

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

Dated: 05.09.2023

**MINUTES OF THE 62nd EXPERT APPRAISAL COMMITTEE (INDUSTRY-3 SECTOR)
MEETING HELD ON 28th AUGUST, 2023**

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

(i) Opening Remarks by the Chairman

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

(ii) Details of Agenda items by the Member Secretary

The Member Secretary apprised the Committee about the details of Agenda items to be discussed during this Expert Appraisal Committee (EAC) meeting.

(iii) Confirmation of Minutes of the 61st EAC Meeting.

The EAC noted that the final minutes of the above meeting were issued after incorporating the comments offered by the members and approved by the Chairman. The EAC confirmed the MoM.

The PP of the proposal (Agenda No.60.7), requested the following modification:

Agenda No. 60.7

Proposed Synthetic Organic Chemicals Manufacturing Unit with Production capacity of 4000 MT/Month located at Plot No. 130, 131, GIDC–Nandesari, Dist. Vadodara, Gujarat by M/s. Farmson Pharmaceuticals Gujarat Private Limited - Consideration of Environmental Clearance

[Proposal No. IA/GJ/IND3/437263/2023; File No. IA-J-11011/276/2023-IA-II(I)]

1. The proposal was recommended by the EAC in its 60th Meeting held on 10th August, 2023 and the MoM were published on 24.8.2023. The PP vide e-mail dated 27.8.2023 requested the following correction in the MoM:

Reference of MoM	As per MoM	Correction Required	Remarks
Page 52, Condition no. (v)	PNG shall be used as a fuel in the boiler.	As proposed by the PP, agro briquettes shall be used as a primary fuel, coal shall be used as a secondary fuel during the unavailability of agro briquettes.	Typographical error in nature

2. The EAC deliberated on the above and recommended the same.

Agenda No. 62.1

Setting up of a pesticide and pesticide intermediate manufacturing Units (Unit-I & II) at plot No. CH-21 (Dahej-1) and D3/1/1 (Dahej-3), G.I.D.C Estate, Dahej, Tehsil – Vagra District Bharuch, Gujarat by M/s Insecticides India Limited – Reconsideration of Amalgamation and Amendment in the Environmental Clearances.

[Proposal No. IA/GJ/IND3/296777/2023; File No. IA-J-11011/991/2008-IA II (I) & IA-J-11011/192/2018-IA II (I)]

- The proposal is for amalgamation and amendment in the Environmental Clearances granted by the Ministry to Insecticide India Ltd. (Unit-I) and Insecticide India Ltd. (Unit-II) vide letter no. F. No. J-11011/991/2008-IA II (I), dated 17.03.2009 and F. No. J-11011/192/2018-IA II (I), dated 27.12.2019 respectively for the project of Pesticide and Pesticide Intermediates manufacturing plant located at Plot No. CH-21 & D-3/1/1, Dahej Industrial Estate, Tehsil: Vagra, Dist. Bharuch, Gujarat in favour of M/s. Insecticide India Ltd. (Unit-I).
- The proposal was earlier considered in the 53rd EAC meeting held on 14th June, 2023, wherein the EAC deferred the proposal for want of requisite information. Reply to the same was submitted by the PP, which is as follows:

S. No.	Queries Raised by EAC	Reply by PP			
1.	Detailed greenbelt plan along with budgetary allocation for completion of greenbelt in one year after amalgamation. Action plan for high carbon sequestration species trees in the greenbelt needs to be submitted.	Summary of greenbelt:			
		Unit	Plot area	Greenbelt area	% of total plot area
		Unit-I	117313.74	38515	32.9
		Unit-II	52634.29	17795	33.8
		Total	169948.03	56310	33.2
		Budgetary allocation for completion of greenbelt in			

		<p>one year after amalgamation has been submitted.</p> <p>Enclosed drawing showing greenbelt area inside project the project has been submitted.</p> <p>PP have proposed to plant high carbon capturing trees species within one year, which was submitted during the presentation. In addition to this, we also take consultation of District Forest Officer-Bharuch for better tree plantation in our premises including high carbon capturing to considering local climatic conditions and soil/water quality.</p>
2.	Layout plan with the requisite green belt for the proposed project.	Layout plan with the requisite green belt existing/proposed greenbelt area inside project has been submitted.
3.	Undertaking for use of Biomass as primary fuel.	Undertaking stating for use of Biomass as primary fuel has been submitted.
4.	The details of amalgamation. i.e physical changes, fuel, water, additional interventions etc.	The details of amalgamation. i.e. physical changes, fuel, water, additional interventions etc has been submitted.
5.	Details of reduction in the environmental parameters (emission, fuel, water, carbon footprint etc.) due to the proposed amalgamation.	Details of reduction in the environmental parameters (emission, fuel, water, carbon footprint etc.) due to the proposed amalgamation has been submitted.
6.	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.	The details of carbon footprints and carbon sequestration study w.r.t. proposed project has been submitted.

3. The project proponent has requested for amalgamation & amendment in the ECs with the details as under:

Sr. No .	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/read as	Justification/ reasons
1.	EC letter no Unit-I: J-11011/991/20	Details of both ECs are summarized below.	The Proposal is for amalgamation and amendment of ECs of Insecticide India Ltd.	Both the EC granted by MoEFCC, New Delhi for production of Technical Pesticide &

Sr. No .	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/read as	Justification/ reasons
	<p>08-IA II (I) Unit-II: J- 11011/192/20 18-IA II (I)</p>		<p>(Unit-I) (Plot no. CH-21) (Dahej-1) and Insecticide India Ltd. (Unit-II) (Plot no. D3/1/1) (Dahej-3) by M/s. Insecticide India Ltd. (Unit-I)</p>	<p>Pesticide Specific Intermediates. Both the unit is in the same name with same ownership. Both the land is owned by one owner Insecticide India Limited. Local Electricity Authorities is not agreed to give separate electricity connection. Amalgamation will facilitate more scientific & effective EMS and operation of Plants and also minimize administrative problems. GIDC authority has already issue letter of amalgamation of plot No. CH-21 & D-3/1/1 at Dahej Industrial Estate</p>
2.	<p>Condition no. 4 and specific condition A (i) of EC (Unit-I)</p>	<p>Condition no. 4: It is noted that the total water requirement of 280 m³/day will be sourced from GIDC water supply. The wastewater generation will be 147 m³/day. Concentrated effluent containing organics and pesticides residue will be incinerated by incineration. High salt stream containing heavy inorganic & organic load will be treated in Triple Effect Evaporator. Balance quantity of effluent will be</p>	<p>Total water requirement after amendment is estimated to be 1096 KLD, which includes fresh water requirement of 752 KLD proposed to be met from GIDC water supply. Total wastewater generation will be 1062 KLD (Industrial: 1030 KLD + Domestic: 32 KLD). • Effluent from process (391 KLD) will be</p>	<p>Modification in change in mode of disposal of effluent due to currently CTP Dahej is under operation. Resulted to 302 KLD effluent able to confirming industry specific discharge standard of CETP, Dahej hence we need to amend our EC. Because this more feasible and more environment friendly option.</p>

Sr. No .	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/read as	Justification/ reasons
		treated in ETP for primary, secondary and tertiary treatment and treated effluent will be sent to CETP for final treatment and disposal.	taken into ETP-1 and taken to MEE. MEE Condensate (365 KLD) will be taken to ETP-2 along with dilute stream for further treatment.	<p><u>Effluent Management after amendment:</u> 32 KLD: STP 25 KLD: to Incinerator 391 KLD: ETP-1 followed by MEE/ATFD, MEE condensate (365 KLD will be treated in ETP-2 along with dilute stream of 249 KLD) 614 KLD: to ETP-2 followed by RO [312 KLD - RO Permeate - recycle and 302 KLD - RO Reject - send to CETP, Dahej]</p>
	<p>Specific condition A (i): The wastewater generation shall not exceed 147 m³/day. The effluent shall be segregated as per the pollution load. Concentrated effluent stream containing organics and pesticides residue shall be incinerated by incineration. High salt stream containing heavy inorganic & organic load shall be treated in Triple Effect Evaporator. Balance quantity of effluent will be treated in ETP for primary, secondary and tertiary treatment and treated effluent after confirming to the industry specific discharge standard send to CETP for final treatment and disposal.</p>	<ul style="list-style-type: none"> • Concentrated effluent (25 KLD) containing organics and pesticides residue will be incinerated by incinerator. • Effluent from lab, scrubber, washing and utilities (249 KLD) and MEE Condensate (365 KLD) Total: 614 KLD will be taken into ETP-2 and passed through RO. RO Permeate (312 KLD) will be reused. RO reject (302 KLD) will be sent to CETP for final treatment & disposal. • Domestic wastewater (32 KLD) will be treated in STP and treated water will be utilized for Greenbelt development. 		
Condition no. 6 of EC (Unit-II)	Total water requirement is estimated to be 750 cum/day, which includes fresh water requirement of 253 cum/day proposed to be met from GIDC water supply. Effluent from process and lab (393 cum/day) will be taken into ETP-1 and passed through RO & MEE. MEE Condensate (175 cum/day) and RO permeate (235			

Sr. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/read as	Justification/reasons
		cum/day) will be reused. Effluent from scrubber, washing and utilities (110 cum/day) will be taken into ETP-2 and passed through RO. RO reject (35 cum/day) will be sent to MEE and RO Permeate (75 cum/day) will be reused. Domestic wastewater (12 cum/day) will be treated in STP and treated water will be utilized for Greenbelt development. There will be no discharge of treated/ untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.		

Details of Plot and Plot Area

Particulars	Area as per EC of Insecticide India Limited	Area as per EC of Insecticide India Limited (Unit-II)	Total after merging of both EC
Plot No.	CH-21	D3/1/1	CH-21 & D3/1
Total Area	117313.74 m ²	52634.29 m ²	169948.03 m ²

The details of products and capacity after amalgamation are as under:

Type of Products	Unit-I MTPM	Unit-II MTPM	Total after amalgamation MTPM
Herbicides	748.333	625	1373.333
Insecticide	748.333	625	1373.333
Fungicides	162.5	250	412.5
Intermediates	1666.666	1000	2666.666
Formulation	4466.667	0	4466.667
Total	7792.499	2500	10292.5

List of products of both units

Sr. No.	Name of Products	CAS No.	Quantity (MT/Month)		
			Unit-1	Unit-II	Total
A	Herbicides				

Sr. No.	Name of Products	CAS No.	Quantity (MT/Month)		
			Unit-1	Unit-II	Total
1.	2-4-D Ethyl Ester	533-23-3	748.333	0.0	1373.333
2.	2-4-D Sodium salt	2702-72-9			
3.	Quizalofop	100646-51-3			
4.	Imazethapyr	81335-77-5			
5.	Met sulfuron methyl	74223-64-6			
6.	Butachlore	23184-66-9			
7.	Pretilachlor	51218-49-6			
8.	Glyphosate	1071-83-6			
9.	Oxyfluorfen	42874-03-3			
10.	Paraquate	4685-14-7			
11.	Bispyribac sodium	125401-92-5	0.0	625	
12.	Diuron	330-54-1			
13.	Glufosinate ammonium	77182-82-2			
14.	Pyribenzoxim	168088-61-7			
15.	Cyhalofop-butyl	122008-85-9			
16.	Clordinafop-propargyl	105512-06-9			
17.	Cloquintocet-mexyl	105512-06-9			
18.	Tembotrione	335104-84-2			
19.	Pinoxaden	243973-20-8			
20.	Penoxsulam	219714-96-2			
21.	Chlorimuron-ethyl	74223-64-6			
22.	Fomesafen	72178-02-0			
23.	Metribuzin	21087-64-9			
24.	Triclopyr	55335-06-3			
25.	Flucetosulfuron	120162-55-2			
26.	2,4-D amine salt	2008-39-1			
27.	Glyphosate potassium salt	70901-12-1			
B	Insecticides				
1.	Thiodicarb	59669-26-0	755.833	0.0	1380.833
2.	Acetamiprid	135410-20-7			
3.	Imidacloprid	138261-41-3			
4.	Thiacloprid	111988-49-9			
5.	Atrazine	1912-24-9			
6.	Chlorpyrifos	2921-88-2			
7.	Dichlorvos (DDVP)	62-73-7			
8.	Allethrin	584-79-2			
9.	Alpha cypermethrin	65731-84-2			
10.	Cyfluthrin	68359-37-5			
11.	Cypermethrin	52315-07-8			
12.	Deltamethrin	52918-63-5			
13.	d-transallethrin	28434-00-6			
14.	Lambda Cyhalothrin	91465-08-6			

Sr. No.	Name of Products	CAS No.	Quantity (MT/Month)					
			Unit-1	Unit-II	Total			
15.	Permethrin	52645-53-1						
16.	Prallethrin	23031-36-9						
17.	Transfluthrin	118712-89-3						
18.	Fipronil	120068-37-3						
19.	Buprofezin	69327-76-0						
20.	Cartap hydrochloride	15263-52-2						
21.	Metalaxyl	57837-19-1						
22.	Novaluron	116714-46-6						
23.	Diafenthiuron	80060-09-9				0.0	625	
24.	Thiocyclam oxalate	31895-22-4						
25.	Dinotefuran	165252-70-0						
26.	Pymetrozine	123312-89-0						
27.	Chloranthraniliprole	500008-45-7						
28.	Cyantraniliprole	736994-63-1						
29.	Ethiprole	181587-01-9						
30.	Flubendiamide	272451-65-7						
31.	Flonicamid	158062-67-0						
32.	Spirotetramat	203313-25-1						
33.	Cyenoxyrafen	560121-52-0						
34.	Profenofos	41198-08-7						
35.	Thiamethoxam	153719-23-4						
36.	Fenpyroximate	134098-61-6						
C	Fungicides							
1.	Difenoconazole	119446-68-3	162.5	0.0	412.5			
2.	Hexaconazole	79983-71-4						
3.	Ipconazole	125225-28-7						
4.	Paclobutrazol	76738-62-0						
5.	Propiconazole	60207-90-1						
6.	Tebuconazole	107534-96-3						
7.	Tricyclazole	41814-78-2						
8.	Indoxacarb	173584-44-6						
9.	Thiophanate Methyl	23564-05-8						
10.	Abamectin	71751-41-2						
11.	Azoxystrobin	131860-33-8						
12.	Emamectin Benzoate	155569-91-8						
13.	Pyraclostrobin	175013-18-0	0.0	250				
14.	Kresoxim methyl	143390-89-0						
15.	Trifloxystrobin	141517-21-7						
16.	Cyazofamid	120116-88-3						
17.	Dimethomorph	110488-70-5						
18.	Boscalid	188425-85-6						
19.	Metrafenone	220899-03-6						

Sr. No.	Name of Products	CAS No.	Quantity (MT/Month)		
			Unit-I	Unit-II	Total
20.	Carbendazim	10605-21-7			
21.	Myclobutanil	88671-89-0			
22.	Copper Oxychloride	1332-40-7			
23.	Cuprus chloride	7758-89-6			
24.	Cuprous oxide	1317-39-1			
25.	Azoxystrobin	131860-33-8			
D	Intermediate Chemicals				
1.	Mono Chloro Acetic Acid	79-11-8	583.333	0.0	583.333
2.	IDA	142-73-4	500.000	0.0	500.000
3.	PMIDA	5994-61-6	333.333	0.0	333.333
4.	CMAC	52314-67-7	50.000	0.0	50.000
5.	MPBD	39515-51-0	50.000	0.0	50.000
6.	CCMP	70258-18-3	41.667	0.0	41.667
7.	CMMA	-	25.000	0.0	25.000
8.	1,2,4-Traizoles	288-88-0	83.333	0.0	83.333
9.	Lambda acid	91465-08-6	0.0	1000	1000
10.	Bifenthrin alcohol	76350-90-8			
11.	3-Methyl-4-nitroimino perhydro 1,3,5-oxadiazine (MNIO)	153719-38-1			
12.	2-(Nitroimino) Imidazolidine (NII)	5465-96-3			
13.	2-Chloro-5-(Chloromethyl) Thiazole (CCMT)	105827-91-6			
14.	Phenyl 4,6-dimethoxy pyrimidine-2yl-carbamate	89392-03-0			
15.	Diethyl Thiophosphoryl Chloride (DETCL)	2524-04-1			
Sub Total (A+B+C+D)			3333.332	2500.000	5833.332
Formulations					
1.	Liquid Pesticide	--	250.000	0.0	250.000
2.	Granuler Pesticide	--	3333.333	0.0	3333.333
3.	Powder Pesticide	--	833.333	0.0	833.333
4.	Emulsifier Formulation	--	50.000	0.0	50.000
Sub Total Formulation			4466.667	0.0	4466.667
Grand Total			7799.999	2500	10299.999
Say			7800	2500	10300

Break up of Water consumption and w/w generation

(Based on request for change in mode of disposal of effluent)

Sr. No.	Source	Water Consumption (KL/day)	
		Total (After merger)	Total after amendment

1.	Domestic	40	40
2.	Green Belt	62	62
3.	Industrial		
A	Process	411	411
B	Lab	3	3
C	Scrubber	34	34
D	Cooling	216	216
E	Boiler	200	200
F	Washing	95	95
G	Water Treatment	35	35
Total Industrial		994	994
Total (1 +2 + 3)		1096	1096
Recycle Water		563	344
Fresh water requirement		533	752

Wastewater generation

Sr. No.	Source	Wastewater Generation (KL/day)		Remark
		Total (After merger)	Total after amendment	
1.	Domestic	32	32	To STP
2.	Industrial			
A	Process	416	416	25 KLD to Incinerator + 391 KLD ETP-1 followed by MEE
B	Lab	3	3	To ETP-2
C	Scrubber	34	34	To ETP-2
D	Cooling	52	52	To ETP-2
E	Boiler	30	30	To ETP-2
F	Washing	95	95	To ETP-2
G	Water Treatment	35	35	To ETP-2
H	MEE Condensate	--	365	To ETP-2 followed by RO
Total Industrial		665	1030	
Total (1 + 2)		697	1062*	Increase the treatment effluent is due to addition of 365 KLD condensate water (1062 KLD – 365 KLD = 697 KLD)

***Effluent Management:**

32 KLD: STP

25 KLD: to Incinerator

391 KLD: ETP-1 followed by MEE/ATFD, MEE condensate (365 KLD will be treated in ETP-2 along with dilute stream of 249 KLD)

614 KLD: to ETP-2 followed by RO [312 KLD - RO Permeate - recycle and 302 KLD - RO Reject - send to CETP, Dahej]

4. The PP reported that after the amalgamation & amendment in EC, the EC and its conditions will be as follows:

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	This has reference to your letter no. nil dated 17.12.2008 along with form 1 and detailed pre-feasibility report on the above mentioned subject seeking environmental clearance under the Environment Impact Assessment Notification, 2006.		This has reference to your online proposal No. IA/GJ/IND2/75306/2018 dated 29 th August, 2019 for environmental clearance to the above project.		This has reference to your online proposal No. IA/GJ/IND3/296777/2023 dated 18.01.2023 for amalgamation of environmental clearance to the above project.
2	It is noted that M/s. Insecticides India Ltd. have proposed for manufacturing of technical pesticides and intermediates at GIDC estate,	2	The Ministry of Environment, Forest and Climate Change has considered the proposal for environmental clearance to the project for setting up pesticide intermediates manufacturing unit of capacity 2500 TPM by M/s.	2	The Ministry of Environment, Forest and Climate Change has considered the proposal for environmental clearance to the project for amalgamation of pesticide intermediates manufacturing unit of capacity 5833.332 MTPM by M/s. Insecticides India Limited in an

Sr. No.	EC conditions of Unit-I	Sr. No.	EC conditions of Unit-II	Sr. No.	EC conditions after amalgamation																																																																						
	Dahej in district Bharuch in Gujarat. No eco-sensitive areas are located within 10 km radius of the plant. Total cost of the project will be Rs. 40.00 Crores.		Insecticides India Limited (Unit-II) in an area of 52000 sqm at Plot No. D3/1, GIDC Estate, Dahej, Tehsil Vagra, District Bharuch (Gujarat).		area of 169948.03 sqm at Plot No. CH-21 (Dahej-1) and D3/1/1 (Dahej-3), GIDC Estate, Dahej, Tehsil Vagra, District Bharuch (Gujarat). No eco-sensitive areas are located within 10 km radius of the plant. Total cost of the project will be Rs. 80.0 Crores.																																																																						
3	<p>The list of the existing and proposed capacities with increase in Captive Power Plant capacity as under:</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Product</th> <th>Capacity (MT/Annun)</th> </tr> </thead> <tbody> <tr> <td></td> <td>Phenoxy Herbicides</td> <td>1950</td> </tr> <tr> <td>1</td> <td>2-4-D Ethyl ester</td> <td></td> </tr> <tr> <td>2</td> <td>2-4-D Sodium</td> <td></td> </tr> </tbody> </table>	Sr. No.	Product	Capacity (MT/Annun)		Phenoxy Herbicides	1950	1	2-4-D Ethyl ester		2	2-4-D Sodium		<p>The details of proposed products are as under:</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Name of Products</th> <th>Capacity (MT/Annun)</th> <th>Quantity (MT/Month)</th> </tr> </thead> <tbody> <tr> <td colspan="4">A Herbicides</td> </tr> <tr> <td>1</td> <td>Bispyribac Sodium</td> <td>125401-925</td> <td>2635625</td> </tr> <tr> <td>2</td> <td>Diuron</td> <td>33054-1</td> <td>1000</td> </tr> <tr> <td>3</td> <td>Glufosinate Ammonium</td> <td>77182</td> <td>300</td> </tr> </tbody> </table>	Sr. No.	Name of Products	Capacity (MT/Annun)	Quantity (MT/Month)	A Herbicides				1	Bispyribac Sodium	125401-925	2635625	2	Diuron	33054-1	1000	3	Glufosinate Ammonium	77182	300	3	<p>The details of products after amalgamation are as under:</p> <table border="1"> <thead> <tr> <th rowspan="2">Sr. No.</th> <th rowspan="2">Name of Products</th> <th rowspan="2">Capacity (MT/Annun)</th> <th colspan="3">Quantity (MT/Month)</th> </tr> <tr> <th>Unit-I</th> <th>Unit-II</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td colspan="6">A Herbicides</td> </tr> <tr> <td>1</td> <td>2-4-D Ethyl Ester</td> <td>5323-3</td> <td>748.33</td> <td>0.0</td> <td>1373.33</td> </tr> <tr> <td>2</td> <td>2-4-D Sodium salt</td> <td>2702-72-9</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>Quizalofop</td> <td>100646-51-3</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>Imazetapyr</td> <td>8133-5-</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Sr. No.	Name of Products	Capacity (MT/Annun)	Quantity (MT/Month)			Unit-I	Unit-II	Total	A Herbicides						1	2-4-D Ethyl Ester	5323-3	748.33	0.0	1373.33	2	2-4-D Sodium salt	2702-72-9				3	Quizalofop	100646-51-3				4	Imazetapyr	8133-5-			
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4	Imazetapyr	8133-5-																																																																									

S r. N o	EC conditions of Unit-I		S r. N o	EC conditions of Unit-II		S r. N o	EC conditions after amalgamation						
		Salt			-2				77				
	3	Quizalofop		4	Pyribenzoxim	16 80 88 - 61 -7	50 00		5	Met sulfur on methy l	74 22 3- 64 -6		
		Imidazolinone Herbicides							6		23 18 4- 66 -9		
	4	Imazethapyr		5	Cyhalofopbutyl	12 20 08 - 85 -9	>5 00 0			Butachlore			
		Sulfonyl Urea Herbicides	300						7		51 21 8- 49 -6		
	5	MetSulfuronmethyl		6	Clodinafoppropargyl	10 55 12 - 06 -9	22 71		8		10 71 - 83 -6		
		Organochlorine Herbicides	80						9		42 87 4- 03 -3		
	6	Butachlore		7	Cloquintocetmexyl	10 55 12 - 06 -9	13 92		10		46 85 - 14 -7		
		Other	160 0						1	Bispyribac sodium	12 54 01 - 92 -5	0.0	62 5
	7	Pretilachlor		8	Tembotrione	33 51 04 - 84 -2	>2 00 0		1	Diuro	33		
			505	9	Pinoxaden	24 39 73 - 20 -8	>5 00 0						
				10	Penoxsulam	21 97	>5 00						

S r. N o	EC conditions of Unit-I		S r. N o	EC conditions of Unit-II		S r. N o	EC conditions after amalgamation						
	Herbicides	0			14 - 96 -2	0		2	n	0- 54 -1			
	8	Glyp hosat e		1	Chlori muron -ethyl	>5 00 0		1	Glufos inate ammo nium	77 18 2- 82 -2			
	9	Oxyf luorf en		1	Fomes afen	50 00		1	Pyribe nzoxi m	16 80 88 - 61 -7			
	1 0	Paraq uate		1 2		02 -0		1 5	Cyhal ofop- butyl	12 20 08 - 85 -9			
	Carbamate insecticide	150		1 3	Metrib uzin	11 00		1 6	Clordi nafop- propar gyl	10 55 12 - 06 -9			
	1 1	Thio dicar b		1 4	Triclo pyr	>2 00 0		1 7	Cloqui ntocet - mexyl	10 55 12 - 06 -9			
	Neo Nicotino id insecticide	130 0		1 5	Flucet osulfu ron	>5 00 0		1 8	Temb otrion e	33 51 04 - 84 -2			
	1 2	Acet amip rid		1 6	2,4-D amine salt	>1 00 0		1	Pinox	24			
	1 3	Imid aclop rid		1 7	Glyph osate potass ium	>2 00 0							
	1 4	Thiac lopri d											

S r. N o	EC conditions of Unit-I		S r. N o	EC conditions of Unit-II				S r. N o	EC conditions after amalgamation					
	Organo phospho rus Insectici de	360 0		salt	-1			9	aden	39 73 - 20 -8				
	1 5	Attrazine		1 3	Metribuzin	21 08 7- 64 -9	11 00		2 0	Penoxsulam	21 97 14 - 96 -2			
	1 6	Chlorpyrifos		B Insecticides					2 1	Chlorimuron-ethyl	74 22 3- 64 -6			
	1 7	DDVP		1	Diafenthiuron	80 06 0- 09 -9	20 68 5		2 2	Fomesafen	72 17 8- 02 -0			
	Pyrethroid Insecticide		242 0	2	Thiocyflam Oxalate	31 89 5- 22 -4	>5 00 0		2 3	Metribuzin	21 08 7- 64 -9			
	1 8	Allethrin		3	Dinotefuran	16 52 52 - 70 -0	24 50		2 4	Triclopyr	55 33 5- 06 -3			
	1 9	Alpha Cypermethrin		4	Pymetrozine	12 33 12 - 89 -0	58 20		2 5	Flucetosulfuron	12 01 62 - 55 -2			
	2 0	Cyfluthrin		5	Chlorantraniliprole	50 00 08 - 45 -7	>5 00 0		2 6	2,4-D amine	20 08			
	2 1	Cypermethrin		6	Cyanoaniliprole	73 69 94 -	>5 00 0							
	2 2	Delta Cypermethrin												

S r. N o.	EC conditions of Unit-I		S r. N o.	EC conditions of Unit-II				S r. N o.	EC conditions after amalgamation								
	hrin					63					·	· salt	-				
						-1							39				
2	D-		7	Ethipr	18	>5				2	Glyph	70					
3	trans		·	ole	15	00				7	osate	90					
	alleth				87	0				·	potass	1-					
	rin				-						ium	12					
					01						salt	-1					
2	Lam		8	Flube	27	20					B Insecticides						
4	·bda		·	ndiam	24	00				1	Thiodi	59	75	0.0	13		
	Cyha			ide	51					·	carb	66	5.8		80.		
	lothri				-							9-	33		83		
	n				65							26			3		
					-7							-0					
2	Perm		9	Flonic	15	17				2	Aceta	13					
5	ethri		·	amid	80	68				·	miprid	54					
	n				62							10					
2	Prall				-							-					
6	ethri				67							20					
	n				-0							-7					
2	Trans		1	Spirot	20	>2				3	Imida	13					
7	fluthr		0	etrama	33	00				·	clopri	82					
	in		·	t	13	0					d	61					
					-							-					
					25							41					
	Other	160			-1							-3					
	Insecti	0	1	Cyeno	56	>2				4	Thiacl	11					
	des		1	pyrafe	01	00				·	oprid	19					
			·	n	21	0						88					
	2	fipro			-							-					
	8	nil			52							49					
					-0							-9					
2	Bupr		1	Profen	41	40				5	Atrazi	19					
9	ofezi		2	ofos	19	0				·	ne	12					
	n		·		8-							-					
					08							24					
					-7							-9					
3	Carta		1	Thiam	15	15				6	Chlor	29					
0	p		3	ethoxa	37	63				·	pyriph	21					
	Hydr																
	ochlo																

S r. N o	EC conditions of Unit-I		S r. N o	EC conditions of Unit-II				S r. N o	EC conditions after amalgamation							
		ride		.	m	19					os	-				
	3	Meta 1 lexyl				-						88				
						23						-2				
	3	Nova 2 luron		1	Fenpy 4 roxim ate	13 40 98	48 0				7	Dichlo rvos (DDV P)	62 -			
		Conazol e Fungici des	140 0			-						58				
						61						4-				
						-6						79				
				C Fungicides								-2				
	3	Difen 3 cona zole		1	Pyracl ostrob in	17 50 13	>5 00 0	25 0			9	Alpha cyper methri n	65 73 1-			
						-						84				
	3	Hexa 4 cona zole				18						-2				
				2	Kreso xim Methy l	14 33 90	>5 00 0				1	Cyflut 0 hrin	68 35			
						-						9-				
	3	Ipcon 5 azole				89						37				
						-0						-5				
	3	Paclo 6 butra zol		3	Triflo xystro bin	14 15 17	>5 00 0				1	Cyper 1 methri n	52 31			
						-						5-				
						21						07				
						-7						-8				
	3	Prop 7 econ azole		4	Cyazo famid	12 01 16	>5 00 0				1	Delta 2 methri n	52 91			
						-						8-				
						88						63				
	3	Tebu 8 cona zole				-3						-5				
				5	Dimet homor ph	11 04 88	>2 00 0				1	d- 3 transal lethrin	28 43			
						-						4-				
												00				
	3	Tricy 9 clozo le										-6				
		Other	200								1	Lamd 4 ba Cyhal	91 46			
						-						5-				

S r. N o	EC conditions of Unit-I		S r. N o	EC conditions of Unit-II		S r. N o	EC conditions after amalgamation							
	Fungicide				70 -5				othrin	08 -6				
	4 0	Indoxacarb	6 .	Boscalid	18 84 25 - 85 -6	>5 00 0	1 5 .	Permethrin	52 64 5- 53 -1					
	4 1	Thiophenatemethylfermentation technology		7 .	Metrafenone	22 08 99 - 03 -6	>5 00 0	1 6 .	Prallethrin	23 03 1- 36 -9				
	4 2	Abamectin		8 .	Carbendazim	10 60 5- 21 -7	10 00 0	1 7 .	Transfluthrin	11 87 12 - 89 -3				
	4 3	Azoxystrobin		9 .	Myclobutanil	88 67 1- 89 -0	16 00	1 8 .	Fipronil	12 00 68 - 37 -3				
	4 4	Emamectinbenzoate		1 0 .	Copperoxychloride	13 32 - 40 -7	>2 00 0	1 9 .	Buprofezin	69 32 7- 76 -0				
		Total	200 00	1 1 .	Cuprous Chloride	77 58 - 89 -6	14 0	2 0 .	Cartap hydrochloride	15 26 3- 52 -2				
		Intermediate chemical		1 2 .	Cuprous Oxide	13 17 - 39 -1	13 40	2 1 .	Metalaxyl	57 83 7- 19 -1				

