sakhya GIDC.

(xvii). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA/ EMP report in letter and spirit.

(xviii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

(xix). 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.

(xx). As committed by the project proponent, shall install Solar Photovoltaic Electricity Generation systems in the surroundings villages.

(xxi). As committed by the project proponent, shall carry out the life cycle analysis of their products and submit a report in this regard to IRO, MoEF&CC.

Agenda No. 31.3

Expansion of Propylene Glycol Plant by 50000 MTPA located at S.F. No. 1/6, 1/8, 23 to 29, 30/3 & 31, Sathangadu Village, Manali Industrial Area, Manali, Chennai, Ambattur Taluk, Thiruvallur District, Tamil Nadu by Manali Petrochemicals Limited - Plant-II - Consideration of Environmental Clearance

[Proposal No. IA/TN/IND3/264526/2022; File No. J-11011/156/2008-IA-II(I)]

1. The proposal is for environmental clearance to the project for Expansion of Propylene Glycol Plant by 50000 MTPA located at S.F.No. 1/6, 1/8, 23 to 29, 30/3 & 31, **Sathangadu Village,** Manali Industrial Area, Manali, Chennai, Ambattur Taluk, Thiruvallur District, Tamil Nadu by Manali Petrochemicals Limited- Plant-II.

2. The project/activity is covered under Category 'A' of item 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) Notification2006 (as amended) and requires appraisal at Central Level by Expert Appraisal Committee (EAC) as the general condition is applicable for the project.

3. The ToR has been issued by the Ministry, vide letter No. IA-J-11011/156/2008-IA-II(I) dated 09/03/2022. Project site is located inside the Notified Industrial area as per Gazette dated 23.11.1966. The Ministry had issued EC earlier vide letter no. J-11011/156/2008-IA(II) dated 07.05.2008 to the existing project "Augmentation of Propylene Oxide, Propylene Glycol and Polyol Units" in favour of M/s. Manali Petrochemicals Limited – Plant – II. The CTO was granted by Tamil Nadu Pollution Control Board consent order no. 210813941933 dated 3.9.2021.

4. The PP vide proposal no. IA/TN/IND2/264526/2022 applied for grant of EC in Form-2 on 29.03.2022 and submitted EIA/EMP Report and other documents. Due to some shortcomings, the Project was referred back to PP and reply to the same was submitted by PP on 26.04.2022. The proposal is now placed before 31st EAC Meeting held on 11-12 May, 2022, wherein the Project Proponent and the accredited Consultant, Eco Tech Labs Pvt. Ltd. [Accreditation number NABET/EIA/2124/SA01407 Valid up to September, 15, 2023] made a detailed presentation on the salient features of the project and informed the following:

5. The details of products and their capacity are as under:

S. No.	Product Details	Category of the Product	CAS No.	Existing Quantity (MTPA)	Proposed Quantity (MTPA)	Total Quantity (MTPA)	Uses
1.	Propylene Glycol	Main Product	57-55-6	12000	50000	62000	Used in Pharmaceutical and Food industries
2.	Di-Propylene Glycol	By-Product	25265-71-8	1581	6588	8169	Used in manufacturing of cosmetics and perfumes
3.	Tri-Propylene Glycol	By-Product	24800-44-0	202	842	1044	Used in manufacturing of Polyester resins
4.	Propylene Oxide	Main Product	75-56-9	18000	0	18000	Used in manufacturing of Propylene Glycol and Polyol
5.	Di-Chloro Propane	By-Product	78-87-5	3600	0	3600	Used as degreaser and dry cleaning fluid
6.	Polyol*	Main Product	9082-00-2, 52434-08-9, 52625-13-5, 67800-94-6, 25791-96-2 & 9049-71-2	22705	0	22705	Used in the manufacturing of Poly Urethane Mattresses, insulation for refrigerators, furniture panels.
* Various grades are produced under the Product – Polyol. Hence CAS Nos. of different grades of Polyols are given above which are being produced.							

6. The PP reported that the existing land area is 17.632 ha and the proposed expansion will be carried out within this existing land area covering 0.374 ha. Industry has already developed greenbelt in an area of 71981 m^2 (i.e. around 40.82 % of total area).The estimated project cost is ₹ 125 crores excluding existing investment of ₹ 10.2 crores. Total capital cost earmarked towards pollution control measures is ₹14.11 crores and the Recurring cost (operation and maintenance) will be about ₹ 6.77 crores per annum. Total Employment will be 10 persons as direct after expansion & 60 persons as indirect during construction. Industry proposes to allocate ₹ 1.875 crores towards CER for Avenue Plantation/Plantation in community areas, Drinking water system, Sanitation, Health Centres, Solid waste management facilities.

7. 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. Buckingham Canal is flowing at a distance of 0.83 km in East direction.

8. The PP reported that the Ambient air quality monitoring was carried out at 8 locations during end of December 2021 to end of March 2022 and the baseline data indicates the ranges of concentrations as: PM_{10} (32 – 82 µg/m³), $PM_{2.5}$(15 – 38 µg/m³), SO_2 (5 – 33µg/m³) and NO_X (17 – 59 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.22 µg/m³, 2.5µg/m³ and 7.74 µg/m³ with respect to PM_{10}, SO_2 and NO_X respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). Noise levels at the plant site were reported to be within the noise limits prescribed for industrial area. The analysis results show that soil is basic in nature as pH value ranges from 6.72 to 8.15 with Electrical Conductivity of 0.37 to 1.96 µs/cm. The concentration of calcium, sodium and potassium has been found to be in good amount in the soil samples. Iron concentration is found to be very high and the soil quality of the area was found to be of low to medium fertility. The water is odourless. The value of pH in the project site clearly indicates that water is neutral in nature. The Turbidity Value observed is1.5, 5.5, 7 in GW 5, GW2-GW1, GW 6 respectively & BQL in other locations. The TDS value observed is 795 – 2802 mg/l. The value of Calcium observed: 80.1– 229 mg/L, magnesium observed -12.9-104 mg/L, Chloride-143-846 mg/L, Hardness 308-877 mg/L. The surface water quality is compared with the CPCB Water Quality Criteria against A, B, C, D & E class of water. From the test result, it is found that the water does not fit Class A (Drinking Water Source without conventional treatment but after disinfection). But they can be used for outdoor bathing as it meets the requirements shown for class B water.

9. The PP reported that the total water requirement is 3247 KLD for existing facility and additional requirement of 810 KLD for the proposed expansion will be met from Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) After the proposed expansion, the Effluent of 2556 m^3/day will be treated through Effluent Treatment Plant and disposed to sea after meeting the prescribed standards. CRZ clearance issued vide File No. 11-20/2009-IA.III dated 03.07.2009 and its amendment 11-20/2009- IA.III dated 03.06.2011 for a discharge approval limit of 8000 KLD.

10. The PP reported that Power requirement after expansion will be 4000 KVA including existing KVA and will be met from Tamil Nadu Generation and Distribution Corporation (TANGEDCO). Existing unit has DG sets of 1500 KVA capacity (2 Nos.) which are used as standby during power failure. Stack of adequate height for DG sets have been provided as per CPCB norms. Existing unit has 1 No. 21 TPH and 2 Nos. 10 TPH Low Sulphur Fuel Oil (LSFO) fired boiler. Additionally, 30 TPH R-LNG (Re-Gasified Liquefied Natural Gas) fired boiler will be installed by replacing 1 No. of 10 TPH boiler after expansion. All the existing and the proposed boilers will be fired with R-LNG after Expansion. Hence, the pollutant load will reduce drastically due to change over of fuel from LSFO to R-LNG and the existing stack is adequate to handle the generated emissions. No additional stacks are proposed.

11. <u>Deliberations by the EAC:</u>

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 EAC noted several deficiencies in the proposal (viz. Greenbelt budget and plantation schedule, validity of CTO, certified compliance report of EC of Existing Units is 1-year-old and prior to ToR, CER cost needs revision, details of carbon foot prints and carbon sequestration study, onsite and offsite emergency plan, surface water analysis especially BOD and COD, justification regarding the Court cases and the direction given by GPCB). The plantation plan was not as per the standard requirement. The consultant should have considered spacing of 2m x 2m and number of trees has to be increased.

The EAC also noted that since the project is located in a critically polluted area, the proposed expansion is subject to the current policy of Ministry and legal directions on consideration of projects in critically polluted areas.

The committee received representation to refrain from considering EC to the proposed expansion until environmental and health-based carrying capacity and comprehensive cumulative impact assessment of Manali industrial area is carried out. The committee recommended that this representation may be forwarded to the PP for their point wise response with justification & supporting documents.

12. The Committee deliberated the issues related to pollution and conservation of environment. The Committee, after detailed deliberations, **deferred** the proposal and desired for requisite information/inputs in respect of the following:

(i) The detailed greenbelt plan along with budgetary allocation for completion of greenbelt in one year. Action plan for high carbon sequestration species trees in the greenbelt needs to be submitted.

(ii) The surface water analysis, especially BOD and COD may be rechecked and submitted

(iii) The PP needs to submit the current status of CTO.

(iv) The PP needs to submit the latest certified compliance report of EC of existing units from IRO, MoEF&CC.

(v) The PP need to revise the CER cost addressed in the Public hearing.

(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 as this area comes under CPA having CEPI score 84.15.

(vii) The PP needs to submit the details of Onsite/Offsite emergency plan and mitigation measures to be proposed during implementation of the project.

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

(ix) The PP needs to submit the impact of the court case on the project and clarification regarding the direction issued by the GPCB.

(x) Details of court case, and its implication on the project, present status along with copy of petition and affidavits.

(xi) Point wise response to the representation with justification & supporting documents

Agenda No. 31.4

Proposed Expansion in Existing Pesticides Products with Addition of New Products, Expansion in Existing API Products and an Addition of Specialty Chemical Products within Existing Premises at Plot No: 2317, Panoli GIDC Estate, Ankleshwar, Dist.- Bharuch, Gujarat. by M/s. Greenkem Organics Pvt. Ltd.- Consideration of Environmental Clearance

[Proposal No. IA/GJ/IND3/265550/2018; File No. J-11011/287/2018-IA-II(I)]

1. The proposal is for consideration of the environmental clearance to the project for Proposed Expansion in Existing Pesticides Products with Addition of New Products, Expansion in Existing API Products and an Addition of Specialty Chemical Products within Existing Premises at Plot No: 2317, Panoli GIDC Estate, Ankleshwar, Dist.- Bharuch, Gujarat. by M/s. Greenkem Organics Pvt. Ltd.

2. The project/activity is covered under Category 5(b) [Pesticides Industry and Pesticide Specific Intermediates (Excluding Formulations)]& 5(f) [Synthetic Organic Chemical Industry] of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

3. The PP reported that the ToR has been issued by Ministry vide letter No. J-11011/287/2018-IA-II(I); dated 02/02/2022. Ministry had issued EC earlier vide letter no. J-1011/287/2018-IA- II(I); dated 03/07/2019 to the existing project of Pesticides and Active Pharmaceutical Ingredients (API) in favour of M/s. Greenkem Organics Pvt.Ltd.

4. The PP vide proposal number IA/GJ/IND3/265550/2018 applied for grant of EC in Form-2 on 2.4.2022 and submitted EIA/EMP Report. Due to some shortcomings the proposal was refereed back to PP on 20.4.2022 and reply to the same was submitted by PP on 23.4.2022. The proposal is now placed in 31st EAC meeting held on May, 11-12, 2022. wherein the Project Proponent and the Consultant M/s. Envi Cure Environmental Consultant & Engineers made a detailed presentation on the salient features of the project and informed that:

5. The details of products and capacity are as under:

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
A.	Pesticides and Specialty Chemicals					

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
Group – 1 – Herbicide (Technical AND/OR Its Intermediates)						
1.	(2 - Chloroethyl) Trimethylammonium Chloride (CDC) (T) AND/OR	999-81-5	100.00	1,000.00 (Either Individual or total)	1,000.00 (Either Individual or total)	
2.	Pendimethalin (T) AND/OR	40487-42-1	25.00			
3.	Glyphosate (T) AND/OR	1071-83-6	35.00			
4.	Pretilachlor (T) AND/OR	51218-49-6	35.00			
5.	Metribuzin (T) AND/OR	21087-64-9	10.00			
6.	Propanil (T) AND/OR	709-98-8	25.00			
7.	2,4 – Dichlorophenoxy Acetic acid (2,4 D Acid) (T) AND/OR	94-75-7	---			
8.	2,4 D-dimethyl amine salt (2,4 – D Amine) (T) AND/OR	2008-39-1	---			
9.	Acifluorfen (T) AND/OR	50594-66-6	---			
10.	Aclonifen (T) AND/OR	74070-46-5	---			
11.	Alphanaphthyl Acetic acid (T) AND/OR	86-87-3	---			
12.	Atrazine (T) AND/OR	1912-24-9	---			
13.	Azimsulfuron (T) AND/OR	120162-55-2	---			
14.	Bensulfuron Methyl (T) AND/OR	83055-99-6	---			
15.	Bispyribac Sodium (T) AND/OR	125401-92-5	---			
16.	Butachlor (T) AND/OR	23184-66-9	---			
17.	Carfentrazone Ethyl (T) AND/OR	128639-02-1	---			
18.	Chlomethoxyfen (T) AND/OR	32861-85-1	---			
19.	ChlorazifopPropargyl (T) AND/OR	72280-52-5	---			
20.	Chlorfluazuron (T) AND/OR	71422-67-8	---			
21.	Chlorimuron Ethyl (T) AND/OR	90982-32-4	---			
22.	Chlormequat Chloride (T) AND/OR	999-81-5	---			
23.	Clethodium (T) AND/OR	99129-21-2	---			
24.	ClodinafopPropargyl (T) AND/OR	105512-06-9	---			
25.	Clomazone (T) AND/OR	81777-89-1	---			
26.	CloquintocetMexyl (T) AND/OR	99607-70-2	---			
27.	Cyhalofop Butyl (T) AND/OR	122008-85-9	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
28.	Diclosulam (T) AND/OR	145701-21-9	---			
29.	Dicamba (T) AND/OR	1918-00-9	---			
30.	Diclofop Methyl (T) AND/OR	51338-27-3	---			
31.	Diflufenican (T) AND/OR	83164-33-4	---			
32.	Diuron (T) AND/OR	330-54-1	---			
33.	Ethofumesate (T) AND/OR	26225-79-6	---			
34.	Etoxazole (T) AND/OR	153233-91-1	---			
35.	Fenoxaprop P Ethyl (T) AND/OR	71283-80-2	---			
36.	Fluazifop P Butyl (T) AND/OR	79241-46-6	---			
37.	Flufenacet (T) AND/OR	54041-17-7	---			
38.	Fluoroglycofen (T) AND/OR	77501-60-1	---			
39.	Fluoroxypyr-Meptyl (T) AND/OR	81406-37-3	---			
40.	Fluthiacet Methyl (TIM) (T) AND/OR	117337-19-6	---			
41.	Fomesafen (T) AND/OR	72178-02-0	---			
42.	Forchlorfenuron (T) AND/OR	68157-60-8	---			
43.	Glufosinate Ammonium (T) AND/OR	77182-82-2	---			
44.	Halosafen (T) AND/OR	77227-69-1	---			
45.	HaloxyfopEthoxy Ethyl (Etotyl) (T) AND/OR	87237-48-7	---			
46.	Haloxyfop Methyl (T) AND/OR	69806-40-2	---			
47.	Hexythiazox (T) AND/OR	78587-05-0	---			
48.	Imazamox (T) AND/OR	114311-32-9	---			
49.	Imazethapyr (T) AND/OR	81335-77-5	---			
50.	Iodosulfuron Methyl Sodium (T) AND/OR	144550-36-7	---			
51.	Lactofen (T) AND/OR	77501-63-4	---			
52.	Mandipropamid (T) AND/OR	374726-62-2	---			
53.	Mesosulfuron (T) AND/OR	208465-21-8	---			
54.	Mesotrione (T) AND/OR	104206-82-8	---			
55.	Metamifop (T) AND/OR	256412-89-2	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
56.	Metamitron (T) AND/OR	41394-05-2	---			
57.	Metsufluron Methyl (T) AND/OR	74223-64-6	---			
58.	Napropamide (T) AND/OR	15299-99-7	---			
59.	Oxadiargyl (T) AND/OR	39807-15-3	---			
60.	Oxyfluorfen (T) AND/OR	42874-03-3	---			
61.	Paraquatdichloride (T) AND/OR	1910-42-5	---			
62.	Penoxsulam (T) AND/OR	219714-96-2	---			
63.	Picloram (T) AND/OR	01-02-1918	---			
64.	Picolinafen (T) AND/OR	137641-05-5	---			
65.	Pinoxaden (T) AND/OR	243973-20-8	---			
66.	Propaquizafop (T) AND/OR	111479-05-1	---			
67.	Pyrazosulfuron Ethyl (T) AND/OR	93697-74-6	---			
68.	Pyrithiobac Sodium (T) AND/OR	123343-16-8	---			
69.	Quizalofop Ethyl (T) AND/OR	76578-14-8	---			
70.	Quizalofop-P-Tefuryl (T) AND/OR	200509-41-7	---			
71.	Rimsulfuron (T) AND/OR	122931-48-0	---			
72.	Saflufenacil (T) AND/OR	372137-35-4	---			
73.	S-metolachlor (T) AND/OR	87392-12-9	---			
74.	Sodium 2,4-dichlorophenoxyacetate (2,4 D Sodium salt) (T) AND/OR	2702-72-9	---			
75.	Sulfentrazone (T) AND/OR	122836-35-5	---			
76.	Sulfosulfuron (T) AND/OR	141776-32-1	---			
77.	Tembotrione (T) AND/OR	335104-84-2	---			
78.	Terbutryn (T) AND/OR	886-50-0	---			
79.	Topramezone (T) AND/OR	210631-68-8	---			
80.	Triclopyr-Butotyl (T) AND/OR	64700-56-7	---			
		Total (Group - 1)	230.00	1,000.00 (Either Individual or total)	1,000.00 (Either Individual or total)	
Group – 2 – Insecticide (Technical AND/OR Its Intermediates)						

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
81.	Thiamethoxam (T) AND/OR	153719-23-4	22.50	750.00 (Either Individual or total)	750.00 (Either Individual or total)	
82.	lmdacloprid(T) AND/OR	138261-41-3	10.00			
83.	Profenofos (T) AND/OR	41198-08-7	15.00			
84.	Diafenthurion (T) AND/OR	80060-09-9	25.00			
85.	Bifentthrin (T) AND/OR	82657-04-3	5.00			
86.	Chloropyrifos Ethyl & Methyl (T) AND/OR	2921-88-2	10.00			
87.	2-Chloro 5-Chloromethyl Pyridine (CCMP) (T) AND/OR	70258-18-3	---			
88.	Abamectin (T) AND/OR	71751-41-2	---			
89.	Acephate (T) AND/OR	30560-19-1	---			
90.	Acetamiprid (T) AND/OR	135410-20-7	---			
91.	Acrinathrin (T) AND/OR	101007-06-1	---			
92.	Allethrin (T) AND/OR	584-79-2	---			
93.	Alphacypermethrin (T) AND/OR	67375-30-8	---			
94.	Buprofezin (T) AND/OR	69327-76-0	---			
95.	Cartap hydrochloride (T) AND/OR	15263-52-2	---			
96.	Chlorantraniliprole(T) AND/OR	500008-45-7	---			
97.	Clothianidin (T) AND/OR	210880-92-5	---			
98.	Cyantraniliprole (T) AND/OR	736994-63-1	---			
99.	Cycloprothrin (T) AND/OR	63935-38-6	---			
100.	Cyclaniliprole (T) AND/OR	1031756-98-5	---			
101.	Beta Cyfluthrin (T) AND/OR	68359-37-5	---			
102.	Cypermethic Acid Chloride (CMAC) (T) AND/OR	52314-67-7	---			
103.	Cypermethrin (T) AND/OR	52315-07-8	---			
104.	Cyphenothrin (T) & Its [1R-Trans-isomer] (T) AND/OR	39515-40-7	---			
105.	Deltacypermethrin (Deltamethrin) (T) AND/OR	52918-63-5	---			
106.	Diflubenzuron (T) AND/OR	35367-38-5				
107.	Dimefluthrin (T) AND/OR	271241-14-6				