S r. N o	EC conditions of Unit-I		S r. N o	EC conditions of Unit-II				S r. N o	EC conditions after amalgamation					
	Is			1	Azoxystrobin	1360	>500		2	Novaluron	1167			
1	Monocloroacetic acid	7000				-338					14-			
				Total			1500		2	Diafenthiuron	8006	0.0	625	
2	IDA	6000		Intermediate Chemicals							09-			
3	PMIDA	4000		1	Lambda Acid	9146	17100		2	Thiocyclamate	3189			
4	CMA C	600				5086				5-	22-			
5	MPBD	600		2	Bifenthrin Alcohol	7635	2219		2	Dinotefuran	1652			
6	CCMP	500				0908				52	52			
7	CMMA	300		3	3-Methyl-4-nitroimidazo[1,3,5-oxadiazine (MNI O)]	1537	>200		2	Pymetrozine	1233			
8	Triazoles	1000				190				12	-			
	Total	2000				38-1			2	Chlorantraniliprole	5000			
	Formulations			4	2-(Nitroimidazole) Imidazolidine (NII)	5465	>200		7	Cyantraniliprole	7369			
1	Liquid Pesticide	3000				-963			8		94-			
2	Granular	400		5	2-	10	>2			63				

S r. N o .	EC conditions of Unit-I		S r. N o .	EC conditions of Unit-II			S r. N o .	EC conditions after amalgamation															
		pesticide 00			Chloro-5-(Chloromethyl)Thiazole (CCMT)	58 27 - 91 -6	00 0															-1	
	3	Power pesticide 10000																					18
																							15
	4	Emulsifier Formulation 600		6	Phenyl 4,6-dimethoxy pyrimidine-2yl-carbamate	89 39 2- 03 -0	>2 00 0																87
		Total 53600																					-
				7	Diethyl Thiophosphoryl Chloride (DETC L)	25 24 - 04 -1	13 40																01
																							-9
																							27
																							24
																							51
																							-
																							65
																							-7
																							15
																							80
																							62
																							-
																							67
																							-0
																							20
																							33
																							13
																							-
																							25
																							-1
																							56
																							01
																							21
																							-
																							52
																							-0
																							41
																							19
																							8-
																							08
																							-7
																							15
																							37
																							19

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation					
							- 23 -4			
					3 6 .	Fenpy roxim ate	13 40 98 - 61 -6			
					C Fungicides					
					1 .	Difen ocona zole	11 94 46 - 68 -3	16 2.5	0.0	41 2.5
					2 .	Hexac onazol e	79 98 3- 71 -4			
					3 .	Ipcona zole	12 52 25 - 28 -7			
					4 .	Paclob utrazo l	76 73 8- 62 -0			
					5 .	Propic onazol e	60 20 7- 90 -1			
					6 .	Tebuc onazol	10 75			

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation					
					e	34 - 96 -3				
					7 . Tricyc lazole	41 81 4- 78 -2				
					8 . Indox acarb	17 35 84 - 44 -6				
					9 . Thiop hanate Methy l	23 56 4- 05 -8				
					1 0 . Abam ectin	71 75 1- 41 -2				
					1 1 . Azoxy strobi n	13 18 60 - 33 -8				
					1 2 . Emam ectin Benzo ate	15 55 69 - 91 -8				
					1 3 Pyrac lostrob	17 50	0.0	25 0		

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation					
					.	in	13 - 18 -0			
					1 4 .	Kreso xim methy l	14 33 90 - 89 -0			
					1 5 .	Triflo xystro bin	14 15 17 - 21 -7			
					1 6 .	Cyazo famid	12 01 16 - 88 -3			
					1 7 .	Dimet homor ph	11 04 88 - 70 -5			
					1 8 .	Boscal id	18 84 25 - 85 -6			
					1 9 .	Metraf enone	22 08 99 - 03			

S r. N o	EC conditions of Unit-I	S r. N o	EC conditions of Unit-II	S r. N o	EC conditions after amalgamation			
						-6		
				20	Carben dazim	10 60 5- 21 -7		
				21	Myclo butani l	88 67 1- 89 -0		
				22	Coppe r Oxych loride	13 32 - 40 -7		
				23	Cupru s chlori de	77 58 - 89 -6		
				24	Cupro us oxide	13 17 - 39 -1		
				25	Azoxy strobi n	13 18 60 - 33 -8		
				D Intermediate Chemicals				
				1	Mono Chlor o Acetic Acid	79 - 58 11 -8	0.0	58 3.3 33

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation					
					2	IDA	14 2- 73 -4	50 0.0 00	0.0	50 0.0 00
					3	PMID A	59 94 - 61 -6	33 3.3 33	0.0	33 3.3 33
					4	CMA C	52 31 4- 67 -7	50. 00 0	0.0	50. 00 0
					5	MPB D	39 51 5- 51 -0	50. 00 0	0.0	50. 00 0
					6	CCM P	70 25 8- 18 -3	41. 66 7	0.0	41. 66 7
					7	CMM A	-	25. 00 0	0.0	25. 00 0
					8	1,2,4- Traizo les	28 8- 88 -0	83. 33 3	0.0	83. 33 3
					9	Lamb da acid	91 46 5- 08 -6	0.0	10 00	10 00
					10	Bifent hrin alchoh	76 35 0-			

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation				
					1	90 -8			
					1 1 .	3- Methy 1-4- nitroi mino perhy dro 1,3,5- oxadia zine (MNI O)	15 37 19 - 38 -1		
					1 2 .	2- (Nitroi mino) Imida zolidi ne (NII)	54 65 - 96 -3		
					1 3 .	2- Chlor o-5- (Chlor ometh yl) Thiaz ole (CCM T)	10 58 27 - 91 -6		
					1 4 .	Pheny 1 4,6- dimet hoxy pyrimi dine- 2yl- carba	89 39 2- 03 -0		

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation					
						mate				
					15.	Diethyl Thiophosphoryl Chloride (DETCL)	2524-04-1			
					Sub Total (A+B+C+D)		33332	25000	583332	
					Formulations					
					1.	Liquid Pesticide	250000	0.0	250000	
					2.	Granular Pesticide	33333	0.0	33333	
					3.	Powder Pesticide	83333	0.0	83333	
					4.	Emulsifier Formulation	50000	0.0	50000	
					Sub Total Formulation		44667	0.0	44667	
					Grand Total		779999	2500	102999	
					Say		78	25	10	

S r. N o	EC conditions of Unit-I	S r. N o	EC conditions of Unit-II	S r. N o	EC conditions after amalgamation			
						00	00	30 0
4	It is noted that the total water requirement of 280 m ³ /day will be sourced from GIDC water supply. The wastewater generation will be 147 m ³ /day. Concentrated effluent containing organics and pesticides residue will be incinerated by incineration. High salt stream containing heavy inorganic & organic load will be treated in Triple Effect Evaporator. Balance quantity of effluent will be treated in ETP for primary, secondary and tertiary treatment and treated effluent will be sent to CETP for final treatment and disposal. The domestic effluent will be treated	6	Total water requirement is estimated to be 750 cum/day, which includes fresh water requirement of 253 cum/day proposed to be met from GIDC water supply. Effluent from process and lab (393 cum/day) will be taken into ETP-1 and passed through RO & MEE. MEE Condensate (175 cum/day) and RO permeate (235 cum/day) will be reused. Effluent from scrubber, washing and utilities (110 cum/day) will be taken into ETP-2 and passed through RO. RO reject (35 cum/day) will be sent to MEE and RO permeate (75 cum/day) will be reused. Domestic wastewater (12 cum/day) will be treated in STP and treated water will be utilized for Greenbelt development. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.					
					Total water requirement after amalgamation & amendment is estimated to be 1096 KLD , which includes fresh water requirement of 752 KLD proposed to be met from GIDC water supply. Total wastewater generation will be 1062 KLD (Industrial: 1030 KLD + Domestic: 32 KLD). <ul style="list-style-type: none"> • Effluent from process (391 KLD) will be taken into ETP-1 and taken to MEE. MEE Condensate (365 KLD) will be taken to ETP-2 along with dilute stream for further treatment. • Concentrated effluent (25 KLD) containing organics and pesticides residue will be incinerated by incinerator. • Effluent from lab, scrubber, washing and utilities (249 KLD) and MEE Condensate (365 KLD) Total: 614 KLD will be taken into ETP-2 and passed through RO. RO Permeate (312 KLD) will be reused. RO reject (302 KLD) will be sent to CETP for final treatment & disposal. • Domestic wastewater (32 KLD) will be treated in STP and 			

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	<p>through septic tank/soak pit. Process emissions in the form of HCl, SO₂, NH₃ and Cl₂ will be scrubbed by will be scrubbed by four stage HCl + SO₂ and ammonia scrubber. Stack height of 30 m is proposed for the boiler and incinerator. The power requirement will be 1000 KVA which will be sourced form GEB and fuel requirement gas (400 m³/day) or FO (1000 lits./day) for the boiler to recover the solvents secondary condenser will be connected with chilled brine.</p>				<p>treated water will be utilized for Greenbelt development.</p> <p>Process emissions in the form of HCl, SO₂, NH₃ and Cl₂ will be scrubbed by will be scrubbed by four stage HCl + SO₂ and ammonia scrubber. Stack height of 30 m is proposed for the boiler and incinerator.</p> <p>The power requirement will be 2800 KVA which will be sourced form GEB (DGVCL) and fuel requirement Natural gas (2800 m³/day) or Agro Briquettes/Bio Fuel - 82.5 Mt/d OR imported coal – 44 MT/d, Diesel – 1000 lit/day.</p>
--		4	Total land area is 52000 sqm. Greenbelt will be developed in 33% i.e. 17160 sqm of the total project area. The estimated project cost will be Rs. 40 Crores. Total capital cost earmarked towards		Total land area is 169948.03 sqm. Greenbelt will be developed in 33.2% i.e. 56310 sqm of the total project area. The estimated project cost will be Rs. 80 Crores. Total capital cost earmarked towards environmental pollution control measures will be Rs. 10.9

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
			environmental pollution control measures will be Rs. 3.5 Crores and the Recurring cost (operation and maintenance) will be Rs. 5.4 Crore per annum. Total employment including direct and indirect will be 150 persons.		Crore and the Recurring cost (operation and maintenance) will be Rs. 9.51 Crore per annum. Total employment including direct and indirect will be 300 persons.
5	Solid waste generation will be in the form of ETP waste (150 TPA) and evaporation salt (300 TPA) and will be sent to TSDF site. Process waste (1200 TPA) will be sent to common incineration facility. Used lube oil (1 TPA) will be sent to registered recyclers. Drums & containers (25000 nos./annum) and bags & liners (50 TPA) will sold to approved vendors.	--	--		Hazardous waste generation will be in the form of ETP Sludge (150 TPA) and MEE salt (300 TPA) and will be sent to TSDF site. Process waste (400 TPA) will be sent to TSDF site. Used lube oil (2.0 KL/year) will be sent to registered recyclers. Drums & containers (5000 nos./month) and bags & liners (5.67 TPA) will sold to approved vendors. Date expired and off specification pesticides (0.1 TPA) will be disposed off at incineration facility.
	--	5	There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc.		There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
			within 10 km from the project site.		site.
6	All the Pesticides & Pesticide intermediates manufacturing units are listed at serial no. 5(b) of schedule of EIA Notification, 2006 and categorized under “A” category and have to be appraised at central level. The proposal was considered by the Expert Appraisal Committee (Industry) in the 91 st meeting held on 9-11 th February, 2009. The committee recommended the proposal for grant of environmental clearance. As the unit is located in the industrial estate, the public hearing consultation of the project is not require as per para 7 (i)-III (b) Stage (3)–public consultation of EIA Notification,	7	The project/activity is covered under category A of item 5(b) ‘Pesticides industry and Pesticide specific intermediates’ of the schedule to the EIA Notification, 2006 and requires appraisal/approval at central level in the Ministry.		The project/activity is covered under category A of item 5(b) ‘Pesticides industry and Pesticide specific intermediates’ of the schedule to the EIA Notification, 2006 and requires appraisal/approval at central level in the Ministry.

S r. N o	EC conditions of Unit-I	S r. N o	EC conditions of Unit-II	S r. N o	EC conditions after amalgamation
	2006.				
	--	8	Standards Terms of Reference for the project was issued on 9 th July 2018. Public hearing is exempted as the project site is located in the notified Industrial area/estate.		--
	--	9	The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 23-25 October, 2019, wherein the project proponent and their accredited consultant presented the EIA/EMP report. The Committee found the EIA/EMP report to be satisfactory, complying with the ToR, and recommended the project for grant of environmental clearance.		The proposal was considered in its 53 rd EAC Meeting (Industry-3 Sector) held during 14 th -16 th June, 2023 and 62 nd EAC Meeting (Industry-3 Sector) held during 28 th August, 2023, wherein the project proponent and their accredited consultant presented the details on amendment of ECs. The Committee found the details to be satisfactory and recommended the project for grant of environmental clearance.
7	Based on the information submitted by the project authorities, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification, dated 14 th	10	Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2). Ministry of Environment, Forest and Climate change hereby accords environmental clearance to the project for setting up pesticide intermediates manufacturing unit of capacity 2500 TPM by M/s Insecticides India Limited (Unit-II) at Plot No. D3/1,		Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-3). Ministry of Environment, Forest and Climate change hereby accords amendment in environmental clearance to the project for merging of two unit of Pesticide and pesticide intermediates manufacturing unit of capacity 5833.332 TPM by M/s Insecticides India Limited at Plot No. CH-21 (Dahej-1) and D3/1/1 (Dahej-3), GIDC Estate, Dahej,

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	September, 2006 subject to the compliance of the following Specific and General Conditions:		GIDC Estate. Dahej, Tehsil Vagra, District Bharuch (Gujarat), under the provisions of the EIA Notification, 2006 subject to the compliance of and conditions as below:		Tehsil Vagra, District Bharuch (Gujarat) under the provisions of the EIA Notification, 2006 subject to the compliance of and conditions as below:
A)	SPECIFIC CONDITIONS				
i)	The waste water generation shall not be exceeding 147 m ³ /day. The effluent shall be segregated as per the pollution load. Concentrated effluent stream organics and pesticides residue shall be incinerated by incineration. High salt stream containing heavy inorganic & organic load shall be treated in Triple Effect Evaporator. Balance quantity of effluent will be treated in ETP for primary, secondary and tertiary treatment and treated effluent after conforming to the	--			Total wastewater generation shall be 1062 KLD (Industrial: 1030 KLD + Domestic: 32 KLD). <ul style="list-style-type: none"> • Effluent from process (391 KLD) will be taken into ETP-1 and taken to MEE. MEE Condensate (365 KLD) will be taken to ETP-2 along with dilute stream for further treatment. • Concentrated effluent (25 KLD) containing organics and pesticides residue will be incinerated by incinerator. • Effluent from lab, scrubber, washing and utilities (249 KLD) and MEE Condensate (365 KLD) Total: 614 KLD will be taken into ETP-2 and passed through RO. RO Permeate (312 KLD) will be reused. RO reject (302 KLD) will be sent to CETP for final treatment & disposal. • Domestic wastewater (32 KLD) will be treated in STP and

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	industry specific discharge standards sent to CETP for final treatment and disposal. The effluent shall be stripped for solvents before sending it to the ETP. A guard pond shall be constructed for treated effluent. The company shall carry out bio assay test on the treated effluent before discharging. The domestic effluent will be treated through septic tank/soak pit.				treated water will be utilized for Greenbelt development.
	--	i)	Cuprous Chloride shall not be manufactured in the unit		Cuprous Chloride shall not be manufactured in the unit
ii) GPCB shall not permit any new discharge from new industries or expansion of existing industries in the area that lead to CETP until the said CETP meet the required standards and meet the hydraulic		--		302 KLD will be sent to CETP for final treatment & disposal after confirming industry specific discharge standard of CETP, Dahej. Necessary permission will be obtained from GPCB.

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	capacity.				
	--	ii)	No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD50<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.		No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD50<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.
ii i)	The gaseous emissions (SO ₂ , NO _x , VOC, NH ₃ , Cl ₂ and HCl) along with SPM and RSPM from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control systems(s) adopted by the unit, the respective unit shall not be restarted until the		--		The gaseous emissions (SO ₂ , NO _x , VOC, NH ₃ , Cl ₂ and HCl) along with SPM and RSPM from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control systems(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. The gaseous emissions from the boilers from the natural gas/fuel oil fired boiler and incinerator shall be dispersed through stack of height as per CPCB standards.

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	control measures are rectified to achieve the desired efficiency. The gaseous emissions from the boilers from the natural gas/fuel oil fired boiler and incinerator shall be dispersed through stack of height as per CPCB standards.				
--		ii	To control sources and the fugitive emissions (at 99.95%), suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS.		To control sources and the fugitive emissions (at 99.95%), suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS.
i	The company shall install an incinerator as per the CPCB standard. All the vents shall be connected to incinerator to control the odour problems.		--		The company shall install an incinerator as per the CPCB standard. All the vents shall be connected to incinerator to control the odour problems.
---		i	Solvent management shall be carried out as follows:		Solvent management shall be carried out as follows:
		(Reactor shall be connected to chilled brine condenser system.	(Reactor shall be connected to chilled brine condenser system.
		(Reactor and solvent	(Reactor and solvent handling

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
		b)	handling pump shall have mechanical seals to prevent leakages.	b)	pump shall have mechanical seals to prevent leakages.
		()	The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.	()	The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
		()	Solvent shall be stored in a separate space specified with all safety measures.	()	Solvent shall be stored in a separate space specified with all safety measures.
		()	Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.	()	Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
		(f)	Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.	(f)	Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
		(g)	All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.	(g)	All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
V)	The process emissions in the form of HCl, SO ₂ , Cl ₂ and NH ₃ shall be scrubbed with scrubber. Standards notified for pesticides unit under the Environment (Protection) Act, 1986 and amended time to time shall be followed by the	--			The process emissions in the form of HCl, SO ₂ , Cl ₂ and NH ₃ shall be scrubbed with scrubber. Standards notified for pesticides unit under the Environment (Protection) Act, 1986 and amended time to time shall be followed by the unit.

S r. N o	EC conditions of Unit-I	S r. N o	EC conditions of Unit-II	S r. N o	EC conditions after amalgamation
	unit.				
v i)	The unit shall carry out monitoring of VOC in the solvent storage area and ambient air and data submitted to the Ministry/ State Pollution Control Board.		--		The unit shall carry out monitoring of VOC in the solvent storage area and ambient air and data submitted to the Ministry/ State Pollution Control Board.
v ii)	Chilled brine for the secondary condenser shall be installed for recovery of solvents.		--		Chilled brine for the secondary condenser shall be installed for recovery of solvents.
v ii i)	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans Boundary Movement) Rules, 2008 for management of Hazardous wastes and prior permission from GPCB shall be obtained for disposal of		--		The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous & Other Wastes (Management & Trans Boundary Movement) Rules, 2016 and amendment therein for management of Hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid/hazardous waste in the TSDF. Measures shall be taken for firefighting facilities in case of emergency.

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	solid/hazardous waste in the TSDF. Measures shall be taken for firefighting facilities in case of emergency.				
i x)	Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by GPCB.		--		Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by GPCB.
x)	All the storage tanks shall be under negative pressure to avoid any leakages. Breathers, N ₂ blanketing and condenser will be provided for all the storage tanks. Closed handling systems for chemicals and solvents will be provided. Magnetic seals will be provided for pumps/agitators		--		All the storage tanks shall be under negative pressure to avoid any leakages. Breathers, N ₂ blanketing and condenser will be provided for all the storage tanks. Closed handling systems for chemicals and solvents will be provided. Magnetic seals will be provided for pumps/agitators for reduction of fugitive emissions. Chilled Brine based condensers shall be used to prevent VOC emissions. Solvent traps shall be installed wherever necessary.

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	for reactors for reduction of fugitive emissions. Chilled Brine based condensers shall be used to prevent VOC emissions. Solvent traps shall be installed wherever necessary.				
x i)	All venting equipment shall have vapour recovery system. All the pumps and other equipment's where there is a likelihood of HC leakages shall be provided with Leak Detection and Repair (LDAR) system and LEL indicators and Hydrocarbon detectors. Provision for immediate isolation of such equipment, in case of a leakage will also be made. The company shall provide a well-defined Leak Detection and		--		All venting equipment shall have vapour recovery system. All the pumps and other equipment's where there is a likelihood of HC leakages shall be provided with Leak Detection and Repair (LDAR) system and LEL indicators and Hydrocarbon detectors. Provision for immediate isolation of such equipment, in case of a leakage will also be made. The company shall provide a well-defined Leak Detection and Repair (LDAR) programme for quantification and control of fugitive emissions. The detectors sensitivity will be in ppm levels.

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	Repair (LDAR) programme for quantification and control of fugitive emissions. The detectors sensitivity will be in ppm levels.				
x ii)	During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.		--		During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.
x ii i)	The company shall make adequate arrangement for control of odour nuisance from the plant premises.		--		The company shall make adequate arrangement for control of odour nuisance from the plant premises.
x i v)	The adequate financial provisions shall be made in the budget of the project for implementation of the above suggested environmental safeguards. Fund so earmarked shall not be		--		The adequate financial provisions shall be made in the budget of the project for implementation of the above suggested environmental safeguards. Fund so earmarked shall not be diverted for any other purposes.

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	diverted for any other purposes.				
x v)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.		--		Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
x v i)	The company shall make the arrangement for protection of possible fire hazardous during manufacturing process in material handling.		--		The company shall make the arrangement for protection of possible fire hazardous during manufacturing process in material handling.
x v ii)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. As informed to the Ministry, OHSAS 18001 shall be continued. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all		--		Training shall be imparted to all employees on safety and health aspects of chemicals handling. As informed to the Ministry, OHSAS 45001: 2018 shall be continued. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	employees on handling of chemicals shall be imparted.				
x v ii i)	Usage of PPEs by all employees/workers shall be ensured.		--		Usage of PPEs by all employees/workers shall be ensured.
x i x)	The company shall strictly follow all the recommendations mentioned in the charter on Corporate Responsibility for Environmental Protection (CREP).		--		The company shall strictly follow all the recommendations mentioned in the charter on Corporate Responsibility for Environmental Protection (CREP).
x x)	The company shall adopt waste minimization/cleaner production techniques to reduce the pollution load and action plan in this regard submitted to the Ministry.		--		The company shall adopt waste minimization/cleaner production techniques to reduce the pollution load and action plan in this regard submitted to the Ministry.
x x i)	The company shall undertake rainwater harvesting measures to recharge the ground water as well as reduced consumption of water.		--		The company shall undertake rainwater harvesting measures to recharge the ground water as well as reduced consumption of water.

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
x x ii)	Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.		--		Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.
B GENERAL CONDITIONS					
i)	The project authorities shall strictly adhere to the stipulations of the SPCB/state government or any statutory	I.	Statutory compliance		
		i.	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and	i .	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	body.		the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.		Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.
		ii	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	i	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
		ii	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989	i	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh	I	Air quality monitoring and preservation		
)		i.	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment	i	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any. Same condition is repeated in condition X (x) of Unit-II.		(Protection) Act, 1986 or NABL accredited laboratories.		
		ii	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.	i	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
		ii	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM ₁₀ and PM _{2.5} in reference to PM emission, and SO ₂ and NO _x in reference to SO ₂ and NO _x emission) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.	i	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM ₁₀ and PM _{2.5} in reference to PM emission, and SO ₂ and NO _x in reference to SO ₂ and NO _x emission) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.
		i	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emission within permissible limits (as	i	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emission within permissible limits (as applicable). The gaseous emissions shall be dispersed

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
			applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.		through stack of adequate height as per CPCB/SPCB guidelines.
		v	Storage or raw materials, coal etc. shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.	v	Storage or raw materials, coal etc. shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
		v i.	National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21 st July, 2010 and amended from time to time shall be followed.	v i	National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21 st July, 2010 and amended from time to time shall be followed.
		v ii	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 th November, 2009 shall be complied with.	v i i	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 th November, 2009 shall be complied with.
ii i)	The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended. Authorization from the SPCB	I I I.	Water quality monitoring and preservation		
		i.	The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capacity and flow meters in the channel/drain carrying effluent within the premises.	i	The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capacity and flow meters in the channel/drain carrying effluent within the premises.
		ii	As already committed by	i	302 KLD will be sent to CETP

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.	.	the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.	i	for final treatment & disposal.
ii		Total fresh water requirement shall not exceed 253 cum/day, proposed to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.	i	Total fresh water requirement shall not exceed 752 cum/day, proposed to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.	
i		Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.	i	Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.	
v		The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.	v	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.	
v		The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.	v	The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.	
i	Ambient air	I	Noise monitoring and		

S r. N o	EC conditions of Unit-I	S r. N o	EC conditions of Unit-II	S r. N o	EC conditions after amalgamation
v)	quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration are anticipated in consultation with the State Pollution Control Board.	V .	prevention		
		i.	Acoustic enclosure shall be provided to DG set for controlling the noise pollution.	i	Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
		ii	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.	i i	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.
		ii	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	i i i	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
v)	For control of process emissions, stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided. The scrubbed water shall be sent to ETP for further treatment.		--		For control of process emissions, stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided. The scrubbed water shall be sent to ETP for further treatment.
	--	V .	Energy Conservation measures		
	--	i.	The energy sources for lighting purposes shall preferably be LED based.	i	The energy sources for lighting purposes shall preferably be LED based.
v	The company	V	Waste management		

S r. N o.	EC conditions of Unit-I	S r. N o.	EC conditions of Unit-II	S r. N o.	EC conditions after amalgamation
i)	shall undertake following Waste Minimization measures: <ul style="list-style-type: none"> ▪ METERING OF QUANTITIES OF ACTIVE INGREDIENTS TO MINIMIZE WASTE ▪ REUSE OF BY-PRODUCTS FROM THE PROCESS AS RAW MATERIALS OR AS RAW MATERIAL SUBSTITUTES IN OTHER PROCESSES ▪ MAXIMIZING RECOVERIES ▪ USE OF AUTOMATED MATERIAL TRANSFER SYSTEM TO MINIMIZE SPILLAGE ▪ USE OF CLOSED FEED SYSTEM INTO BATCH REACTORS 	I.			
		i.	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.	i.	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
		ii.	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposal off to the TSDF.	ii.	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposal off to the TSDF.
		ii. i.	The company shall undertake waste minimization measures as below:-	ii. i. i.	The company shall undertake waste minimization measures as below:-
		a.	Metering and control of quantities of active ingredients to minimize waste.	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 substitute in other processes.	b.	Reuse of by-products from the process as raw materials or as raw material substitute in other processes.
		c.	Use of automated filling to minimize spillage.	c.	Use of automated filling to minimize spillage.
		d.	Use of Close Feed system into batch reactors.	d.	Use of Close Feed system into batch reactors.
		e.	Venting equipment through vapour recovery system.	e.	Venting equipment through vapour recovery system.
		f.	Use of high pressure hoses for equipment clearing to reduce wastewater generation	f.	Use of high pressure hoses for equipment clearing to reduce wastewater generation

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
v ii)	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the SPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.		--		The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016 and its amendment therein. Authorization from the SPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.
		V I I.	Green Belt		
		i.	The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.		The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
v	The overall noise	V	Safety, Public hearing and		Safety, Public hearing and

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
ii i)	<p>levels in and around the plant area shall be kept well within the standards (85 dBA) 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 Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).</p> <p>Same condition is repeated in condition IV (ii) of Unit-II.</p>	<p>I I I.</p>	<p>Human health issues</p> <p>i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.</p> <p>ii. 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.</p> <p>ii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.</p> <p>i. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.</p> <p>v. Occupational health surveillance of the worker shall be done on a regular basis and records maintained as per the Factories Act.</p>		<p>Human health issues</p> <p>Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.</p> <p>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.</p> <p>The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.</p> <p>Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.</p> <p>Occupational health surveillance of the worker shall be done on a regular basis and records maintained as per the Factories Act.</p>

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
		v i.	There shall be adequate space inside the plant premises earmark for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places		There shall be adequate space inside the plant premises earmark for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places
i x)	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions.		--		A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions.
	--	I X .	Corporate Environment Responsibility		
		i.	As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be Rs. 1.5 crores. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.		As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be Rs. 1.5 crores. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
		ii .	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy		The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standards operating procedures to

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
			should prescribe for standards operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stack holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.		have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/ conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stack holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
		ii	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall set up under the control of senior Executive, who will directly to the head of the organization.		A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall set up under the control of senior Executive, who will directly to the head of the organization.
		i	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked		Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
			for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.		measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
		v	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.		Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
x)	The project authorities shall develop greenbelt in 33% of project area as per the guidelines of CPCB to mitigate the effect of fugitive emission.		--		The project authorities shall develop greenbelt in 33% of project area as per the guidelines of CPCB to mitigate the effect of fugitive emission.
	--	X	Miscellaneous		
		i.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular		The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
			language within seven days and in addition this shall also be displayed in the project proponent's website permanently.		proponent's website permanently.
		ii	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.		The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
		ii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.		The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
		i	The project proponent shall monitor the criteria pollutants level namely; PM ₁₀ , SO ₂ , NO _x , (ambient levels as well as stack emission) or critical sectoral parameters indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.		The project proponent shall monitor the criteria pollutants level namely; PM ₁₀ , SO ₂ , NO _x , (ambient levels as well as stack emission) or critical sectoral parameters indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
		v	The project proponent shall		The project proponent shall

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
		.	submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.		submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
		v i.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.		The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
		v ii .	The project proponent shall inform the Regional Office as well Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.		The project proponent shall inform the Regional Office as well Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
		v ii i.	The protect authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.		The protect authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
		i x .	The project proponent shall abide by all the commitments and		The project proponent shall abide by all the commitments and recommendations made in the

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
			recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.		EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
		x	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).		No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
		x i.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/ monitoring reports.		The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/ monitoring reports.
x i)	The implementation of the project vis-à-vis environmental action plans shall be monitored by Ministry's Regional Office/SPCB/ CPCB. A six monthly compliance status report shall be submitted to monitoring		--		The implementation of the project vis-à-vis environmental action plans shall be monitored by Ministry's Regional Office/SPCB/ CPCB. A six monthly compliance status report shall be submitted to monitoring agencies.