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
108.	Dinotefuran (T) AND/OR	165252-70-0				
109.	D-trans Allethrin (T) AND/OR	28057-48-9	---			
110.	Emamectin benzoate (T) AND/OR	155569-91-8	---			
111.	Ethion (T) AND/OR	563-12-2	---			
112.	Ethephon (T) AND/OR	16672-87-0	---			
113.	Ethiprole (T) AND/OR	181587-01-9	---			
114.	Etofenprox (T) AND/OR	80844-07-1	---			
115.	Fenobucarb (BPMC) (T) AND/OR	3766-81-2	---			
116.	Fenoxycarb (T) AND/OR	72490-01-8	---			
117.	Fenpropathrin (T) AND/OR	39515-41-8	---			
118.	Fenpyroximate (T) AND/OR	134098-61-6	---			
119.	Fenvalerate (T) AND/OR	51630-58-1	---			
120.	Fipronil (T) AND/OR	120068-37-3	---			
121.	Flonicamid (T) AND/OR	158062-67-0	---			
122.	Flubendiamide (T) AND/OR	272451-65-7	---			
123.	Flucythrinate (T) AND/OR	70124-77-5	---			
124.	Flumethrin (T) AND/OR	69770-45-2	---			
125.	Indoxacarb (T) AND/OR	173584-44-6	---			
126.	Imiprothrin (T) AND/OR	72963-72-5	---			
127.	Lambda Cyhalothric Acid Chloride (TFP Acid Chloride) (T) AND/OR	72748-35-7	---			
128.	Lambda Cyhalothrin (T) AND/OR	76703-65-6	---			
129.	Lufenuron (T) AND/OR	103055-07-8				
130.	Meta PhenoxyBenzal Alcohol (MPBAL) (T) AND/OR	13826-35-2	---			
131.	Meta Phenoxy Benzaldehyde (MPBAD) (T) AND/OR	3951551-0	---			
132.	Metofluthrin (T) AND/OR	240494-70-6	---			
133.	Mepiquat Chloride (T) AND/OR	24307-26-4	---			
134.	Monocrotophos (T) AND/OR	6923-22-4	---			
135.	Novaluron (T) AND/OR	116714-46-6	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
136.	Permethrin (T) AND/OR	52645-53-1	---			
137.	Prallethin(T) AND/OR	23031-36-9	---			
138.	Profenophos (T) AND/OR	41198-08-7	---			
139.	Propergite (T) AND/OR	2312-35-8	---			
140.	Propoxur (T) AND/OR	114-26-1	---			
141.	Pymetrozin (T) AND/OR	123312-89-0	---			
142.	Pyridaben(T) AND/OR	96489-71-3	---			
143.	Pyriproxifen (T) AND/OR	95737-68-1	---			
144.	Spirodiclofen (T) AND/OR	148477-71-8	---			
145.	Spiromesifen (T) AND/OR	283594-90-1	---			
146.	Spirotetramat (T) AND/OR	203313-25-1	---			
147.	Spinosad (T) AND/OR	168316-95-8	---			
148.	Sulfoxaflor (T) AND/OR	946578-00-3	---			
149.	S-bioallethrin (T) AND/OR	260359-57-7	---			
150.	Tefluthrin (T) AND/OR	79538-32-2	---			
151.	Temephos (T) AND/OR	3383-96-8	---			
152.	Tetraniliprole (T) AND/OR	1229654-66-3	---			
153.	Thiacloprid (T) AND/OR	111988-49-9	---			
154.	Thidicarb (T) AND/OR	59669-26-0	---			
155.	Thiocyclam Hydrogen Oxalate (T) AND/OR	31895-22-4	---			
156.	Tolefenpyrad (T) AND/OR	129558-76-5	---			
157.	Transfluthrin (T) AND/OR	118712-89-3	---			
Total (Group - 2)			87.50	750.00 (Either Individual or total)	750.00 (Either Individual or total)	
Group – 3 – Fungicide (Technical AND/OR Its Intermediates)						
158.	1,2,4 Triazole (T) AND/OR	288-88-0	---			
159.	3-Methyl 1,2,4 Triazole (T) AND/OR	7170-01-6	---	750.00 (Either Individual or total)	750.00 (Either Individual or total)	
160.	Azaconazole (T) AND/OR	60207-31-0	---			
161.	AzoxyStorbin (T) AND/OR	131860-33-8	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
162.	Benalaxyl (T) AND/OR	98243-83-5	---			
163.	Boscalid (T) AND/OR	188425-85-6	---			
164.	Bromuconazole (T) AND/OR	116255-48-2	---			
165.	Captan (T) AND/OR	133-06-2	---			
166.	Carbendazim (T) AND/OR	10605-21-7	---			
167.	Carboxin (T) AND/OR	5234-68-4	---			
168.	Chlorothalonil (T) AND/OR	1897-45-6	---			
169.	Copper Oxychloride (T) AND/OR	1332-40-7	---			
170.	Copper Sulphate (T) AND/OR	7758-99-8	---			
171.	Cymoxanil (T) AND/OR	57966-95-7	---			
172.	Cyproconazole (T) AND/OR	94361-06-5	---			
173.	Difenoconazole (T) AND/OR	119446-68-3	---			
174.	Dimoxystorbin (T) AND/OR	149961-52-4	---			
175.	Dodine (T) AND/OR	2439-10-3	---			
176.	Epoxiconazole (T) AND/OR	135319-73-2	---			
177.	Etazonazole (T) AND/OR	60207-93-4	---			
178.	Famoxadone (T) AND/OR	131807-57-3	---			
179.	Fenbuconazole (T) AND/OR	114369-43-6	---			
180.	Fenoxanil (T) AND/OR	115852-48-7	---			
181.	Fenpropimorph (T) AND/OR	67564-91-4	---			
182.	Fluazinam (T) AND/OR	79622-59-6	---			
183.	FlufenoxyStrobin (T) AND/OR	918162-02-4	---			
184.	Fluopicolide (T) AND/OR	239110-15-7	---			
185.	Fluopyram (T) AND/OR	658066-35-4	---			
186.	Fluoxastrobin (T) AND/OR	361377-29-9	---			
187.	Fluquinconazole (T) AND/OR	136426-54-5	---			
188.	Flusilazole (T) AND/OR	85509-19-9	---			
189.	Fluxapyroxad (T) AND/OR	---	---			
190.	Hexaconazole (T) AND/OR	79983-71-4	---			
191.	Imazalil (T) AND/OR	35554-44-0	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
192.	Ipconazole (T) AND/OR	125225-28-7	---			
193.	Iprobenfos (T) AND/OR	26087-47-8	---			
194.	Isoprothiolane (T) AND/OR	50512-35-1	---			
195.	Kresoxim Methyl (T) AND/OR	143390-89-0	---			
196.	Mancozeb (T) AND/OR	8018-01-7	---			
197.	Metalaxyl (T) AND/OR	57837-19-1	---			
198.	Metconazole (T) AND/OR	125116-23-6	---			
199.	Metiram (T) AND/OR	9006-42-2	---			
200.	Metominostrobin (T) AND/OR	133408-51-2	---			
201.	Metalaxyl-M (T) AND/OR	70630-17-0	---			
202.	Myclobutanil (T) AND/OR	88671-89-0	---			
203.	Orysastrobin (T) AND/OR	248593-16-0	---			
204.	Paclobutrazole (T) AND/OR	76738-62-0	---			
205.	Pyraclostorobin (T) AND/OR	175013-18-0	---			
206.	Penconazole (T) AND/OR	66246-88-6	---			
207.	Pencycuron (T) AND/OR	66063-05-6	---			
208.	Picoxystrobin (T) AND/OR	117428-22-5	---			
209.	Propiconazole (T) AND/OR	60207-90-1	---			
210.	Propineb (T) AND/OR	12071-83-9	---			
211.	Prothioconazole (T) AND/OR	178928-70-6	---			
212.	Pyroxystrobin (T) AND/OR	131860-33-8				
213.	Quinoxyfen (T) AND/OR	124495-18-7	---			
214.	Tebuconazole (T) AND/OR	107534-96-3	---			
215.	Tetraconazole (T) AND/OR	112281-77-3	---			
216.	Thifluzamide (T) AND/OR	130000-40-7	---			
217.	Thiophanate Methyl (T) AND/OR	23564-05-8	---			
218.	Thiram (T) AND/OR	137-26-8	---			
219.	Triadimefon (T) AND/OR	43121-43-3	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
220.	Triadimenol (T) AND/OR	55219-65-3	---			
221.	Triclopyricarb (T) AND/OR	902760-40-1	---			
222.	Tricyclazole (T) AND/OR	41814-78-2	---			
223.	Trifloxystrobin (T) AND/OR	141517-21-7	---			
224.	Triticonazole (T) AND/OR	131983-72-7	---			
225.	Zineb (T) AND/OR	12122-67-7	---			
226.	Ziram (T) AND/OR	137-30-4	---			
Total (Group – 3)			---	750.00 (Either Individual or total)	750.00 (Either Individual or total)	
Group – 4 – Rodenticides (Technical AND/OR Its Intermediates)						
227.	Aluminum Phosphide (T) AND/OR	20859-73-8	---			
228.	Bromadiolone (T) AND/OR	28772-56-7	---	100.00 (Either Individual or total)	100.00 (Either Individual or total)	
229.	Magnesium Phosphide (T) AND/OR	12057-74-8	---			
230.	Zinc Phosphide (T) AND/OR	1314-84-7	---			
Total (Group – 4)			---	100.00 (Either Individual or total)	100.00 (Either Individual or total)	
Group – 5 – Amino Diphenyl Ether / Phenoxy Compounds						
231.	2-Amino-2', 4'-Dichloro Diphenyl Ether (Y) AND/OR	121-27-7	---			
232.	2-Amino - 2'- Methyl Diphenyl Ether (Red Ether) AND/OR	3840-18-4	---			
233.	Amino Resorcine Di Ortho Cresyl Ether AND/OR	93-67-4	---			
234.	2- Amino Di Phenyl Ether (O-Amino Di Phenyl Ether) AND/OR	2688-84-8	---			
235.	4- Amino Di Phenyl Ether AND/OR	139-59-3	---			
236.	4-Amino 4'- Methyl Di Phenyl Ether (4-PP) AND/OR	41295-20-9	---	100.00 (Either Individual or total)	100.00 (Either Individual or total)	
237.	2- Amino 2', 4, 4'- Tri Chloro Di Phenyl Ether (Benzinamide, 5-chloro-2-2 (2,4-Dichloro Phenoxy) / TADE) AND/OR	3380-34-5	---			
238.	4- Amino 2', 4' Di Chloro Di Phenyl Ether (OD Amino) AND/OR	---	---			
239.	4, 4'- Di Amino Di Phenyl Ether AND/OR	101-80-4	---			
240.	3, 4' - Di Amino Di Phenyl Ether AND/OR	2657-87-6	---			
241.	2- Amino-4-Chloro Di Phenyl Ether (PHD Ether) AND/OR	2770-11-8	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
242.	4-Amino-2, 4'-Di Chloro Di Phenyl Ether (GE/Aminophene) AND/OR	---	---			
243.	2- Amino - 4' -Chloro Di Phenyl Ether AND/OR	---	---			
244.	2- Amino -4'-Chloro-4 - Trifluoromethyl Di Phenyl Ether (ACTM) AND/OR	349-20-2	---			
245.	4- Amino - 4' -Chloro Di Phenyl Ether (PPNA) AND/OR	---	---			
246.	1, 2-Bis (2- Amino Phenoxy) Ethane AND/OR	52411-34-4	---			
247.	1,2-Bis (4-Amino Phenoxy) Ethane AND/OR	---	---			
248.	4-Amino-4'-Nitro Diphenyl Ether AND/OR	6149-33-3	---			
249.	2-Amino-2',4 -Dichloro Diphenyl Ether AND/OR	---	---			
250.	2-Amino-4,4'-Dichloro Diphenyl Ether (PD Amino) AND/OR	121-27-7	---			
251.	2-(4-Nitro Phenoxy) Ethanol AND/OR	16365-27-8	---			
252.	1,4-Bis (4-Amino Phenoxy) Benzene AND/OR	3491-12-1	---			
253.	1,3 – Bis (4-Amino Phenoxy) Benzene AND/OR	2479-46-1	---			
254.	1,3-Bis (3-Amino Phenoxy) Benzene AND/OR	10526-07-5	---			
255.	1,2-Bis (2-Methyl Phenoxy) Ethane AND/OR	---	---			
256.	1,2-Bis (3-Methyl Phenoxy) Ethane AND/OR	54914-85-1	---			
257.	1,2-Bis (4-Methyl Phenoxy) Ethane AND/OR	---	---			
258.	5-Amino-2,2',3-Trichloro-4-Nitro-Diphenyl Ether AND/OR	---	---			
259.	2-Amino-4,4'-Dichloro Diphenyl Ether-2'-Sulfonic Acid/Sodium Salt AND/OR	42293-27-6	---			
260.	4,4'-Dihydroxy Diphenyl Ether AND/OR	1965-09-9	---			
261.	2-Hydroxy-4,4'-Dichloro Diphenyl Ether AND/OR	3380-30-1	---			
262.	2- Hydroxy- 2,4,4'- Trichloro Diphenyl Ether AND/OR	9012-63-9	---			
263.	4- Hydroxy- 2',4'- Dichloro Diphenyl Ether AND/OR	3380-30-1	---			
264.	2- Chloro- 4- (4- Chlorophenoxy) Acetophenone / 4- Acetyl- 3,4'- Dichloro Diphenyl Ether AND/OR	119851-28-4	---			
265.	2- Acetyl- 2',4,4'- Trichloro Diphenyl Ether AND/OR	---	---			
266.	4,4' Dimethyl Diphenyl Ether AND/OR	---	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
267.	4,4'- Dicarboxy Diphenyl Ether AND/OR	2215-89-6	---			
268.	Diphenyl Ether AND/OR	101-84-8	---			
269.	4- Hydroxy Diphenyl Ether / 4-Phenoxy Phenol AND/OR	831-82-3	---			
270.	5 Chloro- 6- (2,3 DichloroPhenoxy)- 2- methylthio- 1H Benzimidazole /TriclabendazoleAND/OR	68786-66-3	---			
271.	3,4'- Dimethyl Diphenyl Ether AND/OR	6842-62-2	---			
272.	3- Phenoxy Toluene AND/OR	3586-14-9	---			
	Total (Group – 5)		---	100.00 (Either Individual or total)	100.00 (Either Individual or total)	
	Group – 6 – Specialty Phenols/ Specialty Chloro Phenol					
273.	2, 3- Dichloro Phenol AND/OR	576-24-9	---			
274.	2, 5- Dichloro Phenol AND/OR	583-78-8	---			
275.	3, 4- Dichloro Phenol AND/OR	95-77-2	---			
276.	3, 5- Dichloro Phenol AND/OR	591-35-5	---			
277.	3- Methyl Phenol (M- Cresol) AND/OR	108-39-4	---			
278.	3- Chloro Phenol AND/OR	108-43-0	---			
279.	3- Nitro Phenol AND/OR	554-84-7	---			
280.	4- (2- Methoxy Ethyl) phenol AND/OR	56718-71-9	---			
281.	Anisole AND/OR	100-66-3	---			
282.	2,3 Dichloro Anisole AND/OR	1984-59-4	---			
283.	2,5 Dichloro Anisole AND/OR	1984-58-3	---			
284.	4- Bromo- 2- Chloro Phenol AND/OR	3964-56-5	---			
285.	4- Bromo 2,5 Dichloro Phenol AND/OR	583-78-8	---			
286.	4- Fluoro Phenol AND/OR	371-41-5	---	200.00 (Either Individual or total)	200.00 (Either Individual or total)	
287.	2- Fluoro Phenol AND/OR	367-12-4	---			
288.	O- Benzyl- p- Chloro Phenol AND/OR	120-32-1	---			
289.	O- Cyano Phenol AND/OR	611-20-1	---			
290.	P- Chloro- m- Cresol AND/OR	59-50-7	---			
291.	P- Chloro- meta XylenolAND/OR	88-04-0	---			
292.	Dichloro- meta –XylenolAND/OR	133-53-9	---			
293.	DichloropheneAND/OR	97-23-4	---			
294.	BromochloropheneAND/OR	15435-29-7	---			
295.	5 - Chloro- 2- Amino Phenol AND/OR	28443-50-7	---			
296.	4- Chloro- 2- Amino Phenol AND/OR	95-85-2	---			
297.	4,6- Dichloro- 2- Amino Phenol AND/OR	527-62-8	---			
298.	3,4,5 Tri Methoxy Toluene AND/OR	6443-69-2	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
299.	4- Bromo Anisole AND/OR	104-92-7	---			
	Total (Group – 6)		---	200.00 (Either Individual or total)	200.00 (Either Individual or total)	
	Group – 7 – Amino Benzoic Esters					
300.	3- Amino- 4- Methyl Benzoic Acid Methyl Ester AND/OR	18595-18-1	---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
301.	3- Amino 4- Methyl Benzoic Acid Isopropyl Ester (AMBI) AND/OR	21447-47-2	---			
302.	3- Amino 4- Methyl Benzoic Acid (2'- Chloro Ethyl Ester) (AMBC) AND/OR	2840-28-0	---			
303.	5- Amino- 2- Methyl Benzene Sulphonic Acid Phenyl Ester AND/OR	118-88-7	---			
304.	Benzene Sulphonic Acid 3- Amino Phenyl Ester AND/OR	98-11-3	---			
305.	2- Cyano- 3,4,5,6- Tetrachloro Benzoic Acid Methyl Ester AND/OR	---	---			
306.	Benzene Sulphonic Acid 2- Methyl- 5- Nitrophenyl Ester AND/OR	82576-75-8	---			
307.	Bisphenol - A (Amino Benzene Sulfonate) AND/OR	80-05-7	---			
308.	3,5 Di Amino 4- Chloro Benzoic Acid Iso Butyl Ester AND/OR	32961-44-7	---			
	Total (Group – 7)		---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
	Group - 8 – Amino Compounds / Hydrogenation Compounds					
309.	3- Amino- 4- Chloro Benzoic Acid AND/OR	2840-28-0	---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
310.	3- Amino- 4- Methyl Benzoic Acid AND/OR	2458-12-0	---			
311.	3- Amino- 4- Chloro BenzotrifluorideAND/OR	121-50-6	---			
312.	3- Amino BenzotrifluorideAND/OR	98-16-8	---			
313.	2- Chloro- 1,4- Phenylene Diamine (2,5 DCPPD) AND/OR	20103-09-7	---			
314.	2, 5- Dichloro- 1, 4- Phenylene Diamine AND/OR	20103-09-7	---			
315.	2- Chloro- 5- Methyl- 1, 4- Phenylene Diamine AND/OR	5307-03-9	---			
316.	2, 5- Dimethyl – 1, 4–Phenylene Diamine AND/OR	6393-01-7	---			
317.	3,4- Diamino Toluene AND/OR	496-72-0	---			
318.	2,3- Dichloro Aniline AND/OR	608-27-5	---			
319.	2, 5- Dichloro Aniline AND/OR	95-82-9	---			
320.	3, 4- Dichloro Aniline AND/OR	95-76-1	---			
321.	3, 5- Dichloro Aniline AND/OR	626-43-7	---			
322.	3- Iso Propoxy Aniline AND/OR	41406-00-2	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
323.	5- Amino Benzimidazole–2- One AND/OR	2818-66-8	---			
324.	6- Methyl- 5- Amino Benzimidazolone AND/OR	67014-36-2	---			
325.	2,4,5 Tri Chloro Aniline AND/OR	636-30-6	---			
326.	Ortho Toluidine AND/OR	95-53-4	---			
327.	Meta Toluidine AND/OR	108-44-1	---			
328.	Para Toluidine AND/OR	106-49-0	---			
329.	Aniline AND/OR	62-53-3	---			
Total (Group – 8)			---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
Group – 9 – Acetylated Compounds						
330.	2, 4- Dichloro Acetophenone AND/OR	2234-16-4	---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
331.	2, 5- Dichloro Acetophenone AND/OR	2476-37-1	---			
332.	4 – FluoroAcetophenoneAND/OR	403-42-9	---			
333.	2,4- Dichloro- 5- Fluoro AcetophenoneAND/OR	704-10-9	---			
334.	4- Fluoro Phenacyl Chloride AND/OR	532-27-4	---			
335.	2,4- Dichloro Phenacyl Chloride AND/OR	4252-78-2	---			
336.	2,4- Dichlorobuterophenone AND/OR	66353-47-7	---			
Total (Group – 9)			---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
Group – 10 – Nitro Compounds						
337.	6 Nitro- 3,4- Dichloro Aniline AND/OR	6331-96-0	---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
338.	4 Nitro- 2,5- Dichloro Aniline AND/OR	6627-34-5	---			
339.	2 Nitro- 4- Methyl Aniline AND/OR	89-62-3	---			
340.	4 Nitro- 2,5- Dimethyl Aniline AND/OR	6972-71-0	---			
341.	4- Nitro- 5- Chloro- 2- Methyl Aniline AND/OR	95-79-4	---			
342.	4 - Nitro- 2,5- Dichloro Phenol AND/OR	583-78-8	---			
343.	4 - Nitro- 2,3- Dichloro PhenolAND/OR	576-24-9	---			
344.	6 - Nitro- 2,4- Dichloro Phenol AND/OR	609-89-2	---			
345.	2 - Nitro- 4- Chloro- Phenol AND/OR	89-64-5	---			
346.	5- Nitro Salicylic Acid AND/OR	96-97-9	---			
347.	3- Nitro - Para Toluic Acid AND/OR	96-98-0	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
348.	3- Nitro- 4- Chloro- Benzotrifluoride AND/OR	121-17-5	---			
349.	Nitro Benzene AND/OR	98-95-3	---			
350.	2,5 - Dichloro Nitro Benzene AND/OR	89-61-2	---			
351.	2,3 - Dichloro Nitro Benzene AND/OR	3209-22-1	---			
352.	3,4 - Dichloro Nitro Benzene AND/OR	99-54-7	---			
353.	2- Nitro Toluene AND/OR	88-72-2	---			
354.	3 - Nitro Toluene AND/OR	99-08-1	---			
355.	4 - Nitro Toluene AND/OR	99-99-0	---			
356.	1,3 - Dinitro Benzene AND/OR	99-65-0	---			
357.	3,5 - Dinitro Benzoic Acid AND/OR	99-34-3	---			
358.	4- Chloro – 3,5 – Dinitro Benzoic Acid AND/OR	118-97-8	---			
Total (Group – 10)			---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
Group – 11 – Triclosan / Diclosan /Amino Hydroxy Ether /HP 100						
359..	HDC HP 100 (Tinosan HP- 100) (Formulated 2- Hydroxy- 4- 4 Dichloro Di phenyl Ether) AND/OR	3380-30-1	---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
360.	Resorcinol Di (Beta - Hydroxy Ethyl) Ether AND/OR	---	---			
361.	Phenofen AND/OR	---	---			
Total (Group – 11)			---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
Group – 12 – Chlorinated Compounds / Carbonyl Chlorides						
362.	Chloro Benzene AND/OR	108-90-7	---	200.00 (Either Individual or total)	200.00 (Either Individual or total)	
363.	Ortho Dichloro Benzene & Para Dichloro Benzene AND/OR	106-46-7	---			
364.	1,3 Di Chloro Benzene AND/OR	541-73-1	---			
365.	Ortho Chloro Toluene & Para Chloro Toluene AND/OR	95-49-8	---			
366.	2,4 – Dichloro Toluene AND/OR	95-73-8	---			
367.	Ortho Chloro Phenol & Para Chloro Phenol AND/OR	95-57-8	---			
368.	2,4 Dichloro Phenol AND/OR	120-83-2	---			
369.	2,6 Di Chloro Phenol AND/OR	87-65-0	---			
370.	N- Valeroyl Chloride AND/OR	638-29-9	---			
371.	4- Nitro Benzoyl Chloride AND/OR	122-04-3	---			
372.	3- Nitro Benzoyl Chloride AND/OR	121-90-4	---			
373.	4- Chloro Benzoyl Chloride AND/OR	122-01-0	---			
374.	4- Methyl Benzoyl Chloride AND/OR	874-60-2	---			
375.	2,4 Di Chloro Benzoyl Chloride AND/OR	89-75-8	---			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
376.	2- Methoxy- 5- Bromo- 6- Methyl Benzoyl Chloride AND/OR	93349-99-6	---			
377.	Terephthaloyl Chloride AND/OR	100-20-9	---			
378.	4- Chloro Butyryl Chloride AND/OR	4635-59-0	---			
379.	Pivaloyl Chloride AND/OR	3282-30-2	---			
380.	Propargyl Chloride AND/OR	624-65-7	---			
Total (Group – 12)			---	200.00 (Either Individual or total)	200.00 (Either Individual or total)	
Group – 13 – Oxidation Compounds						
381.	Para Nitro Benzoic Acid AND/OR	62-23-7	---			
382.	Ortho Chloro Benzoic Acid AND/OR	118-91-2	---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
383.	Para Chloro Benzoic Acid AND/OR	74-11-3	---			
384.	2,4 Dichloro Benzoic Acid AND/OR	50-84-0	---			
385.	Para Toluic Acid AND/OR	99-94-5	---			
Total (Group – 13)			---	50.00 (Either Individual or total)	50.00 (Either Individual or total)	
Total (Group – 1 to 13)			317.50	3,400.00	3,400.00	
Total (A)			317.50	3,400.00 (Either Individual total of group – 1 or 2 or 3 or.....or 13 or summation of group 1 to 13)	3,400.00 (Either Individual total of group – 1 or 2 or 3 or.....or 13 or summation of group 1 to 13)	
B.	Group – 14 – API products					
1.	Famotidine AND/OR	76824-35-6	2.00			
2.	EtoricoxibAND/OR	202409-33-4	2.00			
3.	DerifenacinAND/OR	133099-04-4	2.00			
4.	Rebeprazole Sodium AND/OR	117976-89-3	2.00			
5.	Mexilatine Hydrochloride AND/OR	31828-71-4	2.00	25.00 (Either Individual or total)	25.00 (Either Individual or total)	
6.	Prasugrel Hydrochloride AND/OR	150322-43-3	2.00			
7.	Warfarin AND/OR	81-81-2	2.00			
8.	FebuxostateAND/OR	144060-53-7	2.00			
9.	IloperidoneAND/OR	133454-47-4	2.00			
10.	MetaxalonAND/OR	1665-48-1	2.00			
11.	NisoldipineAND/OR	63675-72-9	2.00			