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
	agencies.				
x ii)	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 and may also be seen at Website of the Ministry at http://envfor.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 Ministry's Regional Office.		--		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 and may also be seen at Website of the Ministry at http://envfor.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 Ministry's Regional Office.
x ii	The project authorities shall		--		The project authorities shall inform the Regional Office as

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
i)	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.				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.
8	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	1 1	The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.		The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.
9	The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner shall implement these conditions.	1 2	Concealing factual data or submission of false/ fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.		Concealing factual data or submission of false/ fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
1 0	Any appeal against this	1 3	Any appeal against this environmental clearance		Any appeal against this environmental clearance shall lie

S r. N o .	EC conditions of Unit-I	S r. N o .	EC conditions of Unit-II	S r. N o .	EC conditions after amalgamation
.	environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.	.	shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.		with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
1	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes (Management, handling and Transboundary) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	1	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1981. The Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and the Public Liability insurance Act, 1991 read with subsequent amendments therein.		The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1981. The Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and the Public Liability insurance Act, 1991 read with subsequent amendments therein.
--		1	This issue with the approval		This issue with the approval of

S r. N o	EC conditions of Unit-I	S r. N o	EC conditions of Unit-II	S r. N o	EC conditions after amalgamation
		5	of the competent authority.		the competent authority.

5. Deliberations by the EAC:

The EAC constituted under the provisions of the EIA Notification, 2006 and comprising of expert members / domain experts in various fields, examined the proposal submitted by the PP in desired form.

The EAC inter-alia, deliberated on the Greenbelt development plan and its budgetary provision, fuel, carbon sequestration, and advised the PP to submit the following:

- Revised layout with the requisite greenbelt and its budgetary provision.
- Action plan for use of cleaner fuel.
- Action plan for year wise and % wise CO₂ reduction in tabular form.

The PP submitted the revised/updated information/documents of the same and the EAC found these to be satisfactory.

6. After detailed deliberations, the EAC **recommended** the proposed Amalgamation and Amendment in the Environmental Clearances, as detailed above and subject to the following additional conditions:

- (i) The PP shall develop Greenbelt over an area of minimum 33% by planting 1700 saplings preferably, within the one year of grant of amendment of EC. In addition to this, as proposed by the PP, 4 rows of greenbelt shall be developed. The saplings selected should be of sufficient height, preferably 6-ft (about 2 m). The budget earmarked for the plantation shall be kept in separate account and should be audited annually. PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of the expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (ii) As proposed, agro-briquettes shall be used as a primary fuel in the boiler and coal shall be used as a secondary fuel during the unavailability of agro briquettes. The secondary fuel may also be phased out over a period of 5 years
- (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) 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.

Agenda No. 62.2

Proposed expansion of API manufacturing Unit production capacity from 86.7 MT/M to 176 MT/M located at Plot No. N-216&217, MIDC Tarapur, Tehsil: Palghar, District: Palghar, Maharashtra by M/s. Bajaj Healthcare Ltd. – Reconsideration of Environmental Clearance

[Proposal No. IA/MH/IND3/248159/2021; File No. IA-J-11011/551/2021-IA-II(I)]

1. The proposal is for the environmental clearance to the proposed expansion of API manufacturing Unit production capacity from 86.7 MT/M to 176 MT/M located at Plot No. N-216&217, MIDC Tarapur, Tehsil: Palghar, District: Palghar, Maharashtra by M/s. Bajaj Healthcare Ltd
2. The project/activity is covered under Category ‘B2’-API of Item 5 (f) ‘Synthetic, Organic Chemicals Industry’ of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 (amendment on 27.03.2020, 15.10.2020 & 16.07.2021). Due to applicability of general conditions **project site is located within a Critically Polluted Area (CPA)**, the project requires appraisal at the Central Level in the Ministry.
3. The PP applied for Environment Clearance in the Common Application Form and submitted EMP Report and other documents. The PP in the Form reported that it is an **Expansion case**. The proposal was placed in this 54th EAC meeting on 28th June, 2023, in which proposal was deferred and now the proposal is placed in this 62nd EAC meeting held wherein the PP along with accredited Consultant, M/s. Sadekar Enviro Engineers Pvt. Ltd [Accreditation number NABET/EIA/2124/SA 0146 dated valid till 19.9.2023] made a detailed presentation on the salient features of the project. The information submitted by the PP is as follows:
4. The PP reported that the existing land area is 1600 m², no land will be acquired for the proposed expansion and no R& R is involved in the Project. The details of products to be manufactured are as follows:

S. No.	Name of Product	CAS NO.	Existing Quantity	Proposed Quantity	Total Quantity	UOM
A	<u>Vitamin Supplements</u>					

1	Calcium Citrate Malate	142606-53-9	18	83	160	MT/M
2	Calcium Citrate	5785-44-4	8			
3	L-Lysine Monohydro chloride USP	9657-27-2	50			
4	DL Methionine.	59-51-8	1			
B	<u>Bronchodilator</u>					
5	Acefylline piperazine	18833-13-1	2	13	15	MT/M
C	<u>Anti- Oxidant</u>					
6	L-Glutamic Acid	56-86-0	0.5	0	Production will be stopped	MT/M
7	Calcium Dobesilate	117552-78-0	4			
D	<u>Anti-Convulsant</u>					
8	Oxcarbazepine .	28721-07-5	3.2	0	Production will be stopped	MT/M
E	R&D Product (API)	-	-	1	1	MT/M
	Total		86.7	97	176	MT/M

- The PP reported that there is no violation case as per the Notification No. S.O. 804(E) dated 14.03.2017 and no direction is issued under E (P) Act/Air Act/Water Act.
- The PP reported that Industry has obtained CTO vide no. Format 1.0/BO/AS(T)/TN-5862-15/CC Cell/R/CC-6990 dated 22.06.2015 valid upto 31.05.2020 for the production of 1. L-Lysine Monohydro Chloride USP, 2. Acephylline Piperazine, 3. Calcium Citrate, 4. L-Glutamic acid, 5. Calcium Citrate Malate, 6. Calcium Dobesilate, 7. Oxcarbimizapine and 8. D.L. Methione with maximum production quantity of 50 MT/M, 2 MT/M, 8 MT/M, 0.5 MT/M, 18 MT/M, 4 MT/M, 3.2 MT/M and 1 MT/M.
- The recent CTO obtained by M/s Bajaj Healthcare Ltd. vide no. Format1.0/AS(T)/UAN No. 0000092654/CR2105000802 dated 18.05.2021 and valid upto 31.05.2025 for production of 1. L-Lysine Monohydro Chloride 8. USP, 2. Acephylline Piperazine, 3. Calcium Citrate, 4. L-Glutamic acid, 5. Calcium Citrate Malate, 6. Calcium Dobesilate, 7. Oxcarbimizapine and 8. D.L. Methione with maximum production quantity of 50 MT/M, 2 MT/M, 8 MT/M, 0.5 MT/M, 18 MT/M, 4 MT/M, 3.2 MT/M and 1 MT/M.
- The Certified Compliance report to the conditions of CTO has been obtained from Maharashtra Pollution Control Board vide no - MPCB/SROT-1/1031/2023 dated 18.8.2023. No non compliances has been observed during the site visit of the sub regional officer.
- The PP reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. within 10 km distance from the project site. Lower Banganga river is flowing at a distance of 2.1 km in South direction. There is no forest land involved in the proposed project.

10. The PP reported that the total water requirement is 94.45 m³/day of which fresh water requirement of 39.609 m³/day will be met from Tarapur MIDC. Industrial Effluent of 21.08 CMD out of which 19.26 CMD sent to Plot No. L-11 and 1.82 CMD sent to Plot No. N-219 for treatment. Effluent will be treated through Stripper, MEE followed by ATFD and full-fledged ETP comprising of primary, secondary and tertiary treatment and R.O plant. The effluent will be treated at plot no. L-11 and Plot no. N-219, Tarapur MIDC wherein the treated effluent will be entirely recycled back to the plant premises. The treated effluent from ETP will be passed through RO system. RO permeate (16.58 CMD) will be used for cooling tower make-up and the RO reject will be sent to plot no L-11 for further treatment. The treated effluent (1.729 CMD) from ETP located at Plot No. N-219 will be recycled and reused in same plot for Boiler Operation. Sewage 6.2 CMD from the same plot will be treated in STP of 7 CMD which will be provided at plot no. N-216 & 217. Treated sewage will be used for gardening purpose and sludge will be used as manure.
11. The Power requirement after expansion will be 350 KVA including existing 188 KVA and will be met from Maharashtra State Electricity Distribution Company limited (MSEDCL). Existing unit has 1 D.G. set of 320 KVA capacity (**Note: It will be scrap out after expansion**), additionally 1 D.G. set of 500 KVA capacity will be used as standby during power failure. Stack height of 4.0 m has been provided for the existing D.G Set and stack height of 6.0 m will be provided as per CPCB norms to the proposed DG sets.
12. The Existing unit has 1 no. of 2.0 TPH boiler fired by Coal, additionally 1 no. of 3 TPH boiler fired by Agri-briquette or Coal respectively will be provided at our sister concern at unit plot no. N-219. 33m height stack has been provided for existing 2 TPH boiler, after expansion existing 33m height stack will be used as a common stack for existing 2 TPH capacity boiler and proposed 3 TPH capacity boiler. For Existing Scrubber 1 separate stack of 8 m height above roof is provided to the scrubbers. (Existing scrubber is sufficient to mitigate the emissions from proposed expansion.)

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

Sr. No.	Description	Cat. of waste	UOM	Existing	Proposed	Total	Method of Disposal
1	Used / Spent Oil	5.1	MT/M	0	0.06	0.06	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
2	ETP Sludge*	35.3	MT/M	0.12	18.2	18.32	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
3	Process dust	28.4	MT/M	0	0.1	0.1	Sale to Authorized Vendor/ Re-processors / Co-processor /

							CHWTSDF
4	Filter & Filter Material which have organic liquid	36.2	MT/M	0	0.01	0.01	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
5	Evaporation Residue (ATFD Salt) #	37.3	MT/M	0	39	39	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
6	Spent carbon	28.3	MT/M	0.7	4.6	5.3	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
7	Spent Resin	35.2	MT/M	0.001	0.005	0.006	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
8	Off specification product	28.4	MT/M	-	1.0	1.0	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
9	Empty barrels/ containers/ liners contaminated with hazardous chemicals / wastes	33.1	Nos/M	50	150	200	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
<p>Schedule I of The Hazardous and Other Wastes (Management and Trans boundary Movement) Rule, 2016. Industry shall ensure disposal to the Actual user having permissions under Rule 9 of Hazardous and Other Waste (M & TM) Rules, 2016. # Evaporation Residue (ATFD Salt) will be generated and disposed from Plot no L-11. * ETP Sludge will be generated and disposed from plot no N-216 & 217, L-11 and N-219.</p>							

Non-Hazardous Waste Details						
Sr. No.	Description	UOM	Existing Quantity	Proposed Quantity	Total Quantity	Method of Disposal
1	Boiler Ash	MT/M	3.6 MT/M	21.4 MT/M	25 MT/M	Sale to Brick manufacturer
2	General scrap (Polythene bags, Empty containers, Glass waste, Wood waste and Metal waste)	MT/A	0 MT/A	08 MT/M	08 MT/M	Sale to Authorized party
3	Contaminated glassware	MT/A	0 MT/A	0.2MT/A	0.2MT/A	Sale to Authorized party
4	Plastic waste	MT/M	0 MT/A	0.4 MT/M	0.4MT/M	Sale to Authorized party

E-Waste Details						
Sr. No.	Description	Category of waste	Existing Quantity	Proposed Quantity	Total Quantity	Method of Disposal
1	E-waste	ITEW2, ITEW3, ITEW6	0 MT/A	0.1MT/A	0.1 MT/A	Sale to Authorized Recycler

Battery Waste Details						
Sr. No.	Description	Existing Quantity	Proposed Quantity	Total Quantity	Method of Disposal	
1	Battery waste	0	0.1 MT/A	0.1 MT/A	Sale to Authorized Recycler	

Biomedical Waste Details						
Sr. No.	Description	Category of waste	Existing Quantity	Proposed Quantity	Total Quantity	Method of Disposal
1	Biomedical waste	Yellow	0	0.1 MT/A	0.1 MT/A	CBWTF

Quantification of hydraulic load and pollution load from the effluent

EFFLUENT POLLUTION LOAD				
Hydraulic Load (KLD)	Pollution Load (Kg/Day)			
	High conc.	Low conc.	Sewage	Total Pollution

Effluent Water	High conc. stream	Low conc. stream	Sewage	TDS	COD	TDS	COD	TDS	COD	TDS	COD
27.28	3.25	17.83	6.2	325	162.5	48.06	120.15	2.79	5.518	375.85	288.168

Sr. No.	Description	UOM	Quantity on per day basis	Method of Disposal
1	Used / Spent Oil	MT/D	0.002	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
2	ETP Sludge*	MT/D	0.61	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
3	Process dust	MT/D	0.0034	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
4	Filter & Filter Material which have organic liquid	MT/D	0.00034	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
5	Evaporation Residue (ATFD Salt) #	MT/D	1.3	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
6	Spent carbon	MT/D	0.18	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
7	Spent Resin	MT/D	0.0002	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
8	Off specification product	MT/D	0.034	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF
9	Empty barrels/ containers/ liners contaminated with hazardous chemicals / wastes	Nos/D	6.67	Sale to Authorized Vendor/ Re-processors / Co-processor / CHWTSDF

Schedule I of The Hazardous and Other Wastes (Management and Trans boundary Movement) Rule, 2016.

Industry shall ensure disposal to the Actual user having permissions under Rule 9 of Hazardous and Other Waste (M & TM) Rules, 2016.

Evaporation Residue (ATFD Salt) will be generated and disposed from Plot no L-11.

**** ETP Sludge will be generated and disposed from plot no N-216 & 217, L-11 and N-219.***

14. The Budget earmarked towards the Environmental Management Plan (EMP) is ₹ 90.36 Lakhs and the Recurring Cost (operation and maintenance) will be about ₹ 92.1 Lakhs per annum) Industry proposes to allocate Rs. 5 Lakhs towards Corporate Social Responsibility.
15. Industry will develop greenbelt over an area of 63.02 % i.e., 1008 m² out of total area of the project. Around 309.01 sq. m. (19.31 %) of greenbelt will be developed inside the plot premises and about 59.44 sq. m. (3.71 %) of greenbelt outside the plot premises. Remaining greenbelt development of 640 sq. m. (40 %) will be developed in the Open Space received from the MIDC on Plot No. OS-58 which is at an aerial distance of approximate 116 meters.
16. The PP reported that the Public hearing is exempted as per the Para 7.III. Stage (3) (i) (b) of the EIA Notification, 2006 as the project site is located within MIDC Tarapur which is declared as notified industrial area vide Notification No. IDC 2180/102842/2385/UDHYOG-14 dated 2.7.1980.
17. The PP proposed to set up an Environment Management Cell (EMC) by engaging Managing Director- Factory manager- site incident controller- QC –HR- Production- Commercial and logistic- EHS officer for the functioning of EMC.
18. The PP reported that the Total carbon sequestration per year (Kg CO₂) – 484680.1 Kg CO₂, Global Warming Potential (GWP) kg CO₂ eq. – 1404783.909 kg CO₂ eq. Thus, considering the total percentage of carbon sequestration is 34.50 %.
19. The PP submitted the Disaster Management Plan and On-site and Off-site Emergency Plans in the EIA report.
20. The estimated project cost is Rs 7.48 Crores including existing investment of Rs 4.98 crores. Total Employment will be 55 persons as direct & 25 persons indirect after expansion.
21. The proposal was earlier considered in the 54th EAC meeting held on 28th June, 2023, wherein the EAC deferred the proposal for want of requisite information. Reply to the same was submitted by the PP, which is as follows:

S. No.	Recommendation of EAC	Reply by PP
i.	The EAC noted that the certified compliance of the existing CTO has been obtained from Maharashtra Pollution Control Board vide letter no. MPCB/ROT/1174 dated 04/03/2022. As per the O.M. dated 8.6.2022, the CCR issued by the	The PP submitted request letter in Sub-regional office of MPCB, Tarapur dated 24/07/2023 for issue of CCR for consent compliance. On official request by PP to the MPCB, the MPCB official visited the project site of M/s Bajaj Healthcare Ltd. dated 11/08/2023 for verifying implementation of compliance of the CTO obtained by M/s Bajaj Healthcare Ltd. vide no. Format1.0/AS(T)/UANNo.0000092654/CR2105000802 dated 18/05/2021 and it is valid up to 31/05/2025. During official visit, MPCB official was satisfied with

<p>concerned Authority shall be valid for a period of one year from the date of inspection of the project. The submission of CCR beyond older than one year from the date of inspection shall not be accepted for carrying out the appraisal process.</p> <p>In view of above, the proposal was deferred for submission of a valid CCR of the existing CTO as per the said O.M.</p>	<p>the complied compliances by M/s Bajaj Healthcare Ltd., (Plot No. – N-216/217), As per joint inspection report submitted in Sub-regional office, MPCB it is found to be satisfactory, Sub-regional office of MPCB, Tarapur-1 issued CCR vide no. MPC/SROT/1031/2023 on dated 18/08/2023. PP has obtained valid compliance from MPCB vide no - MPCB/SROT-1/1031/2023 dated 18.8.2023</p>
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22. Deliberations by the EAC

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

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

The Committee 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 EAC inter-alia, deliberated on the latest Certified compliance report issued by MPCB vide letter no. MPCB/SROT-1/1031/2023 dated 18.8.2023 and the EAC found it to be satisfactory.

The EAC 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 Expert Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

The EAC is of the view that recommendation of EAC and grant of environmental clearance by regulatory authority 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.

23. The EAC, after detailed deliberations, **recommended the project for the grant of environmental clearance, subject to the compliance of the terms and conditions as under, and general terms and conditions in Annexure-I: -**
- i) Adequate stack height as per CPCB/SPCB guidelines shall be provided. Stack emission levels shall be stringent than the existing standards.
 - ii) CEMS shall be installed and connected to SPCB/CPCB Server.
 - iii) Effective fugitive emission control measures shall be adopted in the process, transportation, packing etc.
 - iv) Transportation of materials by rail/conveyor belt, wherever feasible, shall be explored.
 - v) As proposed, agro-briquettes shall be used as a primary fuel in the boiler and coal shall be used as a secondary fuel during the unavailability of agro briquettes. The phasing out of secondary fuel shall also be explored.
 - vi) The best available technology shall be used.
 - vii) The PP shall develop greenbelt over an area of 63.02 % i.e., 1008 m² out of total area of the project. Around 309.01 sq. m. (19.31 %) of greenbelt shall be developed inside the plot premises and about 59.44 sq. m. (3.71 %) of greenbelt outside the plot premises. Remaining greenbelt development of 640 sq. m. (40 %) shall be developed in the Open Space received from the MIDC on Plot No. OS-58 within one year of grant of EC. The saplings selected for the plantation should be of sufficient height, preferably 6-ft. The budget earmarked for the plantation shall be kept in a separate account and should be audited annually. The PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional

Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

- viii) The transportation load on roads shall be within their carrying capacity and adequate width of roads shall be maintained inside the industrial premises.
- ix) Industrial Effluent of 21.08 CMD out of which 19.26 CMD sent to Plot No. L-11 and 1.82 CMD sent to Plot No. N-219 for treatment. Effluent shall be treated through Stripper, MEE followed by ATFD and full-fledged ETP comprising of primary, secondary and tertiary treatment and R.O plant. The effluent will be treated at plot no. L-11 and Plot no. N-219, Tarapur MIDC wherein the treated effluent will be entirely recycled back to the plant premises. The treated effluent from ETP will be passed through RO system. RO permeate (16.58 CMD) will be used for cooling tower make-up and the RO reject shall be sent to plot no L-11 for further treatment. The treated effluent (1.729 CMD) from ETP located at Plot No. N-219 shall be recycled and reused in same plot for Boiler Operation. Sewage 6.2 CMD from the same plot shall be treated in STP of 7 CMD which will be provided at plot no. N-216 & 217. Treated sewage shall be used for gardening purpose and sludge will be used as manure
- x) Continuous monitoring system for effluent quality/ quantity shall be connected to CPCB server.
- xi) 1 No. of storage tank of capacity 15 KL shall be provided for collecting the rain water The rain water shall be used for cooling tower make up water during rainy season.
- xii) The industry shall establish a common ETP at Plot No. L-11, Tarapur MIDC fo treatment of effluent from all the units of M/s. Bajaj Healthcare Ltd. M/s Bajaj Healthcare Ltd shall provide High COD/HTDS treatment plant with Stripper, MEE and ATFD of 300 CMD capacity and for treatment of Low COD/LTDS effluent and MEE Condensate effluent a full-fledged ETP with primary, secondary and tertiary treatment of 350 CMD capacity shall be provided. The entire effluent shall be passed through R.O and reused back in the project premises.
- xiii) Sewage 6.2 CMD shall be treated in STP of capacity 7 CMD (which shall be provided at plot no. N-216&217). Treated effluent shall be used for gardening purpose and sludge shall be used as manure.
- xiv) Dumping of waste (fly ash, slag, red mud, etc.) shall be permitted only at designated locations approved by SPCBs/PCCs.
- xv) The PP shall manage & dispose waste according to the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, category specified in Schedule I [rule 3 (1) (17) (i)]. All the records shall be maintained as per Form – 4 and Form – 10 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. All the recyclable wastes suitable for co-processing having good calorific value shall be identified and utilized in co-processing.

- xvi) Monitoring of the compliance of EC conditions shall be submitted with third party audit every year.
- xvii) As proposed, an amount of ₹ 5 Lakhs shall be allocated towards CER.
- xviii) A separate Environmental Management Cell (having qualified persons 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. PP shall engage Managing Director- Factory manager- site incident controller- QC –HR- Production- Commercial and logistic. In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- xix) 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. The budget proposed under EMP is ₹ 90.36 lakh (Capital cost) and ₹ 92.1 lakh per annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- xx) The Total water requirement is 94.45 m³/day of which fresh water requirement of 39.609 m³/day shall be met from Tarapur MIDC. The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawn only after obtaining valid agreement from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- xxi) No banned chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.
- xxii) 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.
- xxiii) The project proponent shall comply with the environment norms for 'synthetic organic chemicals' as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 608 (E), dated 21st July, 2010 under the provisions of the Environment (Protection) Rules, 1986.

- xxiv) 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.
- xxv) 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.
- xxvi) 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.
- xxvii) 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.
- xxviii) Training shall be imparted to all employees on safety and health aspects for handling chemicals. 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.
- xxix) 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.
- xxx) 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.
- xxxi) The PP shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapor recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.

Agenda No.62.3

Proposed Expansion of Synthetic Organic Chemicals (Packing and Repacking and Storage of chemicals: 950 MT/M and Packing Material: 5100 No/M) with proposed production Capacity of 57,500 TPA located at Survey No. 146, 150, 151, 152, 154 & 74/3 at Village: Dheku, Taluka: Khalapur, District: Raigad, Maharashtra by M/s Prasol Chemicals Pvt. Ltd. Consideration of Environmental Clearance

[Proposal No. IA/MH/IND3/417055/2023; File No. IA-J-11011/114/2020-IA-II(I)]

1. The proposal is for EC for the proposed expansion of synthetic organic chemicals (Packing and Repacking and Storage of chemicals: 950 MT/M and Packing Material: 5100 No/M) with proposed production Capacity of 57,500 TPA located at Survey No. 146, 150, 151, 152, 154 & 74/3 at Village: Dheku, Taluka: Khalapur, District: Raigad, Maharashtra by M/s Prasol Chemicals Pvt. Ltd.
2. The project/activity is covered under Category 'A' of Item 5 (f)-Synthetic organic chemicals of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended) and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) as the project is located outside the notified industrial area.
3. The Standard ToR was issued by the Ministry, vide letter no. IA-J-11011/114/2020-IA-II(I) dated 10.7.2020. The PP applied for the Environment Clearance in the Common Application Form and submitted the EIA/EMP Report and other documents. The PP in the CAF reported that it is a **Expansion case**. The proposal is placed in 62nd EAC Meeting held on 28th August, 2023, wherein the PP and an accredited Consultant, M/s. Eco Chem Sales & Services Surat, made a detailed presentation on the salient features of the project and informed that: (NABET Accreditation Number is NABET/EIA/2023/SA 0156 and valid upto 11th September 2023], made a detailed presentation on the salient features of the project and informed the following:
4. The PP reported that the Existing land area is 30000 m², no additional land will be used for proposed expansion and no R&R is involved in the Project. The details of products are as follows:

Sr. No.	Product	Existing Quantity
Packing and Repacking and Storage of following chemicals		
1.	Fatty Amines	300 MT/M
2.	Acids	300 MT/M
3.	Solvents	300 MT/M
4.	Phosphorus Chemicals	50 MT/M
Packing Material		
5.	PU Boards	1000 No/M
6.	Engineering Plastic	100 MT/M
7.	Empty IBC's/Drums	4000 No/M

Proposed Products:

Sr. No.	Products	CAS No.	Proposed Quantity (TPA)	End - Use
1.	3,5 Dimethyl Phenol	108-68-9	3000	Pharmaceuticals industry
2.	Bisphenol-S	80-09-1	5000	Food industry
3.	Bisphenol-S AE	41481-63-4	2000	Coating, cosmetics, skin & hair care
4.	3-3' Diallyl Bisphenol-S	41481-66-7	2000	Dyes & pigments industry
5.	Isophorone	78-59-1	5000	Paint industry
6.	Perchloric Acid	7601-90-3	1000	Rocket fuel component
7.	Dimethyl Acrylic Acid	541-47-9	1000	Nail primers
8.	Chloroform (By-product)	67-66-3	2000	Pharmaceuticals industry
Hydrogenated Products				
9.	Hexylene Glycol (HG)	107-41-5	15000	Coating, cosmetics, skin & hair care
10.	3,3,5 Trimethylcyclohexanone (TMCnone)	873-94-9	2000	Paint industries
11.	3,3,5 Trimethylcyclohexanol (TMCnol)	116-02-9	1500	Pharmaceuticals industries
12.	Methyl Isobutyl Ketone (MIBK)	108-10-1	10000	Paint & pharmaceuticals industries
13.	Methyl Isobutyl Carbinol (MIBC)	108-11-2	5000	Surface coatings, thinners, printing inks, adhesives, cosmetics, toiletries & cleaners
14.	Di Isobutyl Ketone (DIBK)	108-83-8	1500	Paint industries
15.	Di Isobutyl Carbinol (DIBC)	108-82-7	1000	Coatings, chemical intermediate & ore flotation
16.	Benzyl Acetone	2550-26-7	500	Preparation of perfume & odorant of soap
Total			57500	

- The PP reported that there is no violation as per the EIA notification, 2006, no court case is pending against the proposal and no direction issued under E(P) Act/Air Act/Water Act.
- 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. Patalganga is flowing at a distance of 2.00 km in N direction. The PP reported that no forest area is involved in the proposed project and Pavo cristatus Schedule I species exist within 10

km study area of the project for which conservation plan has been prepared and submitted to Forest Range Officer on 20.7.2022.

7. The PP reported that EC was not applicable for the existing unit as it involves only Packing and Repacking and Storage of chemicals and the unit has obtained CTE/CTO from MPCB for the same. Unit has obtained CTO vide No: Format1.0/AS(T)/UANNNo.MPCBCONSENT-0000162725/CR/2305001457 dated 19.05.2023 which is valid upto 30.04.2026. The unit has obtained a certified compliance report of an existing valid CTO from MPCB, Raigad, vide letter no: MPCB/SROR-1/230712-FTS-0174 dated 12/07/2023. As per the certified compliance report, there is no non-compliance or partly complied condition. The unit compiles all applicable conditions of the valid CTO.
8. The PP reported that the **Ambient air quality monitoring** was carried out at 08 locations during 1st October 2020 to 31st December 2020 and the baseline data indicates the ranges of concentrations as: PM₁₀ (60.4 – 85.2 µg/m³), PM_{2.5} (31.2 – 46.0 µg/m³), SO₂ (9.1 – 15.9 µg/m³) and NO_x (14.3 – 20.7 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 1.07 µg/m³, 1.87 µg/m³ and 0.671 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). **Noise level monitoring** was carried out at 08 locations during 1st October 2020 to 31st December 2020. Based on noise level data obtained during the survey for residential area and industrial area, it is interpreted that noise levels are within the standard norms prescribed by MoEF&CC. Looking towards the increase in noise generating sources it is suggested that there is need to apply noise reducing devices at noise generating sources and generate public awareness.
9. **Ground water quality sampling** was carried out at 08 locations during 1st October 2020 to 31st December 2020 and based on comparison study of test results with drinking water norms, it is interpreted that results for all the locations meet the drinking water permissible limit and desirable limit as per the IS:10500: 2012 except Turbidity. Turbidity is marginally higher than desirable limit but within permissible limit. It shows that they can be used in drinking in absence of alternate source. RO filtration system should be used to bring the results up to desirable range for daily uses as drinking water. **Surface water quality sampling** was carried out at 08 locations during 1st October 2020 to 31st December 2020 and Based on the test results data comparison study with CPCB standard, it is interpreted that surface water quality meets with the criteria D and E, it means these water sources can be used for fisheries, Irrigation and industrial. Results of DO, COD and BOD found more than desired range which indicate that surface water bodies are contaminated with organic matter. This contamination may be due to leaf fall and animal approach. DO level for all the locations are >4.0 mg/L. DO level >4.0 mg/L is considered suitable for the survival of all aquatic life. **Soil quality sampling** was carried out at 08 locations during 1st October 2020 to 31st December 2020 and Based on soil analysis data it is concluded that soil at the project site is saline (EC > 0.8 dS/m). The soils are high in nitrogen, low in phosphorus and high in available potassium status. The levels of total Fe, Cu, Cr, B and Zn are within the limits. However, for successful greenbelt development liberal quantity of organic manure (50 tons/ha) and double the quantity of recommended doses of N and double the recommended dose of P fertilizers should be

applied. The potassium is adequate; hence 20% less than the recommended dose for green belt should be applied. Soil at the site is having good fertility based on CEC value. The soil at the project site should be periodically monitored for EC, pH and ESP as well as OC (organic carbon), available P and K status.

10. The PP reported that the total water requirement is 770.00 KLD of which fresh water requirement of 417.00 KLD will be met from Patalganga River. Total industrial effluent generation will be 204 KLD. Industrial effluent generated will be segregated into two different streams i.e. High COD/TDS stream and Low COD/TDS stream. High COD/TDS effluent stream generated from process (100 KLD) will be collected separately and sent to MEE followed by stripper. The condensate from MEE will be reused for industrial purpose. Low COD/TDS effluent stream generated from utilities (104 KLD) will be treated into ETP consisting of Primary, Secondary and Tertiary Treatment. ETP treated water will be sent to RO plant. RO permeate will be reused for industrial purpose and RO reject will be sent to MEE. Thus, unit will maintain Zero Liquid Discharge (ZLD). Domestic wastewater generation will be 9 KLD which will be treated into STP and treated water will be used for gardening purpose/toilet flushing.
11. The PP reported that the power requirement will be 2000 kW and will be met from Maharashtra State Electricity Board (MSEB). Unit has proposed 01 No. of D.G Set which will have capacity of 400 kVA. D. G. sets will be kept as standby and used during power failure. Stack (height 6.5 m) will be provided as per CPCB norms to the proposed D. G. Set.
12. Unit has proposed to install 10 TPH capacity of imported coal or LSHS fired steam boiler. Multi cyclone separator & Bag filter with a stack of height of 50 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boiler
13. **Details of Process Emissions Generation and its Management:** There shall be emission of Cl₂ gas due to proposed manufacturing process. To control chlorine gas emission, water scrubber followed by alkali scrubber will be installed as APCM.