S. No.	Name of Product	CAS No.	Existing Quantity (MTPM)	Proposed Quantity (MTPM)	Total Quantity (MTPM)	Uses
12.	Mindronic Acid AND/OR	155648-6-5	2.00			
13.	ErlotinibAND/OR	183321-74-6	2.00			
14.	Ethyl benzene AND/OR	100-41-4	1.20			
15.	Ethanol Aldol AND/OR	---	1.20			
16.	ToparimateAND/OR	97240-79-4	1.40			
17.	Methylamine Hydrochloride AND/OR	593-51-1	1.20			
18.	PregabalinAND/OR	148553-50-8	0.95			
19.	FeldopineAND/OR	72509-76-3	0.05			
Total (Group – 14)			32.00	25.00 (Either Individual or total)	25.00 (Either Individual or total)	
Total (A+B)			349.50	3,425.00 (Either Individual total of group – 1 or 2 or 3 or.....or 13 or 14 summation of group 1 to 14)	3,425.00 (Either Individual total of group – 1 or 2 or 3 or.....or 13 or 14 or summation of group 1 to 14)	

6. The PP reported that the existing land area is 39,384.75 m^2, no additional land will be used for proposed expansion. Industry will develop greenbelt in an area of 40.85 % i.e., 16,092.00 m^2 out of total area of the project. The estimated project cost is ₹ 93.55 Crores including existing investment of ₹ 46.84 Crores. Total capital cost earmarked towards environmental pollution control measures is ₹ 17.56 Crores and the Recurring cost (operation and maintenance) will be about ₹ 63 Crores per annum.Total Employment will be 70 persons as direct & 100 persons indirect after expansion. Industry proposes to allocate ₹ 1.17 Crore towards CER for Installation of Rooftop Solar Power System (4 KW – ₹ 4.00 Lakh) and provide drinking water facilities i.e., R.O Plant (₹ 5.00 Lakh for one) in Primary Government School at Umarwada village and Government School at Bhadi village, Provision of X-rays machine (₹ 5.00 Lakh for one) and Sonography machine (₹ 8.00 lakh for one) in Panoli Charitable Hospital and PHC kharod at Kharod village, Provide drinking water facilities i.e., R.O Plant (₹ 8.00 Lakh for one) in Alonj, Bakrol and Kharod villages. Beautification and redevelopment work for existing lake (i.e., Construction of embankment, gate and wall around the pond, Increasing depth of Pond, Tree plantation around the lake) (lake area = 10,717.30 m^2) in Nana Borsara village, Skill development programme in Collage of Education at Kharod village .

7. 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 13.75 km in NNW direction.PP reported that there is one of Schedule-I species i.e. Peacock (*Indian peafowl*) and the conservation plan with budgetary provision of ₹ 8.39 lakhs has been prepared and submitted to DCF, Bhuj-Kutch on 15.04.2022. PP committed to implement the plan in one year.

8. The PP reported that Ambient air quality monitoring was carried out at 8 locations during December-2021 to February-2022 and the baseline data indicates the ranges of concentrations as: PM_{10} (24.38 – 94.76 µg/m^3), $PM_{2.5}$ (16.22 – 54.26 µg/m^3), SO_2 (10.23 – 35.12 µg/m^3) and NO_x (31.72 – 55.18 µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 80.04686 µg/m^3, 29.46613 µg/m^3 and 48.83152 µg/m^3 with respect to PM_{10}, SO_2 and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). The noise levels are within the standard norms prescribed by CPCB. The ground water quality meets the drinking water specification IS 10500:1992 Reaffirmed 2012 except for the parameters TDS, Chloride, Total hardness, Calcium Hardness at Boidara (G5) &Godadara (G7), Alkalinity at Godadara (G7) & Fluoride at Project Site (G1), Dhamdod (G4), Boidara (G5) &Godadara (G7) .The results of pH show that soils are slightly to moderately alkaline in reaction. The soils are categorized as sandy clay loam based on different soil separates (sand, silt and clay). The organic carbon present in the soil is average to more than sufficient quantity. The levels of total Cr, Cu, B and ESP are below detectable limits. The soil should be periodically monitored for pH, EC and ESP

9. The PP reported that Total water requirement is 1,444.70 KLD of which fresh water requirement of 344.10 KLD will be met from Panoli GIDC. Effluent of 1,150.40 m^3/day quantity will be treated through MEE + ATFD and 50.00 m3/day send to high temperature Spray dryer. The plant will be based on Zero Liquid discharge system.

10. The PP reported that power requirement after expansion will be 2700 HP including existing 1700 HP and will be met from Dakshin Gujarat Vij Company (DGVCL). Existing unit has DG sets of 500 KVA capacity, Unit will also install one D. G. Set (500 KVA) as a stand-by to suffice the power requirement in case of main power failure from DGVCL and/or any emergency. Flue gas Emission from existing Steam Boiler having 2.5 TPH capacity with stack of 32 m height. Emission from proposed Boiler having 5 TPH capacity – 2 Nos. will be mitigated by providing separate Multi Cyclone separator, Bag Filter & Water scrubber with separate stack of 32 m height for each boiler.

11. Details of Process Emissions Generation and its Management: The process gas emission will be HCl, HF, HBr, H_2S, Phosgene, P_2O_5, Br_2, Cl_2, SO_2, NO_2 & NH_3 gas which is liberate from manufacturing process of proposed products and it will be mitigated by providing suitable scrubbers to control the emissions from process gas. To meet the environmental standards its control measures are mentioned**.**

Sr. No.	Source of Emission	Stack Height (m)	Air Pollution Control Measures	Type of Emission	Permissible Limit as per CPCB
Existing					
1.	Reaction Vessel	25	Alkali Scrubber	HCL &Acid Mist	20 mg/Nm^3
Proposed					
1.	Group – 1 – Herbicide (Technical AND/OR Its Intermediates)	11	Two stage Alkali scrubber	SO_2	40 mg/Nm^3
		11	Two stage Water scrubber	HCl	20 mg/Nm^3
		11	Two stage Alkali scrubber	Br_2	9 mg/Nm^3
		11	Water Scrubber followed by Acid scrubber	NH_3	175 mg/Nm^3
		11	Two stage Alkali scrubber	HF	6 mg/Nm^3
		11	Two stage Alkali scrubber	HBr	30 mg/Nm^3
		11	Two stage Alkali scrubber	Phosgene	0.1 ppm
2.	Group – 2 – Insecticide (Technical AND/OR Its Intermediates)	11	Water Scrubber followed by Alkali Scrubber	Cl_2	9 mg/Nm^3
		11	Water Scrubber followed by Acid scrubber	NH_3	175 mg/Nm^3
		11	Two stage Alkali scrubber	SO_2	40 mg/Nm^3
		11	Two stage Alkali scrubber	Br_2	9 mg/Nm^3
		11	Two stage Alkali scrubber	H_2S	5 mg/Nm^3
		11	Two stage Alkali scrubber	Phosgene	0.1 ppm
3.	Group – 3 – Fungicide (Technical AND/OR Its Intermediates)	11	Water Scrubber followed by Acid scrubber	NH_3	175 mg/Nm^3
		11	Two stage Alkali scrubber	Br_2	9 mg/Nm^3
		11	Two stage Water scrubber	HCl	20 mg/Nm^3
		11	Water Scrubber followed by Alkali Scrubber	Cl_2	9 mg/Nm^3

Sr. No.	Source of Emission	Stack Height (m)	Air Pollution Control Measures	Type of Emission	Permissible Limit as per CPCB
		11	Two stage Alkali scrubber	SO_2	40 mg/Nm^3
		11	Two stage Alkali scrubber	H_2S	5 mg/Nm^3
4.	Group – 4 – Rodenticides (Technical AND/OR Its Intermediates)	11	Two stage Water scrubber	P_2O_5	10 mg/Nm^3
5.	Group – 5 – Amino Diphenyl Ether / Phenoxy Compounds	11	Two stage Water scrubber	HCl	20 mg/Nm^3
		11	Two stage Alkali scrubber	SO_2	40 mg/Nm^3
6.	Group – 6 – Specialty Phenols/ Specialty Chloro Phenol	11	Two stage Alkali scrubber	SO_2	40 mg/Nm^3
		11	Two stage Alkali scrubber	HBr	30 mg/Nm^3
		11	Two stage Water scrubber	HCl	20 mg/Nm^3
7.	Group – 7 – Amino Benzoic Esters	11	Water Scrubber followed by Acid scrubber	NH_3	175 mg/Nm^3
		11	Two stage Water scrubber	HCl	20 mg/Nm^3
8.	Group – 9 – Acetylated Compounds	11	Two stage Water scrubber	HCl	20 mg/Nm^3
9.	Group – 10 – Nitro Compounds	11	Two stage Water scrubber	HCl	20 mg/Nm^3
10.	Group – 12 – Chlorinated Compounds / Carbonyl Chlorides	11	Water Scrubber followed by Alkali Scrubber	Cl_2	9 mg/Nm^3
		11	Two Stage Water followed by Alkali Scrubber	NOx	25 mg/Nm^3
		11	Two stage Alkali scrubber	SO_2	40 mg/Nm^3
11.	Group – 14 – API products	11	Two stage Alkali scrubber	SO_2	40 mg/Nm^3