14. Details of Solid /Hazardous Waste Generation and its Management: Hazardous/Solid Waste Generation & it's Management

S. No.	Type of Waste	Category	Quantity, TPA	Disposal
1.	Used Oil	5.1 (Sch. I)	9.9	Collection, Storage, Transportation and Disposal by selling to authorized party / recycler
2.	Filter Residue	36.1 (Sch. I)	50	Collection, Storage, Transportation and Disposal by selling to authorized party/ CHWIF / preprocessor/co-processor/re-processor
3.	Tar	36.1 (Sch. I)	500	Collection, Storage, Transportation and Disposal by selling to authorized party /

				CHWIF / preprocessor / co-processor/re-processor
4.	Distillation Residue	36.1 (Sch. I)	18775	Collection, Storage, Transportation and Disposal by selling to authorized party/CHWIF for Incineration/preprocessor/co-processor
5.	Discarded Drums / Barrels	33.1 (Sch. I)	150 (10,000 Nos./Annum)	Collection, storage and Utilize for packing of hazardous waste / Disposal by selling to authorized recycler / by selling to authorized party
6.	ETP sludge	35.3 (Sch. I)	250	Collection, Storage, Transportation and Disposal to TSDF site for landfilling/preprocessor/co-processor
7.	Spent catalyst	28.2 (Sch. I)	20	Collection, Storage, Transportation and Disposal by selling to authorized party/recycler/re-processor
8.	MEE salt	35.3 (Sch. I)	1750	Collection, Storage, Transportation and Disposal to TSDF site for landfilling
9.	Spent carbon from process	36.2 (Sch. I)	5	Collection, Storage, Transportation and Disposal to CHWIF/preprocessor/co-processor/disposal by selling to authorized party

Non-Hazardous Waste Generation

S. No.	Type of Waste	Quantity, TPA	Disposal
1.	Ion exchange resin	1	Collection, Storage, Transportation and Disposal to TSDF site/Sale to Authorized Party/Recycler
2.	Sand from water filtration	10	Collection, Storage, Transportation and Disposal to TSDF site/Sale to Authorized Vendor/Local Body
3.	Miscellaneous (Rubber & Teflon Gasket / Packing / Transmission Belt / V Belt/ PP / FRP etc.)	1	Collection, Storage, Transportation and Disposal by selling to authorized vendor / local body
4.	Fly Ash	2100	Collection, Storage, Transportation and Disposal to brick manufacturer / cement manufacturer
5.	STP Sludge	5	Used as a manure within plant premises
6.	Used hand gloves cotton / PVC / Rubber	5000 Pairs per annum	Collection, Storage and Disposal to authorized vendor / recycler

15. The Budget earmarked towards the Environmental Management Plan (EMP) is ₹ 500.00 Lakhs (capital) and the Recurring cost (operation and maintenance) will be about ₹ 370.00 Lakhs per annum. The industry proposes to allocate 100.00 Lakhs lakhs towards CER.
16. The PP reported that Public Hearing for the proposed expansion project has been conducted by the Maharashtra Pollution Control Board on 17.10.2022. The main issues raised during the public hearing are related to employment to local people, water pollution control measures and Greenbelt.

Sr. No.	Issues raised	Reply by the PP	Action Plan	Fund allocation
1.	<p>Shri. Reddy suggested that while developing the green belt, medicinal plants and fruit trees should be planted, which would benefit the society. Rain water harvesting and water storage should be implemented in the project. It is good to provide job opportunities to local people in the project. However, the company administration is requested to undertake skill development program for the local youth. So that, they can get local employment contract in our and other projects as well.</p> <p>Shri. Reddy suggested that the project proponent should form a coordinating committee with the villagers. It should include a representative of the State Pollution Control Board (SPCB), local Government officials of the village and "Demand Oriented Work" should be done as per advice of the committee in this area.</p>	<p>Project Proponent while thanking Shri Reddy said that the suggestions made by him will definitely be taken positively by the company management.</p>	<p>Around 100 nos. of manpower will be generated and preference will be given to local persons.</p>	<p>A budget of Rs. 100 Lakhs i.e 2 % of the proposed project cost will be allocated for Corporate Environment Responsibility (CER).</p>

2.	<p>The upcoming project of Prasol Company will be developed at Survey no. 146, 150, 151, 152, 154 and 74/3 here and we welcome this good project.</p> <p>The feature of Prasol Company is that in the existing project here the workers are local, the management is local and Marathi. It is also a request that local people should be given job opportunities in the new project. Best luck to the project.</p>	<p>Project Officer while thanking Shri Santosh Patil said that the project always gives job opportunities to local people.</p>	<p>Around 100 nos. of manpower will be generated and preference will be given to local persons.</p>	<p>A budget of Rs. 100 Lakhs i.e 2 % of the proposed project cost will be allocated for Corporate Environment Responsibility (CER).</p>
3.	<p>It would be desirable to provide background information on this new project when public hearing is held for new project. Some issues were raised in previous public hearings. The problem caused to the local people due to the pollution here was presented. We thankful to the company for taking measures in this regard. The smell that was a problem while traveling here has reduced to a great extent. The two wheeler riders used to suffer due to particles while riding or pedestrians while walking. Now, the problem is reduced. The amount of water pollution is decreased.</p> <p>Shri Gaikwad said that the river gets black water many times. Further</p>	<p>Project Officer assured that as per the suggestions given by Shri Gaikwad, all norms of pollution control will be followed in the upcoming project, job opportunities to the local people, any contract work will be given to local contractors.</p>	<p>High COD/TDS effluent stream will be sent to MEE followed by stripper. The condensate from MEE will be reused.</p> <p>Low COD/TDS effluent stream will be treated into ETP. ETP treated water will be sent to RO plant. RO permeate will be reused for industrial purpose and RO reject will be sent to MEE. Thus, unit will maintain Zero Liquid Discharge (ZLD).</p>	<p>Rs. 300 Lakhs has been allocated for water pollution management.</p>

<p>action should be initiated after finding the source. This new project is a short distance away from the old project. This is good for the villagers as there is no river adjacent to the factory, this is one of the good things for the villagers.</p> <p>Hence, it can be say that this new factory will not cause water and river pollution.</p> <p>But as per the directives passed to the Ministry of Environment, Forests and Climate Change, Govt. of India, New Delhi, the project must be 100% Zero Liquid Discharge (ZLO). So that water pollution and any chemical from the soil will not spoil the soil and water.</p> <p>Shri Gaikwad said that while welcoming the project, the factory should also fulfill its responsibility i.e. providing job opportunities to local people, giving work to local contractors, strictly following pollution control rules, such projects are welcomed and supported. I welcome this project in Dheku village, but there should not be any water, air, hazardous solid waste pollution from the company. Care should be taken that there should be</p>			
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	no pollution. I pray that this company should flourish and prosper.			
4.	<p>He said that upcoming industry is good for Dheku area, development of Taluka. Skilled, semi-skilled, unskilled local people should be given job opportunities in the project. The project is within 50 meters of the river bed. So, the information should be given in the meeting about what measures will be taken to control the pollution. I pray that the project should flourish .</p>	<p>Project Proponent replied that in the proposed project, Sewage Treatment Plant for treatment of domestic effluent and Effluent Treatment Plant for treatment of industrial effluent would be commissioned. The waste water generated in the production process will be treated, recycled and reused in the project. Not a drop of water will be discharge outside the factory. Project is Zero Liquid Discharge (ZLD). Project Proponent replied that we are going to implement the Multiple Effective Evaporator (MEE) system in the project. Shri Sandesh Patil that local people should be given priority in employment.</p>	<p>High COD/TDS effluent stream will be sent to MEE followed by stripper. The condensate from MEE will be reused.</p> <p>Low COD/TDS effluent stream will be treated into ETP. ETP treated water will be sent to RO plant. RO permeate will be reused for industrial purpose and RO reject will be sent to MEE. Thus, unit will maintain Zero Liquid Discharge (ZLD).</p>	<p>Rs. 300 Lakhs has been allocated for water pollution management.</p>
5.	<p>Welcome to the owners of Prasol Company that they have brought another project in this area. An investor can invest anywhere. But thanks to him for investing here and proposed job opportunities to the young</p>	<p>Project promoter thanked Shri Deshmukh for his views.</p>	<p>Around 100 nos. of manpower will be generated and preference will be given to local persons.</p>	<p>A budget of Rs. 100 Lakhs i.e 2 % of the proposed project cost will be allocated for Corporate Environment Responsibility</p>

	<p>boys and girls, contract work to local businessmen and contractors.</p> <p>Everyone here said that in Prasol company only local people are given preference. We have no doubt about it. The upcoming project will bring a new hope. There are educated unemployed young boys and girls in the area, for whom this project will create new opportunities. Good luck with the project.</p>			(CER).
6.	<p>Shri. Deshmukh further opined that the directives passed by the Maharashtra Pollution Control Board should be followed. The company administration always tries to solve the problems by understanding the problems of any person. Hence, it is a Prayed that this factory should start and flourish.</p>	<p>Project proponent thanked Shri. Deshmukh and said that the M/s. Prasol company will definitely follow the prescribed standards passed by the Maharashtra Pollution Control Board.</p>	<p>The unit has formulated the environmental management cell for ensuring compliance of EC & CTO conditions. Adequate budget of EMP has been already allocated for pollution control.</p>	<p>Unit has allocated Rs. 500 Lakhs for Environmental Management System.</p>
7.	<p>Welcome to the project. Because 250-200 people will get in this project. So this project is welcomed by all the villagers. He further suggested that the Maharashtra Pollution Control Board should implement the suggestions made by participants in the meeting. It is requested to approve this project.</p>	<p>Project Proponent while thanking assured that the suggestions presented in the meeting will be followed.</p>	--	--
8.	<p>Member, Group Gram Panchayat, Honad, Tal-</p>	<p>Project Officer thanked Shri Prakash</p>	<p>Unit will be started after obtaining EC</p>	--

	<p>Khalapur, Dist - Raigad. He said that last time a public hearing on environment was held for the expansion of the working project. At that time, some supported, some raised many issues. As mentioned in the meeting, the company has made many improvements since then. This is the industrial sector. Many factories came up and closed within 5-6 years. But this is the only factory that survived. Due to construction of new project, local people will get job opportunities. However, I welcome this project. But the factory should be started only after taking all the necessary permissions from the Government. Good luck with the project.</p>	<p>Patil and assured that the project will be implemented as per all government norms.</p>	<p>and CTE/CTO from the authority.</p>	
<p>9.</p>	<p>The project should be commissioned and flourish. But sons of soil should be given job opportunities. There are Marathi people in the Prasol Industry. But sons of soil are very few. We demand that maximum job opportunities should be provided to Bhumiputras - young boys and girls of the area of Honad Gram Panchayat, Aktar Gram Panchayat, Dheku - Sajgaon Gram Panchayat.</p>	<p>Project Proponent promised that the suggestions made by the Chairperson, Environment Public Hearing Committee will strictly follow in new upcoming project in recruitment.</p>	<p>During the construction phase 80 – 100 nos will be required and preference will be given to local villagers and local contractor.</p> <p>Around 100 nos. of manpower will be generated during operation phase and preference will be given to local persons based on their skill.</p>	<p>A budget of Rs. 100 Lakhs i.e 2 % of the proposed project cost will be allocated for Corporate Environment Responsibility (CER).</p>

<p>Also, attention should be given that the contractual work/business can be given to the Bhumi Putra as much as possible. Attention should be given how pollution will be reduced. We are supporting the company, but if there are other issues of some other people, Bhumi Putras, they should be resolved.</p> <p>Project proponent Shri. Nitin Tawle while expressing his wishes informed that the points raised by him will definitely be beneficial. While giving job opportunities in the project, only local people are being given job opportunities, the same policy will be implemented in the new project.</p> <p>Here the Chairperson, Environment Public Hearing Committee remarked that the concerned person has demanded employment of maximum number to Bhoomi Putras within Gram Panchayat limits. So, the Project Administration should send a letter to the Gram Panchayat before starting the recruitment in the upcoming project, asking for the information about local person-Bhoomi Putra with educational qualification and</p>			
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	<p>experience, which is required for the posts. The students who will get it will be recent pass outs. The concerned potential candidates should be trained by the project. A positive point in this is that the energy possessed by recent pass-outs is more than that of experienced persons. So, they should provide training and job opportunities in the project.</p>			
10.	<p>The new factory will provide employment opportunities to the local people. Similarly, local businessmen will get business opportunity in the new project. He further said that this Prasol company has built a school here by spending one crore rupees. Although education is important, there are very few people who spent this huge amount for educational purposes of society. The owners of the company have provided a huge opportunity for this area. Various activities are being implemented in this area through CSR funds. So, there is no reason for anyone to oppose this factory. The promoters of the project are always concerned about how the project will be profitable without suffering.</p>	<p>Project Proponent thanked Shri Naresh Patil.</p>	<p>Around 100 nos. of manpower will be generated and preference will be given to local persons.</p>	<p>A budget of Rs. 100 Lakhs i.e 2 % of the proposed project cost will be allocated for Corporate Environment Responsibility (CER).</p>

	<p>He further said that the suggestion made by the Chairperson is very correct and the recent pass-outs should be trained and given employment in the project. This suggestion should be followed by the Project Proponent. However, I welcome and wish you all the best for the upcoming project.</p>			
11.	<p>We want to make an indicative statement that today due to the small companies of Dheku village, we are suffering a lot pollution in Dheku village. However, there is no doubt that Prasol Chemicals will work well taking this into account. He further said that if we talk about employment today, the company provides employment. Workers here say that the pay scale here is very low. If the local people tolerate the pollution from the companies here, then the company management should look into the salary of the workers. The people of the village suffer due to pollution. As the payment in the company is very low, the Company Administration should pay attention for it. Inflation is very high. For that, the Company Management should keep</p>	<p>Project Proponent replied that Prasol Chemicals is a company that follows the Minimum Wage Act. Your suggestions will definitely be considered.</p>	<p>Around 100 nos. of manpower will be generated and preference will be given to local persons.</p>	<p>A budget of Rs. 100 Lakhs i.e 2 % of the proposed project cost will be allocated for Corporate Environment Responsibility (CER).</p>

	in mind the increase in salary. Rest of the company management works very well. However, the salary should be increased keeping in mind the needs of the local people.			
12.	I am a company professional in association with the company, I was working for. The company has given employment to the local people, as well as produced good professionals. However, I welcome this new company.	Company administration thanked Shri Bharat Patil.	---	---
13.	Prasol Chemicals has been operating in Gram Panchayat-Honad since around 1999. As it co-operates in our Honad Gram Panchayat, it should co-operate in Dheku village also. The co-operation of the Owners is received from time to time. Also, if you are giving 30 to 60% business to local people, you should pay attention that it will go to 100% business.	Project Proponent while thanking them, said that the new project would follow the instructions.	---	---
14.	The company has raised the issue of employment generation. So I would like to give a suggestion to the company that the workers, employees who are required for recruitment or employment in the company, should get the	Project Proponent while thanking Shri Suraj Patil said that while giving employment contracts in the project, they are given only after looking at the educational	Around 100 nos. of manpower will be generated and preference will be given to local persons.	A budget of Rs. 100 Lakhs i.e 2 % of the proposed project cost will be allocated for Corporate Environment Responsibility (CER).

	<p>job without taking any help or influence from the representative of any party.</p> <p>Also, I want to say that the company to take the business of common people. Because for employment in the company you have to mention the name of some leader, party. After that you get employment in the company. Instead of doing this, I would like to say that the company should take note of the person after looking at his qualifications.</p>	<p>qualification and similarly in the future also employment will be given only after looking at the educational qualification.</p> <p>Chairperson, Environment Public Hearing Committee opined here that this is a very good point. Jobs should be given only based on merit without taking any recommendation. All political parties will have support for those who get job according to their qualifications. As the concerned participant might have experienced the same, he has expressed his opinion here. However, jobs should be given in the project only according to the qualifications.</p> <p>Project Officer promised to implement the suggestions.</p>		
15.	<p>He opined that every time it is seen when there is project, every time it is opposed. But today, I am grateful to the local citizens for their support for this project. Everyone should remove the doubt in the mind that also the Company Administration should give employment</p>	<p>Project Officer said that as indicated by the Chairperson, the Environment Public Hearing Committee, the suggestions will be implemented.</p>	<p>Around 100 nos. of manpower will be generated and preference will be given to local persons.</p>	<p>--</p>

	contract in the project as per the merit without giving work to the person of any big political party. I welcome Managing Director of the company to Dheku village.			
16.	Shri Khavale said that there is no use in just opposing for the sake of opposition only. Keeping in mind the past experience, Prasol Chemicals has made a positive presentation. The decision taken by company management to commission this project in this Gram Panchayat is welcomed. However, the Project Proponent should follow the instructions given in the meeting. Plantation should be strictly followed.	Project Proponent while thanking Shri Khawle said that the suggestions regarding green belt development will be followed.	Unit will be developed greenbelt of 33% as per guideline.	Rs. 8 Lakhs will be allocated for development of Greenbelt.
17.	He further said that I would like to point out to the Maharashtra Pollution Control Board that in the report submitted by the company, it has been mentioned that the green belt area will be kept at 33%. This rule is not followed in the project which is in operation. 23.9% has been given in road and open area in the working project. So in the current project, it is not visible. The site photos are also taken. There is an open road at Gate No.1. They have put a shed on it. Drums are placed in it.	Project Officer promised to follow the directives passed in the existing project and in the new project. Here, Member, Convener said that the working project is at Survey no. 8,13,15,16, 25 and 75, located at Honad. The point raised is correct. Maharashtra Pollution Control Board periodically inspects whether the pollution norms are being followed or not. Now survey no.	Unit will be developed greenbelt of 33% as per guideline.	Rs. 8 Lakhs will be allocated for development of Greenbelt.

	<p>If there is an accidental fire, the workers of the company will not be able to move there. There may be a big loss in the company. I am bringing to the attention of Maharashtra Pollution Control Board to direct Prosol Chemicals to strictly follow the rules.</p>	<p>75 is reserved by them for green belt. There is no space in the factory, so they have developed 33% green belt on the plot behind the factory.</p>		
18.	<p>Who is exactly local? How many kilometers from the project is to be considered as local?</p> <p>Shri. Krushikesh Patil asked how many kilometer from the project location is considered for allotting the work as Local Contractor.</p> <p>Project Proponent urged the participant to ask environmental questions and said that the said public hearing was organized by the Maharashtra Pollution Control Board Public Hearing Committee on Environment and environmental questions should be asked.</p>	<p>Project Proponent replied that local means within 10 km from the project location. Those who live within the periphery will be given preference in terms of local employment.</p> <p>Project Proponent replied that 80-90% of the people in the working project are local people.</p> <p>Project Officer assured the person who was online from the actual public hearing hall that as per the suggestions given by them, priority will be given to local people in the new project in giving contract and employment agreement.</p>	<p>Around 100 nos. of manpower will be generated and preference will be given to local persons.</p>	--
19.	<p>This is a good project. I have been watching for years. They are taking good care of the</p>	<p>The project promoters replied that CSR funds have been provided for in the</p>	<p>Unit will be allocated fund for CER activity.</p>	<p>A budget of Rs. 100 Lakhs i.e 2 % of the proposed project</p>

	environment. I have seen the presentation. All points are well made. He suggested that CSR funds from the project should be spent on village development.	proposed new project. It is read out in the presentation. It will be done gradually. Shri Mohan Patil thanked the company for providing employment to the people of the village. Our villagers get the cooperation of the company from time to time.		cost (Rs. 50 crores) will be allocated for Corporate Environment Responsibility (CER) and will be implemented in next 5 years after implementation of project.
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17. Industry has already developed greenbelt over an area of 10% i.e., 3000 m² out of total area of the project and Industry will develop additional greenbelt in an area of 23.33% i.e., 7000 m² out of total area of the project.
18. The PP proposed to set up an Environment Management Cell (EMC) consisting of Director operation- Manager EHS- Manager EMS- Chemist lab- Shift operator EMS (3 in numbers) for the functioning of EMC.
19. The PP reported that total maximum CO₂ Emission (t CO₂e/Annum) due to expansion activity shall be 11485.14 (tCO₂e/Annum) and CO₂ sequestered shall be 1171.18 Ton/Annum, which will increase year on year with the growth of trees planted in the greenbelt.
20. The PP submitted the Onsite and Offsite disaster management plans in the EIA report.
21. The estimated project cost is Rs 50.00 Crores including existing investment of Rs.12.00 Crores. Total Employment will be 100 persons as direct & indirect.

22. **Deliberations by the EAC:**

The EAC, constituted under the provisions 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 the 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 to the effect 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 EAC noted that the EIA reports are in compliance with 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 EAC inter-alia, deliberated on the layout with greenbelt development plan, fuel, details regarding the carbon footprint and advised the PP to submit the following:

- Revised Plant Layout with greenbelt development plan.
- Action plan for use of cleaner fuel.
- Details of Carbon footprint.

The PP submitted the above information/documents and the EAC found it to be satisfactory.

The EAC 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 Expert Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

The EAC is of the view that recommendation of EAC and grant of environmental clearance by regulatory authority 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.

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

- (i) The PP shall develop an additional Greenbelt over an area of atleast 23.33% i.e., 7000 m² by planting 2100 trees, preferably within a year of grant of EC. The saplings selected for the plantation should be of sufficient height, preferably 6-ft. The budget earmarked for the plantation shall be kept in separate account and should be audited annually. PP should annually submit the audited statement along with proof of activities viz. photographs (before

& after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

- (ii) A separate Environmental Management Cell (having qualified persons 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 and shall also engage Director operation- Manager EHS- Manager EMS- Chemist lab- Shift operator EMS (3 in numbers). In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (iii) 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. The budget propose under EMP is ₹ 500 Lakhs (Capital cost) and ₹ 370 Lakhs per annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (iv) The total water requirement shall not exceed 770.00 KLD of which fresh water requirement of 417.00 KLD will be met from Patalganga River. The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawal only after obtaining valid agreement from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (v) Total industrial effluent generation shall be 204 KLD. Industrial effluent generated shall be segregated into two different streams i.e. High COD/TDS stream and Low COD/TDS stream. High COD/TDS effluent stream generated from process (100 KLD) shall be collected separately and sent to MEE followed by stripper. The condensate from MEE shall be reused for industrial purpose. Low COD/TDS effluent stream generated from utilities (104 KLD) shall be treated into ETP consisting of Primary, Secondary and Tertiary Treatment. ETP treated water shall be sent to RO plant. RO permeate shall be reused for industrial purpose and RO reject shall be sent to MEE. The Unit shall maintain Zero Liquid Discharge (ZLD). Domestic wastewater generation shall be 9 KLD which shall be treated in STP and treated water shall be used for gardening purpose/toilet flushing.

- (vi) As proposed, Agrobriquette shall be used as a primary fuel in the boiler and coal shall be used as a secondary fuel during the unavailability of Agrobriquette.
- (vii) No banned chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.
- (viii) The project proponent shall comply with the environment norms for synthetic organic chemical as notified by the Ministry of Environment, Forest and Climate Change, *vide* GSR 608 (E), dated 21. 7.2010 under the provisions of the Environment (Protection) Rules, 1986.
- (ix) 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.
- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) Total effluent of 287.5 m³/day quantity shall be treated through ETP followed by RO, MEE and Spray dryer. Condensate shall be reused for industrial purpose. The plant shall be based on Zero Liquid Discharge system.
- (xiv) 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 servers. 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.
- (xv) 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.
- (xvi) 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.

- (xvii) Training shall be imparted to all employees on safety and health aspects for handling chemicals. 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.
- (xviii) 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.
- (xix) 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 fire 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.
- (xx) 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.
- (xxi) The PP shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapor recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.
- (xxii) The activities and the action plan proposed by the project proponent to address the issues raised during the public hearing as well as the related socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.

Agenda No. 62.4.

Proposed Manufacturing of Dyes and Dye Intermediates with Production Capacities of Para Aminoazobenzene 4 sulfonic acid (PAABSA-120 TPA); N-METHYLE J ACID (60 TPA); Diamino stilbene disulfonic acid (DASDA-240 TPA); Meta Phenylene Diamine 4- Sulphonic Acid (MPDSA-60 TPA); 4 NAP (60 TPA); Diphenyl Diamine (300TPA)(Total Capacity- 840 TPA) located at Survey/ Khasra no. 123 M2 and 124 M2, Village Maheshpuriya, Tehsil-Jawad, District-Neemuch, Madhya Pradesh by M/s. New Babji Industries- Consideration of Environmental Clearance

[Proposal No. IA/MP/IND3/422286/2023; File No. IA-J-11011/158/2021-IA-II(I)]

1. The proposal is for EC for the Proposed Manufacturing of Dyes and Dye Intermediates with Production Capacities of Para Aminoazobenzene 4 sulfonic acid (PAABSA-120 TPA); N-METHYLE J ACID (60 TPA); Diamino stilbene disulfonic acid (DASDA-240 TPA); Meta Phenylene Diamine 4- Sulphonic Acid (MPDSA-60 TPA); 4 NAP (60 TPA); Diphenyl Diamine (300TPA)(Total Capacity-840 TPA) located at Survey/ Khasra no. 123 M2 and 124 M2, Village Maheshpuriya, Tehsil-Jawad, District-Neemuch, Madhya Pradesh by M/s. New Babji Industries
2. The project/activity is covered under Category ‘A’ of Item 5 (f)-Synthetic organic chemicals of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended) and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) as the project is located outside the notified industrial area.
3. The Standard ToR was issued by the Ministry, vide letter no. IA-J-J-11011/158/2021-IA-II(I) dated 16.4.2021. The PP applied for the Environment Clearance in the Common Application Form and submitted the EIA/EMP Report and other documents. The PP in the CAF reported that it is a **Fresh case**. The proposal is placed in this 62nd EAC Meeting held on 28th August, 2023, wherein the PP and an accredited Consultant, Enkay Enviro Services Private Limited made a detailed presentation on the salient features of the project and informed that: (NABET Accreditation No. - NABET/EIA/2023/RA 0183; Valid up to 12.12.2023], made a detailed presentation on the salient features of the project and informed the following:
4. The PP reported that the Proposed land area is 2600 m², and no R&R is involved in the Project. The details of products are as follows:

Name of Product	CAS Number	Production capacity (TPA)
PAABSA	102-23-8	120
N METHYL J ACID	22346-43-6	60
DASDA	81-11-8	240
MPDSA	88-63-1	60
4 NAP	99-57-0	60
DIPHENYL DIAMINE	119 90-4	300
Total Production Capacity		840

5. The PP reported that there is no violation as per the EIA notification, 2006, no court case is pending against the proposal and no direction issued under E(P) Act/Air Act/Water Act.
6. 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. Gambhir Nadi (non -Perennial) is flowing at a distance of 7.40 km in West direction. The PP reported that no forest area is involved in the proposed project and No Schedule I species exist within 10 km study area of the project.
7. The PP reported that the **Ambient air quality** monitoring was carried out at 8 locations during 01.10.2020 to 31.12.2020 and the baseline data indicates the ranges of concentrations

as: PM₁₀ (43.8 to 69.4 µg/m³), PM_{2.5} (25.0 to 41.6 µg/m³), SO₂ (6.1 to 8.8 µg/m³), NO₂ (8.0 to 10.6 µg/m³), CO (458 to 1031 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs as PM₁₀ - 0 to 0.87 µg/m³ PM_{2.5} - 0 to 0.82 µg/m³, SO₂ - 0 to 2.33 µg/m³, NO_x - 0 to 2.81 µg/m³ CO- 0 to 0.62 µg/m³. **Noise level monitoring** The daytime (Leq day) noise levels are observed to be in the range of 41.2 – 54.1 dB(A) which are within the prescribed limit of 55 dB(A). The night time (Leq night) noise levels are observed to be in the range of 39.5 – 45.1 dB(A) Which are within the prescribed limit of 45 dB(A).

8. Ground water samples were collected and analysed for 8 locations. The details are given below:

Parameter	Project Site	Buffer zone
pH	7.12	6.41-7.41
Total Hardness	396 mg/l	212 mg/l – 644 mg/l
Chlorides	73.98 mg/l	41.99mg/l –261.87 mg/l
Fluoride	0.65 mg/l	0.42 mg/l –1.006 mg/l
Heavy metals	<0.001mg/l	<0.001mg/l

The surface water quality at village Bharbhariya is, pH-7.81, Total hardness- 84 mg/l as CaCO₃, Chlorides – 21.99 mg/l, Fluoride -0.18 mg/l. **Soil quality sampling-** It has been observed that the pH of the soil in the study area ranged from 7.75 to 8.68. The maximum pH value of 8.42 was observed at Village Maheshpuriya (S1) and whereas the minimum value of 7.75 was observed at project site (S3). The electrical conductivity was observed to be in the range of 316 µS/cm/cm to 637 µS/cm with the maximum observed at Village Newad (S3) and the minimum observed in Village Subakhera (S5). The nitrogen values range between 7315 Kg/ha to 10800 Kg/ha. The nitrogen content in the study area is more than sufficient. The phosphorus values range between 30 to 64 kg/ha, indicating that the phosphorus content in the study area falls in less to more than sufficient category. The potassium values range between 1417.5- 61440 kg/ha. The potassium content in the study area falls in more than sufficient category. The chlorides were found to be in the range of 12 to 27 mg/kg of soil.

9. The PP reported that the total water demand estimated is 82 KLD. Out of this, daily fresh water demand will be 47 KLD and the recycled water will be 35 KLD and will be met by from gram Panchayat Barkheda Kamliyaand. The Industrial Effluent of 42 KLD will be treated in ETP (50 KLD capacity) followed by MEE and ATFD and MEE permeate will be reused in Cooling Tower/process to maintain the ZLD & STP treated water 2.4 KLD will be reused in plantation.
10. The PP reported that the Power requirement will be 550 kVA and will be met from Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited. The unit will install DG set (1No.) having capacity of 250 kVA with adequate stack height as per CPCB norms.

Power Requirement

Phase	Demand (KVA)	Expected Source
Operational	550	Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited

Fuel consumption Details

S. No.	Raw Material	Proposed Consumption	Source	Mode of transport
1	Agro waste (Briquettes/rick husk) (for boiler)	1400 TPA	Local	Road
2	Fuel (HSD – For DG Set)	30 ltr/h	Local	Road tanker

11. Details of Process Emissions Generation and its Management:

Manufacturing process	Emissions	Mitigation Measures
Boiler (1 Nos. of 4TPH and 1 nos. of 5 LKcal/hr Thermopac)	VOC	Bag filter with adequate stack height.
Transport of raw material/products (Trips – 10 (20 Ton each) for raw material and 11-12(15 ton each) for product)	PM, NO _x , CO ₂	PUC certified vehicles will be used; Plantation will be done at the periphery of the proposed plant with min one row of plants.
Material handling	Fugitive Dust, NO _x & CO, and HC	No drops from height, will be unloaded manually
DG sets (250kVA (1 no.).(Fuel-HSD)	Fugitive Dust	Adequate stack height will be proposed.

12. Details of Solid /Hazardous Waste Generation and its Management: Hazardous/Solid Waste Generation & it's Management:

Particulars	Proposed(kg/day)	Total (kg/day)	Treatment/ disposal
Solid waste			
Municipal Solid Waste	5	5	It will be sent to Municipal Site Neemuch, Rajasthan.

(@0.125Kg/ day)			
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Sr. No.	Type / Name of Hazardous waste	Specific Source of generation	Category and Schedule	Quantity (MT/Annum)	Management of HW
1	Discarded bags / containers	Raw material storage and handling	33.1	2000 Nos HDPE Bags, 150 drums (9.1 Kg/drum=1365 Kg/annum).	Collection, Storage, transportation, sent to Registered recyclers.
2	Used oil	Plant and machinery	5.1	0.5	Collection, Storage, transportation, Sent to register refiners
3	Dilute HCl (27-30%)	APCM (DASA)	Sh-I I B15	49	Collection, storage and reuse in manufacturing process. Total generation will be 48.78 MT/Annum and requirement in process will be 63.2 MT/Annum. Balanced quantity will be -14.42 MT/Annum purchased.
4	Spent Sulphuric Acid (50%)	DASDA	26.3	384.0	Collection, storage and treated in in-house ZLD system for Gypsum recovery or reused in process. (in-house). Total generation will be 384.0 MT/Annum and reuse in process 384 MT/Annum. So, there is no remaining quantity will be left.
	Spent Sulphuric Acid (20-25%)	PAABSA, ANILINE 2 5 DSA, DASA	26.3	1248.0	Collection, storage, transportation and disposal by sending to units having permission under Rule -9. MOU has been obtained from Shree cement, or shall be treated in the ZLD Plant.
5	Iron Sludge	Manufacturing of metanilic Acid and DASA	26.1	882	Will be sent to cement industries or TSDF for land filling
6	SBS Slurry	APCM (DASA/Gama Acid)	26.3	252	Will be reused in the process.

7	Gypsum Sludge	from Neutralization of Spent Acid and neutralization process of Metanilic Acid	26.1	465	Will be sent to cement industries.
8	ETP Sludge	Neutralization of wastewater stream	35.3	365.0	Collection under the steel fabricated roof with HDPE Liner laying under the 6-inch RCC impervious Layer with PCC, send to authorized TSDF.
9	MEE/ATFD Salt	After Concentration and Evaporation remaining Salt+ Organic waste from ZED	35.3	720	
10	Carbon waste	From Purification process	Solid waste	0.308	Collection under the steel fabricated roof with HDPE Bags and Liner and send to authorized TSDF''

13. The Budget earmarked towards the Environmental Management Plan (EMP) is ₹ 80 Lakhs/annum (capital) and the Recurring cost (operation and maintenance) will be about ₹.17 Lakhs/ annum The industry proposes to allocate 12 Lakhs lakhs towards CER.

14. The PP reported that Public Consultation for this project was conducted on 10.02.2022 at 11:00 A.M. which was presided by the Additional District Collector Neemuch, M.P. The main issues raised during the Public Hearing are Employment, Health issues, Greenbelt, Water Pollution etc.

Details of Public	Issues raised	Reply by the PP/Action Plan
Mr. Murtaja Imdad Hussain S/O Imdad Hussain, Village Mahesh Puriya	Employment will be generated from the project benefit	-
Mr. Hozefa Bohra S/O Fakhruddin Village – Maheshpuriya	What will be the benefit of project	The project will directly provide employment to 40 people. Educated people can open shops if the transport increases and get the indirect employment to their efficiency. Which will provide employment.

Mr. Hozefa Bohra S/O Asgar Ali, Village – Maheshpuriya	This is very good proposal for employment in the region. Due this area will be developed. The plantation should be undertaken.	The project will directly provide employment to 40 people. Educated people can open shops if the transport increases and get the indirect employment to their efficiency. Which will provide employment. Plantation will be developed and maintained as per MOEF&CC guildlines within the premises. 33% of the total project area.
Mr. Mukadrak Vohra S/O Tahere ali Bohra from village – Gali Jawad	Employment will be generated from the New Babji Industries and resident may not face any trouble and good employment opportunities should be provided to resident of Jawad.	The project will directly provide employment to 40 people. Educated people can open shops if the transport increases and get the indirect employment to their efficiency. Which will provide employment. Environmental protection measures will be implemented to mitigate the impact.
Mr. Naveen Dena S/O Suresh Chand from Jawad	Preference should be given for employment the local people.	The project will directly provide employment to 40 people. Educated people can open shops if the transport increases and get the indirect employment to their efficiency. Which will provide employment.
Yusuf Ali Bohra S/O Saifuddin Bohra, residence – Jawad	Area will develop. Sources of employment will be available.	The project will directly provide employment to 40 people. Educated people can open shops if the transport increases and get the indirect employment to their efficiency. Which will provide employment.
Mr. Puran S/O Shobharam Chandel, Residence of Jawad, Barkheda Kamaliya	Local people from the area should be employed. The people should be benefited from the project. Slightest harm to the resident of the area	The project will directly provide employment to 40 people. Educated people can open shops if the transport increases and get the indirect employment to their efficiency. Which will provide employment. The EMP suggested by environment consultant will be implemented to prevent impact.
Mr. Subhash Chand Boriwal S/O Gopilal Ji Boriwal village Maheshpuriya, Jawad	There is habitation near to the proposed site and there is full possibility to spread different types of the diseases. Along with this agriculture able land may	The nearest village is Maheshpuriya. The EMP will be implanted in true spirit to mitigated the environmental and health impact due to the project. The stack with adequate stack height and APC will be provided. The periodical health check-up

	become barren land. Different serious impact may occur due to the smoke therefore industry should be established in industrial zone.	camp will be organised for the local people. The conversion of land from agriculture to commercial use was converted from Sub Divisional Officer Revenue, Jawad, Neemuch, M.P. issued vide letter no.-56/A-2/19-20 dated 02.09.2019.
Mr. Dinesh Nayak S/O Radhe Shyam Nayak village – Maheshpuriya	The environmental pollution prevention measures in the village should be taken by the New Babji Industry. The arrangement of safe drinking water and health related facilities to avail to the villagers should be undertaken.	The EMP will be implanted in true spirit to mitigated the environmental and health impact due to the project. The periodical health check-up camp will be organised for the local people. The drinking water and health facilities to be provided under CSR.
Mr. Naresh Chand Patidar S/O Devilal Patidar Ex-Sarpanch Village Maheshpuriya	The most of the people of maheshpuriya village is belong to labour class. The local villagers should be hired for employment	The project will directly provide employment to 40 people. Educated people can open shops if the transport increases and get the indirect employment to their efficiency. Which will provide employment.
Mr. Ramesh Nayak S/O Changanlal Ji Nayak village Maheshpuriya, Jawad	Complete drinking water facilities should be done. Preference to be given to local for employment	The project will directly provide employment to 40 people. Educated people can open shops if the transport increases and get the indirect employment to their efficiency. Which will provide employment. The drinking water and health facilities to be provided under CSR.
Mr. Ghanshyam Rathore S/O Bhairulalji, near to Barkheda Panchayat	Environmental protection to be done. Plantation to be done. The opportunities to local should be given for employment.	
Mr. Sandip Mali S/O Radheshyam Ji Mali Barkheda Kamliya	The opportunities to local should be given for employment. Plantation to be done to clean the atmosphere, any loss from the project to the public is sole responsibility of the plant owner	Waste water will be stored in the project itself and equipment will be installed for treatment. After treatment, the water will be used within the plant. The discharge of waste water will not be carried out outside the plant. Due to which the possibility of water pollution is negligible The waste water generated from the toilets by the people working in the

		<p>project will be disposed into Modular STP, so that no waste water will be discharged out the project. Rain water will be harvested by company.</p> <p>At the same time, the possibility of chemical discharge in the land will be negligible. The chemicals will be stored in the tank and care will be taken to prevent leakage. No impact will be on the land.</p> <p>As per the rules of the Government for plantation, 33% of the project land will be used for plantation so that the emission of the dust particles cannot go out. Water will be sprayed. So that the dust particles do not fly far away. APC equipment will be installed in the boiler to cannot air emission. Further, the solid waste will be given to the authorized person/agency. At the same time from time to time, it is also checked by the Pollution Control Board whether the conditions given in the company environment clearance are being followed or not. If not complied SPCB have to issue notices for it.</p> <p>6 monthly compliance report to be submitted to Government. Medical camps will also be set up by the company from time to time for health for nearby village to check the impact on the health of the people. Qualified doctor will be appointed to check the health of the people.</p>
Mr. Pradeep Pawar S/O Bhairulal Pawar resident of Barkhed Kamliya	The opportunities to local should be given for employment from the plant opening in maheshpuriya so that migration for employment to outside avoided. The labour should get employment so that livelihood of their home run	The project will directly provide employment to 40 people. Educated people can open shops if the transport increases and get the indirect employment to their efficiency. Which will provide employment.
Mr. Ganpat Singh	I have objection for this	Industrial waste water will be treated in

<p>Rajput S/O Amar Singh Ji Rajput village – Maheshpuriya, Jawad Tehsil, dist – Neemuch</p>	<p>project because of this people may become illness. The soil and crop may harm due to chemical pollution first preference should be for labour of maheshpuriya village</p>	<p>ETP followed by MEE & RO and treated water will be recycled with the project. The discharge of waste water will not be carried out outside the plant. The waste water generated from the toilets by the people working in the project will be disposed into Modular STP, so that no waste water will be discharged out the project. Preference for employment for labour of maheshpuriya village will be given.</p>
<p>Surya Pal Singh S/O Unkar Singh village Maheshpuriya</p>	<p>Employment preference to given for people of maheshpuriya village. Avoid harm due to environmental pollution of this project. Water should be not pollute. No harm should be made to the crop of the area due to this project.</p>	<p>Preference for employment for labour of maheshpuriya village will be given. No chemical discharge from the plant hence no crop damage will occur. Industrial waste water will be treated in ETP followed by MEE & RO and treated water will be recycled with the project. The discharge of waste water will not be carried out outside the plant. The waste water generated from the toilets by the people working in the project will be disposed into Modular STP, so that no waste water will be discharged out the project.</p>
<p>Magusingh vasuli Patel etc Maheshpuriya tehsil – Jawad dist-Neemuch MP</p>	<p>We resident of village maheshpuriya moraka request you (to Collector Dist Neemuch) that – in my village the colour paint factory is being established by Vohra Samaj, Mustafa Bhai Bohra etc in which we resident of village have objection. The environment of the village will be polluted and odour will come out and people will suffer from the illness and any type of diseases may occur to the people. Therefore, the factory should not establish in this village and may be</p>	<p>The EMP will be implemented in true spirit to mitigate the environmental and health impact due to the project. The periodical health check-up camp will be organised for the local people. All the reaction will be in the closed reactor and pipeline will be mechanically sealed. ZLD will be maintained. Propoer leakage detection and prevention system will be implemented.</p>

	established in another place. Hence, we request that the colour and paint factory should not be established in village	
Kanhaiyalal, Ambulal etc on behalf of resident fo Maheshpuriya Jawad	<p>We resident of village maheshpuriya moraka request you to (to Collector Dist. Neemuch) that – There is no chowkidar post in our village – Maheshpuriya. The incidents of theft in houses and farmhouse are happening in the area. I request you, sir, to take necessary steps to appoint a post of chowkidar, a matter of course gopal nayak moraka is making visit in my village, therefore, Mr Gopal Nayak should be appointed as Chowkidar. He has full experience and doing the work of chowkidar since many years.</p> <p>Hence, we request that the chowkidar may be appointed in village maheshpuriya to maintain the peaceable, disturbance, encroachment and illegal work can also be avoided by appointing chowkidar and incident of theft can be prevented.</p>	Issue is related to administration

15. The Industry will develop plantation within the Premises over an area of 858.00 Sq.m. (i.e.33%) out of the total project area.
16. The PP proposed to set up an Environment Management Cell (EMC) consisting of Director-Manager EHS- Dy . Manager- Dy . Manager (waste management) –Chemist- 2 no of helpers for the functioning of EMC.

17. The PP reported that the based on the estimate that a cubic metre of wood absorbs just under a ton of CO₂. Tree absorbs anywhere between 10 and 40 kg of CO₂ per year on average, depending on a whole host of factors. Considering the average 25Kg CO₂ /year/ tree The unit will explore the possibilities of roof top solar @ 600 Watt/year say 0.6 Kw. Thus looking at the size of the project the CO₂ reduction will be 9% approx.
18. The PP submitted the Onsite and Offsite disaster management plans in the EIA report.
19. The estimated project cost is Rs 5.6 Crores. Total Employment will be 40 persons as direct employment.
20. **Deliberations by the EAC:**

The EAC, constituted under the provisions 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 the 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 to the effect 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 EAC noted that the EIA reports are in compliance with 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 EAC inter-alia, deliberated on the layout of the plant w.r.t the thickness of the greenbelt and its budgetary provision, carbon footprint & its mitigative measures and advised the PP to submit the following:

- Revised Plant Layout with greenbelt development plan and its budget.
- Details of Carbon Footprint.

The PP submitted the above information/documents and the EAC found it to be satisfactory.

The EAC 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 Expert Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

The EAC is of the view that recommendation of EAC and grant of environmental clearance by regulatory authority 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.

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

- (i) The PP shall develop Greenbelt over an area at least 858.00 m² by planting 215 number of saplings within a year of grant of EC. The saplings selected for the plantation should be of sufficient height, preferably 6-ft. The budget earmarked for the plantation shall be kept in separate account and should be audited annually. PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (ii) A separate Environmental Management Cell (having qualified persons 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 and shall also engage Director-Manager EHS- Dy .Manager- Dy . Manager (waste management) –Chemist- 2 no of helpers. In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (iii) 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. The budget propose under EMP is ₹ 92.04 Lakhs (Capital cost) and ₹ 17 Lakhs per annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before &

after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

- (iv) The PP reported that the total water demand estimated shall not exceed 82 KLD. Out of this, daily fresh water demand shall be 47 KLD and the recycled water shall be 35 KLD which shall be met from gram Panchayat Barkheda Kamliya and through the pipeline. The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawal only after obtaining valid agreement from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (v) The Industrial Effluent of 42 KLD shall be treated in ETP (50 KLD capacity) followed by MEE and ATFD and MEE permeate which shall be reused in Cooling Tower/process to maintain the ZLD. Domestic treated water 2.4 KLD shall be reused in plantation.
- (vi) No banned chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.
- (vii) The project proponent shall comply with the environment norms for synthetic organic chemical as notified by the Ministry of Environment, Forest and Climate Change, *vide* GSR 608 (E), dated 21. 7.2010 under the provisions of the Environment (Protection) Rules, 1986.
- (viii) 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.
- (ix) 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.
- (x) 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.
- (xi) 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.
- (xii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB servers. 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.

- (xiii) 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.
- (xiv) 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.
- (xv) Training shall be imparted to all employees on safety and health aspects for handling chemicals. 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.
- (xvi) 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.
- (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 fire 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 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.
- (xix) The PP shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapor recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.
- (xx) The activities and the action plan proposed by the project proponent to address the issues raised during the public hearing as well as the related socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.

Agenda No. 62.5

Manufacturing of Technical Grade Pesticides and their intermediates with the production capacity of 1100 MT/Year located at Shed No. A1-3618, GIDC Ankleshwar, District Bharuch, Gujarat by M/s. Kashma Agro Industries – Reconsideration of Terms of Reference

[Proposal No. IA/GJ/IND3/433072/2023; File No. IA-J-11011/233/2023-IA-II(I)]

1. The proposal is for the issue of ToR for preparation of EIA/EMP for the Manufacturing of Technical Grade Pesticides and their intermediates with the production capacity of 1100 MT/Year located at Shed No.: A1-3618, GIDC Ankleshwar, District Bharuch, Gujarat by M/s. Kashma Agro Industries. **The PP reported that the project is located in a Critically Polluted Area (CPA) as identified by the CPCB.**
2. The project/activity is covered under Category ‘B’ of Item 5(b) **Pesticides & Pesticide Specific Intermediates** of the schedule to the EIA Notification, 2006. However, since the project site is located within a **Critically Polluted Area**, the project attracts the general condition and considered as Category ‘A’ at Centre.
3. The PP applied for the ToR vide proposal number No. **IA/GJ/IND3/433072/2023** dated 14.6.2023. The proposal is now placed in the 62nd EAC meeting held on 28th August, 2023, wherein the PP made a detailed presentation on the salient features of the project. The information submitted by the PP is as follows:
4. The PP reported the product details are as follows:

S. No.	Product Name	QTY (MT/Year)	CAS NO.
A. Fungicides			
1	Metalaxyl Technical or its Intermediates	1100	57837-19-1
2	Tebuconazole Technical or its Intermediates		107534-96-3
3	Tricyclazole Technical		41814-78-3
4	Hexaconazole Technical or its Intermediates		79983-71-4
5	Thiamethoxam Technical or its Intermediates		153719-23-4
6	Myclobutanil Technical		88671-89-0
7	Thiophanate Methyl		23564-05-8
8	(2E)-2-(methoxyimino)-N Methyl- 2-(2-Phenoxy Phenyl)		133408-

	Acetamide		50-1
9	Difenoconazole Technical		119446-68-3
10	Propiconazole Technical or its Intermediates		60207-90-1
11	Cyproconazole Technical		94361-06-5
12	Azoxystrobin Technical		131860-33-8
13	Chlorpyiphos Technical		2921-88-2
14	Flutriafol		076674-83-6
15	Benalaxyl		71626-11-4
16	Fipronil		120068-37-3
Total		1100	

5. The PP reported that the total land area of the project is 2738 m².
6. 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. Narmada River is flowing at a distance of 7.9 km in North direction.
7. The PP reported that the Total water requirement is **93 m³/day** of which fresh water requirement of **24 m³/day** will be met from Ankleshwar GIDC water Supply System. Effluent of **79.5 m³/day** quantity will be treated through proposed in house ETP, MEE, **Disposal mode of industrial effluent in case of operation of in-house MEE-** Total 78 KLD industrial effluent will be generated from the manufacturing process & utilities. 50 KLD wastewater will be generated from Process out of which, 30 of concentrated/ high COD industrial effluent will be treated into in-house MEE. MEE salt will be sold as by product or disposed into TSDF site. Total LTDS 81 KLD (MEE Condensate 33 KLD + Cooling 6 KLD + Process 20 KLD + Washing 15 KLD + Scrubbing 7 KLD) will be sent to ETP for primary, secondary and tertiary treatment. ETP Sludge will be disposed into TSDF site. 75 KLD from ETP out of 81 KLD will be sent directly to RO for further treatment. 69 KLD RO permeate will be reused in process and RO reject 6 KLD will be sent to MEE for further treatment. **Disposal mode of industrial effluent in case of nonoperation of in-house MEE-** Total 78 KLD industrial effluent will be generated from the manufacturing process & utilities. 50 KLD wastewater will be generated from Process out of which, 30 KLD HTDS will be sent to Common MEE for further treatment & disposal. Total LTDS 48 KLD (Cooling 6 KLD + Process 20 KLD + Washing 15 KLD + Scrubbing 7 KLD) will be sent to ETP for primary, secondary and tertiary treatment. ETP Sludge will be disposed into TSDF site. 44 KLD from ETP out of 48 KLD will be sent directly to RO for further treatment. 40 KLD RO permeate will be reused in process and RO reject 4 KLD will be sent to CMEE for further treatment & disposal. Domestic effluent (1.5 KLD) will be disposed through septic tank/soak pit.

8. The Power requirement for proposed project will be 500 KVA and will be met from Dakshin Gujarat Vij Company Limited (DGVCL) Power Supply. Three D.G set of 200 KVA x 3 Nos. will be used as standby during power failure. Stack height of 11 meter will be provided as per CPCB norms to the proposed DG sets.
9. The unit has installed Thermopack (2 X 4 Lakh Kcal/Hr and D.G Set (200 KVA x 3). Multi Cyclone Separator, Bag Filter, Water Scrubber with a stack of height of 25 m will be installed for controlling the particulate emissions within the statutory limit for the proposed stacks.
10. The PP reported that the project, being in notified industrial area vide Notification No. GHU - 78-20-GID-1977-660CH dated 1.2.1978 is exempted from the public hearing as per the Ministry's O.M. J-11011/321/2016-IA. II(I) dated 27.04.2018.
11. The total land area of the project is 2738 m², out of which we will develop 273.8 m² (i.e., 10 %) greenbelt within the premises and 1095.2 m² (i.e., 40 %) greenbelt outside the premises in collaboration with Ankleshwar Industries association. Hence, Total 50 % greenbelt will be developed by M/s. Kashma Agro Industries.
12. The estimated project cost is Rs. 5.10 Crores. The PP reported that total employment will be 12 persons as direct & 15 persons indirect after proposed expansion.
13. The proposal was earlier considered in the 56th EAC meeting held on 14th July, 2023, wherein the EAC deferred the proposal for want of requisite information. Reply to the same was submitted by the PP, which is as follows:

S. No.	Queries Raised by EAC	Reply by the PP
1.	Compliance to the green belt development of minimum 40% of the total area of the unit (@2500 plantations per hectare), in consultation with forest department and accordingly, submit the details of green belt to be developed.	The PP reported that the green belt would be consisting of shrubs, trees, avenue trees, revenue trees, crops and potted plants. All the species suggested are pollution tolerant, besides having an aesthetic appeal. Out of the total project area 2738 m ² , 621.71 m ² (i.e., 22.70 % of the total project area) will be covered under greenbelt development / plantation. Remaining 1095.2 m ² (40 %) area developed as greenbelt outside of premises in collaboration with Ankleshwar Industry association. This will be around 62.70 % of project site area. Total 512 no. of saplings will be planted. Greenbelt development will be done all along the road & project boundary which will attenuate noise level, arrest dust & increase aesthetic beauty of the area.

		<p>Plantation will be done in appropriate alternate rows around the site to prevent lateral pollution dispersion. The trees will help in maintaining regional ecological balance and conform to soil and hydrological conditions.</p> <p>Good greenery shall be maintained in and around the site by planting various types of trees and maintaining lawns. A green belt shall be developed within the site boundary and across the premises inside roads. Champa, Neem, Mango Jangli badam, Sag, Jamun, Shisham, Ambli, etc. shall be planted in and around the site. Following the norms, 1 tree has to be planted per 2.0 X 2.0-meter area and will increase numbers of trees. Species to be planted has been submitted and proposed Action Plan for 40% Greenbelt Development / Plantation has been submitted. In the proposed greenbelt area, total trees 427 nos. will be grown after considering 80% of survival rate. Considering 62.7 % green belt development no. of trees to be planted 427 Nos. Total No. of Trees going to be planted 512 nos. after considering 80% of survival rate 427 Nos.</p>
2.	Letter from the GIDC for the additional greenbelt outside the project area	A letter to the Regional manager GIDC for the additional greenbelt outside the project area has been submitted.
3.	Layout plan with the requisite green belt for the proposed project.	Layout plan with the requisite green belt for the proposed project has been submitted.
4.	Details of carbon foot prints and carbon sequestration study w.r.t. proposed project needs to spell out.	<p>CO₂ emissions contribute to global warming and climate change, which can significantly cause severe impacts and consequences for humans and the environment. CO₂ emissions act like a blanket in the air, trapping heat in the atmosphere, and warming up the Earth. This layer prevents the Earth from cooling, and thus raises global temperatures. Anticipated Carbon Emission and Terrestrial Sequestration has been submitted.</p> <p>Cumulative LCA report has been submitted.</p>
5.	Explore the possibility of alternate sites and their analysis	Alternative analysis is the process of analyzing the proposed locating for suitability for basic necessities to operate the plant

		safely, this analysis also covers the environmental aspect of pollution prevention and improvement in quality of life nearby the project vicinity. The project alternative is the course of action in pace of another, that would meet the same purpose and need, but which would avoid or minimize negative impacts and enhance project benefits. Such projects may result in specific impacts which can be avoided or mitigated by adherence to certain predetermined performance standards, guidelines or design criteria. Alternative approaches may therefore be more effective in integrating environmental and social concerns into the project planning process. The proposed project site is located at Shed No.: A1-3618, GIDC Ankleshwar, District - Bharuch, Gujarat. The proposed project is to be set up in the 2738 m ² land area. Various aspects are considered during the site selection has been submitted.
6.	Quantified and specific compliance and action plan for the additional safeguard measures prescribed in the ministry's o.m. dated 31.10.2019 for critically and severely polluted areas	Quantified and specific compliance and action plan for the additional safeguard measures prescribed in the ministry's o.m. dated 31.10.2019 for critically and severely polluted areas has been submitted.

14. Deliberations by the EAC:

The EAC inter-alia, deliberated on the Greenbelt development plan and its layout, Proposed CPA compliance. The EAC observed that shrubs, crops and potted plants are not considered a part of green belt.

15. After detailed deliberations, the EAC **recommended** the project for grant of ToR (**Standard ToR [Annexure-II]** and **additional ToR as mentioned below**), **without public hearing** as per the provisions of the EIA Notification, 2006 and as per O.M. No. 22-23/2018-IA.III dated 05.07.2022.

- (i) The status of the action plan, if any, prepared by the State Government/SPCB for the CPA needs to be provided.
- (ii) The PP needs to submit the action plan with respect to mitigation measures for CPA mentioned in the Ministry's O.M dated 31.10.2019.

- (iii) Being in a Critically Polluted Area (CPA), the PP need to submit alternative site analysis and Environmental Cost Benefit analysis in the EIA report.
- (iv) The PP shall submit the details of carbon foot prints and carbon sequestration study w.r.t. the proposed project. The Action Plan for utilization of modern technologies for capturing carbon emitted and developing carbon sink/carbon sequestration resources shall also be prepared and submitted.
- (v) The PP should submit the photographs of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, the PP should submit the original test reports and certificates of the labs which have analysed the samples.
- (vi) Details of Onsite and Offsite emergency plans as per the provisions of the MSIHC Rules need to be submitted.
- (vii) Activity-wise, a time bound action plan along with budgetary provisions for occupational health & surveillance, environment management plan, and green belt development plans shall be prepared and submitted.
- (viii) Undertaking from the PP and the consultant in pursuant to the O.M. No. J-11013/41/2006-IA. II(I) dated 04.08.2009 and J-11013/41/2006-IA. II(I) dated 5.10.2011.
- (ix) The PP shall submit an undertaking to the effect that the project is not a violation proposal in pursuant to the S.O. 804(E) dated 14.03.2017 and SoP dated 07.07.2021.
- (x) Action Plan for the management of hazardous waste and provision for its utilization in co-processing if applicable shall be prepared and submitted.
- (xi) Provision for reuse/recycle of treated wastewater, wherever feasible shall be made. The PP shall explore the possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal. A detailed water harvesting plan also needs to be prepared and submitted. Provision for Zero Liquid Discharge whenever techno-economically feasible shall be included. The PP shall make necessary provisions for continuous monitoring of the effluent quality/quantity.
- (xii) Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains in constructed reservoirs. The rain water shall not be put into groundwater strata.
- (xiii) The PP shall clarify whether project involves ground water utilization. In case of ground water abstraction, a copy of application made to concerned authorities for the same need to be submitted.
- (xiv) The PP should develop Greenbelt over an area of 621.71 m² (i.e., 22.70 % of the total project area), remaining 1095.2 m² (40 %) area shall be developed outside of premises in

collaboration with Ankleshwar Industry association. 512 Number of saplings selected for greenbelt should have greater ecological value and should be of great utility value to the local population with emphasis on local and native species and the species which are tolerant to air pollution.

- (xv) Plan for development of the green belt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc. shall be prepared and submitted.
- (xvi) Assessment of the carrying capacity of transportation load on roads inside the notified industrial premises shall be carried out and submitted.
- (xvii) In addition to the above, the EIA/EMP report shall also address issues such as i) Effective fugitive emission control measures for process, transportation, packing etc. ii) use of cleaner fuels, and iii) best available technology for the plant.

Agenda No. 62.6

Proposed Expansion for Manufacturing of Synthetic Organic Chemicals with production capacity from 505.00 MT/Month to 2515.00 MT/Month and addition of a new plot located at Plot No. C-1/B-651/2, 652 & 653, GIDC Vapi, Dist.-Valsad, Gujarat by M/s. Uniform Synthetics Pvt. Ltd.- Consideration of Environmental Clearance

[Proposal No. IA/GJ/IND3/434443/2023; File No. J-11011/632/2008-IA-II(I)]

1. The proposal is for the Environmental Clearance to the Proposed Expansion for Manufacturing of Synthetic Organic Chemicals with production capacity from 505.00 MT/Month to 2515.00 MT/Month and addition of a new plot located at Plot No. C-1/B-651/2, 652 & 653, GIDC Vapi, Dist.-Valsad, Gujarat by M/s. Uniform Synthetics Pvt. Ltd.
2. The project/activity is covered under Category 'B' of item 5(f), Synthetic organic chemicals industry. However, since the project site is located within a **critically polluted area**, the project attracts the general condition and considered as Category 'A' at Centre.
3. The standard ToR was issued by the Ministry, vide letter no. 11011/632/2008-IA-II(I) dated 26.12.2022. The PP applied for Environment Clearance in the Common Application Form and submitted EIA/EMP Report and other documents. The PP in the Form reported that it is a **Expansion case**. The proposal is placed in this 62nd EAC meeting on 28th August, 2023, wherein the PP along with accredited Consultant, M/s. Unistar Environment and Research Labs Pvt. Ltd, made a detailed presentation on the salient features of the project and informed that: (NABET/EIA/2326/RA 0288, Valid till Date: 15.02.2026] made a detailed presentation on the salient features of the project. The information submitted by the PP is as follows:
4. The PP reported that the Existing land area is 2080 m², additional 3975 m² land will be used for proposed expansion and no R& R is involved in the Project. The details of products to be manufactured are as follows:

S. No.	Product Details (complete name)	CAS NO.	Existing Quantity	Proposed Quantity	Total Quantity	Uses
1.	Polyester Resin (Synthetic & Modified) (Phthalic, Alkyd, Maleic etc.)	--	300.00	-200.00	100.00	Hammer tone paints, Printing inks, Sanding sealers, Stoving varnish
2.	Octoic Driers	--	20.00	-20.00	0.00	speed up the autoxidation process
3.	Varnish (By Mixing & Blending)	--	55.00	0.00	55.00	wooden surfaces, paintings, and various decorative objects.
4.	Paints (By Mixing & Blending)	--	105.00	-100.00	5.00	Industrial protective paints
5.	Printing Inks (By Mixing & Blending)	--	25.00	-20.00	5.00	Inks to be printed on flexible packing
6.	Polyamide resin	63428-84-2	0.00	1500.00	1500.00	Flexo & Gravure inks, Thixotropic Paints, adhesive,
7.	Polyurethane resin	67700-43-0	0.00	300.00	300.00	For printing on Food packaging (Indirect Contact)
8.	Derivatives of Titanium Chelates	17501-79-0	0.00	200.00	200.00	Flexo Graphic and Gravure Inks NC/PU Inks, Reverse Printing Inks
9.	Phenalkamine	868765-93-9	0.00	300.00	300.00	Marine, Protective Industrial coatings and floor coatings primer
10.	Melamine Formaldehyde Resin	9003-08-1	0.00	50.00	50.00	Domestic Household, crockery, Electric switch gear components.