12. Details of Solid Waste/ Hazardous Waste Generation and its Management:

S. No.	Type/ Name of Waste	Category (As per Schedule)	Quantity (MT/Annum)			Source of Generation	Mode of Treatment & Disposal
			Existing	Proposed	Total		
1.	Distillation Residue	20.3 (Sch. I)	22.00	8,500.00	8,522.00	From Distillation activity	Collection, Storage, Transportation, Disposal by incineration at CHWIF or for fuel co processing unit/ cement industry approved by GPCB. (MOU with M/s. Ecosafe Waste Management PVT. Ltd./Geo Cleaner LLP).
2.	ETP/ MEE Sludge	35.3 (Sch. I)	73.50	6,800.00	6,873.50	ETP	Collection, Storage, Transportation, Disposal at TSDF (MOU with Geo Cleaner LLP).
3.	MEE Salt	35.3 (Sch. I)	---	16,000.00	16,000.00	MEE	Collection, Storage, Transportation, Disposal at TSDF.
4.	Spent catalyst	29.5 (Sch. I)	2.20	40.00	42.20	Process	Collection, Storage and send or sell to authorized recycler or Disposal by incineration at CHWIF. (MOU with Geo Cleaner LLP).
5.	Discarded Containers Bag/ Liners	33.1 (Sch. I)	110.00	230.00	330.00	Process	Disposal by send it to authorized decontamination facility/ recycler or reuse or send back to supplier.
6.	Used Oil	5.1 (Sch. I)	2.04	5.10	7.14	Maintenance	Collection, Storage and disposal by reuse in plant and machinery as lubricant or sell it to authorized refiners/ recycler. (MOU with M/s. Shibl Lubricant).
7.	Spent Solvent	20.1/ 20.2/ 28.5/29.4 (Sch. I)	1,574.00	8,220.00	9,794.00	Process	Collection, Storage and send or sell to authorized recycler for recovery and reuse. (MOU with M/s. Rhythm Chemicals/M/s. UMA Chemicals/Geo Cleaner LLP).

S. No.	Type/ Name of Waste	Category (As per Schedule)	Quantity (MT/Annum)			Source of Generation	Mode of Treatment & Disposal
			Existing	Proposed	Total		
8.	Spent acid (100 %)	29.6 (Sch. I)	360.00	---	360.00	Process	Collection, Storage and reused as raw material in proposed product or sold to actual users having permission of Rule – 9 from SPCB/CPCB. (MOU with M/s. Visual PhamaChemfor).
9.	Spent HCl (100 %)	29.6 (Sch. I)	360.00	---	360.00	Process	
10.	Spent HBr/KBr	29.6 (Sch. I)	360.00	---	360.00	Process	
11.	Spent Carbon	18.2/36.2 (Sch. I)	100.00	600.00	700.00	Process	Collection, Storage and send to CHWIF or co-processing for further treatment. (MOU with Geo Cleaner LLP).
12.	Date-Expired and Off-Specification Pesticides	29.3 (Sch. I)	20.00	250.00	270.00	Plant	Collection, Storage and send to Common Incinerator for further treatment.
13.	HCl (30%)	35.1 (Sch. I)	0.00	50,000.00	50,000.00	Scrubber	Collection, Storage and reused as raw material or sold to actual users having permission of Rule – 9 from SPCB/CPCB.
14.	HBr (25-30%)		0.00	9,850.00	9,850.00		
15.	Potassium bromide	29.1 (Sch. I)	0.00	4,500.00	4,500.00	Process	Collection, Storage and reused as raw material or sold to actual users having permission of Rule – 9 from SPCB/CPCB.
16.	Phosphoric Acid	29.1/ 35.1 (Sch. I)	0.00	22,650.00	22,650.00	Process /Scrubber	Collection, Storage and reused as raw material or sold to actual users having permission of Rule – 9 from SPCB/CPCB.
17.	Sodium Sulfite/ Sodium bisulfite (25-30%)	35.1 (Sch. I)	0.00	54,200.00	54,200.00	Scrubber	Collection, Storage and reused as raw material or sold to actual users having permission of Rule – 9 from SPCB/CPCB.
18.	Spent Sulfuric Acid	29.1 (Sch. I)	0.00	70,800.00	70,800.00	Process	
19.	Sodium Bromide	35.1 (Sch. I)	0.00	16,560.00	16,560.00	Scrubber	

S. No.	Type/ Name of Waste	Category (As per Schedule)	Quantity (MT/Annum)			Source of Generation	Mode of Treatment & Disposal
			Existing	Proposed	Total		
	(28 – 30 %)						
20.	Liquid Ammonia (25%)		0.00	75,000.00	75,000.00	Scrubber	
21.	Ammonium Chloride (25-30 %)	29.1 (Sch. I)	0.00	6,500.00	6,500.00	Scrubber	Collection, Storage and reused as raw material in proposed product or sold to actual users having permission of Rule – 9 from SPCB/CPCB
22.	Aluminum Chloride (28 – 30 %)	29.1 (Sch. I)	0.00	40,000.00	40,000.00	Process	Collection, Storage and reused as raw material in proposed product or sold to actual users having permission of Rule – 9 from SPCB/CPCB
23.	Sodium Chloride Salt		0.00	45,000.00	45,000.00	Process	Collection, Storage, Transportation, Disposal at TSDF site.
24.	Iron Sludge	29.2	0.00	15,500.00	15,500.00	Process	Collection, Storage, Transportation, Disposal at TSDF site.
25.	Sodium Fluoride	35.1 (Sch. I)	---	1,500.00	1,500.00	Scrubber	Collection, Storage and reused as raw material in proposed product or sold to actual users having permission of Rule – 9 from SPCB/CPCB
26.	Ammonium Sulfate (25-30%)		---	12,000.00	12,000.00		
27.	Sodium Hydro Sulphide (NaSH)		---	10,000.00	10,000.00	Scrubber	Collection, Storage and reused as raw material in proposed product or sold to actual users having permission of Rule – 9 from SPCB/CPCB
28.	Nitric Acid (25-30%)		---	5,000.00	5,000.00		
29.	Sodium Acetate	29.1 (Sch. I)	---	500.00	500.00	Process	Collection, Storage and reused as raw material in proposed product or sold to actual users having permission of Rule – 9 from SPCB/CPCB

13. PP reported that Industry has already sent the request letter to regional office MoEF&CC, Gandhinagar for the site visit and Certified compliance report. Visit is not done yet by RO –

MoEF&CC, Gandhinagar. The PP reported that Public Hearing is exempted as the project **is located in notified industrial area Panoli GIDC Estate.**

14. Deliberations in the EAC:

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

The EAC noted several deficiencies in the project i.e. the consultant who prepared the EIA & EMP and made presentation before EAC doesn't have NABET accreditation, the Greenbelt condition mentioned in the previous EC was not complied, Life cycle assessment required for a pesticide industry has not been carried, certified compliance report of EC of existing Units from IRO, MoEF&CC not submitted etc. Further, the permissible limits of CPCB for pesticide/herbicide industry for NH_3, Cl_2 and HBr mentioned by PP in the table under Para No. 11 are not the current limits and shall be read as NH_3 - 30 mg/Nm^3, Cl_2 - 5 mg/Nm^3, HBr - 5 mg/Nm^3.

The EAC also noted that since the project is located in a critically polluted area, the proposed expansion is subject to the current policy of Ministry and legal directions on consideration of projects in critically polluted areas.

15. The Committee deliberated the issues related to pollution and conservation of environment. The Committee after, detailed deliberation, **returned the proposal in present from** and is of the view that PP shall first comply with the following:

(i) The EIA/EMP needs to be validated by NABET- Accreditation Consultant having valid accreditation. PP should ensure that all the additional studies/documents prepared and presentation before EAC is through consultant having valid accreditation only.

(ii) The project 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) As this is an expansion proposal, PP need to submit the latest certified compliance report from IRO, MoEF&CC.

(iv) As this is existing unit, the PP shall comply the Greenbelt related condition mentioned in the previous EC.

(v) The PP shall submit the details of carbon foot prints and carbon sequestration study w.r.t. proposed project. Proposed mitigation measures also need to be submitted. -

(vi) Details of Onsite and Offsite emergency plan as per provisions of the MSIHC Rules need to be submitted

(vii) The PP need to conduct the Life Cycle Assessment including the impact on flora and fauna.

(viii) The ground water quality meets the drinking water specification IS 10500:1992 Reaffirmed 2012 except for the parameters TDS, Chloride, Total hardness, Calcium Hardness at Boidara (G5) &Godadara (G7), Alkalinity at Godadara (G7) & Fluoride at Project Site (G1), Dhamdod (G4), Boidara (G5) &Godadara (G7) reason for variation the same needs to be submitted.

Re-consideration of Environmental Clearance

Agenda No. 31.5

Setting up of Pesticides and pesticide specific intermediates & Synthetic Organic Chemicals of capacity 201480 TPA located at Plot no. 41/1, GIDC Notified Industrial Estate, Jhagadia, District Bharuch, Gujarat by M/s Aarti Industries Limited- consideration of Environmental clearance.

[Proposal No. IA/GJ/IND3/236925/2021, F. No. IA-J-11011/458/2021-IA-II(I))]

1. The proposal is for Environmental Clearance to the setting up of Pesticides and pesticide specific intermediates & Synthetic Organic Chemicals project with proposed capacity of 201480 TPA located at Plot no. 41/1, GIDC Notified Industrial Estate, Jhagadia, District Bharuch, Gujarat by M/s Aarti Industries Limited.

2. The project/activity is covered under Category 'A' of item 5(b) and 5(f) of Schedule of Environment Impact Assessment (EIA) Notification and requires appraisal at Central Level by Expert Appraisal Committee (EAC).

3. The ToR has been issued by the Ministry, vide letter No.J-11011/458/2021-IA-II(I) dated 16.11.2021.The public hearing for the proposed project is exempted in pursuant to Ministry OM vide J-11011/321/2016-IA.II (I) dated 27.4.2018 as it is located in Notified Industrial Estate, Jhagadia. As informed by PP, no Litigation is pending against the proposal.

4. The PP vide proposal number IA/GJ/IND3/236925/2021 applied for grant of EC in Form-2 on 9.3.2022 and submitted EIA/EMP Report. Due to some shortcomings, the proposal was referred back to PP by the Ministry on 14.3.2022. The reply to the was submitted by PP on 31.3.2022 and the proposal was placed in 29th EAC meeting held on April, 11-12, 2022 where the EAC deferred the proposal for want of requisite information.

5. The details of products and capacity are as under:

S. No.	Product	CAS Number	Quantity (TPA)	End use/ application	LD50
1. Pesticides and pesticide specific intermediates (excluding formulations)					
1	Fomesafen	72178-02-0	1000	Pesticides	Oral (rat) LD50: 1250 mg/kg

2	Prodiamine	29091-21-2	3000 (either/or)	Pesticides	Oral(rat) LD50 :5000 mg/kg
3	Diflufenican	83164-33-4		Pesticides	Oral(rat) LD50 :2000 mg/kg
4	Oxyfluorfen	42874-03-3		Pesticides	Oral(rat) LD50 :5000 mg/kg
5	Triflumuron*	64628-44-0		Pesticides	Oral(rat) LD50 :5000 mg/kg
6	Metolachlor	51218-45-2	16000	Pesticides	Oral(rat) LD50 :2780 mg/kg
7	Mesotrione	104206-82-8	3000 (either/or)	Pesticides	Oral(rat) LD50 D>2000 mg/kg
8	Diafenthiuron	80060-09-9		Pesticides	Oral(rat) LD50 :2068 mg/kg
9	Aclonifen	74070-46-5		Pesticides	Oral(rat) LD50 :5000 mg/kg
10	Chlorothalonil	1897-45-6		Pesticides	Oral(rat) LD50 :10000 mg/kg
11	Dicamba	1918-00-9	16000	Pesticides	Oral(rat) LD50 :1707 mg/kg
12	Diquat dibromide	85-00-7	4000	Pesticides	Dermal (rat) LD50: 750 mg/kg (R-Pubchem MSDS)
13	Diuron	330-54-1	8000	Pesticides	Oral (rat) LD50: 3400 mg/kg
14	Bromoxynil	1689-84-5	2000 (either/or)	Pesticides	Dermal (rat) LD50:190 mg/kg
15	BromoxynilOctanoate	1689-99-2		Pesticides	Dermal (rat) LD50: 245 mg/kg (P-MSDS)
16	BromoxynilHeptanoate	56634-95-8		Pesticides	Oral(rat) LD50: 359 mg/kg