3. The PP reported that there is no violation case as per the Notification No. S.O. 804(E) dated 14.03.2017 and one show cause notice has been issued to the PP dated 2.11.2022 and reply for the same has been submitted to the Regional Officer vide letter dated 7.11.2022.
4. The PP reported that Ministry had issued EC earlier vide letter no. J-11011/632/2008- IA II (I); dated 19.12.2008 to the existing project in favour of M/s. Uniform Paints. Transfer of EC has been obtained from M/s Uniform Paints” to M/s Uniform Synthetics vide letter dated

31.3.2022. Another Transfer of EC has been obtained from M/s. Uniform Synthetics to M/s. Uniform Synthetics Private Limited vide letter dated 28.11.2022.

5. The PP reported that Certified Compliance Report for the existing EC has been obtained from MoEF&CC vide letter no. J-11/53-2023-IROG NR, dated: 26.05.2023. Out of total 23 conditions, 18 conditions are complied, 2 are partly complied, 1 is agreed to comply, 1 condition is noted by the unit, 1 condition is not applicable to the unit. Unit has submitted Action taken report for partly complied conditions to the IRO vide e-mail dated 22.6.2023.
6. The PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. within 10 km distance from the project site. Daman Ganga River is flowing at a distance of 2.55 Km in SW direction. There is no forest land involved in the proposed project. Schedule-I species i.e., Common Indian monitor and Common Peafowl were observed in the 10 km radius from the proposed project for which Conservation plan has been prepared submitted to PCCF and Chief wildlife warden dated 19.12.2023.
7. The PP reported that the **Ambient air quality** monitoring was carried out at 8 locations during 1st December 2022 to 28th February 2023 to and the baseline data indicates the ranges of concentrations as: PM₁₀ (48 - 95 µg/m³), PM_{2.5} (13 - 34 µg/m³), SO₂ (10.2 – 30.1 µg/m³) and NO₂ (14.5 – 34.5 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.56798 µg/m³, 0.51409 µg/m³ and 5.571 µg/m³ with respect to PM10, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). **Noise-** Industrial Zone: The Leq Day for the industrial zone was found to be in the range of 54.79 dB (A) to 70.90 dB (A) which will not exceed the permissible limit. Residential Zone: The Leq day for the residential zone was observed to be in the range of 61.10 dB (A) to 64.70 dB (A). The Leq for the night was observed to be in the range of 48.26 dB (A) to 53.21 dB (A). Commercial Zone: The Leq Day for the commercial zone was found to be in the range of 53.66 dB (A) to 64.43 dB (A) while the leq for the night was found to be in the range of 40.18 to 50.00 dB (A) found to not exceed the limits. **Soil-** The soil quality of the study area has been studied for 8 locations and the result of soil quality of the collected samples have been analyse statistically to determine the soil quality profile & fertility level based on 'Nutrient Index' of the study area. The samples were examined for various physical and chemical characteristics in order to assess the impact on soil. The result for individual sample has also been studied for the quality profile and fertility level. **Surface Water-** Water quality of the study area, analysis of all eight locations was conducted by grab sampling. The samples were examined for various parameters as well as Microbiological parameters. **Ground Water** – Ground Water quality of the study area, analysis of all eight locations was conducted and the samples were examined for various parameters as well as Microbiological parameters.
8. The PP reported that the total water requirement is 25.35 m³/day of which fresh water requirement of 22.45 m³/day will be met from GIDC Water supply department. Effluent of 5.46 KLD quantity will be treated through ETP with primary treatment (if required) then

treated effluent will be sent to CMEE Vapi. The plant will be based on Zero Liquid discharge system.

9. The Power requirement after expansion will be 250 HP including existing 100 HP and will be met from Dakshin Gujarat Vij Company Ltd. (DGVCL). Existing unit has DG sets of 125 KVA capacity, Not required additionally DG sets. Existing DG Sets are used as standby during power failure. Stack (height-9 meter) has been provided as per CPCB norms to the proposed DG sets.
10. Existing unit has 1 no. 4.00 Lac K. Cal/hr Thermic Fluid Heater (Natural Gas as fuel). Additionally, 1 no. 4.00 Lac K. Cal/hr Thermic Fluid Heater (Natural Gas as fuel) and 1 no. 2000 Kgs/Hr steam Boiler (Natural Gas as fuel) will be installed. Adequate stack of height of 11 m has been provided for existing Thermic Fluid Heater and 11 m stack height will be provided for proposed Thermic Fluid Heater and Steam Boiler for controlling the particulate emissions within the statutory limit of PM<150 mg/Nm³, SO₂<100 ppm and NO_x<50 ppm for the proposed Thermic fluid heater & steam boiler.
11. **Details of Process Emissions Generation and its Management:** There will no Process emissions generation from the proposed expansion project.

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

Sr. No	Types of Waste (HW Sch. Cat.)	Source of Generation	Unit	Quantity			Method of Disposal
				Existing	Proposed	Total	
1.	ETP Waste (Sch.I: 35.3)	ETP Operation	MT/Yr.	0.50	1.75	2.25	Collection, Storage, Transportation, Disposal at TSDF – RSPL.
2.	Used oil (Sch.I: 5.1)	From plant and machinery	Litre/Yr	100.00	5.00	105.00	Collection, Storage, Transportation, disposal by selling to registered recyclers/refiners.
3.	Discarded Drum, Liners/ Bags/ Carboys	Raw Materials	Nos./Yr	600.00	15000.00	15600.00	Collection, Storage, transportation, disposal at GPCB approved

	(Sch.I: 33.1)						decontamination facility.
4.	Paint Residue (Sch.I: 21.1)	Manufacturing process	MT/Yr.	0.10	0.00	0.10	Collection, Storage, Recovered and recycle for reuse in process.
5.	Spent Solvent (Sch.I: 26.4)	From Solvent recovery Plant	MT/Yr.	0.00	39.00	39.00	Collection, Storage, Recovered and reused in process.
6.	Laboratory waste (Sch.II: Class -C)	From Laboratory	MT/Yr.	0.00	3.50	3.50	Collection, Storage, Transportation, Disposal at TSDF – RSPL.
Solid Waste:							
7.	STP Sludge	STP	MT/Yr.	0.00	0.10	0.10	Used as manure in gardening
<i>(Source: Uniform Synthetics Pvt. Ltd.)</i>							

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

Sr. No.	Types of Waste (HW Sch. Cat.)	Source of Generation	Unit	Quantity			Method of Disposal
				Existing	Proposed	Total	
8.	ETP Waste (Sch.I: 35.3)	ETP Operation	MT/Yr.	0.50	1.75	2.25	Collection, Storage, Transportation, Disposal at TSDF – RSPL.
9.	Used oil (Sch.I: 5.1)	From plant and machinery	Litre/Yr	100.00	5.00	105.00	Collection, Storage, Transportation, disposal by selling to registered recyclers/refiners.
10.	Discarded Drum, Liners/ Bags/ Carboys (Sch.I:	Raw Materials	Nos./Yr	600.00	15000.00	15600.00	Collection, Storage, transportation, disposal at GPCB approved decontamination

	33.1)						facility.
11.	Paint Residue (Sch.I: 21.1)	Manufacturing process	MT/Yr.	0.10	0.00	0.10	Collection, Storage, Recovered and recycle for reuse in process.
12.	Spent Solvent (Sch.I: 26.4)	From Solvent recovery Plant	MT/Yr.	0.00	39.00	39.00	Collection, Storage, Recovered and reused in process.
13.	Laboratory waste (Sch.II: Class -C)	From Laboratory	MT/Yr.	0.00	3.50	3.50	Collection, Storage, Transportation, Disposal at TSDF – RSPL.
Solid Waste:							
14.	STP Sludge	STP	MT/Yr.	0.00	0.10	0.10	Used as manure in gardening
<i>(Source: Uniform Synthetics Pvt. Ltd.)</i>							

14. The Budget earmarked towards the Environmental Management Plan (EMP) is ₹ 68.00 Lakhs (capital) and the Recurring Cost (operation and maintenance) will be about ₹ 22.35 Lakhs /annum. Industry proposes to allocate Rs. 1.75 Lakhs towards Corporate Social Responsibility.
15. Industry will develop greenbelt in an area of 40 % i.e., 2425 m² out of total area of the project.
16. The PP reported that the Public hearing is exempted as per the Ministry's O.M. J-11011/321/2016-IA. II(I) dated 27.04.2018 as the project site is located within GIDC Vapi which is declared as notified industrial area vide letter (Notification No.GHU-75-45-GID-1974-4084 (I)CH dated 06.05.1975
17. The PP proposed to set up an Environment Management Cell (EMC) by engaging Managn Director- Technical Director- Marketing Director- Fcatory Manager- HSE Head- HSE incharge- HSE officer- ETP operator- Enviornment Engineer- Quality Control Department for the functioning of EMC.
18. The PP reported that the Scope-1 Direct GHG emissions occurring from sources that are owned or controlled by the Companythe range of 3027.76 tCO₂/annum.Scope-2 emission i.e. from the indirect emissions i.e. purchased electricity consumed by thecompany the rage of 949.59 tCO₂/annum.Scope-3 emission i.e. from Passenger Commute, Freight transport – Inbound, Freight transport Outbound. Which are optional in terms of reporting which generated 140.61 tCO₂/annum.

19. The PP submitted the Disaster Management Plan and On-site and Off-site Emergency Plans in the EIA report.
20. The estimated project cost is Rs 498.00 lakhs including existing investment of Rs.0.60 crores. Total Employment will be 50 persons as direct & 0 persons indirect after expansion.

21. **Deliberations by the EAC**

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

The EAC noted that the PP has given an undertaking to the effect 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 PP.

The EAC noted that the EIA reports are in compliance with the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The EAC deliberated on the proposed mitigation measures towards Air, Water, Noise and Soil pollutions. The EAC advised that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The EAC inter-alia, deliberated on the treatment scheme, CPA compliance of OM dated 31.10.2019, carbon sequestration and advised the PP to submit the following:

- Revised water treatment scheme (to install collection tank instead of septic tank).
- Revised amount of carbon sequestered through increase in plantation.

The PP submitted the above information/documents and the EAC found it to be satisfactory.

The EAC deliberated on the Onsite and Offsite Emergency plans and various mitigation measures to be proposed during implementation also 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 expert members of the EAC found the proposal in order and recommended for grant of environmental clearance.

The EAC is of the view that its recommendation and grant of environmental clearance by the regulatory authority 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 PP 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.

22. The EAC, after detailed deliberations, recommended the project for the grant of environmental clearance, subject to the compliance of the terms and conditions as under, and general terms and conditions in Annexure-I:
- (i) Adequate stack height as per CPCB/SPCB guidelines shall be provided. Stack emission levels shall be stringent than the existing standards.
 - (ii) CEMS shall be installed and connected to SPCB/CPCB Server.
 - (iii) Effective fugitive emission control measures shall be adopted in the process, transportation, packing etc.
 - (iv) Transportation of materials by rail/conveyor belt, wherever feasible, shall be explored.
 - (v) As proposed, Natural gas shall be proposed as a primary fuel for the proposed project.
 - (vi) The best available technology shall be used.
 - (vii) The PP shall develop greenbelt over an area of at least 2425 m² (1825 m² within the plant premises+600.00 m² in Vapi area area within one year of grant of EC. The saplings should be of sufficient height, preferably 6-ft. The budget earmarked for the plantation shall be kept in a separate account and should be audited annually. The PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
 - (viii) The transportation load on roads shall be within their carrying capacity and adequate width of roads shall be maintained inside the industrial premises.
 - (ix) Total @5.46 KLD high concentrated effluent (2.26 KLD from process, 1.00 KLD from Washing, 1.60 KLD from Boiler blowdown & 0.60 KLD from cooling blowdown) shall be sent to in house ETP for primary treatment (if required) and then treated effluent shall be sent to CMEE through dedicated authorized tanker. 1.00 KLD from boiler blowdown shall be reused in washing.

- (x) CCTV camera at strategic locations shall be installed within premises with web link facility for the continuous monitoring and recording to ensure that there is no discharge from the premises.
- (xi) Rain Water Harvesting system after expansion activity within plant premises shall be practised. The roof top area shall be designed for maximum rainwater collection and with necessary facilities like gutter and drain pipes. A well-designed pipeline network or properly lined impervious storm water drainage shall be provided near all buildings. All storm water drainage or pipelines shall be connected to the rain water storage pond and the total rain water harvesting area shall be about 6252 m³/annum.
- (xii) After proposed expansion there shall not be any discharge on land or into underground drainage to CETP. The generated wastewater shall be collected primary treated and it will be transferred through CMEE through dedicated authorized tanker.
- (xiii) Domestic wastewater generation shall be @ 1.90 KL/day which shall be treated in modular STP and disinfected sewage to be reused for gardening.
- (xiv) Dumping of waste (fly ash, slag, red mud, etc.) shall be permitted only at designated locations approved by SPCBs/ PCCs.
- (xv) The PP shall dispose hazardous waste under the Hazardous Waste (Management Handling and Trans-Boundary Movement) Rules, 2016 and amended as on date for management of Hazardous wastes. The unit shall carry out the transportation of hazardous wastes through GPS mounted vehicles only for disposal at TSDF/CHWIF, co-processing etc.
- (xvi) Monitoring of the compliance of EC conditions shall be submitted with third party audit every year.
- (xvii) As proposed, an amount of ₹ 1.75 Lakhs shall be allocated towards CER.
- (xviii) A separate Environmental Management Cell (having qualified persons with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Managing Director- Technical Director- Marketing Director- Factory Manager- HSE Head- HSE incharge- HSE officer- ETP operator- Environment Engineer- Quality Control Department. In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (xix) 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. The budget proposed under EMP is ₹ 68.00 Lakhs

Lakhs (Capital cost) and ₹ 22.35 Lakhs /annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

- (xx) The total water requirement shall not exceed 25.35 m³/day of which fresh water requirement of 22.45 m³/day shall be met from GIDC Water supply department. The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawn only after obtaining valid agreement from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (xxi) No banned chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.
- (xxii) 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.
- (xxiii) The project proponent shall comply with the environment norms for 'synthetic organic chemical as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 608 (E), dated 21st July, 2010 under the provisions of the Environment (Protection) Rules, 1986.
- (xxiv) 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.
- (xxv) 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.
- (xxvi) 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.

- (xxvii) 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.
- (xxviii) Training shall be imparted to all employees on safety and health aspects for handling chemicals. 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.
- (xxix) 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.
- (xxx) 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.
- (xxxi) The PP shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapor recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.

Agenda No.62.7

Proposed Expansion of Synthetic Organic Chemicals, Intermediates and Agrochemical Product Manufacturing Unit with total production capacity from 1320 TPA to 7887 TPA and 6540 TPA (EC Products 14427 TPA and Non EC Products 792 to 14564 TPA) located at Plot No. F-447, F-447 A, F-448 and F-449 Matsya Industrial Area, Tehsil-Alwar, Rajasthan- by M/s Sri Dwarika Dheesh Polymers Pvt. Ltd. -Consideration of Environmental Clearance

[Proposal No. IA/RJ/IND3/426667/2023; File No. IA-J-11011/450/2022-IA-II(I)]

1. The proposal is for the environmental clearance to the Proposed Expansion of Synthetic Organic Chemicals, Intermediates and Agrochemical Product Manufacturing Unit with total production capacity from 1320 TPA to 7887 TPA and 6540 TPA (EC Products 14427 TPA and Non EC Products 792 to 14564 TPA) located at Plot No. F-447, F-447 A, F-448 and F-449 Matsya Industrial Area, Tehsil-Alwar, Rajasthan by M/s Sri Dwarika Dheesh Polymers Pvt. Ltd.

2. The project/activity is covered under Category 'A' of Item 5(b) & 5(f) Pesticides industry and pesticide specific intermediates, synthetic organic chemical (excluding formulations) of Schedule of EIA Notification, 2006 (as amended).
3. The standard ToR was issued by the Ministry, vide letter no. J-11011/450/2022-IA-II(I) dated 23. 1.2023. The PP applied for Environment Clearance in the Common Application Form and submitted EIA/EMP Report and other documents. The PP in the Form reported that it is an **Expansion case**. The proposal is placed in this 62nd EAC meeting on 28th August, 2023, wherein the PP along with accredited Consultant, M/s. Perfact Enviro Solutions Pvt. Ltd, made a detailed presentation on the salient features of the project and informed that: (NABET/EIA/2225/RA 0284, Valid till Date:26.11.2025] made a detailed presentation on the salient features of the project. The information submitted by the PP is as follows:
4. The PP reported that the Existing land area is 6000 m², proposed land will be 2128 m² used for proposed expansion, and the total land after the expansion will be 8128.00 m² and no R&R is involved in the Project. The details of products to be manufactured are as follows:

S.No	Product	Activity	Existing (TPA)	Proposed (TPA)	Total Production Capacity (TPA)	CAS Number	End use
A- EC Products							
1.	Di-Nitrosopenta Methylene Tetramine (DNPT)	5(f)	528	972	1,500	110-18-9	Blowing Agent
2.	Azo- Di-Carbonamide (ADC)		792	1,608	2,400	123-77-3	Blowing Agent
3.	2,6-Dichlorophenol		Nil	660	660	87-65-0	Intermediate
4.	2,4-Dichlorophenol/2,4 DCP Salt		Nil	3,300	3,300	120-83-2	Intermediate
5.	2,4 D Acid (Technical)	5(b)	Nil	2,739	2,739	94-75-7	Pesticide intermediate
6.	2,4 D Ethyl Ester (Technical)		Nil	1,518	1,518	533-23-3	Pesticide intermediate
7.	2,4 D Amine		Nil	2,310	2,310	25168-26-7	Herbicide
	Total (A)		1,320	13,107	14,427		
B- Non EC Products							

9.	DNPT based Formulation (EVA & PT)		792	2708	3500	-	Blowing Agent
10.	ADCA based Formulation		Nil	3000	3000	-	Blowing Agent
11.	Sodium Hypochlorite		Nil	4,500	4,500	7681-52-9	Bleaching Agent
12.	Hydrochloric acid (HCl) 32-34 %		Nil	3,300	3,300	7647-01-0	Lab Reagent
13.	Calcium chloride (CaCl ₂)		Nil	264	264	10043-52-4	Drying Agent
	Total (B)		792	13772	14564	-	
	Grand Total (A+B)		2,112	26879	28991		

5. The PP reported that there is no violation case as per the Notification No. S.O. 804(E) dated 14.03.2017 and no direction is issued under E (P) Act/Air Act/Water Act.
6. The PP reported that the unit has been in operation since 2005 which is prior to the EIA notification, 2006; Therefore, the existing plant is not having any Environmental Clearance under EIA notification, 2006. The project is an operational synthetic organic chemical manufacturing industry with a total production capacity of 2112 TPA (1320 TPA of EC products and Non EC products 792 TPA) synthetic organic chemicals in accordance with CTO vide order no. **F(Tech)/Alwar(Alwar)/7221(1)/2022-2023/4049-4051** dated **15/11/2022** granted by Rajasthan State Pollution Control Board. The unit is currently involved in manufacturing Azo- Di- Carbonamide (ADC) at 792 TPA, Di - Nitrosopenta Methylene Tetramine (DNPT) at 528 TPA, EVA (formulation) of 264 TPA & PT (formulation) of 528 TPA (Non EC products). Due to increase in market demand and change in planning, the company is proposing to expand the manufacturing capacity of the unit to 28,991 TPA including (14427 TPA of EC products and Non EC products 14564 TPA).
7. Since the CTO was granted within the last one year, the PP submitted the Self Certified Compliance Report for the CTO as per the OM dated 8.6.2022.
8. The PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. within 10 km distance from the project site. There is no forest land involved in the proposed project. Schedule-I species i.e., Pavo cristatus (Indian Peafowl) & Varanus bengalensis (Bengal Monitor Lizard) were observed in the 10 km radius from the proposed project for which Conservation plan has been prepared submitted to Deputy Conservator of Forest dated 11.7.2023
9. The PP reported that the **Ambient air quality monitoring**- The ambient air quality of 8 Sampling Locations. All the sampling locations PM₁₀, CO, SO₂, NO₂, VOCs & PM_{2.5} values are within the limits of National Ambient Air Quality Standards. The mean value of PM₁₀

ranges from (74.10-78.93 $\mu\text{g}/\text{m}^3$), PM2.5 ranges from (33.01-40.88 $\mu\text{g}/\text{m}^3$), SO₂ ranges from (12.33-15.8 $\mu\text{g}/\text{m}^3$), NO₂ ranges from (19.78 - 23.90 $\mu\text{g}/\text{m}^3$), CO ranges from (0.69-0.76 mg/m^3) & Ammonia ranges from (4.55- 8.10 $\mu\text{g}/\text{m}^3$) which are within the limits of National Ambient Air. **Noise level** Monitoring was carried out at 10 locations and the results showed that core zone Leq values ranged from 67.7 dB(A) to 68.4 dB(A) for the day time and 58.8 dB(A) to 60.1 dB(A) for the Night time. Whereas, Buffer Zone: 64.2 dB(A) to 72.4 dB(A) for the day time and 54.3 dB(A) to 68.4 dB(A). for the Night time. It may be concluded that ambient noise level during day time at the proposed project site varies from 67.7 dB(A) to 68.4 dB(A) which are within the day time standard limit of Industrial area ~ 75 dB (A). During night the noise level at the project site ranges from 58.8 dB(A) to 60.1 dB(A) which are within the night time standard limit of Industrial area 70.0 dB (A) and in Buffer zone is slightly higher than the limit due to residential activity and vehicular activity.

10. **Ground water**- Ground water Quality Monitoring was carried out at 8 locations; **Core Zone data showed that** all the parameters (Color, odor, Turbidity, pH Value, Temperature, Conductivity, TDS, Chloride, Fluoride, Total Hardness, Ca, Mg, SO₄, Na, K, TSS, Alkalinity, Nitrate Nitrogen are within the drinking water standards and quality in buffer zone shows range of primary characteristics as pH: 7.11- 7.19, Total Hardness: 242-252 mg/l, Chlorides: 134.7-141.8 mg/l, TDS: 622-746 mg/l. Surface water Quality Monitoring was carried out at 6 locations and **Buffer Zone: pH: 7.88-8.46 ; DO: 1-5.2 mg/l and BOD: 14-1240 mg/l, COD: 65-5420 mg/l. The Surface water** quality of the Kamalpur Drain (SW1) shows that the parameters including Turbidity, TDS, TSS, Nitrate nitrogen, BOD, COD & iron content are higher as compared with EPA discharge standards. Thus it can be concluded based on the results that the surface water quality is not fit for consumption or any other use. The surface water quality of the Bhajeet Pond (SW2) shows that the values of the parameters BOD & DO value indicating that the surface water quality of SW2 can be placed in Class “D” i.e. The surface water quality of the Agayara Pond (SW3) shows that the values of the parameters BOD and DO value indicating that the surface water quality of SW2 can be placed in Class “E”. **Soil Quality** Monitoring was carried out at 7 locations and the analysis showed that Core Zone samples had Texture- [Sand% (4.6), Silt % (73.4), Clay % (21.9)], Organic Matter-0.44%, Available Nitrogen % -0.21, Available Potassium (mg/kg)- 206.6, Available Phosphorus (mg/kg)- 422. Whereas, the Buffer Zone: Texture- [Sand% (1.9-6.3), Silt % (73.5-88.7), Clay % (6.2-21.6)], Organic Matter-0.48-0.58 %, Available Nitrogen % (0.18-0.62) , Available Potassium (mg/kg)- 201.6-312.4, Available Phosphorus (mg/kg)- 321.5-525.8. Therefore, the Primary nutrient profile shows that soil is Average fertile in the buffer zone due to the availability of extremely low amounts of nitrogen
11. The PP reported that the water requirement after expansion will be 78 KLD (40 KLD from Borewell and 33 KLD from Borewell / RIICO and 5 KLD from reuse (3 KLD from steam condensate and 2 KLD from STP). The wastewater generation will be 47 KLD, out of which 2 KLD of domestic wastewater which will be sent to STP, and 45 KLD wastewater from (38 KLD Processes Washing, 4 KLD Scrubber, 16 KLD Cooling Tower, 8 KLD Boiler) and will be treated in ETP of capacity 60 KLD. The treated water of 41.5 KLD will be sent to 38.5 ATFD and 3 KLD to steam condensate Recovery.

12. The Power requirement after expansion will be 1000 kVA and will be sourced from Jaipur Vidyut Vitran Nigam Ltd (JVVNL). DG sets of 1x380 kVA & 2x320 kVA acoustic enclosures are being used as standby during power failure with maximum stack height of 30 m as per CPCB norms. Existing power supply will be sufficient for the proposed expansion.

Particulars	Unit	Existing	Proposed	Total after Expansion
Source	Jaipur Vidyut Vitran Nigam Ltd			
Power Requirement	kVA	550	450	1000
D.G. Set back up	kVA	1 x320	1x 320 & 1x380	2x 320 & 1 x 380 Will be used as Back up

S. No.	Name of Utility	Capacity	Existing (Nos.)	Proposed (Nos.)	Total (Nos.)
1.	Steam Boiler with softner	2 Ton	1	0	1
		1 Ton	0	1	1
2.	DG Set	380 KVA	0	1	1

13. Details of Process Emissions Generation and its Management:

S. No.	Stack Attached To	Stack Height in Meter	APCM	Type of Emission	Permissible Limit	Existing/Proposed
1.	ADC Reactor	12	Water Scrubber	PM	150 mg/Nm ³	Existing
2.	DNPT Reactor	12	Water Scrubber	SOx	100 PPM	Existing
3	2,4 D Reactor	12	Water Scrubber	NOx	50 PPM	Proposed
				Chlorine TLV	1 PPM	
				Chlorine STEL	3 PPM	

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

S. No.	Name of Waste	Source of generation (Plant/Group)	Category (as per HWM Rules,2016)	Quantity (MTPA)			Disposal Method
				Existing	Proposed	Total	
1.	ETP Sludge	ETP	35.3	4	2	6	Is being sent to M/s Rajasthan Waste Management Projects Pvt. Ltd. Same will

							be followed for the proposed expansion also.
2.	Salt Residue after solar evaporation	Evaporator	-	50	0	50	Is being sent to M/s Rajasthan Waste Management Projects Pvt. Ltd. Same will be followed for the proposed expansion also.
3.	Used Oil	Engine, Machinery etc.	5.1	200	100	300	Is being sold to Authorised Recycler/end users. Same will be followed for proposed expansion also.

S. No.	Name of Waste	Quantity (MTPA)			Disposal Method
		Existing	Proposed	Total	
1.	Organic Waste	0.33	0.33	0.56	Currently it is given to the Approved Vendor for Disposal At Municipal Solid Waste Disposal Site. Same will be followed for the future expansion phase also.
2.	Recyclable Waste (Wood, glass etc)	0.99	0.33	1.32	Currently it is given to Approved Recycler and same will be followed after expansion

Type of Waste	Unit	Existing	Proposed	Total after expansion	Treatment /Disposal
Boiler Ash	TPA	3.3	3.3	6.6	To Cement and Brick Manufacturing Unit

Effluent Pollution Load Summary				
Sr.no.	Parameter	Unit	Inlet	Outlet
1	TSS	kg/day	13.5	3.6
2	COD	kg/day	1.8	0.9

15. The Budget earmarked towards the Environmental Management Plan (EMP) is ₹ 0.21 Crores (capital) and the Recurring Cost (operation and maintenance) will be about ₹ 0.17 Crores. Industry proposes to allocate Rs. 0.16 Crores Lakhs towards Corporate Social Responsibility.
16. Green belt/greenery has been developed along most of the periphery of the project area as well as along roads. Out of the total plant area; 20 % (1626 m²) of the area will be developed as greenbelt in order to reduce dust and noise pollution levels and to increase aesthetic beauty of the area and land area of 2960 m² (36.41 % of the plant area) RIICO Park, adjoining to the unit has been adopted for green belt development. Greenbelt shall be developed in the first year of the project and wind breaks shall be erected.
17. The PP reported that the Public hearing is exempted as per the Ministry's O.M. J-11011/321/2016-IA. II(I) dated 27.04.2018 as the project site is located within Matsya Industrial area which is declared as notified industrial area vide letter dated F.2(118) Gov/Gr.3/74 dated 11.9.1974.
18. The PP proposed to set up an Environment Management Cell (EMC) by engaging Environment Officials for the functioning of EMC.
19. The PP reported that During the peak operations, the total CO₂ emissions will be 8,347 MT/annum which is equivalent to 0.87 tonne CO₂ eq / tonne Production. Through development of a green belt having total area of 1626 sq.m having 325 trees, there will be natural sequestration of CO₂ emissions. Due to which, company will sequester 590 MT/annum eq. CO₂ (7%) through new green belt development within plant premises within every operational year. Therefore, at peak production the Residual Gate to Gate CO₂ emissions from the proposed plant will be 7,757 Tonne eq. CO₂ / annum which is about 0.81 tonne CO₂ eq. / tonne production.
20. The PP submitted the Disaster Management Plan and On-site and Off-site Emergency Plans in the EIA report.
21. The estimated project cost after expansion is INR 6.56 Crores and Existing 4.02 Crores and proposed 2.54 Crores. Total Employment given is for 51 persons out of which 40 are skilled workers and 11 are unskilled.

22. Deliberations by the EAC

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

The EAC noted that the PP has given an undertaking to the effect 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 PP.

The EAC noted that the EIA reports are in compliance with the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The EAC deliberated on the proposed mitigation measures towards Air, Water, Noise and Soil pollutions. The EAC advised that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The EAC inter-alia, deliberated on the Greenbelt development plan and its layout, Conservation plan for schedule –I species, pollution load, Life cycle assesment, carbon footprint and advised the PP to submit the following:

- Revised layout with greenbelt (with respect to greenbelt area within the site, within adjacent RIICO park, number of trees within the premises after considering 70% survival rate)
- Acknowledgement slip of the submission of the conservation plan for the Schedule-I species.
- Revised Pollution Load Assesment.
- Updated life cycle assesment
- Updated carbon footprint (w.r.t Carbon emission and its sequestration with the aid of greenbelt development)

The PP submitted the above information/documents and the EAC found it to be satisfactory.

The EAC deliberated on the Onsite and Offsite Emergency plans and various mitigation measures to be proposed during implementation also 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 expert members of the EAC found the proposal in order and recommended for grant of environmental clearance.

The EAC is of the view that its recommendation and grant of environmental clearance by the regulatory authority 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 PP 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.

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

- (i) The PP committed to develop greenbelt over an area of at least 1626 m² within the plant premises+ 2000 m² within adjacent RIICO plot/park by planting 340 saplings (within premise) + 143 number within RIICO plot within one year of grant of EC. The saplings should be of sufficient height, preferably 6-ft. The budget earmarked for the plantation shall be kept in a separate account and should be audited annually. The PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (ii) A separate Environmental Management Cell (having qualified persons 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. PP shall engage Environment Officials. In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (iii) 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. The budget proposed under EMP is ₹ 0.21 Crores (Capital cost) and ₹ 0.17 Crores /annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (iv) The water requirement after expansion shall not exceed 78 KLD (40 KLD from Borewell and 33 KLD from Borewell / RIICO and 5 KLD from reuse (3 KLD from steam condensate and 2 KLD from STP).The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawn only after obtaining valid agreement from Concerned Authority. The PP should submit the details of

utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year.

- (v) The wastewater generation shall be 47 KLD, out of which 2 KLD of domestic wastewater shall be sent to STP, and 45 KLD wastewater shall be treated in ETP of capacity 60 KLD. The treated water of 41.5 KLD shall be sent to 38.5 ATFD and 3 KLD to steam condensate Recovery.
- (vi) No banned chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.
- (vii) 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.
- (viii) The project proponent shall comply with the environment norms for 'synthetic organic chemical as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 608 (E), dated 21st July, 2010 under the provisions of the Environment (Protection) Rules, 1986.
- (ix) The project proponent shall comply with the environment norms for Pesticide Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 446 (E), dated 13.6.2011 under the provisions of the Environment (Protection) Rules, 1986.
- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) 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.

- (xiv) Training shall be imparted to all employees on safety and health aspects for handling chemicals. 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.
- (xv) 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.
- (xvi) 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.
- (xvii) The PP shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapor recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.

Agenda No.62.8

Proposed Expansion of Existing Ammonia, Urea, Ethyl Acetate & Ammonium Nitrate Melt Plants & installation of New Weak Nitric Acid and Ammonium Nitrate Prills Plants with production capacity from 72,22,531 MT/A to 55,56,801 MT/A, 36,09,648 KNm³ /Year to 30,88,170 KNm³ /Year, 12,80,448 MWH/Year to 8,20,800 MWH/Year, 1,50,000 Liter/year located at Survey No. 5, 24/1-B, 99/3-A, 127, 38, 15 and 74, Ta& Dist: Bharuch, Gujarat by M/s. Gujarat Narmada Valley Fertilizers & Chemicals Limited - Consideration of Environmental Clearance

[Proposal No. IA/GJ/IND3/434188/2023; File No. J-11011/310/2012-IA-II (I)]

1. The proposal is for the grant of Environmental Clearance to the Proposed Expansion of Existing Ammonia, Urea, Ethyl Acetate & Ammonium Nitrate Melt Plants & installation of New Weak Nitric Acid and Ammonium Nitrate Prills Plants with production capacity from 72,22,531 MT/A to 55,56,801 MT/A, 36,09,648 KNm³ /Year to 30,88,170 KNm³ /Year, 12,80,448 MWH/Year to 8,20,800 MWH/Year, 1,50,000 Liter/year located at Survey No. 5, 24/1-B, 99/3-A, 127, 38, 15 and 74, Ta& Dist: Bharuch, Gujarat by M/s. Gujarat Narmada Valley Fertilizers & Chemicals Limited.

2. The project/activity is covered under Category ‘A’ of Item 5(a) & 5(f) **Chemical Fertilizer Industry and synthetic organic chemicals (excluding formulations)** of Schedule of EIA Notification, 2006 (as amended).
3. The Standard ToR was issued by the Ministry vide letter No. J-11011/310/2012-IA-II(I) dated 26.11.2022. Further, Amendment in ToR was granted by the Ministry vide letter dated 13.2.2023 for the Proposed expansion of Existing Ammonia, Urea, Ethyl Acetate & Ammonium Nitrate Melt Plants & installation of New Weak Nitric Acid and Ammonium Nitrate Prills Plants at Survey No. 5, 24/1-B, 99/3-A, 127, 38, 15 and 74, Ta & Dist: Bharuch, Gujarat by M/s Gujarat Narmada Valley Fertilizers & Chemicals Limited (Unit-1 & 2). The PP applied for Environment Clearance in Common Application Form and submitted EIA/EMP Report and other documents. The PP reported that it is an **Expansion case**. The proposal is placed in 62nd EAC Meeting held on 28th August, 2023 wherein the Project Proponent and an accredited Consultant, M/s. Kadam Environmental Consultants (NABET Accreditation no. NABET/EIA/2023/SA 0164 valid up to September 11, 2023], made a detailed presentation on the salient features of the project and informed the following:
4. The PP reported that the Existing land area is 38,89,698 m², no additional land will be required for proposed expansion. The proposed expansion will be done in existing premises and no R& R is involved in the Project. The details of products and by-products are as follows:

Sr. No	Description	CAS No.	Unit	Capacity approved as per EC dated 23.03.2015	Addition al Capacity proposed	Total capacity Proposed after expansion	Uses
1	AMMONIA PLANT						
1.1	Ammonia	7664-41-7	MT/A	16,52,000	-7,57,750	8,94,250	Used in captive production of Urea, Weak Nitric Acid, Ammonium Nitro Phosphate, Ammonium Nitrate Melt etc.
1.2	Pure CO ₂	124.38-9	KNm ³ /Year	10,21,478	-5,21,478	5,00,000	Used in captive production of

							Urea, Methanol, Ammonium Nitro Phosphate,
1.3	Impure CO ₂	-	KNm ³ /Year	4,32,000	0	4,32,000	Used in captive production of Ammonium Nitro Phosphate
1.4	Tail Gas	-	KNm ³ /Year	69,120	0	69,120	Used in captive production of Formic Acid, Toluene Di Isocyanate
1.5	Liquid Nitrogen	7727-37-9	KNm ³ /Year	8,64,000	0	8,64,000	Used in captive production of Ammonia & Utilities
2	FERTILIZERS & RELATED PRODUCTS						
2.1	Urea	57-13-6	MT/A	21,25,250	- 11,21,500	10,03,750	Used as a Fertilizer
2.2	NPK Fertilizers*	66455-26-3	MT/A	3,96,000	0	3,96,000	Used as a Fertilizer
2.3	Ammonium Nitro Phosphate*	57608-40-9	MT/A	2,88,000	0	2,88,000	Used as a Fertilizer
2.4	Calcium Ammonium Nitrate	6484-52-2	MT/A	2,70,000	0	2,70,000	Used as a Fertilizer
2.5	Ammonium Nitrate Melt	6484-52-2	MT/A	1,92,960	62,540	2,55,500	Widely used in production of Explosives, manufacture of Fertilizers like Calcium Ammonium Nitrate &

							Ammonium Nitro Phosphate, Pharmaceuticals, Pyrotechnics, Herbicides and Insecticides, as Absorbent, Ingredient of Freezing Mixture, Nutrient for Antibiotics & Yeast.
2.6	Calcium Carbonate	471-34-1	MT/A	1,61,280	0	1,61,280	Used in manufacturing of quick lime, Glass
2.7	Ammonium Nitrate Prills	6484-52-2,1037 7-60-3 & 7732-18-5	MT/A	0	2,19,000	2,19,000	Used in production of Explosives
3	METHANOL						
3.1	Methanol-I	67-56-1	MT/A	86,400	0	86,400	Used in captive production of Acetic Acid. Other end uses are in manufacturing of Formaldehyde, Hexamine, Pentaerythritol, Methyl Amines, Methyl Methacrylate, Di Methyl
3.2	Methanol-II		MT/A	2,25,000	0	2,25,000	

							Sulphate, Paints, Organic Derivatives, Synthetic Resins, Chloromethanes etc.
3.3	Methanol synthesis unit (MSU)	-	MT/A	50,400	0	50,400	Used in captive production of Methanol
3.4	Fusel Oil	64741-62-4	MT/A	10,800	0	10,800	Used as food for bacterial in Denitrification process at Nitro ETP.
3.5	Synthesis Gas Generation Unit	-	KNm ³ /Year	2,47,800	0	2,47,800	Used in captive production of Methanol
4	FORMIC ACID						
4.1	Formic Acid I	64-18-6	MT/A	36,000	0	36,000	Used as an auxiliary for delining and pickling of fur, fixing of dyes-in leather industry and in processing in textile industry. Used as a coagulant for obtaining rubber from latex. Used as an intermediate in manufacturing

							of basic drugs, plant protection agents, pesticides, vulcanisation accelerators, antioxidants and cleaning agents. Used in electroplating and as a solvent as well.
4.3	Methyl Formate	107-31-3	MT/A	45,000	0	45,000	Used in captive production of Formic Acid. Used as a raw material in the manufacture of Di Methyl Formamide, Pharmaceuticals and Metal Foundries. Used in Organic Synthesis and in formulation of Synthetic Flavours. Used as a Cellulose Acetate Solvent for Anisotropic Cellulose

							Acetate Fibres spun in a modified Dry Spinning Process. Used as a Fumigant and Larvicide.
4.4	Potassium Formate salt	590-29-4	MT/A	360	0	360	Used in manufacturing of potassium based salts
5	ACETIC ACID				0		
5.1	Acetic Acid I	64-19-7	MT/A	1,71,000	0	1,71,000	Used in captive production of Ethyl Acetate. Used in production of PTA, Acetic Anhydride, Agrochemicals
5.3	Dilute acetic acid	64-19-7 & 7732-18-5	MT/A	1,080	0	1,080	
6	WEAK NITRIC ACID				0		
6.1	Weak Nitric Acid-I	7697-37-2	MT/A	3,42,000	0	3,42,000	Used in captive production of Concentrated Nitric Acid, Ammonium Nitrate Melt and Ammonium Nitro
6.2	Weak Nitric Acid-II		MT/A	1,98,000	0	1,98,000	
6.3	Weak Nitric Acid-III		MT/A	0	2,62,800	2,62,800	

							Phosphate fertilizer. Used in the manufacture Sodium Nitrate, Potassium Nitrate, Calcium Nitrate, Glyoxal, H-Acid, Nitrobenzene and other Nitro Derivatives, Dyes and Dye Intermediates, Drugs and Pharmaceuticals, Pickling of Steel and Metallurgy, Acrylic Fibre, Pesticides, etc.
7	CONC. NITRIC ACID						
7.1	Conc. Nitric Acid-I	7697-37-2	MT/A	45,000	0	45,000	Used in captive production of Aniline & TDI. Widely used in the manufacture of Organic Synthesis, Dyes, Drugs, Explosives, cellulose Nitrate, Nitrate salt, Nitro Chloro benzene and other Nitro
7.2	Conc. Nitric Acid-II		MT/A	45,000	0	45,000	
7.3	Conc. Nitric Acid-III		MT/A	72,000	0	72,000	
7.4	Conc. Nitric Acid-IV		MT/A	72,000	0	72,000	

							Derivatives, Nitro Toluene, Acrylic Fibre, Dyestuff and Dye Intermediates, Photo Engraving, Oxidizer in Liquid Rocket Propellants, etc
8.1	CPP POWER	-	MWH/Year	4,32,000	0	4,32,000	Captive Use
8.2	Co-generation power & steam unit (CPSU) MWH/Year	-	MWH/Year	7,77,600	-3,88,800	3,88,800	
9	H₂ Generation	1333-74-0	KNm ³ /Year	9,75,250	0	9,75,250	For captive production of Ammonia
10	Ethyl Acetate	141-78-6	MT/A	50,000	37,600	87,600	Used in production of Printing inks, Paints and Coatings, Laminates, Aluminium Foil, Flavour in Pharmaceuticals, Varnishes, Perfumes, Adhesives, Pharmaceuticals, Pesticides, Nitrocellulose, Synthetic Fruit Essence and Photographic Films and Plates
11	GRADES OF	-	MT/A	5,000	-5,000	0	-

	WATER SOLUBLE FERTILIZER (NPK)						
12	Neem Seed Expelling Unit				0		
12.1	Neem Oil	8002-65-1	MT/A	400	0	400	For captive production of Neem Urea, Neem oil based products
12.2	Neem Cake	-	MT/A	8,200	0	8,200	Used as a Fertilizer
13	Neem Soap Unit-1	-	MT/A	495	0	495	Cosmetic Use
14	Neem Soap Unit-2	-	MT/A	495	0	495	
15	Neem based Pesticide	11141-17-6	Liter/year	1,50,000	0	1,50,000	
16	Neem based Shampoo	-	MT/A	350	0	350	
17	Neem based Hand wash	68603-42-9	MT/A	350	0	350	
18	Neem based Face wash	-	MT/A	350	0	350	
19	Neem Oil Solvent Extraction Plant						Neem oil recovery
19.1	Neem Oil	8002-65-1	MT/A	3,300	0	3,300	For captive production of Neem Urea, Neem oil based products
19.2	Neem De-Oiled Cake	-	MT/A	26,400	0	26,400	Used as a Micro Nutrients, Used to Control Fungus, Nematodes

							and other soil pests, Can be used with other fertilizers/Urea
20	Neem Nite/ Mosquito Repellant	-	MT/A	130	0	130	Mosquito Repellent
21	Hair Oil	-	MT/A	35	0	35	Cosmetic Use
22	Liquid Catalyst Solution						
22.1	G-101 N-Concentrated Catalyst Solution	-	MT/A	600	0	600	Used as catalyst in Pollution Abatement in Chemical Processing and Other Industries.
22.2	G-202 C-Concentrated Chelate Solution	-	MT/A	1200	0	1200	
22.3	G-302 S-Surfactant Solution	-	MT/A	120	0	120	
23	ANILINE PLANT						
23.1	Aniline	62-53-3	MT/A	1,32,420	-84,420	48,000	Used in production of Pharma, Rubber, Dyes & Intermediates, MDI
23.2	Nitrobenzene	98-95-3	MT/A	1,83,840	-1,14,840	69,000	For captive production of Aniline
23.3	Sulphuric Acid (72%)	7664-93-9	MT/A	16,800	0	16,800	Used in manufacturing of single super phosphate
24	TOLUENE DI ISOCYANATE PLANT						
24.	Toluene Di	26471-	MT/A	21,600	0	21,600	Used in

1	Isocyanate (TDI)	62-5					production of Flexible PU, Mattresses, Car Seating, Adhesives, Elastomers, Coatings
24.2	Meta Toluene Di Amine (MTD)	95-80-7	MT/A	17,400	0	17,400	For captive production of TDI. Used as an intermediate as Monomer, Chain Extender, Cross Linker or Intermediate use in Rubber Chemical and Dyes, use in Polyamides / Polyimides.
24.3	Ortho Toluene Di Amine (OTD)	496-72-0 / 2687-25-4	MT/A	564	0	564	In the manufacture of Polyols , Antioxidants, Corrosion Inhibitors, Rubber Chemicals and Dyes.
24.4	Hydrochloric Acid 30%	7647-01-0	MT/A	64,800	0	64,800	Used in manufacturing of textile and paper
24.5	Dilute Sulphuric Acid 72%	7664-93-9	MT/A	24,252	0	24,252	Used in manufacturing of dyes
24.6	Weak Nitric Acid	7697-37-2	MT/A	3,180	0	3,180	Used in various usages including pickling.
24.7	Sodium Hypochlorite	7681-52-9	MT/A	2,760	0	2,760	Used as Disinfectants

24.8	TM blend	584-84-9/91-08-7/101-68-8	MT/A	7,800	0	7,800	Used in Automobile industry
25	CAPTIVE POWER PLANT						
25.1	Electrical Power	-	MWH/Year	70,848	-70,848	0	-
25.2	Steam	-	MT/A	1,64,160	-1,64,160	0	-
Total Production			MT/A	72,22,531	-16,65,730	55,56,801	
			KNm³/Year	36,09,648	-5,21,478	30,88,170	
			MWH/Year	12,80,448	-4,59,648	8,20,800	
			Liter/year	1,50,000	0	1,50,000	

5. The PP reported that there is no violation case as per the Notification No. S.O.804(E) dated 14.03.2017 and no direction is issued under E(P) Act/Air Act/Water Act.
6. 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. Narmada River at a Distance of 2.20 km The PP reported that Pavo cristatus, Black kite, Milvus migrans, govinda, Shikra Accipiter badius, Oriental Honey-Buzzard Pernis ptilorhynchus, and Black-Winged Kite Elanus caeruleus Schedule-I species exist within 10 km study area of the project for which conservation plan has been prepared and submitted to PCCF.

S. No.	Sensitive Ecological Features	Name of feature / Location	Distance (~km)	Direction	Reason of Significance
1	Water courses / water bodies	Narmada River	2.20	South	Near to site within study area
		Amravati River	2.81	South-South-East	
		Kaveri River	8.69	South-East	
		Bhukhi River	8.51	North	
		Karedi Nala	7.49	North	
		Lindia Nala	0.99	North	
		Garamiya Khadi	0.00	West	

		(Nallah)			
2	Inland, coastal, marine waters	-	-	-	-

7. The PP reported that the Ministry had issued the latest EC vide letter no. J-11011/310/2012-1A-II(I); dated 23rd March 2015 to the project – “Expansion of Brownfield Ammonia, Urea Plant, New Aniline, TDI- MDI Blends, Water Soluble Fertilizer (NPK), Acetic Acid and CPSU plants at Narmadanagar, Bharuch, Gujarat at Survey No. 5, 24/1-B, 99/3-A, 127, 38, 15 and 74 in Notified Industrial Area as per gazette notification enacted by Government of Gujarat.” in favour of M/s. Gujarat Narmada Valley Fertilizers & Chemicals Limited (as per Name Changed EC letter dtd 05.09.2016). The list of EC received till date –from latest to earlier- are given below:

Sr. No.	Name of Unit	Year	File No. of EC	Date	Remark
1	Unit-1 & Unit-2	2016	J-11011/310/2012-1A-II(I)	05.09.2016	Received name change form M/s. Gujarat Narmada Valley Fertilizers Company Ltd. To M/s. Gujarat Narmada Valley Fertilizers & Chemicals Limited
2	Unit-1 & Unit-2	2015	J-11011/310/2012-1A-II(I)	23.03.2015	Received combine EC expansion in 5(a), 5(f) & 1(d) category in existing Unit-1 & Unit-2
3	Unit-1	2011	SEIAA/GUJ/EC/5(f)/107/2011	09.06.2011	Received EC from SEIAA for addition of Ethyl Acetate Plant in existing plot of Unit-1
4	Unit-1	April 2008	J-11011/1218/2007-1A-II(I)	28.04.2008	Received expansion in 5(a), 5(f) & 1(d) category in Fertilizer Plant, Unit-1
5	Unit-1	March 2008	J-11011/731/2007-1A(II)	10.03.2008	Received expansion in 5(a) & addition of 5(f) category in Fertilizer Plant, Unit-1
6	Unit-2	2007	J-11011/350/2007-IA II (I)	23.08.2007	Received EC for 5(f) category products (Aniline Plant, Toluene Di Isocyanate Plant & Captive Power Plant)

8. The PP reported that the compliance report for the existing EC dated 23.3.2015 has been submitted to IRO Gandhinagar, MoEF&CC. Site visit was done on 6th February 2023. Certified compliance report was received vide F. No. J-11/42-2023-IROG NR dated 26th May 2023. Out of 206 conditions 146 are complied, 18 are partly complied, 26 are agreed to comply by the PP, 15 conditions are noted by the unit, 1 condition can't be ascertained. Action taken report for the partly complied conditions has been submitted vide letter dated 21.6.2023.
9. The PP reported that **Ambient air quality monitoring** was carried out at 10 locations during 15th October 2022 to 15th January 2023 and the baseline data indicates the ranges of concentrations as: PM₁₀ (68-87 µg/m³), PM_{2.5} (22-40 µg/m³), (NH₃<10 µg/m³) and NO₂ (14.4-18.4 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.316 µg/m³, 1.974 µg/m³ and 3.654 µg/m³ with respect to PM₁₀, NH₃ and NO_x respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). **Noise:** Industrial Zone: The day time noise level at the Project site was in the range of 67.5 – 71.2 dB (A), which is well below the permissible limits of 75 dB (A). Residential Zone: The daytime noise levels in all the residential locations including silence zone were observed to be in the range of 53.1 dB (A) to 54.6 dB (A). The noise levels at all the locations were below the permissible limits of 55 dB (A). Night time Noise Levels (night) Industrial Zone: The night time noise level in the Project site was observed in the range of 58.4- 65.3 dB (A), which is well below the permissible limits of 70 dB (A). Residential Zone: The night time noise levels in all the residential locations were observed in the range of 43.2 dB (A) to 44.1 dB (A). The noise levels were below the permissible limits of 45 dB (A) in night-time at all the locations.
10. **Ground Water Quality-** pH of the ground water collected was in the range of 8.4 – 8.1. Total Dissolved Solids in the collected samples were in the range between 776 mg/l to 3792 mg/lit. The Chlorides concentration varies from 251 mg/l to 1816 mg/l. The presence of high Nitrate contains in ground water samples is indicating hydraulic connections (leakage) in between upper & lower aquifer. The presence of Nitrogen found in ground water samples and at places are above the desirable limit and this could be due to by-product of organic compounds, septic system and animal manure, agriculture waste. **Surface water quality** - The river water samples SW07 and SW09 of Narmada river and can be compared with class D and E and can be utilized for Propagation of Wild Life and Fisheries, Irrigation and industrial cooling, etc. The Garamiya nallah samples (SW 01, SW 02, SW 03 and SW 04) are comparable with Class E for Irrigation, Industrial Cooling purposes. Other pond water samples SW 05, SW06, SW08 and SW10 can be compared with Class D and E and can be utilized for Propagation of Wild Life and Fisheries, Irrigation and industrial cooling, etc. It can be seen from the analytical results of Garamiya Natural Drainage stream that the treated waste water of GNFC, added in the Garamiya Natural drainage has no significant impact on the quality and the waters are being utilised for irrigation purpose by local farmers downstream of project site. **Soil-**The analysis of physico-chemical properties of soil samples collected from the surrounding area including site indicated that porosity ranged from 48 – 56 % and WHC varied from 40.99 – 47.50 %, while permeability ranged from 14.94 – 25.85 mm/hr. The EC (0.112– 1.322 dS/m) was low (<0.80 dS/m) to moderate (< 3.2 dS/m) and ESP (2.13 – 2.26) was well within the safe limits of 15. The soils were neutral (pH 6.5 to 7.78) to slightly alkaline (pH 7.8 to <8.5). Among water soluble cations predominance of Ca (7.05 to 10.02 meq/ 100 g) was seen followed by Mg (5.51 to 9.01 meq/100 g), Na (0.67 to 2.19 meq/100 g) and K (0.07 to 0.22 meq/100 g). The available phosphorus was low (<28 kg P₂O₅/ha) to medium (28-

56 kg P2O5/ha). The potassium status was in low (<140 kg K₂O /ha) to medium (140 to 280 kg/ha) category.

11. The PP reported that the total water requirement will be 68,848 KLD (Unit-1:-63096 KLD, Unit-2:- 2602 KLD & Outside consumer:- 3150 KLD) after proposed expansion of which fresh water requirement of 55,598 KLD (Unit-1:-49886 KLD, Unit-2:- 2562 KLD & Outside consumer:- 3150 KLD) will be met from Narmada River, Narmada Canal and Ukai Canal. Effluent of 23,226 KLD (Unit-1:- 21754 KLD, Unit-2:- 1472) will be generated and from that, 13,250 KLD (Unit-1:- 13210 KLD, Unit-2:- 40 KLD) will be Recycled within premises and 9729 KLD (Unit-1:- 8544 KLD, Unit-2:- 1185 KLD) will be discharged into Natural drain (Garamiya nallah) ultimately meeting to river Bhukhi which further meets River Narmada in Estuarine Zone after meeting prescribed norms.
12. The Power requirement after expansion will be met from existing 83 MW capacity Captive Power Generation Plants & Dakshin Gujarat Vij Company Limited (DGVCL). Existing unit has 5 nos. of DG sets (2 nos. of 1748 KVA, 01 no. of 1010 KVA and 2 nos. of 1250 KVA). DG sets are used as standby during power failure for safe shutdown of plants. Stack of adequate height as per CPCB norms is provided in each DG set.

13. Details of Process Emissions Generation and their Management:

Process Emission & Management					
Flue Gas Stacks Details for Unit-1					
Existing as per EC dated 23.03.2015					
Sr.No	Plant	Type Of Stack	Height (m)	Air Emission Pollutant & Conc.	Air Pollution Control Measures
1.	Steam Generation Plant (Boiler)	Boiler-1	125 Meter Two Common stack for all three BHEL Boilers	PM : 100 mg/Nm ³ , SO ₂ : 600 mg/Nm ³ , NO _x : 600 mg/Nm ³	Electro Static Precipitator
		Boiler-2			
		Boiler-3			
		Boiler-4	85		--
2.	Methanol – 1	Reformer Furnace (SGGU)	40	NO _x :350 mg/Nm ³ , SO ₂ : 50 mg/Nm ³ , PM : 10 mg/Nm ³ , CO :150 mg/Nm ³	--
3.	Methanol – 2	Reformer	30	NO _x : 350	--

		Furnace Stack (BI – 201)		mg/Nm ³ , SO ₂ : 50 mg/Nm ³ , PM : 10 mg/Nm ³ , CO :150 mg/Nm ³	
4.	CPSU Plant	CPSU Plant	45	NO _x :450 mg/Nm ³ , SO ₂ : 600 mg/Nm ³ , PM :50 mg/Nm ³ , Hg :0.03 mg/Nm ³	--
5.	Hydrogen Plant	Reformer Furnace	30	SO ₂ : 100 PPM, NO _x : 50 PPM	--
6.	CPSU Plant	CPSU Plant	45	NO _x : 450 mg/Nm ³ , SO ₂ : 600 mg/Nm ³ , PM : 50 mg/Nm ³ , Hg :0.03 mg/Nm ³	--
7.	Brownfield ammonia plant	Reformer Furnace	30	SO ₂ : 100 PPM, NO _x : 50 PPM	--
No additional flue gas stacks will be required after proposed expansion					
After Proposed Expansion					
Sr.No	Plant	Type Of Stack	Height (m)	Air Emission Pollutant & Conc.	Air Pollution Control Measures
1	Steam Generation Plant (Boiler)	Boiler-1 Boiler-2 Boiler-3	125 Meter Two Common stack for all three BHEL Boilers	PM : 100 mg/Nm ³ , SO ₂ : 600 mg/Nm ³ , NO _x : 600 mg/Nm ³	Electro Static Precipitator

		Boiler-4	85		--
2	Methanol – 1	Reformer Furnace (SGGU)	40	NO _x :350 mg/Nm ³ , SO ₂ : 50 mg/Nm ³ , PM : 10 mg/Nm ³ , CO :150 mg/Nm ³	--
3	Methanol – 2	Reformer Furnace Stack (BI – 201)	30	NO _x : 350 mg/Nm ³ , SO ₂ : 50 mg/Nm ³ , PM : 10 mg/Nm ³ , CO :150 mg/Nm ³	--
4	CPSU Plant	CPSU Plant	45	NO _x :450 mg/Nm ³ , SO ₂ : 600 mg/Nm ³ , PM :50 mg/Nm ³ , Hg :0.03 mg/Nm ³	--
5	Hydrogen Plant	Reformer Furnace	30	SO ₂ : 100 PPM, NO _x : 50 PPM	--
Flue Gas Stacks Details for Unit-2					
Existing as per EC dated 23.03.2015					
Sr. No	Plant	Type Of Stack	Height (m)	Air Emission Pollutant & Conc.	Air Pollution Control Measures
1.	SAC Plant	Thermic Fluid Heater	31	PM :150 mg/Nm ³ SO ₂ : 100 PPM NO _x : 50 PPM	-
2.	Aniline Plant	Aniline Incinerator	30	PM : 50 mg/Nm ³ SO ₂ : 200 mg/Nm ³	Venturi scrubber, packed bed scrubber

				NO _x : 400 mg/Nm ³ HC : 15 mg/Nm ³ HCl : 50 mg/Nm ³ NH ₃ :175 mg/Nm ³	
3.	TDI Plant	TDI Incinerator-I	31	PM : 50 mg/Nm ³ HCl : 20 mg/Nm ³ SO ₂ : 40 mg/Nm ³ NO _x : 25 mg/Nm ³ CO : 100 mg/Nm ³ HC : 15 mg/Nm ³ Phosgene: Absent Cl ₂ :09 mg/Nm ³	Water & Caustic Scrubber
4.	TDI Plant	TDI Incinerator- II	31	PM : 50 mg/Nm ³ HCl : 20 mg/Nm ³ SO ₂ : 40 mg/Nm ³ NO _x : 25 mg/Nm ³ CO : 100 mg/Nm ³ HC : 15 mg/Nm ³ Phosgene: Absent Cl ₂ :09 mg/Nm ³	Water & Caustic Scrubber, Mist separator
No additional flue gas stacks will be required after proposed expansion					
After Proposed Expansion					
Sr. No	Plant	Type Of Stack	Height (m)	Air Emission Pollutant &	Air Pollution Control Measures

				Conc.	
1	SAC Plant	Thermic Fluid Heater	31	PM :150 mg/Nm ³ SO ₂ : 100 PPM NO _x : 50 PPM	-
2	Aniline Plant	Aniline Incinerator	30	PM : 50 mg/Nm ³ SO ₂ : 200 mg/Nm ³ NO _x : 400 mg/Nm ³ HC : 15 mg/Nm ³ HCl : 50 mg/Nm ³ NH ₃ :175 mg/Nm ³	Venturi scrubber, packed bed scrubber
3	TDI Plant	TDI Incinerator-I	31	PM : 50 mg/Nm ³ HCl : 20 mg/Nm ³ SO ₂ : 40 mg/Nm ³ NO _x : 25 mg/Nm ³ CO : 100 mg/Nm ³ HC : 15 mg/Nm ³ Phosgene: Absent Cl ₂ :09 mg/Nm ³	Water & Caustic Scrubber
4	TDI Plant	TDI Incinerator-II	31	PM : 50 mg/Nm ³ HCl : 20 mg/Nm ³ SO ₂ : 40 mg/Nm ³ NO _x : 25 mg/Nm ³ CO : 100 mg/Nm ³	Water & Caustic Scrubber, Mist separator

				HC : 15 mg/Nm ³ Phosgene: Absent Cl ₂ :09 mg/Nm ³	
Process Vents Unit-1 Existing as per EC dated 23.03.2015					
Sr.No	Plant	Type Of Stack	Height (m)	Air Emission Pollutant & Conc.	Air Pollution Control Measures
1.	Urea	Prilling tower-1	92.5	PM: 50 mg/Nm ³ or 0.5 Kg/MT of Product, NH ₃ : 175 mg/Nm ³	
2.	Concentrated Nitric Acid – 1	Waste Gas Absorption Column (20K401)	30	NO _x : 1.5 Kg/MT of acid	Packed Bed Absorption Column
3.	Concentrated Nitric Acid – 2	Waste Gas Absorption Column (22K401)	33	NO _x : 1.5 Kg/MT of acid	Absorption Column
4.	Weak Nitric Acid-I	Tail Gas Turbine Outlet(10MT02)	60	NO _x :1.5 Kg/MT of acid	NO _x Absorption tower
5.	Weak Nitric Acid – II	Tail Gas Turbine Outle	57	NO _x : 1.5 Kg/MT of acid	NO _x Absorption tower
6.	Calcium Ammonium Nitrate (CAN)	De-dusting System of CAN Equipment & drying drum (50V001)	54	PM: 150 mg/Nm ³ , NH ₃ : 175 mg/Nm ³	High Efficiency Cyclone Separator & Scrubbing system
		Lime Drying Bag Filter (50K010)	54	PM: 150 mg/Nm ³ , NH ₃ : 175 mg/Nm ³	Bag Filter Scrubbing system
7.	Ammonium Nitro Phosphate	Rock Phosphate Bines Handling Unit (31K001)	41	PM:150 mg/Nm ³	Bag Filter
		Rock Dissolving	48.5	Total	Packed Bed Column