17	Mecoprop-P (MCPP)	16484-77-8	2100 (either/or)	Pesticides	Oral(rat) LD50: 1050 mg/kg
18	4-Chloro-2-methylphenoxyacetic acid (MCPA)	94-74-6		Pesticides	Oral(rat) LD50: 700 mg/kg
19	Salicyl-aldehyde	90-02-8		Pesticides	Oral(rat) LD50: 520 mg/kg (P-MSDS)
20	4-Methyl-2-hydrazino benzothiazole (HMBT)	20174-68-9	3000	Pesticides	Oral(rat) LD50: 697 mg/kg
21	1,3-diisopropyl-2-isothiocyanato-5 phenoxybenzene (DIPPI)	80058-93-1	2000	Pesticides	Oral(rat) LD50: 125 mg/kg
Total Pesticides and pesticide specific intermediates (excluding formulations)			**60100**		
2. Synthetic Organic Chemicals					
1	Anthraquinone	84-65-1	3000	Pharma intermediate, Colorant intermediate	
2	1- Nitro Anthraquinone	82-34-8	2000	Colorant intermediate	
3	1- amino anthraquinone	82-45-1	1500	Colorant intermediate	
4	Bromamine Acid	116-81-4	4000	Colorant intermediate	
5	1,4 dihydroxyanthraquinone	81-64-1	1000 (either/or)	Colorant intermediate	
6	1,8 dinitro -4,5 dihydroxyanthraquinone	39003-36-6		Colorant intermediate	
7	Beta naphthol	135-19-3	25000	Pharma intermediate, Colorant intermediate	
8	BON Acid	92-70-6	4000	Pharma intermediate, Colorant intermediate	
9	Tobias Acid	81-16-3	4000	Colorant intermediate	
10	Alpha Naphthol	90-15-3	1000	Pharma intermediate	
11	Cyclohexanone*	108-94-1	20000	Pharma intermediate, Colorant intermediate	
12	6 hydroxy 2 naphthoic acid	16712-64-4	2000	Pharma intermediate	
13	Benzoic acid	65-85-0	10000	Pharma intermediate, Colorant intermediate	

14	Sodiumbenzoate	119-61-9	15000	Pharma intermediate
15	Benzoylchloride	98-88-4	3000	Pharma intermediate, Colorant intermediate
16	N-Tertiarybutyl-2-benzothiazole sulfennamide (TBBS)	95-31-8	10000 (either/or)	Rubber Intermediate, Food Chemical Intermediate
17	N-cyclohexyl-2-benzothiazolesulfenamide (CBS)	95-33-0		Rubber Intermediate, Food Chemical Intermediate
18	2,2,4-Trimethyl-1,2-dihydroquinoline (TMQ)	26780-96-1	2400	Rubber Intermediate, Food Chemical Intermediate
19	N-1,3-Dimethylbutyl-N -phenyl-pphenylenediamine (6 PPD)	793-24-8	8000	Rubber Intermediate
20	O-tolylbenzonitrile	114772-53-1	3000 (either/or)	Pharma intermediate
21	2 cyano-4-bromo methyl biphenyl	114772-54-2		Pharma intermediate
22	2,4,5 trifluorobromobenzene	327-52-6	1000 (either/or)	Pharma intermediate
23	3,4,5 trifluorobromobenzene	138526-69-9		Pharma intermediate
24	dibromo - tri-fluoromethoxy aniline	88149-49-9		Pharma intermediate
25	L-Menthol*	2216-51-5	9000 (either/or)	Pharma intermediate
26	Vitamin E	59-02-9		Pharma intermediate
27	Thymol	89-83-8		Pharma intermediate
28	1,4-Dihydroxy-2,3,5-trimethylbenzene (2,3,5-TMHQ)	700-13-0		Pharma intermediate
29	M-hydroxy benzoic acid	99-06-9		Pharma intermediate
30	DL-Menthol*	89-78-1		Pharma intermediate
31	2,6-Diisopropylaniline	24544-04-05	2000 (either/or)	Specialty Chemical intermediate
32	2-Isopropylaniline*	643-28-7		Pharma intermediate
Total Synthetic organic chemicals			**130900**	**--**

* Indicates have Co product					
3. List of Co products					
S. No.	**Product**	**CAS Number**	**Quantity (TPA)**	**End use/ application**	**LD50**
1	1H-imidazole	288-32-4	1680	Pesticides	Oral(rat) LD50: 970 mg/kg
2	Cyclohexanol	108-93-0	700	Polymers	--
3	D-Menthol	15356-60-2	3780	Pharma intermediate	
4	Isomenthol	3623-52-7	1620	Pharma intermediate	
5	Neomenthol	2216-52-6	2700	Pharma intermediate	
Total Co products			**10480**		
Total 1+2+3			**201480**		
4	**Co-Generation Power Plant (1 No.)**		**4.9 MW**	Captive use	

6. The PP reported that Proposed land area of the project is112435 m^2. Industry will develop greenbelt in an area of 33.06% i.e. 37166 m^2 out of total area of the project. The estimated project cost is ₹ 1669.80 Crore. Total capital cost earmarked towards environmental pollution control measures is ₹ 87 Crore and the Recurring cost (operation and maintenance) will be about ₹ 165 Crore. Total direct employment will be 150 persons. Industry proposes to allocate ₹ 10.15 Crore towards CER which includes Health & Hygiene Project, Environment & Water Conservation Project, Education etc.

7. 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 Amravati river, Kaveri River, KondhkiKhaadi& Kim Nadi is flowing at a distance of 2.64 kms to S, 6.04 kms to NNE, 6.89 kms to SW & 9.02 kms to SSE in direction respectively. PP reported that there is one of Schedule-I species i.e. Peacock (*Indian peafowl*) and the conservation plan with budgetary provision of 2 Lakh has been prepared and submitted to Deputy Conservator of Forests, Bharuch on 21.03.2022. PP committed to implement the plan in five years.

8. The PP reported that Ambient air quality monitoring was carried out at 8 locations during March 2021 to May 2021 to and the baseline data indicates the ranges of concentrations as: PM_{10} (58.1-77.4 µg/m^3), $PM_{2.5}$ (29.8 - 39.6 µg/m^3), SO_2 (7.0 - 12.1 µg/m^3) and NO_2 (12.5-17.5 µg/m^3).AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 69.69 – 78.20 µg/m^3, 10.17 – 12.18 µg/m^3 and 15.51 – 20.11 µg/m^3 with respect to PM_{10}, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Average noise level was recorded 53.5 to 54.9 dB(A) at residential area and 53.5 dB(A)at project site during day time. Average noise level was recorded 43.7 to 44.8 dB(A) at residential area and 43.7dB(A) at project site during night time. Noise level monitoring was carried out 1.0 meter away from State Highway – 165. Average noise level was recorded 75.6 dB(A) during day time and 72.1 dB(A) during night time. The soil at the studied locations are neutral in reaction and moderately saline (EC > 0.8 dS/m). The soils are medium to high in nitrogen, low in phosphorus and high in available potassium status.. The results for all the locations are within the drinking water permissible limit as per the IS:10500: 2012 except Talodara village water.

9. The PP reported that total water requirement is 9330 m3/day of which fresh water requirement of 4278.1 m3/day will be met from GIDC. Effluent of 5387quantity will be treated through ETP+ATFD+ETP+RO+STP.

10. The PP reported that Power requirement after expansion will be 32000 including existing KVA and will be met from DGVCL, Gujarat. Unit has DG sets of 6 nos. of 2000 kVA capacity, additionally DG sets are used as standby during power failure. Stack will be provided as per CPCB norms to the proposed DG sets.

11. Details of Process emissions generation and its management.

S. No.	Product name	Stack attached to	Stack height (m)	Dia m-eter (mm)	APCM	Parameter	Permissible Limit
1	Fomasafen	Reactor	15	250	2 stage water scrubber followed by caustic	SO_2	40 mg/nm3
						HCl	20 mg/nm3
2		Reactor	15	400	2 stage Sulphuric acid scrubber followed by Caustic	NOx	25 mg/nm3
3	Prodiamine	Amidation reactor	15	400	Water Scrubber	NH_3	30 mg/nm3
4	Diflufenican	Reactor	15	400	2 stage water scrubber followed by caustic	SO_2	40 mg/nm3
						HCl	20 mg/nm3
5	Diafenthiuron	Reactor	15	250	2 stage water scrubber followed by caustic	SO_2	40 mg/nm3
						HCl	20 mg/nm3
6	Aclonifen	Reactor	15	200	Caustic Scrubber	HBr	5 mg/nm3

7	Aclonifen&Chlorothalonil		15	400	Water Scrubber	NH_3	30 mg/nm3
8	Chlorothalonil	Reactor	15	400	Water Scrubber	HCl	20 mg/nm3
						Cl_2	5 mg/nm3
9	Diuron	Reactor	15	400	Water Scrubber	HCl	20 mg/nm3
10	Bromoxynil	Reactor	15	250	2 stage water scrubber followed by caustic	SO_2	200 mg/nm3
						HCl	20 mg/nm3
11	BromoxynilOctanoate&BromoxynilHeptanoate	Reactor	15	400	Water Scrubber	HCl	20 mg/nm3
12	N-Tertiarybutyl-2-benzothiazole sulfennamide (TBBS) & N-cyclohexyl-2-benzothiazolesulfenamide (CBS)	Reactor	15	400	Water Scrubber	HCl	20 mg/nm3
						Cl_2	9 mg/nm3
13	Benzoic acid	Hydrolysis Reactor	15	900	Water Scrubber	HCl	20 mg/nm3
14	Tobias Acid	Sulfonation	15	400	Water Scrubber	HCl	20 mg/nm3
15	1,4-Dihydroxy-2,3,5-trimethylbenzene (2,3,5-TMHQ)	Reactor	15	200	Cautic scrubber	SO_2	200 mg/nm3
16	2,6-Diisopropylaniline & 2-Isopropylaniline	Reactor	15	400	Water Scrubber	HCl	20 mg/nm3
17	dibromo - tri-fluoromethoxy aniline	Reactor	15	400	2 stage Sulphuric acid scrubber followed by Caustic	NOx	25 mg/nm3
18	Anthraquinone	Reactor	15	350	Water Scrubber	HCl	20 mg/nm3
19	1-Nitro anthraquinone, 1-amino anthraquinone& 1,8 dinitro-4,5 dihydroxyanthraquinone	Reactor	15	400	2 stage Sulphuric acid scrubber followed by Caustic	NOx	25 mg/nm3
20	1,4 dihydroxyanthraquinone	Friedel craft acylation	15	350	Water Scrubber	HCl	20 mg/nm3
21	1,8 dinitro-4,5 dihydroxyanthraquinone	Hydrolysis	15	450	Caustic scrubber	SO_2	200 mg/nm3
22	Dibromo-trifluoromethoxy aniline	Reactor	15	400	Water Scrubber	HCl	20 mg/nm3
						Cl_2	9 mg/nm3
23	4-Methyl-2-hydrazino benzothiazole (HMBT)	Reactor	15	400	Water Scrubber	HCl	20 mg/nm3
						Cl_2	9 mg/nm3

24	2,6-Diisopropylaniline & 2-Isopropylaniline	Reactor (Natural gas consumption 5 Kg/Hr for Flare stack)	18	--	--	--	--

Proposed flue gas stack details

S. No.	Stack Attached To	Stack Height in Meter	Fuel	APCM	Type of Emission	Permissible Limit
1	Coal Fired Boiler (2nos. x 50 TPH)	60	Coal or Coal & lignite or Coal & Biomass	ESP and Lime addition along with coal (Dry Scrubber) & OCEMS	PM, SO_2 & NO_X	150 mg/ Nm3 100 ppm 50 ppm
2	CPP Boiler (50 TPH)	60				
3	TFH (1 x 25 lakh Kcal/hr)	20	Natural gas	--		
4	DG Set (6 nos.) (2000 kVA)	11	HSD	Adequate Stack Height		

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

(a) Hazardous Waste and its Management

S. No.	Name of Waste	Source of generation (Plant/Group)	Schedule & Category	Quantity (MTPA)	Disposal Method
1	ETP Waste	ETP	I-35.3	20000	Collection, Storage, Transportation, disposal to TSDF/ Pre/Co processing.
2	Discarded containers/Plastic waste/ drums/carboys	Packing material	I-33.1	500	Collection, Storage, Decontamination, and Disposal by sold to authorize recyclers/ Contaminated waste sent to TSDF site/Pre/ Co processing.
3	Used oil	Maintenance of Machineries and equipment	I-5.1	50	Collection, Storage, Transportation, Disposal by selling to registered re-processors.
4	Distillation Residue	Process	I-26.1/29.1	92665	Collection, Storage, transportation, disposal at CHWIF/Pre/ Co-processing/incineration
5	MEE + ATFD salt	Waste water treatment	I-35.3	42630	Collection, Storage, transportation, disposal to TSDF

6	Concentrated/ High TDS Effluent	Process	--	200 (KLD)	Collection, Storage, transportation, disposal to CMEE
7	Off-specification product	Process	I-26.1/29.1	100	Collection, Storage, transportation, disposal to disposal by Pre/Co-processing/Incineration.
8	Non- recyclable plastic waste (PPE's/ Liners)	Process waste	I-33.3	200	Collection, Storage, Transportation, disposal to Pre/ co-processing/TSDF.
9	Spent Catalyst	Process	I-26.5/29.5	1080	Collection, Storage, Decontamination, Disposal by sold to authorize vendor/Recycle/TSDF
10	Spent Carbon	ETP & Process	I-36.2	15	Collection, Storage, transportation sent for Pre/co-processing /incineration
11	Spent Solvent	Process	I-26.4/29.4	500	Collection, Storage, transportation, disposal to disposal by Pre/Co-processing/Incineration.
12	Hydrochloric Acid	Process	B15 of Schedule II	88906	Will be sold to market as per Rule 9 of Hazardous and Other wastes (Management & Transboundary Movement) Rules 2016
13	Sulphuric acid	Process	B15 of Schedule II	19567	
14	Ammonium hydroxide	Process	B15 of Schedule II	390	
15	Sodium Bromide (NaBr)	Process	B15 of Schedule II	1213	
16	Acetic Acid	Process	B15 of Schedule II	1530	
17	Ammonia Solution	Process	B15 of Schedule II	4362	
18	Chromium Sulphate	Process	B23 of Schedule II	25020	
19	Sodium Hyprochloride Solution	Process	B15 of Schedule II	9800	
20	Process Salt	Process	35.3	342	Collection, Storage, Transportation, disposal to TSDF.