		Reactor (32K001)		Fluoride: 25 mg/Nm ³ , NO _x :1.5 Kg/MT of product	& Ammonia Scrubber
		NP Melt Neutralization Unit Equipment (35K001)	54	NH ₃ : 175 mg/Nm ³	Packed Bed Ammonia Scrubber
		ANP Drying Drum & De dusting System (36V001)	54	PM: 150 mg/Nm ³	Cyclone Separator & Scrubbing system
		Calcium Nitrate Unit & Ammonium Carbonate Synthesis Section (41K002)	48.5	NO _x :25 mg/Nm ³ , NH ₃ : 175 mg/Nm ³	Ammonium Scrubber
8.	Acetic Acid	K- 8503, Vent scrubber for T8509 off specs Tank	10.95	Acetic acid vapour: 75 mg/Nm ³	Scrubber
		K- 9101A, Vent scrubber for T9101A Main Tank	10.95		Scrubber
		K- 9101B, Vent scrubber for T9101B Main Tank	10.95		Scrubber
		K- 9101C, Vent scrubber for T9101C Main Tank	10.95		Scrubber
		K- 8502A, Vent scrubber for T-8502A day Tank	10.95		Scrubber
		K- 8502B, Vent scrubber for T-8502B day Tank	10.95		Scrubber
9.	Concentrated Nitric Acid – 3	Waste Gas Absorption Column	30	NO _x : 1.5 Kg/MT of acid	Absorption Column

10.	Concentrated Nitric Acid – 4	Waste Gas Absorption Column	30	NO _x :1.5 Kg/MT of acid	Absorption Column
11.	Ethyl Acetate Plant	Acetic Acid tank scrubber Vent K3601	11.8	Acetic Acid: 75 mg/Nm ³	Scrubber
12.	Neem Oil Solvent Extraction Plant	Pre-Cleaner / Destoner	19	PM: 150 mg/Nm ³	Cyclone & Bag Filter
		Cake Dryer / Doc Cooler	19	PM: 150 mg/Nm ³	Cyclone
		Air Vent (Sep)	11.5	HC: 15 mg/Nm ³	Condenser
13.	Urea	Prilling tower-2	92.5	PM: 50 mg/Nm ³ or 0.5 Kg/MT of Product, NH ₃ : 175 mg/Nm ³	--
Proposed					
1.	Ammonium Nitrate Prills	Prilling tower	50	PM:100 mg/Nm ³	Dry filer/scrubber/cyclone
				Ammonia :150 mg/Nm ³	
2.	Weak Nitric Acid-III	Tail Gas Turbine Outlet	60	NO _x :400 mg/Nm ³	NO _x Absorption tower
After Proposed Expansion					
Sr.No	Plant	Type Of Stack	Height (m)	Air Emission Pollutant & Conc.	Air Pollution Control Measures
1.	Urea	Prilling tower-1	92.5	PM: 50 mg/Nm ³ or 0.5 Kg/MT of Product, NH ₃ : 175 mg/Nm ³	
2.	Concentrated Nitric Acid – 1	Waste Gas Absorption Column (20K401)	30	NO _x : 1.5 Kg/MT of acid	Packed Bed Absorption Column
3.	Concentrated Nitric Acid – 2	Waste Gas Absorption Column (22K401)	33	NO _x : 1.5 Kg/MT of acid	Absorption Column
4.	Weak Nitric	Tail Gas Turbine	60	NO _x :1.5	NO _x Absorption

	Acid-I	Outlet(10MT02)		Kg/MT of acid	tower
5.	Weak Nitric Acid – II	Tail Gas Turbine Outlet	57	NO _x : 1.5 Kg/MT of acid	NO _x Absorption tower
6.	Calcium Ammonium Nitrate (CAN)	De-dusting System of CAN Equipment & drying drum (50V001)	54	PM: 150 mg/Nm ³ , NH ₃ : 175 mg/Nm ³	High Efficiency Cyclone Separator & Scrubbing system
		Lime Drying Bag Filter (50K010)	54	PM: 150 mg/Nm ³ , NH ₃ : 175 mg/Nm ³	Bag Filter Scrubbing system
7.	Ammonium Nitro Phosphate	Rock Phosphate Bines Handling Unit (31K001)	41	PM:150 mg/Nm ³	Bag Filter
		Rock Dissolving Reactor (32K001)	48.5	Total Fluoride: 25 mg/Nm ³ , NO _x :1.5 Kg/MT of product	Packed Bed Column & Ammonia Scrubber
		NP Melt Neutralization Unit Equipment (35K001)	54	NH ₃ : 175 mg/Nm ³	Packed Bed Ammonia Scrubber
		ANP Drying Drum & De dusting System (36V001)	54	PM: 150 mg/Nm ³	Cyclone Separator & Scrubbing system
		Calcium Nitrate Unit & Ammonium Carbonate Synthesis Section (41K002)	48.5	NO _x :25 mg/Nm ³ , NH ₃ : 175 mg/Nm ³	Ammonium Scrubber
8.	Acetic Acid	K- 8503, Vent scrubber for T8509 off specs Tank	10.95	Acetic acid vapour: 75 mg/Nm ³	Scrubber
		K- 9101A, Vent scrubber for T9101A Main	10.95		Scrubber

		Tank			
		K- 9101B, Vent scrubber for T9101B Main Tank	10.95		Scrubber
		K- 9101C, Vent scrubber for T9101C Main Tank	10.95		Scrubber
		K- 8502A, Vent scrubber for T-8502A day Tank	10.95		Scrubber
		K- 8502B, Vent scrubber for T-8502B day Tank	10.95		Scrubber
9.	Concentrated Nitric Acid – 3	Waste Gas Absorption Column	30	NO _x : 1.5 Kg/MT of acid	Absorption Column
10.	Concentrated Nitric Acid – 4	Waste Gas Absorption Column	30	NO _x :1.5 Kg/MT of acid	Absorption Column
11.	Ethyl Acetate Plant	Acetic Acid tank scrubber Vent K3601	11.8	Acetic Acid: 75 mg/Nm ³	Scrubber
12.	Neem Oil Solvent Extraction Plant	Pre-Cleaner / De-stoner	19	PM: 150 mg/Nm ³	Cyclone & Bag Filter
		Cake Dryer / Doc Cooler	19	PM: 150 mg/Nm ³	Cyclone
		Air Vent (Sep)	11.5	HC: 15 mg/Nm ³	Condenser
13	Ammonium Nitrate Prills	Prilling tower	50	PM:100 mg/Nm ³	Dry filter/scrubber/cyclone
				Ammonia :150 mg/Nm ³	
14	Weak Nitric Acid-III	Tail Gas Turbine Outlet	60	NO _x :400 mg/Nm ³	NO _x Absorption tower
Process Vent Details for Unit-2 Existing as per EC dated 23.03.2015					
Sr.No	Plant	Type Of Stack	Height (m)	Air Emission Pollutant & Conc.	Air Pollution Control Measures
1.	Phosgene Plant	Phosgene Plant	50	HCl : 20 mg/Nm ³	Caustic Scrubber
				NO _x :25	

				mg/Nm ³	
				Cl ₂ : 09 mg/Nm ³	
				Phosgene: 01 mg/Nm ³	
2.	TDI Plant	Chlorine scrubber	17	HCl :20 mg/Nm ³	Caustic Scrubber
				Cl ₂ :09 mg/Nm ³	
3.	DNT Plant	NO _x absorption column – Di Nitro Toluene (DNT) plant	20	NO _x :25 mg/Nm ³	Absorption Tower
				SO ₂ : 40 mg/Nm ³	
4.	MTD Plant	Hydrogen Vent MTD plant	30	HC :15 mg/Nm ³	Catch Tank & Water seal pot
5.	HCL Plant	HCL scrubber	31	HCl :20 mg/Nm ³	Water Scrubber
				Cl ₂ : 09 mg/Nm ³	
6.	SAC Plant	NO _x absorption column Sulphuric Acid Concentration (SAC) Plant	19	NO _x : 25 mg/Nm ³	Absorption tower
				SO ₂ : 40 mg/Nm ³	
				H ₂ S: 45 mg/Nm ³	
7.	NB Plant-1	Nitrobenzene Vent of Nitrobenzene Plant	15	NO _x : 25 mg/Nm ³	Chilled NB Scrubber, Caustic scrubber
				SO ₂ : 40 mg/Nm ³	
				Benzene : 90 mg/Nm ³	
8.	Aniline Plant-1	Hydrogen Vent Aniline plant	15	HC :15 mg/Nm ³	Letdown separator & water seal pot
9.	NB Plant-2	Nitrobenzene Vent of Nitrobenzene Plant	15	NO _x :25 mg/Nm ³	Chilled NB Scrubber, Caustic scrubber
				SO ₂ : 40 mg/Nm ³	
				Benzene :90 mg/Nm ³	
10.	Aniline Plant-2	Hydrogen Vent Aniline plant	15	HC : 15 mg/Nm ³	Flash tank/catch tank/scrubber
No additional process vents will be required in proposed expansion					
After Proposed Expansion					
Sr.No	Plant	Type Of Stack	Height (m)	Air Emission	Air Pollution Control Measures

				Pollutant & Conc.	
1.	Phosgene Plant	Phosgene Plant	50	HCl : 20 mg/Nm ³	Caustic Scrubber
				NO _x : 25 mg/Nm ³	
				Cl ₂ : 09 mg/Nm ³	
				Phosgene: 01 mg/Nm ³	
2.	TDI Plan	Chlorine scrubber	17	HCl : 20 mg/Nm ³	Caustic Scrubber
				Cl ₂ : 09 mg/Nm ³	
3.	DNT Plant	NO _x absorption column – Di Nitro Toluene (DNT) plant	20	NO _x : 25 mg/Nm ³	Absorption Tower
				SO ₂ : 40 mg/Nm ³	
4.	MTD Plant	Hydrogen Vent MTD plant	30	HC : 15 mg/Nm ³	Catch Tank & Water seal pot
5.	HCL Plant	HCL scrubber	31	HCl : 20 mg/Nm ³	Water Scrubber
				Cl ₂ : 09 mg/Nm ³	
6.	SAC Plant	NO _x absorption column Sulphuric Acid Concentration (SAC) Plant	19	NO _x : 25 mg/Nm ³	Absorption tower
				SO ₂ : 40 mg/Nm ³	
				H ₂ S : 45 mg/Nm ³	
7.	NB Plant	Nitrobenzene Vent of Nitrobenzene Plant	15	NO _x : 25 mg/Nm ³	Chilled NB Scrubber, Caustic scrubber
				SO ₂ : 40 mg/Nm ³	
				Benzene : 90 mg/Nm ³	
8.	Aniline Plant	Hydrogen Vent Aniline plant	15	HC : 15 mg/Nm ³	Letdown separator & water seal pot

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

Hazardous Waste Generation & Classification for Existing and Proposed Expansion (Unit 1 & 2)				
Unit-1				
Sr.	Type of	Hazardou	Quantity	Treatment / Disposal

No .	Waste	s Waste Category	Existing as per EC dated 23.03.2015 MT/Year	Proposed MT/Year	Total MT/Year	
1.	Spent Catalyst	18.1 & 1.6 & 17.2	1000	-670	330	Collection, storage and return of platinum rhodium catalyst to authorized supplier. Other catalyst sold to GPCB/CPCB approved reprocessor/ actual end users/registered recyclers.
2.	Central ETP Lime sludge	35.3	2040	0	2040	Sludge dewatering and further drying /Collection, storage, transportation & disposal to Secured landfill (TSDF) at BEIL Infrastructure Limited, Ankleshwar
3.	Nitro ETP Chemical Sludge	35.3	2000	0	2000	Sludge dewatering and further drying/ Collection, storage, transportation and reused in process. Sale to M/S. Maruti Fertilizes & Ind., village Muland, Tal. Jhagadia / sale to GPCB authorized small scale industries producing mixed fertilizers having valid Rule-9 permission.
4.	Waste oil	4.1	96	1	97	No treatment/ Collection, Storage, Transportation and burnt in Boiler along with coal or send to actual recyclers/ re-processors registered with GPCB/CPCB
5.	Used oil	5.1	160	-58	102	No treatment/ Collection, Storage, send to actual recyclers/ re-processors registered with

						GPCB/CPCB or reused in process
6.	Gasifier Slag	Sch - 2 A - 67/68	100	0	100	No treatment / Collection, Storage & Transportation, sale to CPCB/GPCB registered recycler having valid Rule-9 permission
7.	Insulated Copper wire Scrap	Sch - 2 A66	75	-15	60	No treatment/ Collection, Storage & Transportation, sale to CPCB/GPCB registered recycler
8.	Asbestos containing waste (In sheet form)	Sch - 2 B1	10	0	10	No treatment/ Collection, storage, transportation & disposal to Secured landfill (TSDF) at BEIL Infrastructure Limited, Ankleshwar
9.	Spent Silica Gel	1.6	20	-10	10	No treatment/ Collection, storage, transportation & disposal to Secured landfill (TSDF) at BEIL Infrastructure Limited, Ankleshwar
10.	Spent Resin	35.2	140	-50	90	No treatment/ Collection, storage, transportation & Utilization in GNFC Unit-1 boilers for energy recovery or sent to CHWIF at BEIL Infrastructure Limited, Ankleshwar
11.	Spent Pearl Gel	1.6	10	0	10	No Treatment / Collection, storage, transportation & disposal to Secured landfill (TSDF) at BEIL Infrastructure Limited, Ankleshwar
12.	Spent molecular sieves	1.6	92.8	0	92.8	No Treatment/ Collection, storage, transportation & disposal to Secured landfill (TSDF) at BEIL Infrastructure Limited, Ankleshwar

13.	Ethyl Acetate Reactor Residue	1.4/20.2	180	135	315	No treatment/ Collection, storage, transportation and send to Common Incineration facility for Incineration or Sent to GPCB authorized units who has valid CC&A for spent solvent (Ethyl Acetate) recovery and rule-9 permission
14.	Ethyl Acetate plant ETP Sludge	35.3	50	25	75	No treatment/ Collection, storage, transportation & disposal to Secured landfill (TSDF) at BEIL Infrastructure Limited, Ankleshwar
15.	Empty barrel / carboys /bags contaminated with hazardous chemical /waste	33.1	244.72 (MT/Year) (11124 Nos)	0.864 MT/Year (96 Nos)	245.584 (MT/Year) (11220 Nos)	No Treatment/ Collection, Storage, decontamination at GNFC (Unit- 1) or sent to GPCB approved facility for decontamination & detoxification
16.	Neem Extraction plant ETP Lime sludge	35.3	36	0	36	No Treatment/ Collection, storage & Transportation to Secured landfill site (TSDF) at BEIL Infrastructure Limited, Ankleshwar
Other Wastes						
1.	Biological Sludge	35.3	3840	0	3840	No treatment/ Collection, storage, Transportation & sale to actual end users and external agencies for organic manure and soil conditioner purpose.
2.	Spent Hard Coke/ Activated carbon	--	200	0	200	No treatment /Collection, Storage and burnt in Boiler along with coal
3.	Carbon Soot	--	2000	0	2000	No treatment /Collection,

						Storage and burnt in Boiler along with coal or send to actual re-processor registered with GPCB/CPCB
4.	Sludge from wet scrubbers	Sch-1 37.1	500	0	500	No treatment/ Collection, Storage, transportation and Reused in process. Sale to M/s Maruti Fertilizer Ind, Village Mulad, Tal. Jhagadia / Sale to GPCB authorized small scale industries producing mixed fertilizer having rule-9 permission
5.	Spent Acid from battery	--	1	-0.5	0.5	Treatment in CETP with lime
6.	Insulation Waste	--	100	0	100	No Treatment/ Collection, Storage, transportation & disposal at TSDF, M/s BEIL Infrastructure Limited, Ankleshwar
Sr. No.	Type of Waste	Hazardous Waste Category	Quantity			Treatment / Disposal
			Existing as per EC dated 23.03.2015 MT/Year	Proposed MT/Year	Total MT/Year	
1.	Furnace Debris	1.1	37.2	0	37.2	No Treatment/ Collection, storage, transportation & disposal at TSDF, M/s BEIL Infrastructure Limited or M/s Saurashtra Enviro Projects Pvt Ltd, Kutch.
2.	Process Wastes (Tarry residue)					
	A) From Aniline plant	1.2	1144	-894	250	Incinerated in Aniline Incinerator Designed as per the CPCB's

						Guideline for hazardous waste incinerator / Collection, storage, transportation, incineration within industrial unit OR pre-processing or incineration at M/s Saurashtra Enviro Projects Pvt. Ltd, Kutch. And M/s BEIL Infrastructure Limited.
	B) From TDI Plant	1.2	3000	0	3000	Collection, storage, transportation for co-processing in cement kiln of authorized cement industries.
3.	Organic Residue	1.4	13.72	-10	3.72	Collection, storage, transportation, incineration within industrial unit.
4.	Spent catalyst from both Aniline & TDI plants	1.6	64.4	-2	62.4	Sent to Approved catalyst recyclers for Catalyst recovery Disposal -Collection, storage, transportation sends to authorized re-processor or disposal at TSDF, M/s BEIL Infrastructure Limited or M/s Saurashtra Enviro Projects Pvt. Ltd, Kutch.
5.	Chemical Sludge from Wastewater treatment plant	35.3	1965	-1365	600	Natural Drying and Mechanical drying Before disposal to BEIL. Disposal- Collection, storage, transportation & disposal at TSDF, M/s BEIL Infrastructure Limited or M/s Saurashtra Enviro Projects Pvt. Ltd, Kutch.
6.	Waste & residue	5.2	38.2	-7	31.2	Recycling to Unit-I Disposal- Collection,

	Containing oil					storage, transportation, sell to registered re-refiner or recycled in gasification process of Ammonia plant of GNFC (Unit-1) or disposal by incineration at TSDF, M/s BEIL Infrastructure Limited or M/s Saurashtra Enviro Projects Pvt. Ltd, Kutch.
7.	Process waste residue & Sludge of paint of paints, Ink, Pigments, Varnish & Lacquers	21.1	1.7	-0.5	1.2	Incineration in Aniline Incinerator Disposal- Collection, storage, incineration within unit/transportation, disposal at TSDF M/s BEIL Infrastructure Limited or M/s Saurashtra Enviro Projects Pvt. Ltd, Kutch.
8.	Empty barrels containers / liners contaminated with hazardous chemicals / waste	33.1	155 MT/Year (6850 Nos)	-0.5 MT/Year (30 Nos)	154.5 MT/Year (6820 Nos)	Decontamination/detoxification Disposal - Collection Storage, decontamination and Detoxification at GNFC (Unit-2) or sent to GPCB approved facility for decontamination and detoxification
9.	Spent carbon from Wastewater treatment of Aniline plant	36.2	50.4	0	50.4	Incineration in Aniline Incineration. Disposal- Collection, storage, transportation, incineration within industrial unit or incineration at TSDF M/s BEIL Infrastructure Limited or M/s Saurashtra Enviro Projects Pvt. Ltd, Kutch.
10.	Incineration Ash					
	A) Aniline Tar incinerator ash	37.2	1.5	-0.9	0.6	Collection, storage, transportation & disposal at TSDF, M/s BEIL Infrastructure Limited or

	B) TDI waste Incinerator Ash	37.2	1500	-550	950	M/s Saurashtra Enviro Projects Pvt. Ltd, Kutch.
11.	Spent Acid from batteries	9.3	6	0	6	treatment in CETP with lime Disposal - Collection, storage, treatment at GNFC (Unit-2) or transportation & disposal at TSDF, M/s BEIL Infrastructure Limited or M/s Saurashtra Enviro Projects Pvt. Ltd, Kutch.
12.	Asbestos containing waste	Sch-II Class-B1	0.12	0	0.12	No Treatment Disposal - Collection, storage, treatment, transportation & disposal at TSDF, M/s BEIL Infrastructure Limited or M/s Saurashtra Enviro Projects Pvt. Ltd, Kutch
13.	Scrubbed liquid (Spent Caustic) Generated from TDI Plant scrubbers	Sch-II Class-C2	3650	0	3650	Used for raising pH at Central ETP before Ammonia Stripping Disposal- Collection, storage, transportation and use for neutralization in central effluent treatment plant of GNFC (Unit- 1).
14.	Insulation Waste	-	30	0	30	No Treatment Disposal- Collection, storage, transportation & disposal at TSDF, M/s BEIL Infrastructure Limited or M/s Saurashtra Enviro Projects Pvt. Ltd, Kutch.

15. The Budget earmarked towards the Environmental Management Plan (EMP) is ₹ 34.16 Crore (capital) and the Recurring cost (operation and maintenance) will be about ₹ 8.58 Crore per annum, Industry proposes to allocate Rs. 5 Crores towards CER.

16. Industry has already developed greenbelt in an area of 36.77% i.e., 14,30,164 m² out of total area 38,89,698 m². Unit has proposed development of green belt in additional 1,45,814 m² area. Total green belt area after proposed expansion will be 15,75,978 m² which is 40.51 % of total area.
17. The PP proposed to set up an Environment Management Cell (EMC) to engage Managing Director- General Manager Environment- Additional General Manager Environment- Senior Mnager Environment- Manager Environment- Sr. Environment Engineer/ Enviornment Engineer for the functioning of EMC.
18. The PP reported that the Public Hearing is exempted as per the Para 7.III. Stage (3) (i) (b) of the EIA Notification, 2006 as the project site is located within Notified Industrial Area which is declared as notified industrial area vide notification number No.GHU-53GD/1684(4)-3124-G1 dated 19th September 1985.
19. The PP reported that the carbon footprint for proposed project is 4,42,480 MTCO₂e/Annum emission will be further reduced after adopting various mitigation measures. Consequently, after all mitigation measures are implemented, the net emission will be 31,39,729 MTCO₂e/Annum this will be even lower than the current emission level of 33,39,297 MTCO₂e/Annum. The overall reduction of carbon foot print by 22.6% considering expansion and mitigation measures.
20. The PP submitted the Onsite and Offsite disaster management plan in their EIA report.
21. The estimated project cost is Rs. Rs 6746.23 Crore including existing investment of Rs 5399.28 Crore. Total employment will be 2443 persons as direct & 2215 persons indirect after expansion.
22. **Deliberations by the EAC**

The EAC, constituted under the provisions 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 the 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 to the effect 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 EAC noted that the EIA reports are in compliance with 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 EAC inter-alia, deliberated on the Greenbelt development plan, fuel, water balance, Ground water recharge, recharge wells and STP process flowdigaram, Carbon sequestration and advised the PP to submit the following:

- Action plan for Greenbelt development plan (w.r.t number of saplings considering 80% survival rate within the plant premises including periphery area and open patches)
- Action plan for use of cleaner fuel
- Revised water balance including STP flow diagram (the treated sewage shall be used for gardening instead of the treated industrial water)
- Action plan for carbon sequestration with futuristic approach.

The PP submitted the above information/documents and the EAC found these to be satisfactory.

The EAC 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 Expert Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

The EAC is of the view that recommendation of EAC and grant of environmental clearance by regulatory authority 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.

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

- i) The PP shall develop greenbelt over an area of at least 1,45,814 m² within one year of grant of EC. The saplings (1,00,000 number of saplings shall be planted within the premises including

periphery area and open patches area by the end of next 2 months seasons by the end of 2025. selected for the plantation should be of sufficient height, preferably 6-ft. The budget earmarked for the plantation shall be kept in a separate account and should be audited annually. The PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

- ii) A separate Environmental Management Cell (having qualified persons 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. PP shall engage Managing Director- General Manager Environment- Additional General Manager Environment- Senior Manager Environment- Manager Environment- Sr. Environment Engineer/ Environment Engineer. In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- iii) 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. The budget proposed under EMP is ₹ 34.16 Crore (Capital cost) and ₹ 8.58 Crore per annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- iv) The total water requirement after expansion shall not exceed 65,698 KLD after proposed expansion of which fresh water requirement of 56,166 KLD, outside consumer is 3150 KLD shall be met from Narmada River, Narmada Canal and Ukai Canal. The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawn only after obtaining valid agreement from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- v) Total Effluent of 22,271 KLD shall be generated and from the Unit-I and II out of which 12732 KLD shall be Recycled within premises, 247 KLD- effluent to incinerator, 3 KLD (effluent loss in ETP/STP and 9289 KLD shall be discharged into Natural drain (Garamiya nallah) ultimately meeting to river Bhukhi which further meets River Narmada in Estuarine Zone after meeting prescribed norms prescribed by GPCB. Domestic water shall be treated in STP and treated water shall be reused for gardening.

- vi) As proposed by the PP, Industry shall construct additional 12 nos. of recharging wells in greenbelt area, by December- 2023, with investment of approx. Rs.72 Lakh.
- vii) As proposed by the PP, Industry shall explore further reduction up to 50% of coal consumption for power generation by 2033.
- viii) No banned chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.
- ix) 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.
- x) The project proponent shall comply with the environment norms for 'synthetic organic chemicals' as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 608 (E), dated 21st July, 2010 under the provisions of the Environment (Protection) Rules, 1986.
- xi) The project proponent shall comply with the environment norms for 'Fertilizer Industry' as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 1607 (E), dated 29.12.2017 under the provisions of the Environment (Protection) Rules, 1986.
- xii) 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.
- xiii) 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.
- xiv) 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.
- xv) 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.
- xvi) Training shall be imparted to all employees on safety and health aspects for handling chemicals. 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.

- xvii) 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.
- xviii) 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.
- xix) The PP shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapor recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.

GENERAL EC CONDITIONS

- 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.
- The PP 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.
- The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- 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).
- 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.
- 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.
- A copy of the clearance letter shall be sent by the PP 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.
- The PP 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.
- 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.

- The PP 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.
- 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.
- 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.

STANDARD TERMS OF REFERENCE**A. GENERIC TERMS OF REFERENCE****1) Executive Summary****2) Introduction**

- i. Details of the EIA Consultant including NABET accreditation
- ii. Information about the PP
- iii. Importance and benefits of the project

3) Project Description

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

to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

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

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

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- ii. Land-use map based on High resolution satellite imagery of the proposed site delineating the forestland (*in case of projects involving forest land more than 40 ha*)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the PP shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project

- location and the recommendations or comments of the Chief Wildlife Warden-thereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife
- vii. Recommendations and NOC from the concerned State/UT Coastal Zone Management Authority on CRZ angle

6) Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
 - AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests. Study should indicate minimum, maximum value of different parameters for the period (3 months) collected. Collected data should be supported by the reference data of either CPCB or SPCB. AAQ data & GLC of pollutants from stack emissions should suggest technology/ measures- Best Practiced Technology (BPT) indicating best achieved results.
- ii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with – min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iii. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- iv. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- v. Ground water monitoring at minimum at 8 locations shall be included.
- vi. Noise levels monitoring at 8 locations within the study area.
- vii. Soil Characteristic as per CPCB guidelines.
- viii. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- ix. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- x. Socio-economic status of the study area.

7) Environment Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all

sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

- ii. Water Quality Modelling – in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules 1986.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8) Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of

- exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
 - iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

9) Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report
- v. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

10) Corporate Environmental Responsibility (CER)

- i. Adequate funds, as per the Ministry's OM/Guidelines, shall be earmarked towards the Corporate Environmental Responsibility based on Public Hearing issues/socio-economic issues and item-wise details along with time bound action plan shall be included (CER activities shall be related to environment). Socio-economic development activities need to be elaborated upon. For the projects where public hearing is not conducted, CER plan shall be provided based on socio-economic study of the area.

11) Additional studies/Measures to be considered

- (i) Provide latest and ecofriendly technology for product manufacturing.
- (ii) Emphasize on Green chemistry/Clean Manufacturing
- (iii) Provide CAS No. of products along with product list.
- (iv) Provide details of amount of carbon sequestered in their unit through greenbelt/other modes, in case of expansion project.
- (v) Life structure and sustainability for carbon and water foot print.
- (vi) Detailed pollution Load estimation.
- (vii) Transportation of Hazardous substance, effluents etc shall be carried out through authorized and GPS enable vehicles/Trucks only.
- (viii) Category of Hazardous Wastes shall be mentioned in the EIA/EMP report and in presentation.

- (ix) Details of greenhouse gases and emissions shall be provided.
- (x) Greenbelt shall be developed in the first year of the project and wind breaks shall be erected.
- (xi) Study area map shall be overlapped with all the associated features.
- (xii) Emphasize on green fuels.
- (xiii) The project from NCR shall not use Coal as fuel. Further, PP shall avoid use of Coal in the CPAs and elsewhere also if alternatives are available.
- (xiv) Provide the Cost-Benefit analysis with respect to the environment due to the project.

12) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

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

B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR 5(b) CATEGORY - PESTICIDES INDUSTRY AND PESTICIDE SPECIFIC INTERMEDIATES (EXCLUDING FORMULATIONS)

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

Details of carbon foot prints and carbon sequestration study w.r.t. proposed project needs to spelled out. Proposed mitigation measures also needs to be analysed and submitted for further appraisal of the EAC.

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

S. No.	Name of Member	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	Chairman
2.	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
3.	Dr. Suresh Panwar House No.4, Gayateri Green Society, NH 58 Bypass, Kankerkhara, Meerut, Uttar Pradesh Email- spcpri@gmail.com	Member
4.	Shri Tukaram M Karne "SHREYAS ORNATE" F-1, 95-Tulasibagwale Colony, Sahakarnagar-2, PUNE: 411 009, Maharashtra E-mail: tmkarne@gmail.com	Member
5.	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
6.	Shri Santosh Gondhalkar 'Shree' Apartment, Flat 401, Plot No. 22, Tukaram Society, Santnagar, Pune- 411009 E-mail: santoshgo@gmail.com	Member
7.	Shri Sanjay Bisht Scientist 'E', Room No. 517, Office of the Director General of Meteorology, Indian Meteorological Department, Musam Bhawan, Lodhi Road, New Delhi -110003 E-mail: sanjay.bist@imd.gov.in	Member

8.	Prof. (Dr.) Suneet Dwivedi, Professor in K Banerjee Centre of Atmospheric and Ocean Studies, University of Allahabad, Allahabad - 02 Uttar Pradesh E-mail: dwivedisuneet@rediffmail.com /suneetdwivedi@gmail.com	Member
9.	Dr. M. Ramesh Scientist 'E' Ministry of Environment, Forest and Climate Change Indira Paryavaran Bhawan, Room No. V-203, Vayu Wing, Jor Bagh Road, New Delhi-110003 Tel. 011-20819338 E-mail: ramesh.motipalli@nic.in	Member Secretary

MOM approved by



**(Prof. Aniruddha B. Pandit)
Chairman**