(b) Solid & other waste and its management

S. No.	Name of Waste	Source of generation (Plant/Group)	Quantity (MTPA)	Disposal Method

1	Office Waste	Admin/ Office	30	Collection, Storage, Transportation Registered recyclers
2	Insulation Waste/ Thermocol	Plant and machinery	150	Collection, Storage, Transportation disposal by at TSDF Site.
3	E-waste/ Electrical waste	Plant and machinery	25	Collection, Storage, Transportation, Disposal by selling to authorized recyclers
4	Battery waste	Plant and machinery	200 Nos.	Collection, Storage, Transportation, Disposal by selling to authorized recyclers
5	Bio-medical waste	Occupational health center	1	Collection, Storage, Transportation , Disposal to CBWTF-Incineration
6	Glass	Plant/lab/ Buildings	15	Collection, Storage, Transportation , disposal/sold to scrap processors
7	STP Waste (Sludge)	STP	50	Collection, Storage, Transportation disposal as manure.
8	Fly ash	Boiler	27000	Collection, Storage, Transportation disposal to Brick manufacturer/Road construction/Co-processing
9	Construction & Demolition Waste	Construction	What so ever	Collection, Storage, Transportation and Disposal to Low Lying Area, or for Road Construction etc.
10	Canteen waste	Canteen	What so ever	Collection, Storage, Transportation disposal as manure, food digester or Send to municipal facility

12. The proposal was earlier considered in the 29th EAC meeting held on 11-12th April, 2021, wherein EAC deferred the proposal and desired for certain requisite information/inputs. The PP has submitted the reply of ADS on 27.4.2022 and the proposal is now placed before the 31st EAC Meeting held on 11-12 May, 2022 wherein the Project Proponent and the accredited Consultant [M/s Eco Chem Sales and Services [Accreditation number NABET/EIA/2023/RA0181 validity till 3.2.2023] made a detailed presentation on the additional information sought:

13. Information desired by the EAC and response submitted by the project proponent is as under:

S. No.	Queries Raised by EAC	Reply by PP	Observation of EAC
1.	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. Selection of plant species shall be as per the CPCB guidelines in consultation	Greenbelt will be grown @ 2500 trees/Ha and plant. Species will be selected as per CPCB guideline and in consultation with a state forest department. Plant	The Reply submitted by PP, EAC found it to be satisfactory.

	with the State Forest Department. 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	species like - Azadirachataindica, Delonix Regia, Albizialebbeck etc. will be selected preferably for carbon sequestration. Only those species will be selected which are local species and fast growing. Trees will be planted with spacing of 2.0 m x 2.0 m 2.0 m ratio. Plantation activities will be carried out in the first and subsequent years the green belt year and they will be monitored in subsequent years. Revised greenbelt plan with budgetary allocations has been submitted	
2.	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.	This is a new project. Onsite/offsite emergency plan/mock drill etc. and mitigation measures are adequately described as per Schedule-11 under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules,	The Reply submitted by PP, EAC found it to be satisfactory.

		1996 in ch. 7 of EIA report. •Also, on-site emergency plan will be prepared and submitted as per rules on starting of operation. • We have On site emergency plan for Existing units located at Jhagadia and same has been submitted to DISH. Submission Copy has enclosed as Annexure-2. Similar process will be followed for the new project.	
3.	The PP should submit the revised water balance with improvement in recycle/reuse and revise water scheme accordingly.	PP has explored the best possible way for recycle and reuse of treated effluent. We have prepared water balance and treatment scheme based on R & D, Carbon footprint calculation and treatability study. After recycling and reuse, Unit will discharge only 3.58% of effluent generated. Water balance & ETP scheme has been submitted.	The Reply submitted by PP, EAC found it to be satisfactory.
4.	The PP shall submit the details of carbon foot prints and carbon sequestration study w.r.t. proposed project. Proposed mitigation measures also need to be submitted for further appraisal of the EAC.	Detailed carbon foot prints and carbon sequestration study w.r.t. proposed project has been carried out and submitted.	The Reply submitted by PP, EAC found it to be satisfactory.

5.	The EAC noted that there is availability of Natural gas in the area, then why PP want to use Coal as a fuel?. Please justify the reason. Also the PP needs to explore the possibility to use of bio fuel/briquettes in place of coal.	Aarti Industries Limited has started phase wise conversion of coal fired boiler to in to dual fired Boiler i.e Coal & Biomass based boiler in existing facility. Purchase order for existing unit has been submitted Same will be explore for the proposed new project • Aarti Industries Limited has evaluated technology in the market for maximization of biomass utilization in the Boiler along with Coal that can be run on dual fuel i.e coal and Biomass. • PP will increase the percentage of Biomass gradually along with coal which will be largely driven by the availability of alternate fuel i.e Biomass. Currently availability of Biomass is constraint. • Natural gas is also one of the natural resources hence only biomass is an alternate option for reduction of CO2 emission.	The Reply submitted by PP, EAC found it to be satisfactory.

6.	The EAC noted that PP has not presented the Life Cycle Analysis Study which was already communicated through Agenda. In this regard, PP needs to rework and submit the same for appraisal of the EAC.	Life cycle analysis was presented and Detailed Life cycle analysis study along with carbon foot print has been carried out and submitted.	The Reply submitted by PP, EAC found it to be satisfactory.
7.	Details of carbon content of Soil and study w.r.t. microbial flora needs to be submitted as deliberated during the EAC meeting.	Analysis of organic carbon has been conducted during the baseline study of soil for the proposed EiA& organic carbon has been found in the range 0.65 to 0.80 % which can be considered as medium availability of organic carbon. As per Indian Agricultural Department organic carbon 0.5 to 0.75 % is considered medium availability and greater than 0.75 % is considered high availability. All the soil parameters has been selected for analysis as per CPCB guideline. • As per Journal of International Academic Research for Multidisciplinary, The microbial populations are interrelated with organic carbon. As soon as organic carbon increases microbial population increases. In this case organic carbon availability medium and probability of soil	The Reply submitted by PP, EAC found it to be satisfactory.

		microorganism, algae, fungi and actimycetes will be medium. During the plantation organic manure having sufficient moisture will be used in the soil to take care of soil fertility and micro flora.	
8.	The PP should revise the Schedule-I species conservation plan as suggested by the EAC.	The proposed project is in GIDC Jhagadia, Notified Industrial Estate there is no Schedule-I species except Indian peafowl. PP has submitted conservation plan for same along with budget to DFO, Bharuch. Acknowledgement receipt has been submitted.	The Reply submitted by PP, EAC found it to be satisfactory.

14. Total Carbon Footprint -Specific emission (per ton of production) = 0.899
Production from the project = 201480 MT/Annum
CO2 emission = **166024 tCO2e/Annum** (=0.899*201480 = 166024)

15. Action Plan of Carbon Footprint with the Time Period: Emission reduction plan are as follows-

S .No.	Initiative	Emission calculation	CO_2 Saving(tCO_2e/ Annum)
1	Replacement of Coal with 10% of Biomass in boilers	(150*19.8*365*0.0961*0.1 =10418) 150Ton capacity 19.8 emission factor 0.0961 calorific value 0.1 is 10 % biomass replacement	10418
2	Greenbelt development-10300 Number of trees will planted	(20kgpertree*10300 trees =206tCO2e)	206
3	Residue to Co-processing in cement industry	=0.327*46000 ton of waste will go to co-	15000

		processing	
4	Use of Renewable energy sources(Solar Panel, LED)	224KW = (0.79*224*300)/1000 0.79 emission factor for electricity	53
5	VAM Installation(Use of LP Steamin VAM)		20826
Total CO2 saving			**46503 tCO_2e/Annum**

Other initiatives which not calculated above:

i. Utilization of Energy efficient equipment's
ii. Installation of economizer for Waste heat recovery
iii. Recycling of steam condensate in boiler
iv. Installation of CPP Boiler
v. Rain water harvesting
vi. Flyash to brick manufacturer

16. 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.

17. The PP submitted an undertaking for owning contents (information and data) providing in EIA/EMP report being submitted to MoEF&CC for EC of proposed project. The consultant submitted an undertaking M/s Aarti Industries Limited has appointed Eco chem. Sales and services for carrying out this EIA study as per Notification, 2006 as amended till date. ECCS has approved EIA coordinators and field area experts for undertaking environmental and related studies in 23 approved sectors by NABET, Quality Council of India, New Delhi

18. <u>Deliberations in the EAC:</u>

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

The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of 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 order and 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 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 pesticide usage and the effect of pesticide on Crops and pests. The Committee also deliberated on the point raised during the last 29th EAC Meeting and found it to be satisfactory.

The Committee also deliberated on utilization of biomass in boilers and quantitative carbon footprint for proposed project, life cycle assessment of the proposed project. The information submitted by the PP in this regard is found it to be satisfactory. The EAC also deliberated on the conservation plan for schedule—I species. PP has submitted the application to DFO dated 21.3.2022

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.

The environmental clearance to be 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.

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

(i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP and other Reports 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 dyes/chemicals/pesticides shall be manufactured by the project proponent. No banned raw materials/chemicals shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.

(iv). The PP shall conduct the life cycle study within one year and the finding of the reports shall be communicated to the MoEFCC/ IRO, MoEFCC Gandhinagar and the outcome of the study shall be implemented.

(v). 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.

(vi). 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 13th June 2011 under the provisions of the Environment (Protection) Rules, 1986.

(vii). 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.

(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 Integrated Regional Office of Ministry and SPCB along with the compliance report.

(x). The treated waste water of 193 KLD shall be discharged into NCT for deep sea discharge. Effluent of 5387 quantity shall be treated through ETP+ATFD+ETP+RO+STP.

(xi). Total fresh water requirement shall not exceed 4278.1 m3/day will be met from GIDC, Necessary permission obtained in this regard shall be renewed from time to time.

(xii). 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.

(xiii). 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.

(xiv). 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.

(xv). Necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents.

(xvi). Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(xvii). 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.

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

(xix). 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.

(xx). The green belt of at least 5-10 m width shall be developed in nearly 33 % of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Trees have to be planted with spacing of 2m x 2m and number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration and plantation shall be completed in first year itself.

(xxi). 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.

(xxii). 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. 31.6

Setting up of 70 TPD Formaldehyde Manufacturing in existing facility located at plot no H-304 RIICO Industrial Area, Bhiwadi, District. - Alwar, State- Rajasthan by M/s SB PolychemPvt Ltd. - Consideration of TOR

[Proposal No. IA/RJ/IND3/205325/2021; File No. IA-J11011/117/2021-IA-II(I))

The committee noted that the PP vide email dated 10.5.2022 informed the Ministry that they are withdrawing **the proposal** due to some shortcomings in the proposal and will re-upload after necessary modifications.

Agenda No. 31 .7

Amendment in Environment Clearance for Proposed Pesticides and Pesticide Specific Intermediates manufacturing located at Plot No. D-2/11/B/3/2, GIDC, Dahej-II, Taluka: Vagra, District: Bharuch-392130 (Gujarat) by M/s. NACL Spec Chem Ltd. Consideration of Amendments in Environmental Clearance

[Proposal No.; IA/GJ/IND3/269078/2022, File No. IA-J-11011/437/2017-IA-II(I))

1. The proposal is for amendment in the Environment Clearance granted by the ministry vide letter IA-J-11011/437/2017-IA-II(I) dated 22.2.2019 for Pesticides and Pesticide Specific Intermediates Manufacturing Unit at Plot no. D-2/11/B/3/2, GIDC, Dahej-II, Taluka: Vagra, District: Bharuch-392130 (Gujarat) by M/s. NACL Spec Chem Ltd.

2. The PP reported that M/s. Greentec Chemicals Pvt. Ltd. had obtained Environment Clearance vide F. No. IA-J-11011/437/2017 – IA – II(I) dated 22/02/2019 for pesticides and pesticide specific intermediates manufacturing unit at Plot no. D-2/11/B/3/2, GIDC, Dahej-II, Taluka: Vagra, district: Bharuch-392130 (Gujarat). During the year 2020,M/s. Greentec Chemicals Pvt. Ltd. was takeover by the M/s. NACL Spec Chem Ltd and M/s. NACL Spec Chem Ltd. has obtained EC-Transfer order vide letter no. F. No. IA-J-11011/437/2017 – IA – II(I) dated 15/02/2021 from MOEF&CC, New Delhi with the same terms and conditions.

3. The M/s. NACL Spec Chem Ltd vide proposal No. IA/GJ/IND3/269078/2022 applied for amendment in EC on 24.10.2020 The proposal is now placed in 31st EAC meeting held on May, 11-12, 2022, wherein the project proponent and the accredited Consultant Envision Enviro Technologies Pvt. Ltd., having an accreditation number NABET/EIA/2023/RA0212 valid till 7.12.2023 Ahmedabad made a detailed presentation and requested for following amendment in previously granted EC:

S. No	Para of EC issued by MoEF&CC	Details as per the EC	To be revised / read as	Justification / reasons
1	Point – 5 of page -1	Total water requirement is estimated to be 1,750 cum/day, of which fresh water demand of 1,100 cum/day is to be met from GIDC water supply.	Total water requirement is estimated to be 1,750 cum/day, of which fresh water demand of **1,000cum/day** is to be met from GIDC water supply.	• Fresh water requirement for process will increase from 70 to 194 KLD to maintain/ achieve the quality norms as per export requirement. • Entire recycle water cannot be used in

		Total effluent generated from different industrial operation is estimated to be **792 KLD**, which will be taken to the effluent treatment plant (ETP) followed by MEE & RO for treatment. The treated water of 650 KLD shall be reused /recycled for cooling, scrubbing and process. Domestic wastewater of 40 KLD shall be treated in STP and treated water will be reused for land irrigation/gardening. There will be no discharge of treated/untreated wastewater from the unit, and thus conforming to Zero Liquid Discharge.	Total effluent generated from different industrial operation is estimated to be 792 KLD, which will be taken to the effluent treatment plant (ETP) followed by MEE & RO for treatment. **The treated water of 556 KLD** shall be reused /recycled for cooling, scrubbing and process. Domestic wastewater of 40 KLD shall be treated in STP and treated water will be reused for land irrigation/gardening. There will be **disposal of 100 KLD high TDS/COD treated effluent stream from stripper outlet to CETP – Dahej. Remaining industrial effluent – 652 KLD will be further treated in in-house MEE – 1 followed by ATFD**	process scrubber as we will recover Br_2 from HBr Scrubber hence, 10 KLD fresh water will be required for scrubber. • We propose 2 nos. of boiler of capacity 15 TPH each. Condensate steam can be recycled back, hence make up water requirement will be reduced from 812 KLD to 658 KLD. • After EC-Amendment, reuse of STP treated water – 40 KLD for gardening. Industrial effluent after treatment in ETP followed by RO and MEE-2/ATFD will be reuse –596 KLD for various industrial activities and 154 KLD internal recycle. Considering these revised scenarios for entire water consumption and wastewater generation is as under, ▪ Total water requirement: 1,750 KLD ▪ Fresh water requirement reduces from 1,100 to 1,000 KLD. ▪ Quantity to be recycled: 596 KLD ▪ Reuse water will be 596 KLD along with 154 KLD internal recycle. • Prior permission letter no. GIDC/DEE/WS/BRH/9 dated 1/04/2022 from GIDC has been obtained by the unit. • Most of our products will be exported in more than 25
2	Point – (iii) of Annexure on page – 6	As already committed by the project proponent, Zero liquid discharge shall be ensured and no waste/treated water shall be discharged outside the premises.	There will be **disposal of 100 KLD high TDS/COD treated effluent stream from stripper outlet to CETP – Dahej. Remaining industrial effluent – 652 KLD will be further treated in in-house MEE – 1 followed by ATFD**	
3	Point – (viii) of Annexure on page – 6	Total fresh water requirement shall not exceed 1,100 cum/day is to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.	Total fresh water requirement shall not exceed **1,000 cum/day** is to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.	
4	Point – (ix) of Annexure on page – 6	Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by	Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD **stream – 632 KLD** shall be passed through stripper. **100 KLD of stripper outlet will be**	

		MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.	**disposed to CETP – Dahej and remaining 532 KLD effluent will be treated in MEE followed by ATFD (agitated thin film drier)**. Low TDS effluent stream shall be treated in ETP/RO **followed by MEE - 2** to meet the prescribed standards.	countries of South-East Asia and Africa. Best quality of products without any contamination will be produced to meet export requirement. After taking over the unit from M/s. Greentec chemicals Pvt. Ltd., NACL technical team observed requirement of changes in water balance as some of our products/group of products like Herbicides & Fungicides treated water cannot utilized for manufacturing process. • At the time of EC application CETP – Dahej was not in operation phase, hence M/s. Greentec Chemicals Pvt. Ltd. received EC with ZLD condition. Now CETP – Dahej is in operation phase. M/s. Greentec Chemicals Pvt. Ltd. is been takeover by us in the year 2020. Membership for disposal of 100 KLD treated effluent into CETP – Dahej has been obtained to change the EC condition. • According to the identified changes in water balance, the effluent generation from the project will be 792 KLD, out of which around 87% i.e. 692 KLD will be treated in-house and maintained as ZLD. Remaining 13% i.e. 100 KLD will be partially disposed though CETP-Dahej after treatment. • Disposal of 100 KLD primary treated High
5.	Point – (xii) of Annexure on page –7	Process Organic Residue and spent carbon, if any, shall be sent to cement industries. ETP Sludge, process inorganic & evaporation salt shall be disposed-off to TSDF.	Process Organic Residue and spent carbon, if any, shall be sent to cement industries. ETP Sludge, process inorganic & evaporation salt shall be disposed-off to TSDF.	

				TDS/COD effluent into CETP – Dahej after treatment in stripper will reduce operational cost of MEE – 1/ATFD. • High TDS/COD effluent – 632 KLD from process, washing and scrubber will be primary treated in ETP followed by stripper. • 100 KLD from stripper outlet will be disposed to CETP – Dahej and remaining effluent will be treated in MEE – 1 followed by ATFD. • Condensate stream from MEE – 1 will be homogenized with low TDS/COD effluent stream from utility blow down and will be treated in ETP – 2. • ETP – 2 consist of primary, secondary and tertiary treatment units followed by RO and MEE – 2. • Treated water – 556 KLD (RO permeate and condensate of MEE – 2) will be reused /recycled for cooling, scrubbing and process. Steam condensate –154 KLD from boiler will be recycled/ recirculate.

4. Deliberations in the EAC:

The Committee observed that being a Pesticides and Pesticide Specific Intermediates Manufacturing unit, the PP needs to submit life cycle analysis. In addition, the PP shall submit the details of carbon foot prints and carbon sequestration w.r.t. the project and also the list of products for which treated water cannot be utilized for manufacturing process. The same have been submitted by the PP and the committee found them to be satisfactory.

The PP also confirmed that they have obtained the EC for 792 KLD wastewater for ZLD. Now, they are proposing to partially dispose of 100 KLD treated wastewater to CETP-Dahej and remaining 692 KLD wastewater will be treated through MEE/ATFD & RO and will be reused within the plant for industrial purposes.

5. After detailed deliberations, the EAC accepted the request of the PP and **recommended** the proposal for Amendment in EC condition, as detailed in above mentioned table. The Committee 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 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.

Agenda No. 31 .8

Amendment in Environmental Clearance for "Change in location of new 1500 MTPD Sulphuric Acid (100%) Plant within the existing fertilizer complex" and "to add Desalination Plant with Capacity of 15 MLD" at Sriharipuram, Vishakhapatnam District, Andhra Pradesh by M/s Coromandel International Limited (formerly M/s Coromandel Fertilizers Limited)- Consideration of Amendments in Environmental Clearance

[Proposal No IA/AP/IND2/49286/2016.; File No. IA-J-11011/51/2016-IA II(I))

1. The proposal is for amendment in the Environment Clearance granted by the Ministry vide letter dated 07.01.2021for project "Enhancement of Phosphoric Acid production from 700 MTPD to 1000 MTPD P_2O_5 and other auxiliary facilities within the Existing Fertilizer complex by M/s Coromondel International Limited located at Sriharipuram, Vishakhapatnam district, Andhra Pradesh".

2. M/s Coromondel International Limited vide proposal No **IA/AP/IND2/49286/2016** applied for amendment in EC on 24.1 .2017 The the proposal is now placed in 31st EAC meeting held on May, 11-12, 2022, wherein the project proponent and the accredited Consultant M/s. EQMS India Pvt. Ltd. having accreditation number NABET/EIA/1922/RA0197 valid till 23.11.2022] made a detailed presentation and requested for following amendment in previously granted EC:

S.No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/read as	Justification/reasons
1	Para 3, Sr. No. 1 of Table *(Subject)*	"Proposed Setting up of new 1500 MTPD Sulphuric Acid (100%) plant within	"Proposed Setting up of new 1500 MTPD Sulphuric Acid (100%) plant	Only change in location of new 1500 MTPD Sulphuric Acid (100%) Plant within

		the Existing Fertilizer Complex, for total Sulphuric acid production of 3600 MTPD at Sriharipuram, Vishakhapatnam district, Andhra Pradesh, without increase pollution load and total production of NP/NPK (3900 MTPD) and Phosphoric Acid (1400 MTPD) by M/s. Coromandal International Limited (Formerly M/s Coromandel Fertilizers limited)"	within the Existing Fertilizer Complex, for total Sulphuric acid production of 3600 MTPD at Sriharipuram, Vishakhapatnam district, Andhra Pradesh, without increase pollution load and total production of NP/NPK (3900 MTPD) and Phosphoric Acid (1400 MTPD) by M/s. Coromandal International Limited (Formerly M/s Coromandel Fertilizers limited)"	the existing fertilizer complex is proposed. The change in the location of proposed Sulphuric acid plant is envisaged to bring the plant near to utilities and downstream its user plants such as Phosphoric Acid Plant and Complex Fertilizer plant. By installation of proposed Sulphuric acid plant at a new location, pipeline extension will be reduced and there would be optimization of pipeline size as the pressure drop will be reduced. There will be no change in pollution load as shifting of land location has been proposed. Both Sulphuric Acid and Phosphoric Acid are intermediates to chemical fertilizer (Phosphotic fertilizers), which stand alone is not covered under the ambit of EIA Notification,2006.
2	Para 3, Sr. No. 5 of Table *(Point 4 para 3)*	Fresh Water requirement will be increased from 10350 m3/day to 14550 m3/day, which will be sourced from Greater Vishakhapatnam Municipal Corporation(GVMC). **Sea Water consumption will be same i.e 84600 m3/day.**	Fresh Water requirement will be increased from 10350 m3/day to 14550 m3/day , which will be sourced from Greater Vishakhapatnam Municipal Corporation (GVMC). **Sea Water consumption will be increased from 84600 m3/day to 124600 m3/day.Therefore, supply source will**	GVMC is unable to supply the agreed freshwater demand during drought or monsoon failure. Hence, the company has proposed for utilization of sea water for production of sweet water by "Installation of Desalination Plant". The desalination plant will act as backup during failure of monsoon and as standby source for freshwater.

			be GVMC or sea water.	
3	Para 3, Sr. No. 7 of Table *(A-Specific Condition 2)*	The present freshwater requirement is 10350 m3/day. Additional fresh water for the proposed enhancement will be 4200 m3/day. The Total freshwater requirement post enhancement shall be not exceed 14550 m3/day. **The present sea water requirement for once through cooling will remains to be 86400 m3/day**.	The present freshwater requirement is 10350 m3/day. Additional fresh water for the proposed enhancement will be 4200 m3/day. The Total freshwater requirement post enhancement shall be not exceed 14550 m3/day. **The present sea water requirement for once through cooling will increase from 84600 m3/day to 124600 m3/day.**	
4	Para 4 (v)	Point 4 para 3 shall be read as "Fresh water requirement will be increased from 10350 m3/day to 14550 m3/day, which will be sourced from Greater Vishakhapatnam Municipal Corporation (GVMC). **Sea Water consumption will be same i.e 84600 m3/day.**	Point 4 para 3 shall be read as "Fresh water requirement will be increased from 10350 m3/day to 14550 m3/day, which will be sourced from Greater Vishakhapatnam Municipal Corporation (GVMC). **Sea Water consumption will be increased from 84600 m3/day to 124600 m3/day.**	
5	Para 4 (vii)	A-Specific Condition 2 Shall be read as "The present freshwater requirement is 10350 m3/day. Additional fresh water for the proposed enhancement will be 4200 m3/day. The total freshwater	A-Specific Condition 2 Shall be read as "The present freshwater requirement is 10350 m3/day. Additional fresh water for the proposed enhancement will be 4200 m3/day.	

		requirement post enhancement shall not exceed 14550 m3/day. **The present sea water requirement for once through cooling will remains to be 84600 m3/day."**	The total freshwater requirement post enhancement shall not exceed 14550 m3/day. **The present sea water requirement for once through cooling will be increased from 84600 m3/day to 124600 m3/day.**	

3. Deliberations in the EAC:

The EAC deliberated on the change in location of new 1500 MTPD Sulphur Acid, fresh water requirement, sea water requirement, change in the pollution load, The Committee also recommended that the PP needs to develop the dense green belt around the periphery of the Unit.

4. After detailed deliberations, the EAC accepted the request of the PP and **recommended** the proposal for Amendment in EC condition, as detailed in abovementioned table. The Committee also recommended the following specific conditions:

(iii). 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.

(iv). The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

The meeting ended with thanks to the Chair.

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ANNEXURE

GENERAL EC CONDITIONS

(i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

(ii) The Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.

(iii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.

(iv) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

(v) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

(vi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

(vii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZillaParishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

(viii) The project proponent shall also upload/submit six monthly reports on Parivesh Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

(ix) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Integrated Regional Office of MoEF&CC by e-mail.

(x) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at **https://parivesh.nic.in/**. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

(xi) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

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

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Annexure

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

S. No.	Name of Members	Designation
1.	**Prof. (Dr.) A.B. Pandit** Vice Chancellor, Institute of Chemical Technology, Mumbai, Sir JC Bose Fellow, Government of India Email: ab.pandit@ictmumbai.edu.in	EAC Chairman
2.	**Dr. Ashok Kumar Saxena, IFS** Bunglow No. 38, Sector-8A, Gandhinagar, Gujarat – 382008 E-mail: ashoksaxena1159@gmail.com	Member
3.	**Prof. (Dr.) S. N. Upadhyay** Research Professor(Hon.), Department of Chemical Engineering & Technology, Indian Institute of Technology (Banaras Hindu University), Varanasi E-mail: snupadhyay.che@iitbhu.ac.in	Member
4.	**Prof. (Dr.) Vijay S. Moholkar** Professor in Department of Chemical Engineering,Block-K (Academic complex), Room No. 111, Inidia Institute of Technology Gawahati, Gawahati – 781039 E-mail: vmoholkar@iitg.ac.in	Member
5.	**Shri Santosh Gondhalkar** 'Shree' Apartment, Flat 401, Plot No. 22, Tukaram Society, Santnagar, Pune- 411009 E-mail: santoshgo@gmail.com	Member
6.	**Dr. Suresh Panwar** House No.4, Gayateri Green Society, NH 58 Bypass, Kankerkhera, Meerut, Uttar Pradesh Email: spcppri@gmail.com	Member
7.	**Shri Tukaram M Karne** "SHREYAS ORNATE" F-1, 95-Tulasibagwale Colony, Sahakarnagar-2, PUNE: 411 009, Maharashtra E-mail: tmkarne@gmail.com	Member
8.	**Shri Dinabandhu Gouda** Additional Director, DH IPC-I, Room No. 309A, Third Floor, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi – 110032 E-mail: dinabandhu.cpcb@nic.in	Member

9.	**Dr. M. Ramesh** **Scientist-'E', MoEF&CC** Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003 Email- ramesh.motipalli@nic.in Tel: 011- 20819249	Member Secretary

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MOM have been Read and approved with the corrections in the norms suggested by Dr, D B Gauda

Prof Aniruddha B Pandit, Chairman